Saving the Market From Itself: The Politics of Financial Intervention

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Dedication

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Abstract of Dissertation

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What accounts for divergent and unexpected patterns of state response to banking crises? Contrary to predictions of convergence, significantly different patterns persist across countries. Moreover, these are contrary to expectations. States with a tradition of "laissez-faire" economic policy, such as the United States and United Kingdom, rely heavily on intensive and punitive state intervention, including compulsory nationalization of banks. Conversely, states such as Germany, with an "organized capitalist" tradition in which the state plays an active role in managing the economy, favor state intervention on much more generous and voluntary terms. Such states also see far more extensive privately-organized and -funded rescues than the laissez-faire states.

I draw on the comparative capitalisms and multi-level governance literatures to explain these patterns by examining the organization of the financial system and the presence or absence of private governance networks. Divergence is explained by different conceptions of the self-interest of healthy banks in times of crisis. In organized capitalist states, a focus on interbank cooperation produces private governance networks, and means that healthy banks are invested in the fate of failing banks and willing to take action to support them. The healthy banks and institutions of private governance organize privately-funded rescues and lobby the state for generous terms of public assistance. By contrast, in the Anglo-American states interbank relations are atomized, with little or no private governance. In such an environment, healthy banks are unwilling to take action to support struggling peers. Thus there are few private rescues, but without healthy bank lobbying

state policymakers are free to impose more stringent terms on banks receiving state-funded rescues. Research has been carried out in a combination of interview and archive-based case study research of American, British, and German responses to the 2007-2009 crisis and of quantitative analysis of state responses to banking crises in the advanced industrial world from 1974 to present.

This research offers a valuable contribution to the comparative capitalisms and governance literatures. It demonstrates how corporatist capitalist systems perpetuate themselves in time of crisis through political influence rather than economic functionalism. It also offers comparative examples of how private governance or its absence can play a crucial role in shaping responses to banking crises. Moreover, it highlights how private governance can be both boon, through increased burden-sharing by healthy private interests, and bane, by compelling the state to offer more generous assistance.

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Glossary of Abbreviations

APS: Asset Protection Scheme

BdB: *Bundesverband deutscher Banken* (Federal Association of German Banks")

BVR: *Bundesverband der Deutschen Volksbanken und Raiffeisenbanken* ("Federal Association of German Co-operative Banks")

CBI: Central Bank Independence

CME: Coordinated Market Economy

CPE: Comparative Political Economy

DSGV: Deutscher Sparkassen- und Giroverband ("German Savings Banks Association")

DSW: Deutsche Schutzvereinigung für Wertpapierbesitz

EMH: Efficient Market Hypothesis

FASB: Financial Accounting Standards Board

FDIC: Federal Deposit Insurance Corporation

FHFA: Federal Housing Finance Agency

FMSA: Financial Market Stabilization Act

FSA: Financial Services Authoirty

GSE: Government-Sponsored Enterprise

HRE: Hypo Real Estate

IASB: International Accounting Standards Board

IKB: Industrialkreditbank

IndyMac: Independent National Mortgage Corporation

IPE: International Political Economy

KfW: Kreditanstalt für Weideraufbau

LBBW: Landesbank Baden-Württemberg

LIKO Bank: Liquidity Consortium Bank

LME: Liberal Market Economy

LTCM: Long Term Capital Management

MLEC: Master Liquidity Enhancement Conduit

MLG: Multi-Level Governance

OCC: Office of the Comptroller of the Currency

OFHEO: Office of Federal Housing Enterprise Oversight

OTS: Office of Thrift Supervision

RBS: Royal Bank of Scotland

SEC: Securities and Exchange Commission

SLS: Special Liquidity Scheme

SoFFin: Sonderfonds Finanzmarktstabilisierung (Special Financial Market Stabilization Funds)

TAF: Term Auction Facility

TARP: Troubled Asset Relief Program

UKSA: United Kingdom Shareholders Association

VdP: Verband deutscher Pfandbriefbanken ("Association of German Pfandbrief Banks")

WaMu: Washington Mutual

Chapter 1: Introduction

The 2007-2009 financial crisis demonstrated, not for the first or last time, how capitalist financial systems are vulnerable to banking panics. The allocation of credit through financial systems is central to the functioning of modern capitalist economies, meaning that a financial crisis's effects will be both broadly and deeply felt across the economy for years to come. The costs of an uncontained crisis can dwarf even the immense costs of a state intervention to contain the crisis, giving the state a compelling reason to intervene to limit the damages of such crises. The terms of that intervention, however, can vary substantially in both redistributive effect and degree of moral hazard. In 2007-2009, many states, in order to stave off this wider economic disaster, launched ambitious and expensive plans to contain the banking crisis. Despite frequently comparable size and shared goals, the details of these plans differed substantially in the methods adopted and their generosity to banks and bank shareholders. Contrary to national stereotypes of laissez-faire Anglo-American economies and interventionist European economies, the American and British responses to the financial crisis involved heavy state intervention on punitive terms, while the Germans and other continental Europeans favored generous, hands-off aid to their banks. In the US and UK, responses favored full or partial compulsory nationalization, with compensation paid at or below market rates. In Germany, by contrast, the preferred response was generous provision of aid, with voluntary recapitalization through non-voting shares provided at an above-market premium.

This fits in a general historical pattern of consistently divergent responses to financial crises across the advanced capitalist economies. Contrary to what may be

expected, state intervention in systems with a liberal, laissez-faire tradition in economic policy is generally much more compulsory and on harsher terms than in states with a tradition of state-managed organized or corporatist capitalism. Those states with liberal financial systems, in which the stock market is a primary source of capital and inter-bank relationships are generally thin and arms'-length, favor state intervention on fairly stringent terms. State aid is generally compulsory and on relatively harsh terms, involving punitive rates of repayment or compulsory nationalization. By contrast, in states with corporatist economies, private banks dominate the provision of capital, and those banks have much tighter inter-bank relationships, including greater interdependence and stronger private governance associations. Because of this, the healthy banks play a much greater role in shaping state responses in the corporatist systems. This means that the private banks are willing to shoulder a greater burden of the costs of crisis containment, but also that they will influence the state to offer public assistance on more generous and less invasive terms than in states with liberal financial systems.

Remarkably, the politics surrounding immediate state responses to financial crises have been largely unexplored, with far more attention paid to either debates over financial policies in good times or the longer-term post-crisis reform process. Exploring the dynamics of immediate crisis response is obviously important from a public policy perspective, given the immense sums involved in financial rescues, the potential for redistribution from taxpayers to financial actors, and, by shaping the incentives of bankers, the effect on the likelihood of future crises. It also offers insight into several literatures connected to political economy. The literatures on convergence and on comparative capitalisms have long been in tension with one another over whether

national diversity in economic systems will persist or will collapse into a single 'best practices' model under the pressure of increased global interconnectedness. Central to these debates is the stability of national financial systems; the shape of much of the rest of the national economy will be determined by the firm-bank relationship, and whether investors provide long-term "patient" capital or short-term capital which puts pressure on firms to produce immediate growth. Financial crises provide a crucial test of this stability, when major actors are weakened and assumptions about the strengths of the financial system model may be questioned. Radical change should therefore be easier in times of crisis than other times, and the ability of national financial systems to self-replicate in these moments of crisis will be crucial to determining whether national diversity persists. More generally, the comparative capitalisms literature has been criticized for a status-quo bias and a weak theory of change; exploring how financial systems respond to crises provides a more compelling account of why systems persist or transform.

Studying financial systems in crisis also provides opportunities to expand the utility of the governance literature, and especially the multi-level governance literature. Much attention has been paid recently to a shift from hierarchical, state-directed 'government' to 'governance,' which has greater private and international components, and less formal structure. Especially of interest is the multi-level governance literature, which emphasizes how sub-national, supra-national, and private governance structures are blurring the boundaries between domestic and international spheres, and between public and private authority. Much of this literature is divided, however, as to whether governance is descriptive, prescriptive, or the kernel of a new theoretical approach. The

differing role played by other banks and their private associations in the different national financial systems allows for an empirical exploration of the role of private governance structures, allowing comparative capitalisms to be recast as a story of the presence or absence of private governance structures and allowing for examination of the political impact of private governance in a cross-national comparison. Doing so provides firmer microfoundations and a greater level of detail for the comparative capitalisms literature, which is often critiqued as weakly-specified and overly-reductive. It also provides a way to move the governance literature toward a firm theoretical foundation, by examining the empirical impact of governance structures in high finance, an area of crucial importance to states.

A Primer on Financial Crises and Policy Responses

The literature on financial crises and their responses is vast, spreading across multiple disciplines and with significant divisions on the causes, culpability, and best practices in responding to financial crises. Within this diversity, however, there remains a common fundamental understanding of the basic technical issues of financial crises, which are worth exploring in some depth to provide a basic lexicon to discuss state responses without requiring a pre-existing technical expertise on the part of the reader. This is even more valuable given how different authors may use the same terms in somewhat different fashions. This is most apparent in the case of "bailouts," which for some authors refers to all state aid, but for others to refer only to state aid which substantially insulates private actors from losses, with the attendant moral hazard and perverse redistribution issues.

As Mayntz notes, financial crises are an aggregate of multiple events, filtered into a single event as a cognitive construct.[1] Therefore, there may be many different causes of financial crises, as well as three essential forms a financial crisis may take. Here we are concerned with banking crises, or panics, where a large number of banks run into distress, as well as market crashes, when the value of a state's stock market drops dramatically. The term 'financial crisis' may also involve questions of the state's solvency, and encompass sovereign debt or fiscal crises, where the state's ability to pay its debts comes into doubt and foreign and domestic creditors question the state's creditworthiness. Financial crises may also refer to currency crises, when currency traders question the state's ability to maintain a set value for its currency. The presence of both a private financial crisis, in the form of a banking panic and/or stock market crash, together with a sovereign debt or currency crisis is referred to as a "twin crisis." These may occur because the state's attempts to contain a banking crisis may tax the state's own fiscal resources, causing creditors and currency speculators to question the state's ability to both pay for rescue programs and service its existing obligations.

The financial sector is both more likely to cause 'contagion,' or negative spillover effects, than other sectors, and uniquely vulnerable to crises relative to other sectors. Without a steady access to credit, many businesses in the "real" economy would be forced to suspend or contract operations, meaning that a banking crisis can have far wider collateral impact than a comparably-sized crisis in, for instance, manufacturing sectors. At the same time, the leveraged nature of banking makes banks especially vulnerable to crises of confidence. This is because banks operate by funding long-term investments

[1] Renate Mayntz, "Institutional Change in the Regulation of Financial Markets: Questions and Answers," in *Crisis and Control: Institutional Change in Financial Market Regulation*, ed. Renate Mayntz, Vol. Bd. 75. (Frankfurt: Campus Verlag, 2012), 7.

with short-term credit. Both commercial banking, based on depositors and loans, and investment banking, based on managing clients' investment portfolios, rely on customers who provide the banks money on a short-term basis, meaning they can withdraw their money at any time. That money, however, is used to fund investments which may take a long time to produce a positive return. In order to retain the ability to pay back customers on-demand, banks will only lend or invest a portion of the assets provided by customers. The rest will be held back to pay operating costs and to pay back customers looking to withdraw their assets. This portion held back is the capital reserve. The ratio of money held back to pay customers on demand to money invested in long-term investments is the capital ratio, and state regulators typically set a minimum capital ratio, below which a bank may not fall. What constitutes an appropriate minimum capital ratio, and to how to measure the value of various assets, is highly contested among bankers, regulators, and academics. A low capital ratio allows banks to lend out greater amounts of money, increasing the amount and lowering the price of credit available to the real economy, theoretically increasing the overall level of economic activity. It therefore is typically favored by banks, which profit from the additional lending, and by those actors who think a financial crisis is unlikely. A high capital ratio, on the other hand, requires banks to hold more of their money back, decreasing their ability to lend and raising the price of borrowing, but making it easier for banks to absorb bank runs and panics.

This imbalance between short-term funding and long-term investments creates a possibility for banking panics and runs. Because the bank doesn't have enough money on-hand to pay back all customers, if a large number of customers demand repayment at the same time, the capital reserve may be depleted before all can be repaid. Even if long-

term assets retain their value, without the money to fund day-to-day operations, the bank will be forced to close. Unless some form of outside depositor insurance program is in place, this means that everyone who had not already withdrawn their money will lose it when the bank closes. Because of this, bank runs are rational even if the bank is otherwise healthy: once enough people start withdrawing their money from the banks, it becomes rational for other customers to also rush to withdraw their money, based purely on the fact that if they don't, they will lose their investment when the bank collapses. This is true whether the run began because of a bank's own bad decisions or simply because investors began withdrawing their money, and others began to suspect that the other customers would start to panic and withdraw their money as well.

This general panic is one of two possible channels of contagion, by which other banks can be made vulnerable, and even fall, because of the high profile fall of a large peer, or a large number of peers. Once a high profile run on one bank occurs, investors in other banks may begin to fear a run on their own banks. This fear becomes a self-fulfilling prophecy: the greater the fear of a run, the more rational it will be to start one, or to join one that has begun, rather than take losses when the bank is forced to close. This is especially likely if the second bank bears a resemblance to the failing one, such as by holding a similar investment portfolio. The second channel of contagion is more direct, and involves inter-bank lending. Since banks customarily lend and borrow from each other, if a borrower-bank fails, creditor banks may take a loss if their loan is not well-collateralized, pushing them either into insolvency or illiquidity.

Banks may fail from two interrelated causes, insolvency and illiquidity. Insolvency is the simpler problem; if a bank owes more money to investors or depositors

than it holds in assets (loans and investments), then the bank will fail eventually simply because it won't be able to pay its obligations unless it somehow increases the value of its assets, typically through an injection of fresh capital from a new investor. Insolvency typically occurs because a bank invests in assets that fail to perform as expected, and lose value.

The second way in which a bank can fail is by becoming illiquid, when the bank's capital reserves are depleted and it no longer has the money to conduct business. Banks may fail from liquidity issues even while they hold valuable assets, and are therefore solvent, if those assets are 'illiquid,' meaning that they cannot easily be sold or otherwise converted into cash on hand. If a bank is illiquid, but not insolvent, it can potentially be saved by loans from a third party. So long as the bank is solvent, it has assets that will, in time, pay enough to repay those loans, so long as the repayment terms of the loans are not too onerous. However, in a banking crisis, willing lenders may be in scarce supply, either because they are unwilling to risk lending to an illiquid bank or because they are afraid that they will need to shepherd their own liquidity reserves in case they should be subject to a bank run.

As Goodhart notes, in modern financial systems, liquidity and solvency issues may blur together.[2] Banks typically are highly reliant on liquidity not from their own capital reserves, but from their ability to borrow from other banks, with that inter-bank lending backed by a claim on the bank's financial assets. This reliance on available liquidity means that banks may fall if the supply of available interbank credit declines or the price of borrowing increases. If the collateral assets fall in value, therefore, banks

[2] C. A. E. Goodhart, *The Regulatory Response to the Financial Crisis* (Northampton, MA: Edward Elgar Pub, 2009).

may face both solvency issues, as their asset portfolio loses value, and also liquidity issues, as other banks demand greater collateral or higher interest rates as both the value of existing collateral decreases and the risk of a bank run, and failure to repay the loan, increases.

Separating liquidity and solvency issues, therefore, becomes increasingly difficult. It still remains a matter of great concern to both other banks and to the state. Other banks may be interested in buying an illiquid bank, if they have the liquidity on hand to absorb the panic, and in doing so may be able to get a good deal on the bank's solvent assets. The state may also be more willing to provide support to an illiquid but solvent bank, as a case could credibly be made that the bankers managed their bank well, but were caught at the mercy of unpredictable external disruptions to their liquidity sources. Therefore, there may not be substantial moral hazard in aiding an illiquid but insolvent bank. On the other hand, no bank would be interested in taking the net loss of buying an insolvent bank's entire book of assets and liabilities, and healthy banks' interest will likely be limited to buying what assets still have value. It is also harder to avoid moral hazard issues in providing state aid to an insolvent bank, which is more clearly culpable for its own bad bets in its asset purchases.

Further complicating matters are so-called "toxic assets," which were overvalued by speculators in the run-up to the crisis, but are likely undervalued in the immediate aftermath of the crisis. The pre-crisis value is clearly too high, but the post-crisis value is likely too low, though it will be virtually impossible to accurately estimate the amount of value the asset will recover over time. Toxic assets, therefore, create a quandary for evaluating both solvency and liquidity. If the toxic assets were used as collateral, the

lending bank will favor a low estimation of their current value, decreasing the available liquidity support to the borrowing bank. Therefore, toxic assets can precipitate a liquidity crisis by limiting access to interbank lending. Toxic assets may also affect solvency. The "book value," or pre-crisis price, is clearly no longer accurate. If valued at the current price, asset holders may be insolvent. Valuing at some estimated future price may make the holder solvent again, at least on paper, but any such valuation will be highly questionable. The current asset holder has strong incentives to over-estimate that value, which may return the bank to solvency or provide sufficient collateral to gain valuable liquidity

Responses to Banking Crises

As noted above, banking crises can be spectacularly devastating not only to the directly-affected banks, but to other banks through contagion effects, and to the real economy through a contraction of lending. Therefore, both other banks and the state will both have clear interests in taking action to contain banking crises, if such actions can insulate the other banks from losses or limit damage to the broader economy. Responses to financial crises come in many varieties, but all can be evaluated on two essential dimensions: effectiveness at containing the crisis and degree of moral hazard created by the intervention.[3] At one extreme, relying only on private market solutions create no moral hazard issues but may prove ineffective at containing the crisis. At the other extreme, using state funds to completely insulate market actors from losses contains the crisis, but with severe distortions of incentives and massive redistribution of wealth. Responses may be broadly categorized into three groups: private solutions, liquidity

[3] Robert E. Wright, "Hybrid Failures and Bailouts : Social Costs, Private Profits," in , ed. Robert E. Wright (New York: Columbia University Press, 2010), 18.

solutions, and capital solutions.[4] Within each category, a number of policies may be implemented, and their effectiveness in containing the crisis and diminishing moral hazard concerns will vary substantially based on their implementation. Without understanding their goals and methods, policy options cannot be easily compared in their moral hazard implications. Evaluating the moral hazard implications of various policies, therefore, requires an understanding of how the policies work, and what a "good" moral hazard-limiting form and a "bad" moral hazard-creating form look like for specific policy options.

Private Solutions

Private solutions, in which no public money is used, are most in keeping with the logic of orthodox classical economics. Any injection of state funds in markets distorts prices, creating inefficient outcomes by encouraging inefficient patterns of behavior.[5] The state may take substantial actions short of using its own funds to resolve a crisis, chiefly by orchestrating a private rescue. Letting private actors sort market problems out themselves out eliminates distortion, and generally purges inefficient or unstable firms in favor of the stronger and more prudent. This not only eliminates market distortions, but also the problem of moral hazard. If firms know no public rescue is coming, and that they will be held accountable for their bad decisions, they will act in a more prudent manner. Because of this, financial crises should be rarer if a laissez-faire state response

[4] Guillermo Rosas and Nathan M. Jensen, "After the Storm : The Long-Run Impact of Bank Bailouts," in *Bailouts: Public Money, Private Profit*, ed. Robert E. Wright (New York: Columbia University Press, 2010), 108.
[5] Walter Bagehot, *Lombard Street : A Description of the Money Market* (New York: Charles Scribner's Sons, 1892), viii, 359 p. WRLC no., *p. 78;* Wright, *Hybrid Failures and Bailouts : Social Costs, Private Profits*, 18.

is expected.[6] The risk of contagion should also be lower, as firms will better prepare themselves for crises of liquidity. Furthermore, the direct cost to states is minimal, as no expensive outlay is required to finance a private response. The indirect effect on the real economy, however, can be immense, dragging GDP down for years. This cost gives policymakers an incentive to intervene despite market distortion and moral hazard problems, and therefore gives firms reason to anticipate state intervention if their fall will precipitate a broader economic disaster.

Do Nothing – The *prima facie* simplest option for policymakers is to not involve the state in a financial crisis, letting market forces and the actions of private actors separate those firms capable of withstanding a crisis from those which cannot. Doing so avoids direct costs to the state and prevents moral hazard. It also most clearly reflects the private risk/private reward logic of free-market capitalism.

There are several reasons, however, why this is not the best option for policymakers. Most prominent is the problem of contagion, when the distress or failure of a single firm, or small number of firms, causes a loss of confidence in the sector in general. The financial sector's susceptibility to bank runs makes it uniquely vulnerable to contagion effects. A firm may face failure not through its own actions, but because a rival's collapse causes a general lack of faith in the sector. Aid to an otherwise-healthy firm suffering from another's poor decisions may be justifiable, especially given the costs of allowing contagion to overrun the sector, at severe cost to the broader real economy.

[6] Guillermo Rosas, "Bagehot Or Bailout? an Analysis of Government Responses to Banking Crises," *American Journal of Political Science* 50, no. 1 (2006), 175-191.; Guillermo Rosas, *Curbing Bailouts: Bank Crises and Democratic Accountability in Comparative Perspective* (Ann Arbor: University of Michigan Press, 2009).; Martin Schneider and Aaron Tornell, "Balance Sheet Effects, Bailout Guarantees and Financial Crises," *The Review of Economic Studies* 71, no. 3 (2004), 883-913. A corollary to this is that speculative booms should also be smaller, as firms are more reluctant to lend.

Once healthy firms become caught in the panic, only action by the state, with its significantly greater reserves, may serve to stem the panic.

Firm collapse in the financial sector is devastating to an advanced economy, given the sector's central role in allocating capital to the real economy. The resulting broader recession would likely both activate automatic stabilizer welfare programs and create demand for a state economic stimulus package, indirectly causing the state to increase spending even in the absence of a financial rescue. Therefore, there are good reasons to expect significant costs to both the state and the real economy from simply letting a crisis "burn itself out." Furthermore, an action bias will likely prevail among policymakers. The public may not want to spend public funds on the financial sector, but neither will they want a broad economic crisis. Even if there is reason to expect that government intervention will not significantly affect the size and duration of the crisis, electorally-sensitive policymakers will want to appear as though they are attempting to solve the crisis. Voters may be expected to forgive more readily unsuccessful action than no action at all, which may be perceived as "fiddling while Rome burns."

Nevertheless, states will let even large and important firms fail, for a number of reasons. They may simply lack the legal or fiscal resources necessary to save the firm, or have philosophical or practical objections to state aid. Policymakers may conclude that state aid will create too-great market distortions, or encourage other firms to engage in risky behavior confident that they will receive support if they run into trouble. Alternately, policymakers may conclude that the firm is small enough or its troubles have been broadly known long enough that its failure will not cause disastrous repercussions. All of these reasons were cited by people close to the decision by the US government not

to save Lehman Brothers in 2008, by far the most prominent recent example of a state letting a firm fail. This action was not unprecedented, however. The Hoover Administration chose not to intervene following the Crash of 1928, from a belief that state intervention would ultimately cause more problems than it solved.

Private Rescues—The state does, however, have options between simply letting firms fail and intervening directly, however. States will frequently take action by attempting to broker a rescue of the distressed firm by private actors, either through a sale or a liquidity provision from healthy firms. Private-market solutions, in which other firms act to contain the crisis, are optimal from a policymaker's perspective in a number of ways. If effective, the crisis is contained and damage to the broader economy prevented. Using private funds instead of public monies eliminates redistributive consequences, which should limit negative public fallout. Finally, because private rescues are ultimately bargains between private actors, moral hazard issues should be limited.

Because of these advantages, policymakers may seek to facilitate private-market solutions, by brokering mergers or other forms of assistance. Such private-market solutions may involve a healthy firm purchasing a distressed firm, either in full or by making an investment which increases the firm's capital reserves and makes the healthy firm a part owner. Mergers may also occur between two distressed firms with complementary strengths and weaknesses, in which the merged firm is capable of surviving even if the constituent firms would fail on their own. Finally, healthy firms may provide lending to distressed firms, a solution which addresses liquidity issues, but not solvency issues.

Private rescues may also take the form of consortium rescues, in which a group of firms pool their resources to assist distressed firms, either by issuing joint loans or, more rarely, by issuing a pooled capital injection. Such consortiums may be standing facilities, pre-existing institutions ready to provide private funding to firms which require it and meet their qualifications. The German *Liko-bank* facility provides an example of such a privately-funded facility, set up to assist distressed firms with private support.[7] Alternately, consortium rescues may be conducted on an *ad hoc* basis. As an example of the latter, in 1998 the US Federal Reserve organized a consortium of US financial institutions to provide liquidity assistance to the failing Long-Term Capital Management hedge fund. Such rescues distribute the burden of assistance across financial firms, but require greater organizational effort than a relatively-simple individual bank-to-bank rescue.

State involvement in brokering such private rescues is not politically unproblematic. By actively taking on the role of merger broker, policymakers risk accusations of undue meddling in markets. They may be seen as cajoling less-than-willing firms to take actions they otherwise would not or as showing favoritism by either taking steps to preserve favored weak firms or by pushing mergers to strengthen favored strong firms. Finally, policymakers may be tempted to encourage private solutions by including "sweeteners," public funds to absorb debts, guarantee loans, or otherwise incentivize the merger. Introducing such sweeteners, however, involves the use of public funds, and therefore should be considered a form of public rescue.

[7] Michael Roth, ""Too-Big-to-Fail" and the Stability of the Banking System: Some Insights from Foreign Countries," *Business Economics* 29 (1994), 43-43.

Public Rescues

Public assistance in financial crises can be classified into two kinds of approaches: those that provide liquidity assistance, and those that address solvency issues. The former focuses on providing failing firms with access to loans or loan guarantees, enabling firms to address their cash flow problems, but not directly affecting their underlying balance sheet issues. As such, liquidity approaches cannot solve problems of solvency, although they may limit contagion effects and buy time for a firm to find a private solution. Solving solvency issues requires the state to directly take steps to address a firm's capital ratio, generally by taking full or partial ownership of a firm or its assets. Both approaches vary in their moral hazard implications, depending on how state aid is priced and the terms attached to such aid.

Liquidity Approaches

Regulatory Favoritism—The state may chose to assist a firm by altering its regulatory restraints, either temporarily or permanently. Temporary regulatory relief typically involves removing or relaxing capital reserve requirements, allowing more of the firm's reserve capital to be used to address liquidity needs without falling below the minimum reserves necessary to remain open. Permanent relief involves changing the firm's legal status. This may be a change in the regulations governing a type of firm, or it may involve allowing the firm to adopt a different legal status that provides certain advantages. For instance, in 2008, US regulators allowed investment banks Morgan Stanley and Goldman Sachs to reclassify themselves as bank holding companies. This put them under increased regulatory supervision in some aspects, but also allowed them expanded access to loans from the Federal Reserve. Regulatory favoritism may alter a

firm's legal capital requirements, but unless accompanied by a capital injection, can only affect a firm's liquidity, and not its solvency. Increased ability to borrow can only delay a failure from solvency issues, and cannot make a negative balance sheet into a positive one. Therefore, a firm experiencing solvency issues will continue to experience solvency issues, although they may now face pressure primarily from investors, rather than regulators.

Regulatory favoritism does not directly involve state funds, so may introduce fewer moral hazard issues than other state aid approaches. Typically, regulatory favoritism is used to allow firms to access state liquidity reserves available to other kinds of firms, and thus indirectly puts more state funds in play. The effects, however, are relatively small if the change merely provides the at-risk firm access on the same terms as other, healthy firms. Morgan Stanley and Goldman Sachs' shift to bank holding company status, for instance, was an option available to them in good times as well as bad, at the discretion of the Federal Reserve, so did not provide them with significant extraordinary access. It merely gave them the same status as existing bank holding companies, granting them certain advantages but also increasing regulatory oversight in other ways. Relaxation of capital requirements and other temporary relief are more problematic from a moral hazard standpoint, but still do not directly involve public finances in extraordinary spending. Therefore, the distorting effects are smaller than in rescues involving direct state aid, although still present, as the firm is allowed greater lenience than the existing legal framework should lead it to expect.

Guarantees—States may attempt to solve liquidity problems by guaranteeing repayment to creditors or depositors, reducing or eliminating the pressure to withdraw funds and the

reluctance to make new loans. State-backed guarantees remove doubts over repayment in the event of firm collapse, making lending to the firm as safe as lending to the state. As such, if guarantees work as intended, the provision of the guarantee itself solves the crisis of confidence, and state funds need never actually be used. If the firm's crisis is purely one of confidence, such guarantees can therefore solve the crisis at no direct cost to the state.

Such guarantees do create moral hazard issues with both the firms themselves and depositors and creditors. The firm gets to substitute the state's superior creditworthiness for its own, escaping market judgment of its likelihood to honor its obligations. Therefore, the provision of guarantees insulates firms from losses, if only prospective ones, and creates moral hazard issues. Typically states address these concerns by charging a fee for the provision of guarantees, even if they are not used. If guarantees are standing facilities, as in the typical case of deposit insurance, firm fees may be collected into a standby reserve, such that even if guarantees are paid out, the state incurs no direct costs. This is the case for the US Federal Deposit Insurance Corporation, which pays its deposit guarantees out of the Deposit Insurance Fund, a FDIC-managed pool of money funded by an annual levy on FDIC-insured institutions. In the case of emergency guarantees, the state may charge the firm a fee based on the amount covered, regardless of whether the guarantee is called on or not.

Guarantees also create moral hazard problems for depositors and creditors, who can disregard a firm's failure risk when making guaranteed deposits or loans. States generally address this problem by imposing some limit on the guarantee protection provided. For depositors, states may provide a limit on the amount covered, either by a

cap on coverage, or by only protecting a percentage of assets. In the United States, deposit insurance only covers the first $250,000 of assets, and nothing above that amount. In the UK, 100% coverage is provided for the first £50,000, and then only 90% coverage above that amount. For creditors, states may provide only a "backstop" against losses, with guarantees kicking in only after a lender has lost a certain amount of the value of the loan.

Lender of Last Resort– The state may also address liquidity issues through more direct measures, by lending to a firm when no other institutions will, in what is described as a "lender of last resort" role. The classical formulation of a lender of last resort, per Walter Bagehot, is to lend freely on good collateral at a high, or penalty, rate of interest. This formula would save solvent banks from liquidity crises, but at a high enough cost to make it an undesirable option. Modern central banks, however, have frequently disregarded the call for a penalty rate of interest, fearing that a penalty rate would discourage firms from taking advantage of such funds. Facing a penalty rate, firms may instead "gamble for resurrection", engaging in extremely risky behavior in a last-ditch effort to save the firm, then turning to the lender of last resort when the need has become much greater.[8] In addition, in times of crisis, central bankers may loosen their definitions of "good collateral" in order to more easily facilitate lending. Without a penalty rate of interest, or without requiring good collateral, state liquidity provisions can provide firms with "free money," or below-market rate access to liquidity, and thus introduce moral hazard problems, endangering public money in loans to firms that the market regards as too risky to lend to.

[8] Rosas, *Curbing Bailouts: Bank Crises and Democratic Accountability in Comparative Perspective*.

Even at penalty rates, however, the state is still in the position of supplying loans private lenders are either unable or unwilling to provide. If other firms are unable, due to pressure they themselves are feeling, such loans may introduce few moral hazard problems, by providing only the access the private market would normally provide in a non-panic environment. If, however, sources of liquidity exist but are unwilling to lend, for fear that they will not get their money back, or will not get their money back in a timely fashion, then moral hazard problems are inevitably created, as the state is giving failing firms an opportunity that private interests deem to be a poor investment. A high rate and good collateral mitigates, but does not eliminate, these problems.

Solvency Approaches

Liquidity approaches may vary in the degree of moral hazard created, but will only be effective in containing crises based on liquidity issues. Liquidity provision can delay the failure of an insolvent firm, and in doing so perhaps give a firm a window to solve its solvency problems by finding a new source of private capital, but liquidity alone cannot prevent the failure of an insolvent firm. Therefore, the state may adopt policies to repair a firm's solvency position. As with liquidity provisions, the price a firm charges for solvency assistance determines the degree of moral hazard created.

Cash Grant – The simplest form of solvency assistance is for a state to simply give funds to troubled firms without expectation of repayment or conditions attached. When weighed against the immense costs of a financial crisis, such a transfer may be a relative bargain. However, cash grants most nakedly illustrate the problem of moral hazard, where firms receive direct subsidies against loss. As such, cash grants are rare, although not unheard of. US aid to failing airlines in the 2001 Air Transportation Safety & System

Stabilization Act included a direct grant of $5 billion without an attendant ownership stake.[9] In that instance, such aid was justified by arguing that the airlines suffered a direct loss by a state-ordered cessation of operations for several days following the Sept. 11 attacks.

State-Subsidized Private Purchase—As noted above, the state may provide incentives for a private firm to purchase a failing firm. This may involve the state taking ownership of less-desirable parts of a firm's assets, as a form of "bad bank" discussed below. It may also involve a guarantee of losses for the acquiring firm. Such a guarantee would work similarly to loan guarantees, with the state agreeing to absorb some amount of prospective losses. This may take the form of a "backstop," with the state agreeing to cover any losses above a set amount, or may involve the state taking the first losses up to a set amount on an asset, with the acquiring firm taking losses above that amount. Such purchases inevitably introduce moral hazard issues, as the state is subsidizing a private sale. This inevitably benefits the purchasing firm, and may or may not benefit the failing one, depending on how the deal is structured.

Partial Nationalization/Capital Injection – The state may provide capital directly by purchasing stock in a distressed firm. Doing so not only provides additional funds to deal with solvency issues, but may also indirectly solve liquidity issues by restoring the confidence of would-be lenders and providing additional collateral to use to access inter-bank lending. The moral hazard from capital injections depends chiefly on the price the state pays for its ownership stake. State ownership shares dilute existing shareholders, therefore diminishing the returns of those shareholders. If the state pays at or below

[9] Benton E. Gup, "Financial Crises and Government Responses : Lessons Learned," in , ed. Robert E. Wright (New York: Columbia University Press, 2010), 48.

market rate for those shares, the moral hazard effect is negligible, as state aid is equivalent in price to private assistance. If, however, the state pays above-market rates, shareholders receive assistance at cheaper-than-market rates, insulating them from losses and increasing moral hazard issues.

Capital injections may take the form of ordinary shares, with the same dividend and voting rights as other investors, though states frequently opt to use forms of stock which do not include voting rights, but pay a higher, generally fixed dividend, variously called 'preferred shares' or 'silent partnerships.' Because such forms do not carry voting rights, control by ordinary shareholders is not diluted, though preferred shares are generally 'senior,' meaning their dividends are paid in full before ordinary shareholders see any return, and preferred shareholders will recover more of their money in any bankruptcy proceeding. Preferred stock may in some cases be convertible to common stock or come with warrants giving the state the option of purchasing stock at a pre-set price at a later date. The moral hazard of preferred stock is determined chiefly by the level of the fixed dividend. A higher dividend lowers the moral hazard created by using preferred stock capital injections by reducing the money left over to pay out to ordinary shareholders. Because of their fixed rate of return and lack of control, preferred stock injections resemble in some ways loans more than ownership stakes, and are frequently referred to as hybrid capital. As such, their legal standing counting toward core capital may vary depending on the exact form of the capital and the regulatory regime under which the firm operates. Under Basel II capital guidelines, most hybrid capital generally counted as Tier One core capital, and therefore could be counted toward a bank's capital

reserves.[10] The revised Basel III standards, however, classified most kinds of hybrid capital as a form of loan, and not eligible to count toward capital reserves. As such, preferred stock injections fall somewhere between liquidity and solvency as a form of aid, depending on the specific legal form of the injection used and the accounting standards in use in the relevant country.

Full Nationalization— The most radical step a state can take to address solvency issues is to take full ownership of a failing firm. In some cases, this will be by purchasing existing owners' shares, but in others, the state may seize the firm by fiat, at a level of compensation determined by law or policymakers' discretion. Once acquired, the firm may then be sold in full or in part to other firms, or held by the state as a state-owned enterprise. A temporary nationalization with intent to reprivatize the firm essentially intact is a conservatorship, while a temporary nationalization with intent to sell constituent parts of the firm separately is a receivership. Once the state completely owns a firm, it may inject capital into that firm without redistributive consequences. Unlike in a bailout, this is a transfer of funds from taxpayers to a state agency, and not from taxpayers to private actors. Although it may distort competition, such a move does not create moral hazard for private actors, who are no longer in control of the firm. It may, however, create moral hazard for state-owned firms, encouraging them to take risks that private firms would not.

[10] The Basel Accords are a series of agreements among the world's leading central banks (initially the G-10 plus Luxembourg and Spain, but as of 2009 the G-20) to set common minimum capital and other operational requirements for their banks. Basel I (1988) set minimum capital requirements that were seen by the 2000s as outdates and not reflecting the current state of financial innovation and consolidation, and so was replaced by the Basel II in 2004. Basel II redefined and lowered capital requirements, reflecting current thinking the ability of financial innovations to allow superior risk management. Basel II, in turn, was seen as too lax in the wake of the 2007-2009 crisis, and so was replaced in 2009 by the more stringent Basel III requirements. Note, however, that all of the Basel Accords are non-binding recommendations, and thus have been unevenly adopted internationally as the basis of domestic banking regulation.

Toxic Asset Purchase/Bad Bank—States may also provide solvency assistance by buying bad assets from a firm. Such assets may simply have lost value, and the state's purchase may be a way for the state takes a loss rather than private owners, subsidizing losses in a similar manner as an above-market partial nationalization. They may also be toxic assets, which may recover some of their value, but over too long a time horizon for a bank already struggling to avoid failure. Such a state asset purchase is generally referred to as a "bad bank." Freed of its bad assets, the firm can hopefully return to solvency. The state, meanwhile, holds the assets, which may potentially regain some of their value. The state may purchase the assets outright, or merely hold them for a period of time, after which the firm agrees to buy them back. In either form, the key question when evaluating both the efficacy and the moral hazard consequences of the bad bank is the price the state pays for the toxic asset. A low purchase price imposes a penalty on the firm, reducing the moral hazard problem of state-funded "cleanup" of the firm's balance sheets, but this limits the degree to which the operation helps the firm. Conversely, a high purchase price provides substantial assistance to the firm, but creates significant moral hazard issues. In short, bad banks work by *creating* moral hazard, by insulating firms from the costs of having bad assets on their balance sheets. Bad banks, therefore must create moral hazard, and overpay for bad assets, if they are to be more effective than having the firm simply write off the lost value of bad assets and take the loss.

Nevertheless, bad banks have been a popular tool of financial intervention, because they address the core problem of solvency crises: the drop in value of assets on a firm's balance sheet. Therefore, despite the moral hazard problems, bad banks provide a highly effective way of preserving firms as solvent and privately-held institutions. By

cleaning up their balance sheets, rather than allowing the problem assets to remain in place but subsidizing losses, bad bank policies avoid creating so-called "zombie banks," in which underlying problems remain but are made manageable through state subsidies. They also avoid extensive state ownership of functioning banks, which may regarded as undesirable by both by ideological opponents of state ownership and by rival banks not eager to face state-subsidized competition.

One final key consideration in implementation of state policy is whether state aid is mandatory or voluntary. Making state aid mandatory grants the state significant advantages in setting moral hazard-limiting terms. Firms may resist accepting state aid until they have no choice other than bankruptcy, to avoid the costs imposed by the state or for fear of stigmatizing themselves in the eyes of investors by accepting assistance. As such, they may refuse state aid at a time when such assistance might save the firm at a relatively low cost to the state, and only accept such aid once the cost of saving the firm has grown substantially. This is, in essence, another manifestation of the "gambling for resurrection" problem. Moreover, knowing that the state may be forced to pay higher costs if the firm resists taking assistance gives the firm bargaining leverage with the state. If the firm refuses to accept state aid unless it is issued on favorable terms, state policymakers may find it cheaper to offer aid on generous terms immediately rather than offer harsher terms later, when the greater support needed exceeds the savings from the harsher terms the bank will now accept. Therefore, state aid on voluntary terms will generally be higher than mandatory state aid, as the firm's bargaining leverage will force the state to make aid more attractive. However, the state may be constrained from being able to force mandatory assistance, and the time required to legislate mandatory

assistance may itself raise the cost of aid enough that voluntary aid on generous terms may ultimately be less costly to the state, even if it does increase moral hazard problems.

Evaluating Responses to Financial Crises

States may respond to financial crises using any of the above methods, and will frequently use several methods in a given crisis, and sometimes even use several methods with regards to a single distressed bank. Both liquidity support and capital support may be generous or harsh, depending on the terms offered. Key to evaluating the stringency of these terms will be whether the state charges more or less than a hypothetical private actor would in the same circumstances.[11] If shareholders of failing firms receive market rate or worse terms for state assistance, they are still required to shoulder a substantial burden for their rescue, and this will present less of a moral hazard problem than if state aid is generous and better than could be expected from a private savior. Related to this question will be whether state aid is mandatory or voluntary; voluntary aid will be typically more generous, as the state will be forced to bargain with the failing bank, which can use the threat of broader distress if it refuses the aid to compel the state to offer more generous terms. Whether the state offers generous or harsh terms will be determined in large part by the structure of the national financial system, and the willingness and ability of healthier banks to pressure the state into offering more generous terms of assistance.

Chapter 2 outlines the broader scope of the relevant literature on financial crises and on private governance. The economics and public policy literatures are briefly touched on, but are of relatively little utility, as the policy prescriptions that follow

[11] Note that, especially in large cases, there may be no private actors able to provide assistance on the scale needed, while in other cases, the issue may be that private actors are simply unwilling to take on ambitious expansions of their portfolios in a time of high uncertainty.

depend highly on which model of financial crises dominate. That question, in turn, is determined by the political strength of the relevant actors, and the ability of the banks to promote a frame of understanding financial crises which casts their actions in a favorable light, maximizes the case for state assistance, and minimizes the negative consequences of such action. The predominant political economy literature which addresses this question has long been the comparative capitalisms literature, which has challenged the assumption of the convergence literature that diversity of national capitalist systems will eventually collapse into a single dominant model. Although the long persistence of both the liberal and corporatist, or organized, capitalist models provides empirical support for the persistence of national diversity, the literature has long been critiqued for a status quo bias and an over-reliance on economism and functionalism. Advancing the argument on comparative capitalisms, therefore, requires turning from this economism toward a political theory of comparative capitalisms, and an examination of how political clout, and not just economic advantage, drives the persistence or transformation of national capitalist systems. This can to some degree be addressed by turning to the governance literature, and especially the multi-level governance literature. This literature provides a firmer set of microfoundations for the comparative capitalisms literature, and provides a valuable framework with which to examine the political clout of key private sector actors. In turn, examining the consequences of governance helps moves the governance literature beyond simple description into an exploration of the consequences of the presence or absence of private governance structures.

Chapter 3 explores how these literatures can be combined to produce a theory to explain a seeming paradox in state responses to financial crises: that the states with a long

tradition of laissez-faire economic management are far more activist and invasive in managing failing banks than those with a tradition of state management and organized capitalism. The atomized nature of interbank relationships and the lack of private governance structures in the former leave failing banks without allies, allowing the state to adopt policies which minimize moral hazard and perverse redistribution from taxpayers to financiers, while maximizing the likelihood of the state recovering its funds. By contrast, in the corporatist states, greater interbank interdependence and stronger banking private governance associations give failing banks allies with both the incentive and means to shape policy responses on more favorable terms. This produces more generous state aid provision, but also increases the likelihood and size of privately-funded rescues.

These dynamics can best be explored through a combination of quantitative research and case study analysis. Quantitative research illustrates general trends, and indicates whether overall patterns of policy responses map onto financial systems. However, exploring whether and how financial system design, and especially the presence or absence of private governance networks, shape state responses requires the more detailed process-tracing of case-study analysis. Case study analysis, allows for detailed exploration of crucial cases, and explore whether the dynamics identified above hold true upon deeper analysis.

Chapter 4 therefore demonstrates the broad correlation between national financial systems and state responses, through a quantitative analysis of state responses to financial crises in the advanced capitalist states from 1974 to 2009. Although the propensity for private rescues and the terms of state intervention cannot be captured with the available

data, the propensity for states to provide liquidity or capital support, as well as the form of capital support and the likelihood of the state recovering its investment can be captured. Within this period, clear patterns emerge, indicating that nationalizations and recovery of state investments are both more common in liberal, stock market-based systems than in organized capitalist systems with private bank-based systems.

Case study analysis allows both the exploration of the nature of that relationship, as well as an examination of the presence or absence of private rescues and an examination of the terms of public rescues. Chapters 5, 6, and 7 explore the dynamics of responses to the 2007-2009 crisis in Germany, the United Kingdom, and the United States. These three cases provide a useful basis of comparison, all being leading economies and exemplars of the two chief models of national financial systems, with the US and UK often cited as the model liberal systems, and Germany the exemplar of a corporatist private-bank system. Moreover, Germany and the US both have a federal system versus the British unitary state, and both Germany and the UK are EU members while the US is not, allowing an exploration of potential alternate hypotheses related to the importance of the European Union or state structure. All three were also hit by a common financial crisis with broadly similar causes: the rapid devaluation of subprime mortgage assets. All three moreover responded with rescue plans of comparable size, though they differed substantially in the details. The German plan was voluntary in nature, and considerably more generous to banks than the UK or US plans, which were frequently mandatory and relatively punitive, and relied far more on nationalization and part-nationalization than the German equivalent. However, German banks organized and contributed to private and public-private rescues, which were all but absent in the US and

UK cases, where private rescues were all but unheard-of. Case study analysis traces how these patterns can be traced to the nature of the interbank relationships and the presence or absence of strong private governance associations.

Finally, Chapter 8 summarizes the findings and examines what can be concluded about the role of divergent national systems in state responses to financial crises. It also connects specific findings with broader theoretical implications, especially as pertains to the resilience of divergent national capitalist systems and the study of governance and multi-level governance. Potential policy implications of a comparison of state responses to banking crises will also be considered.

Chapter 2: Literature Review

Financial crises are almost as old as capitalism itself, and seemingly a permanent feature of capitalist economic systems. The first major financial crisis, the Dutch Tulip Mania and subsequent crisis of 1637, has been followed by crises both large and small throughout the following centuries. Moreover, crises occur without regard for level of economic development or mode of capitalist system. As Reinhart and Rogoff note, states may outgrow sovereign debt crises but never banking crises. The tremendous destructive impact of financial crises means that they have long attracted the attention of scholars in the economics, public policy, and political economy disciplines.[12] Despite the volumes of cases, however, substantial debate continues on financial crises, their causes, their resolution, and their preventability. These debates have produced a striking lack of consensus. Some argue that a larger state role is required, while others trace the problem to state intervention. Some argue that more coordination is needed between banks, or less, that banking should be partitioned or based in universal banks, and even if financial crises are the cause or effect of disturbances in the real economy. The complexity of modern finance, especially with the rise of computer-based risk algorithms and interconnected webs of credit swaps, only makes it more difficult to parse out blame and define best-practice solutions.

The economics and public policy debates, however, while valuable in shaping the details of policy responses, cannot fully-explain the dynamics of state and private responses. The policy prescriptions and processes that follow from economics or public policy accounts depend crucially on the choice of model used to understand the crisis.

[12] Carmen M. Reinhart and Kenneth S. Rogoff, *This Time is Different: Eight Centuries of Financial Folly* (Princeton: Princeton University Press, 2009).

This framing is a crucial step, which cannot be settled on merely technical grounds; rather it is a political struggle to define the terms of the debate, even before the best response policies can be debated. For that reason, any explanation of financial crises must turn to the political economy literature. This literature has long examined national diversity in financial systems, even as it divides as to whether differences between national financial systems are stable and essentially permanent or under pressure to converge on a single global model. Theories of comparative capitalisms, however, have often suffered from weak microfoundations, leaving them with weak theories of change and limited ability to model responses to crises. The literature on private governance, and especially multi-level governance, here offers a valuable complement, enabling greater modeling of the micro-level dynamics of firms and industries under pressure. The governance literature, however, is too often merely descriptive, and not a source of theoretical predictions.

Examining financial crises therefore is not only valuable from a policy standpoint, given the immense resources involved and redistributive consequences, but also valuable in examining both the comparative capitalisms and governance literatures. While much recent work on comparative capitalisms has focused on slow changes and continuity in economic good times, systems are seemingly most vulnerable in times of great stress and crisis. Given that the literature has long identified financial sectors, and their diverse organizational patterns, as a lynchpin of the broader structure of a capitalist system, the way in which the financial system responds to crises will play a key role in determining the response of the broader capitalist system. A focus on financial systems in crisis also allows for an exploration of the theoretical implications of the governance literature, and

especially the multi-level governance literature. Modeling comparative capitalist systems in governance terms allows both a deeper understanding of the microfoundations of capitalist diversity, but also creates an opportunity to generate testable hypotheses out of the governance literature, especially in how the presence or absence of private governance networks shapes state and private responses to financial crises. The divergent response patterns in the advanced capitalist systems can be traced to the presence or absence of private governance networks in the financial sectors of the states. In states with private bank-based financial systems, such as Germany, strong interdependence among banks produces private governance networks capable of both organizing substantial privately-funded rescues and lobbying for favorable terms from state rescues. On the other hand atomized relationships between banks with stock market-based financial systems, as in the US and UK creates little space for private rescues and gave failing banks relatively little say in the shaping of state rescue policies.

The Economics and Public Policy Literatures on Financial Crises

As illustrated above, policymakers confronting financial crises face a wide range of technical choices in how they respond to financial crises. State responses to financial crises, however, cannot be understood simply in technical or functionalist terms. The economics and public policy literatures offer tremendous detail in modeling financial crises and policy responses, but are of regrettably little utility in explaining divergent national patterns of response to financial crises. Both economics and public policy approaches can offer 'best practices' for response to financial crises within the parameters of the models upon which they are based, but the choice of model is itself a political and potentially self-interested choice. Different models of financial crises offer

substantially different accounts of the culpability of bankers, the necessary and optimal terms of state intervention, and the likely dangers and benefits of state intervention to rescue failing financial firms. In the absence of a clear consensus as to which model is dominant, self-interested actors will have an interest in promoting a model which casts them in the most favorable light. Bankers will prefer narratives which cast their own firm in the most positive light, and ensure the most favorable terms from the state to their specific firms. Because of this, state responses to financial crises cannot simply be understood as applying 'best practices' to accomplish a generally agreed-upon goal. Rather, the very terms of the policy debate, and thus the definition of 'best practices' will be subject to a debate that must be understood in terms of the strength of the actors promoting models which favor their own interests. In other words, since the choice of response policies is in part a choice of model, and the choice of model is not a technical one, state responses to financial crises must be understood as *political*, and determined by the clout and self-interest of relevant actors, rather than *functional*, and a simple matter of finding a Pareto-optimal policy solution. It is for this reason that economics and public policy literatures on financial crises are inadequate. They can provide a framework for understanding crises, and identify the space for action and best practices within that framework, but cannot explain why a given framework dominates.

This understanding, in part, illustrates the chief flaw of the economics literature in conceiving of state intervention. Economics work on state responses to banking crises tends to treat state intervention as yes/no question: either the state intervenes or it doesn't. This approach misses much of the substantial variety in state responses, but is not problematic if the question of framework is prior to the model of financial crisis selected.

Within a given framework of financial crises, the nature of the problem will be understood a certain way, and thus the best way to respond will be clear. State intervention may be treated as binary because the state can be assumed to either respond in the best conceivable way or not at all. The choice of economic model, and thus the best policy of response, is itself a political one, and outside of the scope of economic modeling.[13] The public policy literature offers a more nuanced view of policy choices, by exploring in greater detail the specific policy options and their costs and benefits. However, since it cedes the explanation of the causes of financial crises to economic models, the recommendations of the public policy literature are still dependent on the frame chosen. Moreover, the goals of public policy literature are ultimately to explore the results of policy choices and make policy recommendations, making the literature more concerned with *ex ante* policy recommendations than *ex post* explanations of why a policy was chosen.

Frequently, in effect, the choice of model will determine the choice of policy, by implying which policies are optimal. The model defines not only the short-term effectiveness of a policy, but also the causes of the problem being addressed and the longer-term likelihood of problems down the line. In the context of a financial crisis, for instance, the culpability of banks and the effect a policy will have on the likelihood of future crises varies substantially between models used to explain the origins of the crisis. Therefore, self-interested groups will have reason to favor one model over another. This occurs even in contexts where interests are problematized, as the choice of model shapes the terms of debate. Some terms will be more favorable to different groups than others,

[13] Jean-Jacques Rosa and Edouard Pérard, "When to Privatize? when to Nationalize? A Competition for Ownership Approach," *Kyklos* 63, no. 1 (2010), 110-132.

by offering an understanding which paints the group as a villain or victim, prioritizing or diminishing the importance of a group and its preferences, and by suggesting policy remedies which assign costs or benefits accordingly.

The Economics Literature

Two competing models of financial crises dominate the modern debate in economics, dividing chiefly over whether financial crises are a product of random exogenous shocks or an endogenous result of firm actions and the business cycle.[14] Under an exogenous shock, or "sunspot," model, financial crises are essentially random in nature, as firms are targeted for panics regardless of their actual fundamental solvency. Under a business cycle model, however, firms engage in speculative practices which leave them more vulnerable to bank runs, and financial crises can be understood as a deviation by firms from prudential practices. These two models produce sharply different understandings of the culpability of firms, and thus the danger of state intervention creating "moral hazard" and increasing the danger of future financial crises. A narrative in which firms are the victims of exogenous shocks is one in which state aid can be justified as helping innocent firms recover from forces beyond their control. On the other hand, a narrative which sees financial crises as of the firms' own making makes state aid both harder to justify on fairness grounds and more dangerous, as it increases the willingness of firms to make the same mistakes going forward. In the business cycle model, the very acts of preventing or containing a financial crisis can create the roots of the next crisis.

The sunspot model is so-called because it is rooted in a 19th-century explanation of how purely exogenous events unconnected to financial markets, such as solar flares,

[14] John H. Boyd, Sungkyu Kwak and Bruce D. Smith, "The Real Output Losses Associated with Modern Banking Crises," *Journal of Money, Credit and Banking* 37, no. 6 (2005), 977-999.; Franklin Allen and Douglas Gale, *Comparing Financial Systems* (Cambridge, Mass: MIT Press, 2000), x, 507 p.

could produce financial panics with severe consequences.[15] In its modern form, as described by Diamond and Dybvig, the sunspot model traces how a seemingly irrational run by depositors and creditors on an otherwise healthy bank may be caused by rational behavior by those depositors and creditors responding to the asymmetrical information and danger of bank runs at the core of modern leveraged banking. [16] As such, it offers an explanation of financial panics in line with the rationality assumption and microeconomic focus of neoclassical economics. It also provides an explanation of financial crises which could destroy even well-run and prudent banks, potentially obviating banks from responsibility for crises.

Because the sunspot model frames financial crises as the product of random shocks, this has the effect of eliminating or reducing culpability of firms affected by a bank run. Within the sunspots model, banks can make a credible case that their distress is not of their making, but that they were randomly targeted by exogenous forces. This, in turn, can serve to justify more generous provision of state aid, as the moral hazard problem is greatly reduced. Not even the most liquid bank can endure a sustained bank run for long, and bank runs need not be triggered by an underlying solvency problem at the bank. Because the firm's actions did not cause the panic, there is no moral hazard in state aid rescuing the firm. This is especially the case in issues of contagion, where a bank is assumed to be at risk of a run purely because its peers are failing and regardless of its own internal position. Because the sunspot model identifies the problem in a financial crisis as a panic in which customers draw down a firm's cash reserves, the

[15] Charles Poor Kindleberger and Robert Z. Aliber, *Manias, Panics, and Crashes: A History of Financial Crises* (Hoboken, N.J: John Wiley & Sons, 2005).
[16] Ibid.; Douglas W. Diamond and Philip H. Dybvig, "Bank Runs, Deposit Insurance, and Liquidity," *The Journal of Political Economy* (1983), 401-419.; John Bryant, "A Model of Reserves, Bank Runs, and Deposit Insurance," *Journal of Banking & Finance* 4, no. 4 (1980), 335-344.

policy prescriptions that follow from the sunspot model favor a heavy emphasis on providing liquidity to firms. Because the firm may plausibly claim to be the victim of a panic beyond its cause or control, the sunspot model provides less justification for punitive measures attached to that state aid to the distressed firm. Early work in this tradition emphasized desirability of separating insolvent firms, which were unworthy of state assistance, from merely illiquid ones, which were fundamentally sound and should receive generous state aid.[17] Modern theorists dismiss the importance of determining solvency. Goodhart argues that, because illiquidity creates insolvency problems, it is both impossible and unnecessary to separate the insolvent from the merely illiquid, and both should be provided liquidity on generous terms.[18]

The chief rival to the sunspot model, the business cycle model, is derived from Minksy's financial instability hypothesis, and sees financial crises as the culmination of long-term dynamics in financial markets.[19] In essence, the financial instability hypothesis sees financial crises as the product of banks systematically misreading the danger of future financial crises, and in doing so creating the conditions that make such a crisis virtually inevitable. Essentially, the model is a cyclical one. In the aftermath of a

[17] Walter Bagehot, *Lombard Street : A Description of the Money Market* (New York: Charles Scribner's Sons, 1892), viii, 359 p.
[18] C. A. E. Goodhart, *The Regulatory Response to the Financial Crisis* (Northampton, MA: Edward Elgar Pub, 2009).
[19] Allen and Gale, *Comparing Financial Systems*, x, 507 p.; V. V. Chari, "Banking without Deposit Insurance Or Bank Panics: Lessons from a Model of the US National Banking System," *Federal Reserve Bank of Minneapolis Quarterly Review* 13, no. 3 (1989), 3-19.; Bruce Champ, Bruce D. Smith and Stephen D. Williamson, "Currency Elasticity and Banking Panics: Theory and Evidence," *Canadian Journal of Economics* (1996), 828-864.; Hyman P. Minsky, *Can "it" Happen again?: Essays on Instability and Finance* (Armonk, N.Y: M.E. Sharpe, 1982).; Neil Wallace, "Another Attempt to Explain an Illiquid Banking System: The Diamond and Dybvig Model with Sequential Service Taken Seriously," *Federal Reserve Bank of Minneapolis.Quarterly Review - Federal Reserve Bank of Minneapolis* 12, no. 4 (1988), 3.; Sudipto Bhattacharya and Douglas Gale, "Preference Shocks, Liquidity and Central Bank Policy," in *New Approaches to Monetary Economics: Proceedings of the Second International Symposium in Economic Theory and Econometrics*, eds. William A. Barnett and Kenneth J. Singleton (Cambridge [Cambridgeshire]: Cambridge University Press, 1987), 69.

financial crisis, both financial firms and regulators act extremely prudently, with a strong emphasis on avoiding future crises. This crisis-aversion leads to prudential investing and state fiscal policies focused on maximizing stability, even if it diminishes growth potential. This period of prudential investing and stability-producing policy produces both stability and moderate growth. This stability, however, becomes its own undoing. A long period without crisis reduces the fear of future crises, and both firms and states begin to take the new stability for granted. Firms look for ways to increase growth by engaging in riskier investments with higher potential profits, and by lobbying for the removal of restrictive financial regulations. States, also complacent about risks and hungry for growth, replace stability-focused policies with ones riskier, growth-centric ones. In this period, there may be a general feeling that financial crises have been "solved," and that new financial instruments or policies can increase growth without threatening stability.[20] New risk management techniques can create the illusion that risk can be measured, anticipated, and contained. Reinhart and Rogoff trace numerous instances prior to financial crises through the history of capitalism of economic actors and policymakers espousing the belief that "this time it's different."[21]

This overextension, however, ultimately makes the financial system vulnerable. Firms increase their exposure to risky investments, and, because they believe the risk is contained, at the same time increase their leverage, decreasing the liquidity cushion protecting them against panics. As a consequence, disturbances that would create only minor losses in the early or middle periods cause major solvency issues, as firms' pursuit of high-risk high-reward investments cause them to lose value rapidly. Moreover, their

[20] Kindleberger and Aliber, *Manias, Panics, and Crashes: A History of Financial Crises*; Reinhart and Rogoff, *This Time is Different: Eight Centuries of Financial Folly*
[21] Ibid.

decreased liquidity leaves them only narrow margins to resist panicking creditors and depositors. In the late period, therefore, financial systems are highly vulnerable to crises from events that would be only minor disturbances in earlier times. Actors' becoming aware of this vulnerability only increases the danger of crises at this late point. Conscious that that the market is highly vulnerable to only minor disturbances increases investors' willingness to react severely to any such disturbance.

The business cycle model is both based on different assumptions than the sunspot model, and carries different implications for bank culpability and the efficacy of bank rescue policies. Unlike the sunspot model, firms create the circumstances of their own undoing. Firms overexpose themselves because their managers wrongly believe that the temporary period of stability can be projected indefinitely. Alternately, they may believe that the crisis point is coming, but that until it does, it is rational to continue to attempt to maximize short-term profits, especially if the possibility of a state-backed rescue exists. Therefore, in this model, moral hazard from the precedent of state intervention becomes a very real concern. Unlike in the sunspots model, which firms fail in a financial crisis are not random, but a product of which firms prepared for such a moment and which did not. The precedent of how the state responded in the last crisis will provide a guide as to how it can be expected to respond in the next one. If that earlier precedent either let firms fail or imposed harsh terms, than the firms which can expect to survive a crisis in the best shape will be the ones with more conservative and less short-term profitable risk portfolios. If that earlier precedent insulated shareholders from losses, then the state can be expected to do so in the future, and some portion of the downside of risky investments is passed from private owners to the public. This, in turn, makes those risky investments

more attractive, increasing the likelihood of a crisis if a generous state response is anticipated.

Therefore, under a business-cycle model, state aid to banks should be on stringent terms, to discourage such risky behavior in the future. Moreover, under a business cycle model, it becomes important to separate banks with solvency problems from those which are merely illiquid. Illiquid banks, caught in the contagion from the fall of their less-prudent brethren, are not clearly culpable, and may be supported with liquidity supports without significant moral hazard dangers. Insolvent banks, however, which for business cycle models are the ones at the core of the crisis, require either capital injections to recover their balance sheets or an orderly wind-down, and any aid to them carries severe moral hazard dangers.

Empirically, there is little consensus as to which model is more valid. Boyd et al argue the evidence supports the sunspots model, in that they cannot find statistically significant macroeconomic indicators of crises.[22] Gorton, however, comes to the opposite conclusion, finding stronger support for the business cycle model, as financial crises follow asset price bubbles.[23] Undeniably, however, the models produce different interpretations of the causes of crises, the culpability of banks, and the moral hazard of state aid to banks. Therefore, it should not be surprising that materially-interested parties adopt the model which best suits their interest. As DeGrauwe traces, proponents of financial liberalization in the run-up to the 2007-2009 crisis seized upon the Efficient Markets Hypothesis out of the neoclassical tradition to deflect blame from firms for earlier financial crises, shifting blame onto state regulations and justifying financial

[22] Boyd, Kwak and Smith, *The Real Output Losses Associated with Modern Banking Crises*, 977-999
[23] Gary Gorton, "Banking Panics and Business Cycles," *Oxford Economic Papers* 40, no. 4 (1988), 751-781.

liberalization. Similarly, managers and owners of failing banks would favor sunspot explanations of why their bank was suffering while others survived. Dick Fuld, the CEO of Lehman Brothers, was highly vocal that his bank was fundamentally solvent and healthy, and that the only real problem it faced was that short-sellers had targeted his bank unfairly.[24] In this argument, therefore, Lehman Brothers was fundamentally sound, and should be given unlimited liquidity until such time as the panic passed.

If there is a lack of consensus on which model is dominant, there is also a lack of consensus on the efficacy of policies to contain financial crises. Several studies find little or no macroeconomic effect from spending on financial rescues, that even substantial spending to contain financial crises has little effect on containing damage to the real economy.[25] Such studies, however, are frequently flawed, either in their model of how they measure the effects of policy action or in how they conceptualize or measure policy action.[26] Policymakers in financial crises have a strong political incentive to act, regardless of the economic efficacy of a policy, just to appear to be doing something instead of nothing. Therefore, it is rare to find any but the smallest of financial crises which no state intervention takes place. This, in turn, means that few cases exist from which to model the effects of no support. Empirical work may also not examine if or how state intervention affects the potential for future financial crises. Potentially as damaging, such empirical work frequently does not differentiate between forms of state

[24] Andrew Ross Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves* (New York: Viking, 2009). p. 507.
[25] Guillermo Rosas and Nathan M. Jensen, "After the Storm : The Long-Run Impact of Bank Bailouts," in *Bailouts: Public Money, Private Profit*, ed. Robert E. Wright (New York: Columbia University Press, 2010), 108.; Peik Granlund, "Do Bank Exit Regimes Affect Banking Conditions?" in *Who Pays for Bank Insolvency?*, ed. David G. Mayes (Houndmills, Basingstoke, Hampshire: Palgrave Macmillan, 2004), 180.
[26] Rosas and Jensen, *After the Storm : The Long-Run Impact of Bank Bailouts*, 108

intervention.[27] In part, this failure to differentiate is a function of the models themselves. As demonstrated above, the models not only determine the origins of the crisis, but also imply the optimal policy approach to address it. As such, policy choice is not problematic, and can be assumed to follow best practices under the model used to examine crises.

Public Policy & Financial Crises

The public policy literature offers a greater variety in responses than the economics literature, but remains hidebound by the choice of underlying framework. As Coates notes, relying on a neoclassical paradigm carries with it certain implicit policy biases. Most notably, an emphasis on GDP as the key indicator blinds public policy analysis to other considerations, such as equality or stability. That being said, the public policy literature is far from narrowly pro-privatization, as might be expected from neoliberal rhetoric. The literature has long embraced a temporary-nationalization model for developing countries in financial crises.[28]

There are two key issues in using the public policy literature to study financial crises. The first is that the literature devotes far more attention to financial crises in the developing world than to crises in the advanced economies. In part, it reflects the "this time is different" thinking that predominated in the United States and Western Europe on the eve of the 2007-2009 crisis; that superior understandings of financial crises and superior tools to address them had meant that advanced economies either would no

[27] Mariya Teteryatnikova, "Resilience of the Interbank Network to Shocks and Optimal Bail-Out Strategy: Advantages of" Tiered" Banking Systems," *European University Institute, Working Paper, Italy* (2009).
[28] Eduardo Levy Yeyati et al., "A Reappraisal of State-Owned Banks [with Comments]," *Economía* 7, no. 2 (2007), 209-259.; Simon Johnson and James Kwak, *13 Bankers: The Wall Street Takeover and the Next Financial Meltdown* (New York: Pantheon Books, 2010).

longer experience crises or, if they did, that they had to tools to unproblematically deal with them.

This thinking was to some degree borne out by the empirical data. Since the Second World War, the majority of financial crises have occurred in developing economies.[29] By no means were they exclusively in the developing world, as major crises in Japan, Sweden, and the United States all occurred in that period. Those crises, however, were generally treated as isolated events, and the public policy financial crisis literature focused most of its attention on the developing world. Here a fairly broad consensus developed around a model to address financial crises, based around temporarily nationalizing distressed banks in order to either wind them down or restore them under state supervision. The nationalized banks were then to be restored to the market once the crisis had passed. This model was advocated across the developing world, including in the Argentine Crisis of 1999-2002 and in the states affected by the 1997 East Asian Financial Crisis.[30] Its application to advanced economy financial crises has been disputed, given the different conditions that follow from the greater fragility of developing countries, both in vulnerability to capital flight and because of their greater reliance on international assistance to fund financial interventions. International investors are seen as more ready to abandon a country without a long history of financial stability than one of the long-established advanced capitalist economies. In developing countries, investors' fear that they will not be able to recoup their investments leads to a bank run on a country-wide scale. Additionally, without that reputation as fiscally responsible, developing countries lack the ability to run the substantial deficits that may

[29] Reinhart and Rogoff, *This Time is Different: Eight Centuries of Financial Folly*
[30] Johnson and Kwak, *13 Bankers: The Wall Street Takeover and the Next Financial Meltdown*; Yeyati et al., *A Reappraisal of State-Owned Banks [with Comments]*, 209-259

be necessary to fund extensive financial rescues. Therefore, they must turn to the International Monetary Fund or other international assistance, altering the political calculations as IMF technocrats make implementation of the IMF's preferred model a requirement of accepting their assistance. For these reasons, many disputed the relevance of public policy work on developing economy financial crises to policymakers in the advanced economies. Nevertheless, an approximation of this model would be adopted in both the United States and the United Kingdom.

Work on financial crises in the advanced economies is limited by the relatively small number of large financial crises in advanced economies post-World War II. The dominant cases studied are the Swedish crisis of 1991-1992 and the Japanese crisis of the early 1990s. The former is generally seen as an exemplar of a how to execute a "bad bank" response policy, in which the state responds to the financial crisis with extensive toxic asset purchases.[31] The latter, conversely, is generally held up as a cautionary tale of what not to do. in the Japanese case, the state propped up distressed "zombie banks" with enough assistance to prevent them from failing, but not so much assistance that they were able to return to normal operation.[32] Almost universally seen as a failure, the literature nevertheless remains divided on what Japan should have done differently. Some advocate that Japan should have wound down its banks in an orderly fashion, enduring a short painful recession instead of a decade of stagnant growth. Others, however, argue

[31] Achim Hauck, Ulrike Neyer and Thomas Vieten, "Reestablishing Stability and Avoiding a Credit Crunch: Comparing Different Bad Bank Schemes," *DICE Discussion Paper* 31 (2011).; Mark Blyth, *Great Transformations : Economic Ideas and Institutional Change in the Twentieth Century* (New York: Cambridge University Press, 2002), xii, 284 p.; Natalja v. Westernhagen et al., "Bank Failures in Mature Economies," *Basel Committee on Banking Supervision Working Paper*, no. 13 (2004).
[32] Ibid.

that Japan should have done more to support its banks, not only avoiding recession but returning them to ruddy health, even at the cost of moral hazard.[33]

In both cases, the public policy literature pays scant attention to local political and economic contexts. Economically, the public policy literature, like the economics literature, generally treats capitalist economies as differing only in level of development, and ignores local varieties of capitalism. This reflects the logic of neoclassical economics, in which a single institutional form should demonstrate its superiority. Other economies, and firms within those economies, will adopt that form or fail and be replaced by firms adopting that form. Under that logic, little attention needs to be paid to diversity of forms, nor to the local political or normative context. This is contrary, however, to the findings of the comparative capitalisms literature in Comparative Political Economy, which finds that national diversity in organization of capitalism is both enduring and creates differing but inferior advantages and disadvantages.[34] The public policy literature's discounting of this diversity limits its applicability, as solutions that may work for Sweden or Japan may not be applicable to other economies.

The second context public policy overlooks is the political. Work in the public policy literature may discuss in broad terms the viability of policy options. Eichengreen, for example, includes in his discussion of the strengths and weaknesses of a Tobin tax, a tax on currency exchanges, some discussion of its political viability, concluding that it would be too unpopular to be implemented.[35] Such discussion is limited, and generally focused on the potential for implementing future policies. This reflects the goals of the

[33] Ibid.
[34] Allen and Gale, *Comparing Financial Systems*, x, 507 p.
[35] Barry J. Eichengreen, *Toward a New International Financial Architecture: A Practical Post-Asia Agenda* (Washington, D.C: Institute for International Economics, 1999).

public policy literature, which aims to provide *ex ante* policy recommendations, not *ex post* analysis of why a given policy was chosen. It exists to outline the strengths and weaknesses of various policy tools available. The public policy literature looks backward, therefore, largely with an eye toward the effectiveness of policy choices. It is not concerned with exploring the politics surrounding policy choices. The public policy literature provides a valuable insight into the range of policies available, and into how and why a given policy succeeds or fails and which groups actually benefited or lost. It has only limited utility, however, in explaining which social actors supported which policies before implementation, how they made their interests felt, or why states adopt the policies they do. This is not its purpose, and it should therefore not be over-criticized for this oversight, but it limits the utility of the literature to exploration of the politics of financial crises.

Political Economy and Financial Systems

Economics and public policy literatures on financial crises can provide 'best practice' policy prescriptions within a pre-determined theoretical framework. This makes framing crucial to determining how best to respond to financial crises. In the absence of a consensus on the most appropriate frame, therefore, the choice of frame, and thus the best policy responses, must be a political question, and the interests and relative strength of key actors will be determinative. In order to explain variation in state responses to financial crises, therefore, it is necessary to examine differences in the organization of national financial systems, and the political implications of those divisions. Central to this will be a comparative study of the organization of national financial systems, and the political consequences of those different organizational models.

The political economy literatures on capitalism have long debated on a central question of convergence versus persistence of national diversity. This debate is as old as Marx, who saw capitalism as flattening national differences into a global regime of production, and Weber, who saw cultural differences between northern European Protestants and southern European Catholics as driving divergent patterns of economic activity and entrepreneurship.[36] These debates have carried into the present day, in a debate that maps approximately onto an International Political Economy (IPE)/Comparative Political Economy (CPE) divide. Scholars emphasizing international dynamics, and capitalism as a global system, whether neoliberal or Marxist, tend to see a focus on international pressures to conform to 'best practices,' leading to an international convergence on a single model of capitalism. These fits with a tendency within IPE to "black box" the state, and assume that domestic factors will play only a minor role in shaping responses, while common international pressures will ultimately produce common domestic responses.[37] Within CPE, however, scholars focusing on domestic factors, from Weber through Gerschenkron, Shonfield, and the modern varieties of capitalism literature, emphasize the persistence of national diversity in capitalist systems, especially in the diversity of national financial systems.[38]

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[36] Karl Marx and Friedrich Engels, "The Communist Manifesto," in *The Marx-Engels Reader*, ed. Robert C. Tucker (New York: Norton, 1848 [1978]).; Karl Marx and Friedrich Engels, "Capital, Volume 1," in *The Marx-Engels Reader*, ed. Robert C. Tucker (New York: Norton, 1867 [1978]).; Max Weber and Stephen Kalberg, *The Protestant Ethic and the Spirit of Capitalism* (London: Fitzroy Dearborn, 1930 [2001]).; Wolfgang Streeck, "E Pluribus Unum? Varieties and Commonalities of Capitalism: 10/12," *Max - Planck - Institut Für Gesellschaftsforschung.Discussion Papers* (2010).

[37] Helen Callaghan and Masanobu Ido, "Introduction: Varieties of Capitalism, Types of Democracy, and Globalization," in *Varieties of Capitalism, Types of Democracy and Globalization*, ed. Masanobu Ido, Vol. 18 (Abingdon, Oxon: Routledge, 2012), 3.

[38] Weber and Kalberg, *The Protestant Ethic and the Spirit of Capitalism*; Alexander Gerschenkron, *Economic Backwardness in Historical Perspective: A Book of Essays* (New York: F. Praeger, 1965).; Andrew Shonfield, *Modern Capitalism: The Changing Balance of Public and Private Power* (New York: Oxford University Press, 1965).

The debate between the two approaches has gained a new relevance in recent decades with the increasing international integration across multiple spheres generally classified together as 'globalization.' Advocates of the convergence thesis see a combination of global integration of financial markets, increasing trade integration, and the rise of international flexible production regimes in the real economy as pressing for a convergence on Anglo-American liberal capitalism.[39] As economies become more integrated, firms and states must adopt 'best practices,' or fall behind economically. Others within the convergence school take a less functionalist line, emphasizing not adaptation to economically-rational 'best practices,' but rather convergence as a result of the ascendency of neoliberal ideas.[40] One noteworthy variant on the 'convergence to best practices' approach is Callaghan's, which sees convergence on a 'mixed' system, with elements of both organized and liberal capitalism, rather than simply convergence on liberal capitalism.[41] Theories that can be dubbed 'hegemonic-convergence' approaches sees convergence as a result of incentives to conform to the politically and economically

[39] Philip G. Cerny, "Power, Markets and Accountability : The Development of Multi-Level Governance in International Finance," in , eds. Andrew Baker, David Hudson and Richard Woodward, Vol. 16 (London ;New York: Routledge, 2005), 24.; Helen Callaghan and Martin Höpner, "Changing Ideas: Organised Capitalism and the German Left," *West European Politics* 35, no. 3 (2012), 551-573.; Robert Boyer, "The Convergence Thesis Revisited: Globalization but Still the Century of Nations?" in *National Diversity and Global Capitalism*, eds. Suzanne Berger and Ronald Philip Dore (Ithaca, N.Y.]: Cornell University Press, 1996), 29.

[40] Cerny, *Power, Markets and Accountability : The Development of Multi-Level Governance in International Finance*, 24; David Coates, ed., *Varieties of Capitalism, Varieties of Approaches* (New York: Palgrave Macmillan, 2005), xi, 300 p.; Peter Burnham, "Class, Capital and Crisis: A Return to Fundamentals," *Political Studies Review* 8, no. 1 (2010), 27-39.; Eleni Tsingou, "Regulatory Reactions to the Global Credit Crisis: Analysing a Policy Community Under Stress," in *Global Finance in Crisis: The Politics of International Regulatory Change*, eds. Eric Helleiner, Stefano Pagliari and Hubert Zimmermann (New York: Routledge, 2010), 21.; Hubert Zimmermann, "Varieties of Global Financial Governance? British and German Approaches to Financial Market Regulation," in , eds. Eric Helleiner, Stefano Pagliari and Hubert Zimmermann (New York: Routledge, 2010), 121.

[41] Helen Callaghan, "Beyond Methodological Nationalism: How Multilevel Governance Affects the Clash of Capitalisms," *Journal of European Public Policy* 17, no. 4 (2010), 564-580.

dominant power in the international system.[42] In this later view, neoliberal economic practices are not necessarily uniformly advantageous in all times and places, but are optimal contextually. The economic centrality of the United States, only increased with global integration, means that states have an incentive to adopt economic systems most compatible with American neoliberalism.

This argument, however, cannot explain why the pressures come especially in the 1990s and after, when the rise of the developing world 'BRICs' (Brazil, Russia, India, and China), and the decline of the US economy in relative terms leave the US less economically-central than in the 1950s and 1960s, arguably the heyday of nationally-distinctive capitalist systems. More compelling, therefore, are hegemonic-convergence arguments rooted in power politics, with the ascendency of neoliberal ideas and economic policies reflecting the political clout the US enjoyed in its 'unipolar moment' following the collapse of the Soviet Union. Through the 1990s and 2000s, the US enjoyed a peerless though not limitless ability to make its influence felt in international agreements, including those relevant to trade and financial policy. Both hegemonic-convergence arguments, however, unlike convergence-to-best-practices arguments, suggest that the momentum for convergence may already be shifting, as US economic and political strength, while perhaps still increasing in absolute terms, decline relative to the rising political and economic importance of the BRICs, and especially China.

Comparative Capitalisms

[42] Michael Maurice Loriaux, "The End of Credit Activism in Interventionist States," in *Capital Ungoverned: Liberalizing Finance in Interventionist States*, ed. Michael Maurice Loriaux and others (Ithaca: Cornell University Press, 1997), 1.; Peter J. Katzenstein, *Between Power and Plenty: Foreign Economic Policies of Advanced Industrial States* (Madison: University of Wisconsin Press, 1978).; Burnham, *Class, Capital and Crisis: A Return to Fundamentals*, 27-39; Leo Panitch and Sam Gindin, "Euro-Capitalism and American Empire," in , ed. David Coates (New York: Palgrave Macmillan, 2005), 139.; Georg Menz, *Varieties of Capitalism and Europeanization: National Response Strategies to the Single European Market* (Oxford: Oxford University Press, 2005).

The convergence thesis, regardless of its mechanism, has not gone unchallenged within comparative political economy. Implicit within the convergence thesis, of course, is the existence of varieties of capitalism which must 'converge' to lose their national distinctiveness. Within the convergence literature, this is seen in a teleological light, as part of the development process. States must pass through stages in their economic development, and all will not reach the same stage of development at the same time. Nor, for that matter, need states all take the same path to development. Gerschenkron, and much of the development literature, have traced how multiple alternate paths to industrialization and development may exist.

The political economy literatures on both convergence and comparative capitalisms therefore both recognize an existing diversity of capitalist systems, and differ primarily in whether they view these differences as likely to persist indefinitely or likely to eventually converge on a single capitalist model. At the present time, however, national distinctiveness exists, and can potentially have an impact on the policymaking processes of states. The key difference between the approaches at this level, therefore, is that convergence advocates see persistent differences as pathological, and argue that the optimal response for all states is to adopt a common 'best practices.' For comparative capitalist theorists, however, these differences may represent equivalently stable configurations of interests, whether for economic, political, or social reasons, and therefore no single set of 'best practices' exists. The ability of these diverse systems to perpetuate themselves, both in economic good times and crises, will depend on the mechanisms the theories identify for that self-perpetuation. Thus, evaluation of a comparative capitalisms argument must examine the microfoundations of its theory, to

identify crucial sectors and the ways in which they conceive of and promote their interests. Here, studying systems in crisis, especially crucial sectors such as finance, can be especially enlightening.

Whether different models of national capitalisms are stable and equivalent alternatives or transient legacies of different development patterns, the CPE literature has a long tradition of examining divergent national capitalist systems and their political consequences. This comparative capitalisms literature, which traces through from Weber's *The Protestant Ethic and the Spirit of Capitalism* and Shonfeld's *Modern Capitalism*, finds the beginnings of its contemporary form in the late 1970s and early 1980s work of Peter Katzenstein on foreign economic policy and small-state industrial policy and John Zysman on comparative financial systems.

Katzenstein builds on Schmitter's work on neo-corporatism, which focused on the role of societal actors, and the relative advantages of decentralized liberal systems versus the corporatism found in small European states.[43] Katzenstein followed on this, identifying three chief variants of capitalism: liberal capitalism, found in the United States and marked by pluralist conflictual bargaining, statist capitalism, found in Japan and marked by a heavy state role in directing the economy, and neo-corporatism, as found in the European states. In *Between Power and Plenty*, Katzenstein focuses on how these differences manifest in the foreign economic policy of the major powers, with the US and UK favoring liberal economic policies, Japan a form of neo-mercantilist promotion of

[43] Philippe C. Schmitter, "Still the Century of Corporatism?" *The Review of Politics* 36, no. 1 (1974), 85-131.; Peter J. Katzenstein, *Small States in World Markets: Industrial Policy in Europe* (Ithaca, N.Y: Cornell University Press, 1985).; Katzenstein, *Between Power and Plenty: Foreign Economic Policies of Advanced Industrial States*

domestic exports, and the European states taking a middle course.[44] In *Small States in World Markets*, Katzenstein turns to domestic economic policies, especially in smaller European states.[45] As Katzenstein traces, the small states of Europe (Austria, Belgium, Denmark, the Netherlands, Norway, and Switzerland) developed a distinctive pattern of response to the pressures of the Great Depression rooted in an ideology of social partnership, relatively centralized and concentrated interest groups, and a focus on voluntary and informal coordination of conflicting objectives. Under state guidance, peak associations of business groups and labor organizations come together to negotiate solutions to economic pressures. This offers advantages over the decentralized conflictual model of liberal capitalism without the heavy hand of the state found in statist models. Responses are faster than in liberal systems, and more sensitive to market forces than in statist systems. Katzenstein's approach emphasizes both economic factors and political bargains, but is largely functionalist in its approach: national diversity survives in the small states because their vulnerability to international markets is greater than the larger states, and thus their optimal solutions are different. Explaining corporatism's self-perpetuation is thus unnecessary, as it is in the best interests of all crucial economic actors.

Katzenstein accords little role for finance in his account, apart from noting that some of his cases focus on developing internationally-competitive financial sectors and others do not. Finance, therefore, is present in Katzenstein only as a dependent variable, and not as a causal force in its own right. The centrality of finance to modern capitalism, and the variety of forms it takes, makes this a significant oversight. This is especially true

[44] Ibid.
[45] Katzenstein, *Small States in World Markets: Industrial Policy in Europe*

because the shape of a national financial system can play a key role in determining the time horizons of firms, and therefore their incentives toward various strategies of adjustment.

Contemporary to Katzenstein, Zysman offered an account of varieties of national capitalist systems that not only includes finance, but makes it the central causal factor.[46] Zysman sought to identify the sources of variance in national response policies to the recession of the 1970s. To that end, he identified three varieties of financial systems within capitalist states: the liberal financial market-based system of the Anglo-American world, the private-bank-based system of Germany, and the state-bank-based system of France. These three each offer a distinct way of solving the political and economic problems of growth, and Zysman's analysis of their strengths and weaknesses has been the bedrock of much of the analysis of comparative financial systems which has followed.[47]

His chief insight is that states with liberal, financial-market-based, systems focus firms on short-term objectives, enabling great responsiveness by both firms and investors but also limiting the capacity of firms to engage in projects which may not be profitable for some time. Only firms with a long and successful track record can access long-term funding from the bond market without paying a high risk premium. Firms must therefore focus on quarter-to-quarter profits, to attract short-term investors buying and selling shares on the stock market. In systems where banks provide the bulk of firm capital, a

[46] Ibid.; John Zysman, *Governments, Markets, and Growth: Financial Systems and the Politics of Industrial Change* (Ithaca [N.Y.]: Cornell University Press, 1983).
[47] Karl Orfeo Fioretos, *Creative Reconstructions: Multilateralism and European Varieties of Capitalism After 1950* (Ithaca: Cornell University Press, 2011).; Iain Hardie et al., "Zysman Thirty Years on: The Political Economy of Finance Revisited" 2011).; Streeck, *E Pluribus Unum? Varieties and Commonalities of Capitalism: 10/12*

longer-term focus is possible, though there must be some mechanism to guarantee investors' stake. In stock-market systems, investors have very little control over firms, being generally only minority shareholders, but can easily unload their shares if a firm's performance declines. Lack of control is not an issue, but firms must consistently show short-term positive returns or lose the ability to access capital markets. In bank-based systems, stakes are larger and harder to unload, so some mechanism must exist to guarantee investors' stakes and guide investment decisions. In statist bank-based systems, the state controls the flow of capital to firms, and can direct credit to those sectors it wishes to promote and away from those it wishes to deemphasize. This enables the state to promote new industries with greater ease than in liberal systems, but allows unprofitable firms to survive because of their political influence rather than economic performance. Alternately, in private bank-based systems, banks solve this dilemma by taking an active role in managing investments than the essentially passive role of capital investors in financial-market systems. Unlike the many small investors in a stock-market system, the bank will be one of only a few major owners, and therefore will have much greater say in how the firm is run. This enables the bank to more confidently provide long-term financing, as the bank will have greater influence over the operation of the firm, and greater access to private information, such as the firm's internal accounts and strategies. The state in such a system plays a smaller role than in statist systems, where it can affect firms directly through the state-controlled financial system. However, the state can more easily shape industrial policy than in a financial-market system, where the state has relatively few levers to shape firms' incentives. The state does not have direct influence over firms, but because it is dealing with a handful of banks rather than a large

number of small investors, the state can find the banks to be useful allies in accomplishing shared objectives. Conversely, the banks may more easily promote their interests to the state than investors can in a financial market system.

Zysman and Katzenstein's models' strengths and weaknesses complement each other, though their theories do not mesh perfectly. Katzenstein largely ignores finance, while Zysman focuses extensively on it. Conversely, Zysman pays relatively scant attention to the organization of capitalist systems beyond the realm of finance, except insofar as firms respond to long- or short-term funding incentives. The ability of bank-based systems to function depends in part on the structure of the industries, although will itself in turn help shape the direction of those industries. Financial-market systems can function with any form of industrial organization, since they ultimately are only concerned with short-term growth prospects. That short-term focus, however, prejudices financial-market systems toward firms that can rapidly adapt to maximize short-term potential. Bank-based systems, however, because they involve long-term funding, operate better in more stable environments. In the absence of stability, long-term funding is extremely risky, given the greater potential for future disturbances and thus losses. Therefore, banks will require some manner of assurance of stability. In part, this can be provided by greater control, but this will likely be insufficient, as even complete control cannot prevent disruptions from labor strife or other market disruptions. In state-bank systems, state ownership can solve this problem through implicit or explicit state guarantees, such that state-bank systems can weather some degree of instability. Private-bank systems, however, lack that clear state guarantee. Therefore, they must provide some form of private guarantee of stability. To that end, corporatist arrangements, as

Katzenstein describes, are both enabled by bank finance, which allows a longer-term view and thus easier coordination, and are enable private-bank finance to survive, by guaranteeing a measure of stability absent in financial-market systems. This greater stability makes longer-term investment possible, and that longer-term investment reinforces corporatism as well, because firms are in less-direct competition for fickle financial-market capital.

The division between corporatist, bank-finance systems exemplified by Germany and the liberal, market-finance systems of the Anglo-American states would be central to later work on comparative capitalisms. Albert attracted significant public and academic attention for his discussion of a Rhineland model of capitalism offering a different set of advantages and disadvantages than the Anglo-American model of orthodox neoclassical economics.[48] Deeg would build on Albert's division of Anglo-American and Rhineland capitalisms, focusing narrowly on German capitalism but with greater theoretical rigor than Albert's largely descriptive and under-theorized business press work.[49] While earlier work in the comparative capitalisms tradition would consider the origins of national diversity, Deeg gave considerable attention to the perseverance of these diverse systems. Key for Deeg is how Germany's *Gruppenwettbewerb* ('group competition') banking system self-perpetuates itself by maintaining capacity for joint action within Germany's three major banking groups as they compete with each other, and with the

[48] Michel Albert, *Capitalism Vs. Capitalism : How America's Obsession with Individual Achievement and Short-Term Profit has Led it to the Brink of Collapse* (New York: Four Walls Eight Windows, 1993), xix, 260 p.
[49] Richard Deeg, *Finance Capitalism Unveiled: Banks and the German Political Economy* (Ann Arbor: University of Michigan Press, 1999).

broader world.[50] Deeg, however, focuses on Germany as a unique case, and does not attempt to find broader implications for comparative capitalisms outside of Germany. Allen and Gale do offer a systematic and methodologically-rigorous examination of the differences between financial systems based on capital markets and those based on banks as financial intermediaries, with extensive formal modeling and large-n empirical work.[51] Following Albert, Allen and Gale do not consider French state banks as significantly different from German private banks, instead grouping them as a single category of 'financial-intermediary' systems opposite Anglo-American financial-market-based systems. They identify distinct advantages and disadvantages to each system, ultimately concluding that neither system is obviously superior, as each outperforms the other in some ways. As such, they are critical of neoclassical tendencies to see liberal systems as inherently superior, and reject the convergence thesis. Liberal systems allow for a greater diversity of views on the pricing of assets, by allowing more actors greater opportunity to act on their views than intermediary systems, where only a relatively few actors' views on asset price matter. This enables greater innovation, as it is easier for new firms to find investors. However, financial intermediary systems greatly reduce the complexity for individual investors, who can rely on the banks' expertise, and therefore lower the knowledge-based barriers to entry for investors. Therefore, overall levels of capital for investment will be higher in bank-based financial-intermediary systems. They do not find a significant effect on the likelihood of financial crisis, but find that bank-based systems offer intertemporal smoothing, providing steady access to capital even in times of crisis. Therefore, they conclude that market-based systems do better in good times,

[50] Ibid.
[51] Allen and Gale, *Comparing Financial Systems*, x, 507 p.

but that intermediary-based systems outperform market systems in bad times. Allen and Gale's approach, however, does not consider variables outside of financial sector organization, meaning they discount the importance of both the political context and the organization of the broader economy.

Varieties of Capitalism

Hall and Soskice's Varieties of Capitalism drew significantly on these existing literatures. Their greatest contribution was to combine work on both industrial organization and financial organization, emphasizing the important of institutional complementarities to developing stable equilibria around divergent models of modern capitalism. Hall and Soskice, unlike Zysman or Katzenstein, but following on Albert, Allen and Gale, and other work from the 1990s, identify two varieties of capitalism, which differ on several dimensions.[52] Hall and Soskice identify four areas in which capitalist systems may be oriented to be either liberal and market-oriented or coordinated and managed through organized capitalism: financial systems, labor markets, education and training systems, and research & development systems.[53] If allowed to vary independently, and limited to these four essential dimensions, this would produce 16 possible configurations. Hall and Soskice, however, argue that there are efficiency gains from orienting all four of these four dimensions in the same direction, which produce a lock-in effect through institutional complementarity.[54] Change on only one dimension will reduce the overall economic efficiency of the system, by producing incoherent incentives and time horizons, and therefore be sub-optimal and unlikely. Change will

[52] Peter A. Hall and David W. Soskice, *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage* (New York: Oxford University Press, 2001).
[53] Ibid.
[54] Ibid.

only produce gains if all four dimensions are changed simultaneously, a high barrier making it unlikely for systems to change orientation away from the two ideal configurations of all institutions oriented toward liberal competition or all institutions oriented toward organized cooperation. As discussed above, longer-term finance, as provided by bank-based systems, both enables and is enabled by institutions outside of finance which reinforce stability. Organizing finance on liberal lines produces greater returns if labor markets and competition policies are also organized on liberal lines, focusing firms on purging inefficiencies and allowing rapid labor force readjustment to maximize short-term growth. Conversely, organizing finance on private-bank lines produces greater returns if greater labor security and a focus on coordination over competition produce greater stability. These complementarities work in the other direction as well. It is easier to maintain more rigid labor markets, with more difficulty in releasing workers, if a reliable long-term funding source may be derived from private-bank financing. Moreover, a focus on extensive and expensive worker training is justifiable only if longer-term finance insulates firms from the pressure to shed workers in the face of short-term downturns, and if a focus on coordination diminishes poaching of trained workers by rivals. Because of this, national economic systems should converge on one of two basic models. The first, Liberal Market Economies (LMEs) favor market signals and capital-raising based on stock markets, emphasizing decentralization, short-term advantage, and competition. The second, Coordinated Market Economies (CMEs), favor organization of interests and private bank-based capital-raising, emphasizing cooperation and long-term planning for mutual advantage. "Mixed" national systems, without a common logic across dimensions, will produce

inefficiencies, and thus should feel pressure to converge to either an LME or CME model.

Critiques of Varieties of Capitalism

Hall and Soskice's work, while building on existing traditions in the literature, attracted considerable attention, and a wave of scholarly work followed. In addition to inspiring a significant body of research, Hall and Soskice's Varieties of Capitalism framework also inspired several significant criticisms, all of which can in essence be reduced to a focus on the microfoundations and mechanisms of the model. The theory as presented in Hall and Soskice's original formation has been criticized as "just so" story, without a clear accounting of the origins of the various forms of national capitalist systems or formulation of the conditions under which the national varieties are likely to change, whether to convergence or to some new, as-yet-unspecified alternative. Hall and Soskice's mechanism for replication of the system is one of path dependence produced by institutional complementarity. This approach can be criticized in three fashions: on the number of types of capitalisms, the strength of the theory of change and continuity, and the economism of the underlying mechanisms

How Many Varieties of Capitalism?

Hall and Soskice, like their forbearers in the 1990s comparative capitalism literature but unlike earlier work by Katzenstein and Zysman, identify two models of capitalism based on a binary divide between liberal and coordinated approaches and institutional complementarities creating incentives for convergence across sectors. This model, however, has both theoretical and empirical difficulties.

Theoretically, both the number and relative importance of the dimensions may be debated. In Hall and Soskice's formulation, all four dimensions are of equal importance in causal force. This assumption, however, may not withstand either theoretical or empirical scrutiny. The coequal importance especially is a strong assumption that has not gone unchallenged. Various scholars have argued for the superior importance of one or another. In Katzenstein's framework, labor markets are preeminent, and financial systems appear only in passing. Zysman and many later scholars argue for the preeminence of financial systems.[55] Whether a financial system has the short-term orientation of a capital market system or the long-term, "patient capital" focus of a bank-capital based system determines the time horizon for firms, and thus their tolerance for short-term losses in pursuit of long-term gains from investments in worker training, research & development, and long-term labor contracts. Moreover, finance, dealing with more fungible concerns than labor or research institutions, may be more changeable, and thus more vulnerable to international pressures.

Additionally, it is not obvious that the four dimensions Hall and Soskice consider are the four essential dimensions to the exclusion of others. Weber and more modern scholars following from Weber emphasize the importance of culture and norms as an independent force shaping institutional choices.[56] Other authors point to the importance of political structures, especially the electoral system rules, dynamics of party

[55] Uwe Becker, *Open Varieties of Capitalism : Continuity, Change and Performances* (Basingstoke ;New York: Palgrave Macmillan, 2009), x, 222 p.; Fioretos, *Creative Reconstructions: Multilateralism and European Varieties of Capitalism After 1950*; Thomas Kalinowski, "Regulating International Finance and the Evolving Imbalance of Capitalisms since the 1970s: 11/10," *Max - Planck - Institut Für Gesellschaftsforschung.Discussion Papers* (2011).; Zysman, *Governments, Markets, and Growth: Financial Systems and the Politics of Industrial Change*

[56] Blyth, *Great Transformations : Economic Ideas and Institutional Change in the Twentieth Century*, xii, 284 p.; Neil Fligstein, *The Architecture of Markets: An Economic Sociology of Twenty-First-Century Capitalist Societies* (Princeton, N.J: Princeton University Press, 2001).; Ian Bruff, *Culture and Consensus in European Varieties of Capitalism: A "Common Sense" Analysis* (New York: Palgrave Macmillan, 2008).

competition, and the federal or unitary nature of the political system as key forces in determining economic structures, as discussed below.

Finally, Crouch criticizes Hall and Soskice for determining a typology, then slotting states into that typology, rather than focusing on empirical observation as a way to guide typologies.[57] A national focus may be overly-reductive, missing substantial sub-national or sectoral variation. Both the defense industry and agriculture in the US, for instance, have been identified as corporatist in its orientation, despite being nested in the state that is the exemplar of a Liberal Market Economy.[58] Similarly, stock markets have gained increasing importance in both archetypal Coordinated Market Economies such as Germany and in "mixed" economies like France. Additionally, it is not obvious that a binary classification is either theoretically or empirically ideal. From a theoretical standpoint, there is an obvious trade-off between the parsimony of a limited typology and the accuracy of a more expansive one. Hall and Soskice follow Albert and Allen and Gale in adopting a binary classification, but others have made different choices. Katzenstein used a tripartite system, with the US as one pole, Japan a second, and the neo-corporatist states a third type.[59] Zysman's was also tripartite, though he grouped Japan and the neo-corporatist European states together, and separated French-style state-directed capitalism as a third type.[60] Zysman's typology has been adopted by Fioretos, expanding Varieties of Capitalism's framework to a tripartite classification.[61] Hardie et

[57] Colin Crouch, *Capitalist Diversity and Change : Recombinant Governance and Institutional Entrepreneurs* (Oxford ;New York: Oxford University Press, 2005), 184 p.
[58] Cathie Jo Martin, "Beyond Bone Structure : Historical Institutionalism and the Style of Economic Growth," in , ed. David Coates (New York: Palgrave Macmillan, 2005), 47., p. 59.
[59] Katzenstein, *Small States in World Markets: Industrial Policy in Europe*
[60] Zysman, *Governments, Markets, and Growth: Financial Systems and the Politics of Industrial Change*
[61] Fioretos, *Creative Reconstructions: Multilateralism and European Varieties of Capitalism After 1950*; Peter J. Katzenstein, *Industry and Politics in West Germany: Toward the Third Republic* (Ithaca, N.Y: Cornell University Press, 1989).

al. also kept Zysman's underlying mechanism, the nature of banking and capital markets, but dropped state-directed capitalism as no longer empirically relevant, in favor of a form of "finance capitalism" based on banks selling each other increasingly innovative financial products; the decisive failure of finance capitalism in the 2007-2009 crisis, however, suggests that this model may join statist capitalism as only of historical importance.[62] All of these classifications use the liberal Anglo-American system as one archetype, but differ on the number and nature of the other archetypes. Even within an "archetype," substantial variation can occur, both between cases, as in the contrast between the US and the UK, and within cases across time, as can be seen in both the US and UK's dismantling of the postwar Keynesian Bargain and turn toward neoliberalism in the early 1980s.[63]

Empirically, the most significant problem is the presence of important and successful economies which neither fit comfortably in an LME or CME classification nor have the economic distress that Hall and Soskice predict for "mixed systems." Hall and Soskice acknowledge this in their own formative work, identifying a "Mediterranean" cluster of states which defy easy classification but remain under-theorized in their own work.[64] Perhaps the most prominent poor fit in a binary classification is France, a G7 member which had a state bank-based system for much of the postwar period. In the 1990s, when Hall and Soskice were writing, France was indeed not at a stable equilibrium, following the abandonment of *dirigisme* policies in the 1980s. However, *dirigiste* France did not clearly fit either the LME or CME model, and was a stable and

[62] Hardie et al., *Zysman Thirty Years on: The Political Economy of Finance Revisited*
[63] Menz, *Varieties of Capitalism and Europeanization: National Response Strategies to the Single European Market*; Deeg, *Finance Capitalism Unveiled: Banks and the German Political Economy*
[64] Hall and Soskice, *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*

successful economy until the 1970s. The global disturbances of that decade also severely affected the form of the LMEs and CMEs, making it unclear empirically that *dirigiste* France was any less a stable equilibrium than any other national variety of capitalism. Although the Varieties of Capitalism framework may be sufficient for the world of its writing, where no state successfully followed a statist model of development, it is insufficient to explain the France of the 1950s and 1960s.

East Asia is also frequently cited as an area of concern. Most comparative capitalism models group the East Asian states with the Rhineland model, arguing that both are variants of corporatism.[65] Under this logic, the vertical integration of production and finance in the Japanese *keiretsu* or South Korean *chaebol* approximate the role of bank-based finance and peak associations in European corporatism. This has been disputed by students of East Asian capitalism, who argue that the Europe-focused background of most comparative capitalism scholars blinds them to the significant differences between East Asian and Rhineland capitalism. Becker highlights how the state plays a much more active role in European corporatism than in East Asian capitalism, while in East Asian economies the firm is by far the dominant actor.[66] As such, he uses a four-part categorization, between liberal, statist, corporatist, and what he dubs meso-communitarianism. Katzenstein also groups the East Asian economies differently, seeing Japan as an exemplar of his statist type, which is distinct from Zysman's French statism, rather than embodying a kind of corporatism.[67]

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[65] Zysman, *Governments, Markets, and Growth: Financial Systems and the Politics of Industrial Change*; Allen and Gale, *Comparing Financial Systems*, x, 507 p.; Hall and Soskice, *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*; Fioretos, *Creative Reconstructions: Multilateralism and European Varieties of Capitalism After 1950*

[66] Becker, *Open Varieties of Capitalism : Continuity, Change and Performances*, x, 222 p.

[67] Katzenstein, *Small States in World Markets: Industrial Policy in Europe*

The choice of number of models follows in large part from the underlying theory justifying the selection criteria. Deeg and Jackson provide an extensive list of the criteria used by comparative capitalism approaches, including financial system, corporate governance system, industrial relation systems, skill creation systems, production models, welfare states, and innovation systems.[68] Different comparative capitalism typologies use various sets of these elements to define their categories. To some degree, the choice of categories is a function of the questions being asked. Allen, for instance, examines sector-level policies, and critiques the Varieties of Capitalism paradigm for being too insensitive to sector-level variation.[69] Still, developing a new typology for each new question comparing capitalist systems creates not only unnecessary duplication, but also inhibits the development of cumulative knowledge and comparison of results across studies. Moreover, these various typologies frequently arrive at essentially the same set of categories. It is desirable, therefore, to build a common typology, ideally rooted in a parsimonious definition. Despite other variance, a general consensus exists on the importance of financial systems. Virtually all of the comparative capitalism typologies use financial system as one of the defining characteristics, or failing that, some category that correlates very closely with financial system. Becker's typology, for instance, does not include financial system, but produces a typology that mirrors very closely that of the finance-based Hall and Soskice typology, albeit while reclassifying the "mixed" systems as separate ideal types. This suggests, therefore, that a framework based on Zysman's liberal-financial market/private-bank/public-bank system offers significant advantages. It

[68] Richard Deeg and Gregory Jackson, "Towards a More Dynamic Theory of Capitalist Variety," *Socio-Economic Review* 5, no. 1 (2007), 149-179.
[69] Matthew M. C. Allen, *The Varieties of Capitalism Paradigm: Explaining Germany's Comparative Advantage?* (New York: Palgrave, 2006).

is broadly accepted in the literature, and offers significant advantages in terms of parsimony.

Within Hall and Soskice's framework of institutional complementarities, a focus on finance as the paramount area of focus seems justified as well, given how it may drive the orientation of other sectors. This difference in general orientation affects how training regimes and labor markets organize, but itself may be traced to the system of financing. In a bank-based system, funding is determined on the basis of a long-term bank-firm relationship, which both creates an incentive for the bank to support the firm and vice versa. This frees firms to focus on long-term goals, rather than the quarter-to-quarter performance necessary to secure capital in a financial-market-based system. Extensive worker-training regimes, for example, collapse without a way to prevent parasitic firms from poaching trained workers once the expense of that training is paid. Norms of coordination, however, are unlikely to be self-generating. A financial system emphasizing long-term financing both has an incentive to promote those norms and the means to encourage those norms to dominate. Banks, which may own stakes in multiple competing firms, will discourage actions which are short-term profitable but long-term costly. Identifying additional variables as following from an essential financial system variable allows a much more parsimonious theory. It also suggests an entry point to explain theories of change in capitalist systems, especially as empirically, change in the financial system can be seen as the driving force in changes elsewhere, as outlined below.

Static Comparativism and Theories of Change

The second vulnerability of the Varieties of Capitalism approach is a weak theory of change. Hall and Soskice's mechanism for replication of the system is one of path

dependence produced by institutional complementarity, but the actual mechanisms of that path dependence are poorly defined. As Martin notes, path dependence must be carefully specified.[70] Too weak a theory of path dependence produces little more than tendencies, without producing credible lock-in effects.[71] Conversely, too strong a theory of path dependence becomes overly-deterministic, with no room for actor autonomy or ability to make meaningful changes to the system. Hall and Soskice' path dependence makes it hard to conceive of evolutionary change in a Varieties of Capitalism framework. Streeck and Thelen argue that this makes the model inherently conservative, as any change is regarded as sub-optimal.[72] The model allows only for minor changes or dramatic ones, producing a punctuated-equilibrium model. Under this model, change should be sudden and only in response to severe disruptions.

Hall and Soskice therefore struggle to explain why 'mixed' economies, like France's or Italy's, persist for decades rather than quickly collapsing toward either an LME or CME orientation. Adding a third "type" offers only limited relief, explaining France up to the 1980s, but not since. While Hall and Soskice can explain France's poor post-1970s performance, they cannot explain why France abandoned *dirigisme* or why both French and Italian "mixed" forms persist. Their approach also struggles to explain more recent shifts in both the CMEs, such as Germany, and the LMEs, such as the US and UK. According to their path dependence model, the economic systems of those states should be extremely stable, yet there have been substantial reforms across both the North American and European economies in a liberal direction in recent years. Hall and

[70] Martin, *Beyond Bone Structure : Historical Institutionalism and the Style of Economic Growth*, 47
[71] Allen, *The Varieties of Capitalism Paradigm: Explaining Germany's Comparative Advantage?*
[72] Wolfgang Streeck and Kathleen Ann Thelen, "Introduction: Institutional Change in Advanced Political Economies," in *Beyond Continuity: Institutional Change in Advanced Political Economies*, eds. Wolfgang Streeck and Kathleen Ann Thelen (Oxford: Oxford University Press, 2005), 1.

Soskice poorly-account for this, as it is unclear why what was a stable equilibrium in the 1980s or 1990s no longer is in the modern context. This is especially confounding in the German case, where, as Deeg and Beyer and Höpner note, change has largely been driven by endogenous forces, especially shifting preferences of German bankers.[73]

There have been efforts by scholars working within the Varieties of Capitalism paradigm to address these concerns. Cusack, Iversen, and Soskice have traced a theory of the origins of divergent national systems.[74] Others have engaged more directly with the chief challenge to the Varieties of Capitalism model, convergence theory. For the convergence theorists, whatever the origins of national diversity, capitalist systems are under intense pressure to converge on a single set of 'best practices,' especially as global economies become more integrated. For the convergence theorists, this system will closely resemble the liberal, stock-market based capitalism of the Anglo-American states. This is rooted in the assumptions of neoliberal economics, which emphasizes growth, especially short-term growth, over other virtues such as stability, minimizing social dislocation, or long-term growth. Short-term growth is more-efficiently produced under a liberal system than a coordinated or statist one. In a liberal system, where financing and other relationships are generally short-term, short-term growth becomes essential for firm survival. Superior ability to produce long-term growth matters very little in an environment where funding is only available on a short-term basis, as patient capital, investors willing to let an investment produce sub-optimal returns for years in the hope of a longer-term payoff, will be rare. Global financial integration, per the globalization thesis, is leading to the

[73] Deeg, *Finance Capitalism Unveiled: Banks and the German Political Economy*; Jürgen Beyer and Martin Höpner, "The Disintegration of Organised Capitalism: German Corporate Governance in the 1990s," *West European Politics* 26, no. 4 (2003), 179-198.

[74] Thomas R. Cusack, Torben Iversen and David W. Soskice, "Economic Interests and the Origins of Electoral Systems," *American Political Science Review* 101, no. 3 (2007), 373.

dominance of short-term capital globally, and thus to a global system where the stability-producing structures of statist or corporatist systems become liabilities, barriers to the adaptability needed to thrive in such a liberal world.

Empirically, supporters of the globalization thesis argue that the liberal Anglo-Saxon economies have outperformed their rivals, producing significantly greater growth, especially since 1990. Conversely, the 1980s and 1990s saw the French and German economies struggle. In the French case, this led to the transformation of the national economic model with the dismantling of *dirigsme* policies. In Germany, the structures of corporatism remain, but there has been a significant shift toward more liberal policies. This shift produced a bifurcation of strategies in German banking. The large banks, competing in international markets, increasingly resemble their Anglo-American liberal counterparts, emphasizing shorter-term investments and stock markets over long-term investments and large direct equity investments.[75] Those financial institutions which have retained their more traditional focus tend to be smaller, and focused on non-internationally-competitive sectors.[76]

The convergence thesis has not gone unchallenged by the comparative capitalisms literature, and both theoretical and empirical arguments have been mustered against it. Becker notes that, while the corporatist and statist capitalist states have been moving in a more liberal direction, this has not produced convergence, because the liberal economies themselves have also been liberalizing. Thus while the overall nature of the global

[75] Deeg, *Finance Capitalism Unveiled: Banks and the German Political Economy*; Richard Deeg, "Change from within: German and Italian Finance in the 1990s," in , eds. Wolfgang Streeck and Kathleen Ann Thelen (Oxford: Oxford University Press, 2005), 169.; Callaghan, *Beyond Methodological Nationalism: How Multilevel Governance Affects the Clash of Capitalisms*, 564-580; Beyer and Höpner, *The Disintegration of Organised Capitalism: German Corporate Governance in the 1990s*, 179-198

[76] Zimmermann, *Varieties of Global Financial Governance? British and German Approaches to Financial Market Regulation*, 121

system has become more liberal, national systems have not converged on a single model. More damning for the globalization thesis is that the superior performance of liberal systems may be overstated. This is especially evident when measures of productivity are examined, rather than simple growth measures. Measured in terms of GDP per hour, the advantage of the liberal US over corporatist Europe vanishes, and the corporatist states even have a slight lead. Belgium outperforms the United States in GDP per capita as well, with Flanders particularly looking substantially better than the United States despite a relatively illiberal economy.[77] In the aftermath of the 2007-2009 crisis, Germany's rapid recovery, especially its avoidance of the recession that claimed the majority of the major economic powers, gave new attention to the potential strengths of the German system.

The chief theoretical argument stresses that, although the diverse capitalist systems are responding to the same global stimuli, their differing domestic institutional arrangements produce different dynamics in how they will respond. Therefore, convergence should not be presupposed. Theorists of comparative capitalisms are quick to point out that different institutional arrangements offer different configurations of costs and benefits, but not necessarily inferior ones. Allen and Gale highlight how bank-based and financial-market based systems have different advantages and disadvantages.[78] Financial market systems allow for a greater diversity of views on asset prices, supplying more information on price signals and allowing markets to respond more quickly. Conversely, banks playing a role as financial intermediary lower the knowledge barrier to investing, since the bank can manage a neophyte investor's money. Therefore, bank-based systems can attract a

[77] Becker, *Open Varieties of Capitalism : Continuity, Change and Performances*, x, 222 p., 152
[78] Allen and Gale, *Comparing Financial Systems*, x, 507 p.

greater volume of investment. Secondly, banks offer inter-temporal smoothing, such that bank-based systems experience fewer radical disruptions of investment values than their market equivalents. Because of these factors, Allen and Gale conclude that it is too simplistic to say that one system outperforms the other; rather, market-based systems do better in good times, producing higher returns on investment, while bank-based systems do better in bad times, when investors will feel fewer losses than their market counterparts.[79]

Deeg and Perez build on this insight, arguing that different institutional environments produce different responses, because those institutional environments prove to be a key intervening variable in how systems respond to stimuli. Deeg and Perez reject the convergence thesis as reflecting the neoliberal preoccupation with microeconomic factors at the expense of attention to macroeconomic ones. Although global financial and trade integration will produce microeconomic pressures toward converge, these will be interpreted differently in different macroeconomic contexts. These macroeconomic contexts are not only self-reinforcing in their own right, but can exert a countervailing pressure to conform to traditional practices or arrangements against the international microeconomic liberal pressures. Therefore, institutions will respond to common international pressures, but will still need to respond to their own distinctive domestic pressures, making convergence far from inevitable.[80] Streeck and Thelen and Kalinowski argue along a similar line, that path dependence may affect the response patterns of economic actors, while still allowing for change, and even guiding the

[79] Ibid., #
[80] Deeg, *Change from within: German and Italian Finance in the 1990s*, 169

evolution of the system.[81] Beyer and Höpner build on this, showing how German banks themselves drove the shift toward more liberal shareholder reforms, both from their own endogenous preferences and as a way to capitalize on shifts elsewhere.[82]

Fioretos offers a useful model for thinking of national economic systems' patterns of response to international stimuli.[83] Fioretos relies on the insights of behavioral economics and prospect theory, with an emphasis on the importance of framing situations as entailing losses or gains. Actors will weigh potential losses more heavily than potential gains, creating a conservative bias when evaluating potential transformations. The costs and benefits of the current system will be known, while the costs and benefits of any transformed system can only be hypothesized. Potential gains from the transformed system must not only exceed actual gains from the current system, but do so enough to compensate for the risk of losses from the new system. Because of this, actors will push for change only if the potential gains are significantly above gains from the current system. This captures a status quo bias among key actors without the determinism of institutional complementarities. The longer a system remains in place, the more known the costs and benefits become, and the greater the disparity between the known costs and benefits of the current system and the unknown costs and benefits of the alternatives. One additional implication of this theory is that a coalition for change requires a model of change, creating a role for ideas to have transformative power, both

[81] Streeck and Thelen, *Introduction: Institutional Change in Advanced Political Economies*, 1; Kalinowski, *Regulating International Finance and the Evolving Imbalance of Capitalisms since the 1970s: 11/10*
[82] Beyer and Höpner, *The Disintegration of Organised Capitalism: German Corporate Governance in the 1990s*, 179-198
[83] Fioretos, *Creative Reconstructions: Multilateralism and European Varieties of Capitalism After 1950*

by projecting an alternative model, and by offering plausible arguments about the likely costs and benefits of the alternative.[84]

In the absence of disruptions of the status quo, Fioretos's model predicts stability, as the coalition for the existing system will be maintained. Disruptions, however, will cause the loss/gain profiles of key actors can change, and with them the coalitions behind alternative policies. Such disruptions may be internal, such as a change in technology altering production patterns, or potentially the development of a new model that offers greater advantages or new faith in the estimation of potential losses and gains that causes a reevaluation of key actors' preferences. They may also be external, if increasing pressures of integration change the incentives of crucial members of the coalition for the current system. For Fioretos, this explains the durability of corporatist systems over statist ones. Crucial members of the statist coalition, especially firms able to appeal to private investors and escape state oversight, saw advantages in abandoning statist capitalism, and pushed for reform. The advantages of liberalism over corporatism were less clear for large firms in corporatist systems, however, so the pro-corporatism coalition remained in place.

Using Fioretos's framework, modeling evolutionary change is the easy part. The incentives of firms shift as international changes alter the costs and benefits of the status quo and potential alternative models. The change is not instantaneous, as rational institutionalism would predict, because fear of potential losses creates a pro-status quo incentive. Moreover, existing institutional arrangements change the way in which key actors respond to external stimuli. In a statist system, key actors can see themselves as

[84] Peter A. Hall, "The Role of Interests, Institutions, and Ideas in the Comparative Political Economy of the Industrialized Nations," in *Comparative Politics: Rationality, Culture, and Structure*, eds. Alan S. Zuckerman and Mark Irving Lichbach (Cambridge: Cambridge University Press, 1997), 174-207.

worse off in the current system, while the advantages of liberal systems over corporatist systems to powerful and crucial actors are less clear, so corporatist systems persist. When changes occur, they are the product of a slow accumulation of interests toward change, and a stronger belief that the new system will produce greater benefits.

The greater challenge is explaining continuity in times of crisis, when the coalition for the status quo is disrupted. The key actors defending the status quo are weakened. Moreover, the advantages of the current system are less certain and the disadvantages highlighted. Therefore, fewer barriers exist to the formation of alternative coalitions, both because defenders of the status quo are weakened, and the risks of switching to an alternative model diminished. Change in such circumstances is least remarkable, and indeed crises have produced shifts between liberal and statist systems. Liberal systems may respond to crises by expanding state ownership, as in the cases of the UK nationalization of British Steel. Conversely, statist and liberal systems both frequently respond to economic crises with privatization. The French abandonment of *dirigisme* policies is a high-profile example, but the Thatcherite dismantling of British state-owned enterprises provides a liberal example.

Conversely, corporatist systems have proven to be remarkably durable, but also not widely imitated. Most notably, West German corporatism was restored in the aftermath of the Second World War, despite complete political reorganization, substantial social reorganization, and occupation by powers embracing liberal or statist national economic models. As will be discussed below, this is likely a product of the more complex governance arrangements underpinning a corporatist system. Establishing or maintaining a liberal or statist system essentially just requires concerted state action, either to

intervene directly in economic affairs, or to make a deliberate withdrawal from economic affairs. Assembling a coalition to support this action may be difficult, but no other actors need to play a direct role. Indeed, the state may need to play a role in removing other actors and governance networks, as Polanyi recounts in his detailing of the dismantling of pre-capitalist structures in the creation of English liberalism. Corporatism, on the other hand, requires a broader network of private governance associations, as will be discussed below, and therefore requires a broader consensus to impose in a previously liberal or statist system. The need for this network makes it harder to switch to corporatism than statism or liberalism, but as will be detailed below, the network also reinforces the existing system, making corporatism potentially *more* stable than statism or liberalism, both of which are dependent almost exclusively on state action to preserve the system.

A Political Theory or an Economic Theory?

This focus on the role of the state draws attention to the third critique of Varieties of Capitalism: its emphasis on functionalism and economic forces over political ones. Streeck offers three critiques of the Varieties of Capitalism literature beyond its weak theory of change: methodological nationalism, functionalism, and economism.[85] Ultimately, all three reduce to aspects of a single critique getting to the heart of the foundations of the literature: whether divergent national systems should be understood as the result of economic forces or political ones. For Hall and Soskice, the underlying dynamics are economic, but this is to some degree in tension with both other traditions in the literature and with aspects of their own framework itself.

Hall and Soskice's causal logic is essentially functionalist and driven by economic factors. Institutions exist the way they do because they are the most effective way to

[85] Streeck, *E Pluribus Unum? Varieties and Commonalities of Capitalism: 10/12*

solve a given problem. This may, however, be overly reductive. As Höpner notes, a correlation of similar institutional solutions across several issue areas indicates that those institutional designs are compatible, but doesn't prove by itself that they produce the positive feedback and increasing gains from complementarity that Hall and Soskice claim for them.[86] Moreover, the functionalism of Hall and Soskice's argument is to a degree in tension with their static comparativism. A functionalist account of institutional design should predict that institutions should be extremely flexible in responding to exogenous changes in the international environment. Therefore, states should readily switch between systems, even if it means a massive overhaul of their system, if the international environment requires it. This, therefore, would suggest that varieties of capitalism should be less stable than Hall and Soskice's formula suggests. Fioretos goes some way toward remedying this, by suggesting that bounded rationality and prospect theory indicate that the gains from changes need to be substantial, but that bounded rationality undercuts the functionalism that drives Hall and Soskice.

Moreover, the functionalism of Hall and Soskice is an economic functionalism, driven by maximizing short- to medium-term economic gains. This, to a degree, reflects a desire to address the literature which Hall and Soskice aimed to refute. The convergence literature is similarly driven by a logic of functionalism and economism, with international integration producing economic incentives for CMEs to converge toward the LMEs.[87] The Varieties of Capitalism literature attempted to refute the conclusions of the convergence literature, therefore, on its own methodological grounds, making an argument against convergence that was nevertheless seeped in economism and

[86] Martin Hopner and Lothar Krempel, "The Politics of the German Company Network," *Competition and Change* 8, no. 4 (2004), 339-356.
[87] Callaghan and Ido, *Introduction: Varieties of Capitalism, Types of Democracy, and Globalization*, 3

functionalism.[88] In this they were only partially successful, and several in the Varieties of Capitalism tradition still saw a convergence either toward liberal, financial-market systems, or toward "hybrid" systems combining elements of both.[89]

This functionalism and economism is not unproblematic, however, as it obfuscates the role played by both ideas and power politics. Although neoclassical economics presents a 'homo economicus' whose views hold in all times and all places, certain choices key to shaping economic systems are not clearly rational. A preference for short or long term gains, levels of risk tolerance, and the relative importance of stability versus profitability are not clearly determined by a universals standard of rationality, and therefore are likely to be shaped by ideational forces. Abdelal traces how changes in economic ideas, not exogenous material shifts, drove reforms in the European Union, IMF, and credit rating agencies.[90] Callaghan and Höpner argue that the German shift away from a private-bank capital system and toward a shareholder system was driven by endogenous changes in the perceptions of German bankers as to where their interests lay, as their risk tolerance increased.[91] Lagneau-Ymont and Quack argue that the post-crisis failure to reach an agreement on global accounting reform reflects not just disagreement on the best solution, but in fact a fundamental disagreement on how to

[88] Hall and Soskice, *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*; Allen and Gale, *Comparing Financial Systems*, x, 507 p.; Teteryatnikova, *Resilience of the Interbank Network to Shocks and Optimal Bail-Out Strategy: Advantages of" Tiered" Banking Systems*; Streeck, *E Pluribus Unum? Varieties and Commonalities of Capitalism: 10/12*

[89] Beyer and Höpner, *The Disintegration of Organised Capitalism: German Corporate Governance in the 1990s*, 179-198; Masanobu Ido, ed., *Varieties of Capitalism, Types of Democracy and Globalization*, Vol. 18 (Abingdon, Oxon: Routledge, 2012).; Deeg and Jackson, *Towards a More Dynamic Theory of Capitalist Variety*, 149-179; John L. Campbell and Ove K. Pedersen, "The Varieties of Capitalism and Hybrid Success: Denmark in the Global Economy," *Comparative Political Studies* 40, no. 3 (2007), 307-332.; Gregory Jackson, "Stakeholders Under Pressure: Corporate Governance and Labour Management in Germany and Japan," *Corporate Governance: An International Review* 13, no. 3 (2005), 419-428.

[90] Rawi Abdelal, *Capital Rules : The Construction of Global Finance* (Cambridge, Mass.: Harvard University Press, 2007), xi, 304 p.

[91] Callaghan and Höpner, *Changing Ideas: Organised Capitalism and the German Left*, 551-573

conceive of the problem between the two main regulatory organizations, the IASB (International Accounting Standards Board) and the FASB (Financial Accounting Standards Board).[92] Underhill and Blom similarly see ideational barriers to change internationally, arguing that the expansion of actors playing a crucial role in shaping global financial regulation from the G7 to the G20 has not produced a corresponding shift in regulations because the ideational force of neoliberalism remains dominant even among the new actors.[93] The rise of the 'efficient market hypothesis,' (EMH) which minimized the potential risks from financial innovation and speculation, more than any material changes, drove the deregulatory movement across the advanced economies in the 1990s and 2000s.[94] Although some still argue that the EMH is valid, most scholars now reject it as disproven empirically. EMH remains important, however, as an ideational factor driving economic policy and reshaping capitalist systems. If the 2007-2009 crisis dealt a blow to the 'best practices' argument of the convergence theorists, however, it also dealt a blow to Hall and Soskice's argument of the superiority of 'pure' LME or CME systems. The G7 state that best came through the banking crisis, though not the subsequent European debt crisis, was France, a "mixed" system fitting into neither of Hall and Soskice's binary categories comfortably.

[92] Paul Lagneau-Ymonet and Sigrid Quack, "What's the Problem? Competing Diagnoses and Shfiting Coalitions in the Reform of International Accounting Standards," in , ed. Renate Mayntz, Vol. Bd. 75. (Frankfurt: Campus Verlag, 2012), 213.
[93] Geoffrey R. D. Underhill and Jasper Blom, "The International Financial Architecture: Plus Ça Change...?" in , ed. Renate Mayntz, Vol. Bd. 75. (Frankfurt: Campus Verlag, 2012), 279.
[94] Blyth, *Great Transformations : Economic Ideas and Institutional Change in the Twentieth Century*, xii, 284 p.; Andrew Gamble, *The Spectre at the Feast: Capitalist Crisis and the Politics of Recession* (Basingstoke: Palgrave Macmillan, 2009).; Leila Simona Talani, *The Global Crash: Towards a New Global Financial Regime?* (New York: Palgrave Macmillan, 2010).; David Hudson, "Locating and Understanding the Marketplace in Financial Governance: IPE, Interdisciplinarity, and Multi-Level Governance," in , eds. Andrew Baker, David Hudson and Richard Woodward (London ;New York: Routledge, 2005), 62.

The methodological nationalism of Varieties of Capitalism is also problematic if the theory is driven by economic forces. Hall and Soskice take as their unit of analysis national economies, but their underlying theory is economic in nature, focused on how institutional complementarities generate economic benefits through increased efficiency. It is not clear, therefore, why nation-states are the most appropriate unit of analysis. There is no compelling economic reason why sub-national regions, or even individual national sectors could not have separate organizational logics, and therefore be more appropriate units of analysis. Martin suggests this when she argues that the US defense industry looks more corporatist than other sectors.[95] Deeg makes a similar argument about the corporatist character of US agriculture.[96] Moreover, in an increasingly integrated world, economically-appropriate regional units may be trans-national. "Europe" may be a more appropriate unit of analysis for a theory grounded in economic factors than any European state. On a smaller scale, economic activity may be concentrated in border regions, such as the Detroit-Windsor area on the US-Canada border or the Rhineland between France, Germany, and the Benelux states. The industrial organization of Ontario is far more affected by that of Michigan, for instance, than that of Nova Scotia, given the tightly integrated cross-border automotive industry. If, however, the driving forces are political rather than economic, the nation-state as a unit of analysis makes more sense. Economically, Michigan is more important to Ontario than Nova Scotia, and Ontario more important to Michigan than Florida, but that does not hold politically. If the driving forces of divergent national capitalist systems are political,

[95] Martin, *Beyond Bone Structure : Historical Institutionalism and the Style of Economic Growth*, 47, 59.
[96] Deeg, *Finance Capitalism Unveiled: Banks and the German Political Economy*

then the nation-state, as the preeminent political force in the world remains an appropriate unit of analysis.

Political Theories of Comparative Capitalism

Considering comparative capitalisms as a political theory, rather than simply an economic one, opens up considerable space for lines of inquiry and additional potential variables. Conceivably, economic factors alone could be strong enough to shape patterns of national capitalist development, but that is an empirically-testable proposition, and not one that should be concluded by fiat in theoretical assumptions. Moreover, as noted above, a functionalist economism cannot explain either the causal force of ideas defining what makes 'best practices,' nor the ability of divergent capitalist systems to persist decades, if not centuries, into an era of ever-increasing economic integration. For these reasons, several groups of scholars have explored the dynamics of comparative capitalisms as a political theory. Scholars looking at international factors have traced how the dominance of liberal, Anglo-American capitalism and pressures for convergence may be driven not by economic efficiency or other functionalist pressures, but rather by the economic and political dominance of the United States. Domestically-focused scholars have looked at both how the type of democratic system shapes the variety of capitalist system and vice versa.

As Streeck highlights, the interconnectedness of global trade and finance makes a compelling argument that national diversity of economic systems should be understood more as internationally variegated capitalist world system rather than a series of interconnected national capitalist systems.[97] Within this conception, the relative strength of various nation states, and their economic systems, will have clout relative not only to

[97] Streeck, *E Pluribus Unum? Varieties and Commonalities of Capitalism: 10/12*

their efficiency, stability, or other operational superiority, but also relative to their size, and their ability, and willingness to shape the international system not necessarily toward maximizing some international economic goal, but toward maximizing their own national, or sectoral, interests. Therefore, the dominance of Anglo-American liberal economic ideas reflects not necessarily their superiority over corporatist or other alternative capitalist systems, or even socialist systems, in economic terms, but rather the central and dominant role the US plays in global affairs. The US, as the world's preeminent political and economic power, can use that power to promote its preferred liberal economic system, both formally through trade treaties and international economic organizations, and informally, by promoting its firms abroad.[98] Therefore, the dominance of liberalism is essentially accidental; if the US had kept on the corporatist trajectory it was on in the 19th century, and still become a global superpower by the dawn of the 21st, corporatist models would be promoted instead. Cerny offers as a confirming example the first era of globalization, in the late 19th and early 20th centuries.[99] That era of global integration, not matched in intensity until the 1970s, led to the dominance of imperial capitalism in the mode of the United Kingdom, the dominant power at the time. Langley looks specifically at finance, and comes to similar conclusions: considering finance as a set of social relations, and not just capital flows, makes it clear that the liberalizing reforms of global finance reflects not Pareto-optimizing economic efficiency, but a

[98] Loriaux, *The End of Credit Activism in Interventionist States*, 1; Katzenstein, *Between Power and Plenty: Foreign Economic Policies of Advanced Industrial States*; Burnham, *Class, Capital and Crisis: A Return to Fundamentals*, 27-39; Panitch and Gindin, *Euro-Capitalism and American Empire*, 139; Menz, *Varieties of Capitalism and Europeanization: National Response Strategies to the Single European Market*

[99] Cerny, *Power, Markets and Accountability : The Development of Multi-Level Governance in International Finance*, 24

projection of the Anglo-Saxon social space, and its conception of the appropriate time horizons and risk tolerances.[100]

At the domestic level, inquiries into the connection between varieties of capitalism and politics have tended focus either on how dynamics of party competition push policies that either reinforce or reform capitalist systems, or, expanding on Hall and Soskice's institutional complementarities mechanism, exploring which types of democratic systems, especially economic systems, are most compatible with which capitalist systems. The first approach, on the intersection of party politics and varieties of capitalism, is dominated by Roe's 2003 argument on the incompatibility of Social Democracy and shareholder capitalism. In Roe's account, the presence of Social Democratic parties is a key element to preserving private-bank capital systems, because their advocacy of organized working class interests favor stock market rules advantageous to 'blockholders' over small shareholders; that is, regulations which empower owners with substantial shares over those with only a small stake.[101] 'Blockholder' systems are an essential component to corporatist or CME systems, as stock markets will have limited appeal if small ownership stakes grant virtually no influence. It is better in such a system to simply invest in the banks which are themselves blockholders, and will use their influence to defend their interests, and by extension the interests of their deposit-holders. For firms, the resulting small stock market will give them little alternative but to enter into blockholder relationships with large owners, especially the banks and other firms. In Roe's account, in the absence of a Social

[100] Paul Langley, "The Everyday Life of Global Finance : A Neglected 'level' of Governance," in , eds. Andrew Baker, David Hudson and Richard Woodward, Vol. 16 (London ;New York: Routledge, 2005), 85.
[101] Mark J. Roe, *Political Determinants of Corporate Governance: Political Context, Corporate Impact* (Oxford: Oxford University Press, 2003).

Democratic party, small shareholders were able to win favorable corporate governance terms, leading to the dominance of stock market capital in the US and UK. Gourevitch and Shinn broadly support Roe's argument, extending it further by connecting the presence or absence of Social Democratic parties or other blockholder-favoring parties to a state's electoral system.[102]

Roe's argument has not gone unchallenged. Cioffi and Höpner argue that the center-right, not the center-left, in fact is the illiberal force favoring blockholder interests outside of the Anglo-American world.[103] Contrary to Roe, Cioffi and Höpner argue that Social Democrats have been among the chief forces pushing for pro-shareholder reforms, seeing them as a way to expand their appeal to the potential investors of the middle class and those elements of the financial world which favor liberalization. It can do so with the support of its core organized labor constituency, because union pension funds would be empowered by the reforms. The center-right, by contrast, has been bound by its long-standing alliances to blockholders, and cannot favor shareholder reforms without alienating its own base. For Cioffi and Höpner, this shift by the center-left is not only a shift in material interests, but an ideational shift by the left, as organized labor and the Social Democratic left more generally come to see a shift to liberal capitalism and away from organized capitalism as advantageous. Unions would retain significant influence through the shareholdings of their pension funds, keeping the traditional center-left base happy, while the shift would enable the center-left to appeal to financial sector actors and small shareholders in the middle class. Callaghan modifies this argument somewhat,

[102] Peter Alexis Gourevitch and James Shinn, *Political Power and Corporate Control: The New Global Politics of Corporate Governance* (Princeton: Princeton University Press, 2005).
[103] John W. Cioffi and Martin Höpner, "The Political Paradox of Finance Capitalism: Interests, Preferences, and Center-Left Party Politics in Corporate Governance Reform," *Politics & Society* 34, no. 4 (2006), 463-502.

noting that the specific diffusion of stock ownership affects the political calculus, as levels of diffusion of ownership shape the interests of 'upscale' potential stockholders.[104] The more 'upscale' actors who are not blockholders, the more the right will be divided between blockholding insiders and disempowered outsiders, creating an opportunity for center-left parties to win votes away from the center-right by offering to empower small shareholders. If shareholding already predominates over blockholding, however, as in the UK, the center-right will favor shareholder interests, and the center-left will not be able to win votes by embracing shareholder-friendly reforms. It may then be advantageous for the center-left to oppose expanding shareholder rights, to diminish the frequency and likelihood of job-threatening takeover bids.

While the above authors examine dynamics of party competition and the opportunities for parties to take advantage of different varieties of ownership structures, another strain of research examines party competition at a greater remove, examining the relationship between electoral systems, which shape the number and strength of parties, and varieties of capitalism. This literature traces a correlation between varieties of capitalism and types of electoral system, with organized capitalism associated with proportional representation systems, though the literature divides as to which way causation runs.[105] A number of authors argue that proportional representation systems

[104] Helen Callaghan, "Insiders, Outsiders, and the Politics of Corporate Governance how Ownership Structure Shapes Party Positions in Britain, Germany, and France," *Comparative Political Studies* 42, no. 6 (2009), 733-762.

[105] Gourevitch and Shinn, *Political Power and Corporate Control: The New Global Politics of Corporate Governance*; Marco Pagano and Paolo F. Volpin, "The Political Economy of Corporate Governance," *The American Economic Review* 95, no. 4 (2005), 1005-1005.; Torben Iversen, *Capitalism, Democracy, and Welfare* (New York: Cambridge University Press, 2005).; Cusack, Iversen and Soskice, *Economic Interests and the Origins of Electoral Systems*, 373; Callaghan, *Insiders, Outsiders, and the Politics of Corporate Governance how Ownership Structure Shapes Party Positions in Britain, Germany, and France*, 733-762; Enrico C. Perotti and Ernst-Ludwig von Thadden, "The Political Economy of Corporate Control and Labor

are better able to sustain organized capitalism, as the greater stability of party power dynamics makes it easier to maintain the coordinating bargains at the core of organized capitalism.[106] Implicit in this approach is the idea that capitalist systems are preserved by political bargain, rather than economic advantage. Organized capitalist systems are better-able to advance long-term interests than liberal systems, but can only do so if they need not prioritize the short term. They can only do so if politically protected until long-term advantages can manifest themselves.[107] Liberal systems, which prioritize the short-term over the long-term, can flourish in a less-stable political environment, as short-term bargains can be more easily made and re-made, while longer-term organized capitalism bargains require both greater trust between parties and a greater environmental stability to survive.

Another strand of this literature argues that varieties of capitalism shape the electoral system.[108] For Callaghan, and for Perotti and von Thadden, this is because the interests of economic groups shape those of parties, and that those groups with an interest in maintaining organized capitalism have a vested interest in promoting a political system that will promote their economic interests.[109] Theoretically, this seems less likely than arguing that economic systems follow from political ones, as it is more difficult to argue

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Rents," *The Journal of Political Economy* 114, no. 1 (2006), 145-174.; Cathie Jo Martin, "Sectional Parties, Divided Business," *Studies in American Political Development* 20, no. 02 (2006), 160-184.

[106] Gourevitch and Shinn, *Political Power and Corporate Control: The New Global Politics of Corporate Governance*; Pagano and Volpin, *The Political Economy of Corporate Governance*, 1005-1005; Iversen, *Capitalism, Democracy, and Welfare*; Martin Höpner, "What Connects Industrial Relations and Corporate Governance? Explaining Institutional Complementarity," *Socio-Economic Review* 3, no. 2 (2005), 331-358.; Martin, *Sectional Parties, Divided Business*, 160-184

[107] Streeck, *E Pluribus Unum? Varieties and Commonalities of Capitalism: 10/12*

[108] Cusack, Iversen and Soskice, *Economic Interests and the Origins of Electoral Systems*, 373; Callaghan, *Insiders, Outsiders, and the Politics of Corporate Governance how Ownership Structure Shapes Party Positions in Britain, Germany, and France*, 733-762; Perotti and von Thadden, *The Political Economy of Corporate Control and Labor Rents*, 145-174

[109] Callaghan, *Insiders, Outsiders, and the Politics of Corporate Governance how Ownership Structure Shapes Party Positions in Britain, Germany, and France*, 733-762; Perotti and von Thadden, *The Political Economy of Corporate Control and Labor Rents*, 145-174

that organized capitalism can survive political dislocation long enough to shape the outcomes of political turmoil than it is to argue that economic actors respond to the incentives created by a political system. Economic actors, after all, lack the constitutional barriers to change that many political systems have, and moreover, political systems have many non-economic actors and dynamics pushing to maintain or erode them. However, empirically, organized capitalism in continental Europe has proved to be remarkably resilient. Katzenstein traces the origins of small-state corporatism to the Great Depression, while Gerschenkron, Deeg, and Gourevitch and Shinn all find the origins of German organized capitalism in the 19th century.[110] That means all of these systems survived or revived through the collapse of their democracies in the Second World War and its run-up, and the restoration of democracy after the war. The German system moreover survived unification and partial democratization in the German Empire, and the subsequent revolutionary collapse of the Empire in addition to these dislocations. The ability of organized capitalist systems to self-perpetuate through all of these political dislocations suggests that, while economic actors may use the political system to perpetuate their interests, they themselves are resilient to significant political dislocation.

A final argument on the relationship between capitalist systems and political systems links type of financial system with the federal or central character of the state.[111] In a central state, the concentration of political power will cause a concentration of

[110] Katzenstein, *Small States in World Markets: Industrial Policy in Europe*; Deeg, *Finance Capitalism Unveiled: Banks and the German Political Economy*; Gourevitch and Shinn, *Political Power and Corporate Control: The New Global Politics of Corporate Governance*; Gerschenkron, *Economic Backwardness in Historical Perspective: A Book of Essays*

[111] Daniel Verdier, *Moving Money: Banking and Finance in the Industrialized World* (Cambridge, UK: Cambridge University Press, 2002).; Stefan Handke and Hubert Zimmermann, "Institutional Change in German Financial Regulation," in *Crisis and Control: Institutional Change in Financial Market Regulation*, ed. Renate Mayntz, Vol. Bd. 75. (Frankfurt: Campus Verlag, 2012), 119.; Katzenstein, *Between Power and Plenty: Foreign Economic Policies of Advanced Industrial States*

financial actors, both through a desire to influence the levers of power and through the centralizing legislative force of the state. This concentration of financial actors and capital will produce the necessary volume of financial activity to spur the creation of stock markets. By contrast, in federal states, decentralization of the political system will produce decentralization of the financial system, as the political actors in federal regions will seek to keep financial activity close to home. Without the necessary concentration of financial activity, financial systems will remain reliant on banks as financial intermediaries. Verdier's account, while compelling for the centralized and capital-market-based British and federal and bank-based German systems, is a poor fit elsewhere. The federal United States saw a concentration of financial activity in New York, and to a lesser degree Chicago, while centralized France developed a bank-based system, albeit a state-owned bank system.

A Focus on Financial Microfoundations

These critiques of comparative capitalisms can largely be addressed with a focus on microfoundations, and specifically on the financial sector. The financial sector is either explicitly or implicitly a key element in maintaining a given capitalist system in virtually all specifications. Although Hall and Soskice grant it only co-equal importance in their formulation of Varieties of Capitalism, they also identify change in the financial system as the most likely method of change in the broader financial system. As discussed above, the ability of other cooperative bargains to function hinges to a large degree on the ability of firms and unions to take a long-term perspective, which is only possible with the "patient capital" of a bank-based system removing the pressure to maximize short-term, quarter-to-quarter returns. While it is true that such patient capital is in part

possible because of the stability provided by other institutional arrangements, the privileged influence of banks through their role as blockholders gives them both the incentive and means to push for such stability-increasing institutional arrangements in labor relations, training, and research and development. The literature on democracy and varieties of capitalism moreover traces how the organization of capital-holding interests as blockholders, meaning banks and other large financial actors, instead of decentralized small or diversified shareholders affect the political calculus as well, directing the terms of party competition. The nature of the financial system shapes the political interests of financial actors; as will be seen below, it shapes their access and political clout as well.

At the same time, finance is the most vulnerable aspect of a capitalist system to international pressures. Financial integration has proceeded further than other forms of global integration, in no small part because the fundamental output of the financial industry, credit and investment, is far more fungible. This has only increased with technological integration, as it now makes very little difference in ease-of-access terms whether a deposit account or creditor is in the same country, or even on the same continent. Global financial integration, therefore, puts greater pressure on organized capitalist systems than other forms of integration, as practical transportation barriers and the ability of national financial systems to insulate producers from pressure protect other aspects of national capitalist systems. If the financial system itself should change, however, the rest of the economy may have little choice but to follow.

Both the convergence literature and the comparative capitalisms literature have identified international pressures as driving systems toward a liberal, stock-market based system. In part this is because liberal systems may require less reinforcement. Although, per

Polanyi, liberalization may require political clout to force the abandonment of other forms, liberal market relations thrive on competition, and while the state may need to limit the pressure for anti-market social protections (what Polanyi dubs the "double movement"), market competition can thrive even in the absence of a normative framework to support it.[112] On the other hand, in organized capitalism systems, coordination may require norms of trust and reciprocity, and a willingness of market actors to act in a broader social interest. If these norm break down, organized capitalism may be difficult to sustain. Callaghan argues that the erosion of bankers' norms supporting acting in a broad social interest were a key component driving their shift toward promoting a liberalization of German capital markets.[113] In part, and related to the normative question, is the issue of short-term versus long-term focus. A long-term focus may be difficult to sustain unless the majority of actors in the system share that long-term focus; otherwise short-term focused firms, capable of producing rapid but unsustainable growth, may "suck the air out of the room," and make a long-term strategy for other firms unsustainable unless they can survive without outside capital or credit.

However, Allen and Gale suggest that the distinct economic advantages of a bank-based financial system mean that a functionalist account cannot explain the movement toward liberalization.[114] Moreover, distinctive national financial systems have displayed stubborn persistence not only through the recent decades of financial integration, but also the historic upheavals of the Great Depression, Second World War, and the collapse of the Bretton Woods system. Furthermore, much of the momentum

[112] Karl Polanyi, *The Great Transformation*, (New York,Toronto,: Farrar & Rinehart, inc, 1944), xiii, , 305 p.
[113] Callaghan, *Beyond Methodological Nationalism: How Multilevel Governance Affects the Clash of Capitalisms*, 564-580
[114] Allen and Gale, *Comparing Financial Systems*, x, 507 p.

toward liberalization has been endogenous, with financial integration a project promoted by the banks themselves. It is therefore insufficient to consider the dynamics of change and continuity in the financial system, and by extension the broader national capitalist system, purely in economic terms. Indeed, given the prominent role that banks play in shaping the regulatory regime, both internationally and domestically, financial actors' political clout plays at least as prominent a role in the persistence or evolution of a financial system as economic factors. The democracy and varieties of capitalism literature reinforces this, by emphasizing how financial interests, and political parties attempting to appeal to financial interests, will drive movements to reform or reinforce existing corporate governance regimes.

Microfoundations and the Governance Literature

Here, the insights of the governance literature help flesh out the microfoundations of comparative capitalisms, by providing a framework for evaluating the relative political clout and interest of financial firms in liberal and organized capitalist systems. In short, in part due to the long-term nature of firm-client relationships, firms in private bank-capital-based systems have greater space to form private and public-private governance structures. These governance structures enhance the political clout of the financial actors to perpetuate their systems, increasing their capacity for influence by enabling them to speak with a single voice on issues and to resist state regulation by creating greater capacity for self-regulation.[115] These governance structures help determine the influence of the financial sector in good times, but in times of crisis, as will be shown in subsequent chapters, the presence or absence of private governance structures will play a crucial role

[115] Mancur Olson, *The Rise and Decline of Nations: Economic Growth, Stagflation, and Social Rigidities* (New Haven: Yale University Press, 1982).

in determining the state's response patterns, and with that response, the ability of national financial systems to self-replicate in their times of greatest stress.

The public administration literature has in the past decade turned considerable attention to issues of governance, as 'network governance' has replaced New Public Management as the dominant framework for understanding how the state manages private actors and pursues public policy goals. New Public Management, which emphasized states turning to market mechanisms to solve problems of public administration, itself replaced the public administration literature's focus on government bureaucracy in the 1980s.[116] New Public Management emphasized how both public and private actors could use price competition and market mechanisms to increase efficiency in public administration. However, by the 1990s, the literature had turned its attention away from market mechanisms, whether used by public or private actors, and toward the role of organized, or 'networked,' private interests in managing public problems.

This literature is not specifically concerned with political economy, comparative capitalisms, or finance as such, though its concepts can provide valuable insights into understanding those issues. Willke and Willke argue that, in the absence of a viable alternative to capitalism, crises of capitalism must be understood as crises of *governing* capitalism.[117] The legitimacy of capitalism as an economic system depends on the perceptions of its legitimacy, that it have input, output, and through-put (process) legitimacy, all of which require it to be overseen effectively by the state, or, in the

[116] Jacob Torfing, *Interactive Governance: Advancing the Paradigm* (Oxford: Oxford University Press, 2012).; Eva Sørensen and Jacob Torfing, *Theories of Democratic Network Governance* (New York: Palgrave Macmillian, 2007).; Bob Jessop, "Governance Failure," in *The New Politics of British Local Governance*, ed. Gerry Stoker (New York: St. Martin's Press, published in association with the ESRC Local Governance Programme, 2000).
[117] Helmut Willke and Gerhard Willke, *Political Governance of Capitalism: A Reassessment Beyond the Global Crisis* (Northampton, MA: Edward Elgar, 2012).

parlance of the governance literature, 'metagoverned.' As such, understanding the nature of public and private governance of finance, especially in times of crisis, is essential to understanding the processes by which capitalist systems self-perpetuate or evolve. Moreover, a focus on the relative strength and size of private governance networks provides a key methodological tool to examine the differing dynamics of liberal and organized capitalist systems, in a way that has considerable advantages over Hall and Soskice's mechanism of institutional complementarities and allows for more fine-grain analysis than Becker's bounded rationality approach. Focusing on the size, scope, and access of private governance institutions allows for a finer-grain analysis of levels of capital-system organization than Hall and Soskice's binary, or even the three- or four-type typologies of other comparative capitalism authors. It also directs attention to the specific processes by which organized capitalist systems can use governance networks to further their agendas, and in doing so highlight the mechanisms by which actors in capitalist systems can both press their agendas and respond to shocks.

The first challenge in the governance literature is defining the concept of 'governance.' Here there is wide divergence. The World Bank considers governance, in the context of its 'good governance' promotion, exclusively within the public sphere, as a measure of effectiveness and legitimacy of government administration.[118] At the other end of the spectrum, Jessop defines 'governance' as exclusively the province of civil society, and sets it as the private alternative to public government, as 'governance

[118] World Bank, "WBI Governance & Anti-Corruption," http://web.worldbank.org/WBSITE/EXTERNAL/WBI/EXTWBIGOVANTCOR/0,,menuPK:1740542~pagePK:64168427~piPK:64168435~theSitePK:1740530,00.html (accessed March 19, 2012).

without government.'[119] Bevir and Rodes, meanwhile, consider governance to be merely 'old wine in new bottles,' and just a neoliberal language game attempting to give a veneer of legitimacy to the same market-driven deregulation promoted by New Public Management theory.[120] Most scholars, however, settle on some definition focusing on the blurring of public and private authority. Governance in this conception includes all private and public-private forms of administration, but excludes fully-public administration as 'government.' This, of course, leaves open a wide range of activities that may constitute governance. Another task is to distinguish governance as a distinct phenomenon from the hierarchical command structures of the firm. Williamson shifted the conception of the firm from production unit to governance structure, but just as a definition of governance which includes public government may be too broad to be useful, so too is a definition which includes the tight hierarchical authority structures of a private firm.[121] That is not to say that governance should only include horizontal organization of autonomous actors. Among the most important private governance structures can be those with vertical authority, and thus the ability to direct their members to common purpose with a minimum of negotiation. These, however, should be distinguished from firms, by virtue of greater independence among constituent units, both to act autonomously and to thrive or fail independently of the broader organization. Moreover, while firms are organized as solutions to private problems, governance

[119] Bob Jessop, "The Rise of Governance and the Risks of Failure: The Case of Economic Development," *International Social Science Journal* 50, no. 1 (1998), 29.; Jessop, *Governance Failure*
[120] Mark Bevir, R. A. W. Rhodes and Patrick Weller, "Comparative Governance: Prospects and Lessons," *Public Administration* 81, no. 1 (2003), 191-210.
[121] Oliver E. Williamson, *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting* (New York: Free Press, 1985).

structures, whether vertical or horizontal, are focused on issues of governance, which is to say focused on promoting some solution to a public problem.

The challenge, then, is to develop a definition of governance that is 'positive,' which is to say not just defined as those institutions which are neither fully-public nor as tightly-organized and focused on private problems as firms. Enderlein, Wälti and Zürn define governance as "the sum of regulations brought about by actors, processes, as well as structures, and justified with reference to a public problem."[122] This definition is somewhat broader than some, including vertical organizations that may have little autonomy among member institutions. Others equate governance with network governance, meaning the focus is on horizontal organization of autonomous actors.[123] Sørensen and Torfing add to this focus attention to "diagonal" organization, which is to say horizontal organizations which operate "in the shadow of hierarchy," allowing for both some command structure in private governance structures and a space for the state as a distant guiding hand through metagovernance.[124]

Within this space, there is room for many forms of governance, with different balances of public and private actors. Torfing et al identify three major forms of

[122] Henrik Enderlein, Sonja Wälti and Michael Zürn, eds., *Handbook on Multi-Level Governance* (Cheltenham, UK ;Northampton, MA: Edward Elgar, 2010a), x, 504 p.; Michael Zürn, "Global Governance as an Emergent Political Order - the Role of Transnational Non-Governmental Organisations," in *Global Governance and the Role of Non-State Actors*, ed. Gunnar Folke Schuppert, Vol. Bd. 5 (Baden-Baden: Nomos, 2006), 121.
[123] Fritz W. Scharpf, "Games Real Actors could Play: Positive and Negative Coordination in Embedded Negotiations," *Journal of Theoretical Politics* 6, no. 1 (1994), 27-53.; Torfing, *Interactive Governance: Advancing the Paradigm*; J. Kooiman, *Modern Governance: New Government-Society Interactions* (Newbury Park, Calif: Sage, 1993).; Erik-Hans Klijn, "Governance and Governance Networks in Europe: An Assessment of Ten Years of Research on the Theme," *Public Management Review* 10, no. 4 (2008), 505-525.; Renate Mayntz, "Modernization and the Logic of Interorganizational Networks," in *Societal Change between Market and Organization*, eds. John Child, Michel Crozier and Renate Mayntz, Vol. 11 (Aldershot: Avebury, 1993), 3.
[124] Sørensen and Torfing, *Theories of Democratic Network Governance*

governance, though this should not be taken as an exhaustive list.[125] The first, showing an indebtedness to the older New Public Management literature, focuses on quasi-markets, where states attempt to gain the efficiency of markets without a loss of public control. This may involve soliciting private bidders to perform public roles, or putting regulators in competition with each other. Prior to the Dodd-Frank reforms of 2009, for instance, the two main US banking regulators, the Office of Thrift Supervision and the Office of the Comptroller of the Currency, each were funded by fees on banks under their regulation, so had incentives to maximize their banks' profits, and also to attract banks to classify themselves as under the auspices of themselves, and not the rival regulation. This would be criticized in the aftermath of the 2007-2009 crisis for encouraging both regulators to use 'light touch' regulation, and result in the two being re-merged.

The second mechanism Torfing et al identify is partnerships, where public and private actors embark on joint projects to their mutual benefit. The third are governance networks, horizontal associations of operationally autonomous private actors. These two can blur into each other. German finance has long had strong governance networks among its banking groups. This has produced private governance solutions, as in the German private deposit insurance schemes, the equivalent of which are publically-administered in most other advanced capitalist states. Because these schemes mean that the private governance associations face real costs if their member-institutions fail, the associations also impose private regulatory restrictions on members, to ensure prudential practices which minimize risks to the broader group. This, in turn, means that the private governance associations will partner with public regulators on shared goals of financial

[125] Torfing, *Interactive Governance: Advancing the Paradigm*

Table 2.1: Sørensen and Torfing's Typology of Theories of Governance

	Calculation	Culture
Coordination	Governabilty Theory	Integration Theory
	Rational Choice Inst.	Sociological Inst.
Conflict	Interdependence Theory	Governmentality Theory
	Historical Inst.	Post-Structural Inst.

stability, identifying to public regulators problem banks, and partnering to ensure solutions which achieve both public and private objectives.

In addition to divisions in defining governance, there are also divisions as to how to conceive of the dynamics of governance. Sørensen and Torfing map four schools of governance literature along two dimensions, roughly corresponding to four schools of new institutionalism. The first is conflict or coordination; whether the goals of governance are about managing actors with divergent interests to avoid mutually-destructive intra-group conflict, or organizing actors with shared interests to act toward a common good. The second is whether governance is driven by calculation or culture, whether rational self-interest or norms are the chief guiding force. This produces a four-part typology, with different expectations as to the goals and standards of success or failure for governance. This typology, in turn, corresponds with Streeck's typology of comparative capitalisms approaches, allowing a mapping of governance literatures onto the relevant comparative capitalisms approaches.[126]

[126] Streeck, *E Pluribus Unum? Varieties and Commonalities of Capitalism: 10/12*

Governability theory, which most closely accords with rational choice institutionalism, sees actors as coordinating and calculating.[127] In this formulation, governance institutions allow all actors to gain some advantage, so they pool their resources for mutual gain, while remaining driven by their own rational conception of self-interest. As with rational choice institutionalism generally, governability theory is driven by functionalism; institutions are only as useful as the purpose they are meant to address, and thus should be easily changeable to meet changing environmental demands. This approach thus most closely maps onto what Streeck sees as the rationalist-functionalist strain of comparative capitalisms, including Hall and Soskice's Varieties of Capitalism.[128]

Interdependence theory, which maps onto historical institutionalism, shares with governability theory a conception of actors as rational, but sees their relations as driven more by conflict.[129] Governance institutions in this formulation are more about limiting the damage from that conflict than advancing mutual gains. In keeping with its links to historical institutionalism, interdependence theory emphasizes the path dependent power of institutions. Institutions are the outcomes of past political battles, but are expensive to remake, so may endure long after their creation. This legacy effect, or 'stickiness,' may create institutions which are sub-optimal from a rational choice functionalist perspective, but persist both because they are expensive to replace and may empower crucial actors

[127] Scharpf, *Games Real Actors could Play: Positive and Negative Coordination in Embedded Negotiations*, 27-53; Kooiman, *Modern Governance: New Government-Society Interactions*; Mayntz, *Modernization and the Logic of Interorganizational Networks*, 3

[128] Streeck, *E Pluribus Unum? Varieties and Commonalities of Capitalism: 10/12*

[129] R. A. W. Rhodes, *Understanding Governance: Policy Networks, Governance, Reflexivity, and Accountability* (Philadephia: Open University Press, 1997).; Walter J. M. Kickert, Erik-Hans Klijn and Johannes Franciscus Maria Koppenjan, *Managing Complex Networks: Strategies for the Public Sector* (Thousand Oaks, Calif: Sage, 1997).; Jessop, *The Rise of Governance and the Risks of Failure: The Case of Economic Development*, 29; Bob Jessop, *The Future of the Capitalist State* (Malden, MA: Polity, 2002).

more than a rational-choice 'optimal' institution would. Streeck argues that this historical-institutionalist approach, by virtue of its path-dependence mechanism, offers a better explanation of continuity in a changing environment than the functionalism of governability theory.[130]

Integration theory, which focuses actors aiming for coordination and driven by culture shares with sociological institutionalism a focus on the importance of norms of cooperation.[131] Actors form governance institutions to cooperate, but their motives to do so cannot be understood in purely rational terms; rather, reference to norms of cooperation are necessary to explain this cooperation. This maps most closely onto Streeck's social embeddedness, and fits with comparative capitalisms theories which emphasize the importance of norms to reinforcing and maintain national capitalist systems.[132] In this approach, so long as the normative framework remains in place, systems should remain largely resistant to exogenous shocks, but may come unraveled if norms shift away from coordination and cooperation.

The final school Sørensen and Torfing identify, governmentality theory, doesn't map onto a 'new institutionalist' theory, but shares with post-structural critical theory a focus on conflict in normative terms.[133] Here, relative power of actors, with non-compatible goals, means institutions of governance are created to manage conflict, in a way that

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[130] Streeck, *E Pluribus Unum? Varieties and Commonalities of Capitalism: 10/12*

[131] James G. March and Johan P. Olsen, *Democratic Governance* (New York: Free Press, 1995).; Paul J. DiMaggio and Walter W. Powell, "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields," *American Sociological Review* (1983), 147-160.; Paul J. DiMaggio and Walter W. Powell, *The New Institutionalism in Organizational Analysis*University of Chicago Press Chicago, 1991).; W. Richard Scott, *Institutions and Organizations* (Thousand Oaks: SAGE, 1995).

[132] Streeck, *E Pluribus Unum? Varieties and Commonalities of Capitalism: 10/12*

[133] Mitchell Dean, *Governmentality: Power and Rule in Modern Society,* Sage Publications Limited, 2009).; Nikolas Rose and Peter Miller, "Political Power Beyond the State: Problematics of Government," *The British Journal of Sociology* 43, no. 2 (1992), 173-205.; Michel Foucault, "Governmentality," in *The Foucault Effect: Studies in Governmentality : With Two Lectures by and an Interview with Michel Foucault*, ed. Michel Foucault and others (Chicago: University of Chicago Press, 1991), 87.

presses the agenda of the powerful, as with interdependence theory. However, in this framework, the conflict involves defining the norms and goals of actors. This fits with Streeck's power-resources model of comparative capitalisms, and can be seen in arguments which see convergence as driven not by movement to objective 'best practices,' but as driven by the dominance of neo-liberal ideas to not only define which goals should take priority, such as efficiency over stability, but also the best ways to achieve those goals.[134]

Governability and interdependence theory differ on issues of functionalism versus path dependence, but share a broadly rational conception of actors, where self-interests are unproblematic. In that sense, they are not wholly incompatible approaches. Actors may shift their focus from coordination to conflict, or vice versa, making the division an empirical, rather than theoretical, difference. The question of whether actors' relations are conflictual or coordinating can, and should, be examined empirically, and not assumed away by the model.

However, Sørensen and Torfing see an "unbridgeable gap" between the rationalist governability and interdependence theories and the anti-rationalist integration and governmentality theories. [135] The former two rely on a fairly unproblematic assumption of the nature of interests and cost-benefit calculation, with all actors operating in a common rational framework. The latter two argue that rationality and self interest cannot be treated unproblematically, and that actors operate in a state of 'Knightian uncertainty,' where even their own interests are debatable and in part determined by interaction with other actors and with institutions. Institutions in this latter conception not only manage

[134] Streeck, *E Pluribus Unum? Varieties and Commonalities of Capitalism: 10/12*
[135] Sørensen and Torfing, *Theories of Democratic Network Governance*, #

conflict or facilitate coordination, but define the very terms of debate. Unlike the gap between conflictual and coordinating theories, the rational/anti-rational gap cannot be evaluated empirically. Calculation can be normatively dictated, by a culture which emphasizes self-interested cost-benefit analysis, though even here issues of time horizons and tradeoffs between risks and stability, or social peace versus individual gain, may be normatively determined.

Regardless of the theoretical assumptions, the literatures on governance share a focus on issues of metagovernance, the 'governance of governance,' and the ability of public actors to exert influence or control over private and public-private governance structures. Questions around metagovernance involve both questions of practical control and legitimation of governance networks. The literature on governance broadly agrees that states are increasingly relying on private and public-private governance structures, which may contain advantages in terms of efficiency, as the state can get better compliance with lower costs, but also creates principal-agent problems. Private actors will produce governance structures that reflect their interests, but not necessarily those of the state. Therefore, if governance is replacing government as the chief way in which states manage policy, the state must have ways to exercise some control or guidance over the process. The challenge of metagovernance, moreover, is more than just practical: if governance mechanisms are to be effective, they must be legitimate in the eyes of both the participants and the broader public. This legitimacy must come in three forms. Input-legitimacy means that the actors contributing to governance networks must be seen

as legitimate societal interest with legitimate goals.[136] Through-put legitimacy means that the processes by which they reach decisions must be legitimate. This may involve transparency, as the World Bank and several INGOs have advocated, but in some circumstances transparency may be less than ideal, complicating the ability of actors to strike bargains or undermining the degree to which actors respond to policy outputs. The final legitimacy Allen identifies is output-legitimacy: policies produced through governance networks must be seen as appropriate and effective. This focus on metagovernance, however, can be somewhat problematic, especially in instances where private governance structures have endured through multiple changes in the state. As noted above, European, and especially German, corporatism has survived numerous, at times radical, changes in government, passing through some combination of liberal authoritarianism, democracy, fascism and/or occupation, and restored democracy. Regardless of the debates over specification of governance, there are several problems common to the governance literatures. The obvious one is the lack of a settled definition of governance. As noted above, for some, governance is a wholly-public affair, while for others it is wholly private. Most scholars settle somewhere in the middle, and focus on governance as encompassing private and public-private institutions. However, this still creates some boundary issues. Whether wholly-public government, on one end, or internal firm structures and market mechanisms, on the other, should be considered within 'governance' remains somewhat unsettled.

Perhaps the most significant issue within the governance literature, however, is over goals of the literature. There is some confusion, both between authors and within

[136] Torfing, *Interactive Governance: Advancing the Paradigm*; Enderlein, Wälti and Zürn, *Handbook on Multi-Level Governance*, x, 504 p.; Fritz W. Scharpf, *Governing in Europe: Effective and Democratic?* (Oxford: Oxford University Press, 1999).

individual texts, over whether the 'networked governance' paradigm is a new theoretical lens for understanding public administration issues, a new empirical reality, or a new normative ideal of governance. In other words, is networked governance a new phenomenon which the literature is catching up with, or is it an old phenomenon the literature is only now recognizing, and developing adequate conceptual tools to examine? Related to this is a strong normative streak in the literature, where networked governance, like market mechanisms in New Public Management earlier, is promoted as a superior form of managing public problems. This also muddies the waters as to whether governance is 'new,' or just a new lens for evaluating the role of private actors in policymaking. Certainly there are numerous examples from the comparative capitalisms literature, especially outside of the United States, indicating that governance is not new, though it has only recently caught the attention of the public administration literature. To the degree that networked governance is promoted as a normative good, therefore, it suggests that this literature is a counterweight to the neoliberal convergence literature, extolling the benefits of an organized capitalism model. However, like the convergence literature, it carries a teleological streak, predicting a convergence on organized capitalism, and an increased role for private governance structures, as an alternate set of 'best practices.' In this sense, it has the same issues as the convergence literature.

Multi-Level Governance

One important subfield within the governance literature is multi-level governance (MLG), which draws on the broader shift to governance networks, but offers several advances over previous institutional theories, especially in capturing the simultaneous

trends toward decentralization and internationalization.[137] Multi-level governance offers a useful framework for captures the complexity of these relationships, by examining how semi-autonomous governance networks interact across levels in a way far more complicated than traditional hierarchical and top-down federalist accounts.[138] In doing so, MLG directs valuable attention to the blurring of lines between domestic and international politics, with attention to how subnational actors can shape supranational politics and vice versa, and on the blurring of the lines between public and private governance. [139] This is especially valuable in the context of financial governance, which even in the pre-globalization era had extensive variation in governance at both the international and sub-national levels.

Hooghe and Marks identify two major types of multi-level governance. Type I governance is closer to classic federalism, being formally constructed with different levels having responsibility for a wide range of functions, and generally divided along geographic lines.[140] Type II governance is more informal, with levels organized on functional lines, rather than geographic, and with a more fluid membership than the more rigid Type I.[141] It is Type II that suggests the greatest role for private governance institutions, which tend to be sector-based rather than geographic, and with more informal organization than the constitutional order of federalism or other Type I MLG.

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[137] James N. Rosenau, "Strong Demand, Huge Supply: Governance in an Emerging Epoch," in Ian Bache and Matthew V. Flinders, eds. (Oxford ;New York: Oxford University Press, 2004), 34.
[138] Gary Marks and Liesbet Hooghe, "Unraveling the Central State, but how? Types of Multi-Level Governance," *American Political Science Review* 97, no. 2 (2003), 233-243., 234.
[139] Ian Bache and Matthew V. Flinders, "Themes and Issues in Multi-Level Governance," in *Multi-Level Governance*, eds. Ian Bache and Matthew V. Flinders (Oxford ;New York: Oxford University Press, 2004b), 1., 1-2.
[140] Marks and Hooghe, *Unraveling the Central State, but how? Types of Multi-Level Governance*, 233-243, 236-237.
[141] Ibid., 237-239.

Multi-level governance is not without its problems, however. Chief among these, which it shares with the governance literature more broadly, is its ambiguous standing; whether it is analogy, description, normative prescription, or the core of a theoretical approach.[142] Some have developed theoretical predictions out of MLG, but such work is in relatively early development. Considerable work on multi-level governance has been done in international institutions, comparative federalism, and EU studies, examining the interaction across levels, especially in the blurring of international and domestic politics.[143] However, less work has been done on the role of private governance in an MLG context, a regrettable missed opportunity.

Work on the role of private actors in MLG has largely focused on the international context, especially on the role of private actors in shaping international public and private governance regimes of global financial regulation. Much of this work, however, treats domestic private actors as having similar interests across states, varying in their political clout but not goals, and ignoring how domestic organization shapes both their strength and their conception of their interests.[144] Moreover, attention is more given to the role of individual private domestic actors than private governance networks.

Work on domestic private governance levels, meanwhile, has been largely bereft of cross-national comparison. Grossman examines how the German banking round table,

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[142] G. P. E. Walzenbach, *European Governance: Policy Making between Politicization and Control* (Burlington, VT: Ashgate, 2006).; Ian Bache and Matthew V. Flinders, "Multi-Level Governance: Conclusions and Implications," in , eds. Ian Bache and Matthew V. Flinders (Oxford ;New York: Oxford University Press, 2004a), 195.

[143] Henrik Enderlein, Sonja Wälti and Michael Zürn, "Introduction," in *Handbook on Multi-Level Governance*, eds. Henrik Enderlein, Sonja Wälti and Michael Zürn (Cheltenham, UK ;Northampton, MA: Edward Elgar, 2010b), 1., 6-8

[144] Thomas C. Lawton, Steven McGuire and G. P. E. Walzenbach, "Polycentric Governane Meets the New Economy: The United States, the European Union and Transnational Regulation," in *European Governance: Policy Making between Politicization and Control*, ed. G. P. E. Walzenbach (Burlington, VT: Ashgate, 2006), 37.

the *Zentraler Kreditausschuss*, provides private governance, but without attention to its role in the European Union, or an exploration of the domestic consequences in comparative perspective.[145] Hassel allows for cross-national comparison in her focus on when private governance networks are likely to emerge, but her thesis, that private governance networks are more likely to emerge in Type II (functional division) MLG systems excludes the more interesting questions of how Type II 'levels' can coexist alongside Type I (geographic) MLG levels.[146] Moreover, Hassel fails to explore the policy implications of the presence or lack of private governance systems.

This oversight is unfortunate, as private governance networks conceivably can have a substantial impact on the policy-making process. Private governance offers potential benefits for both private actors and states. Lawton, McGuire, and Walzenbach build on Price and Verhulst's typology of self regulation to explore its potential benefits.[147] For private actors, private governance can be assumed to be on more favorable terms than that imposed by the state. Self-regulation offers both greater scope for negotiation in construction and application of rules, and for rules that more reflect the preferences of the regulated sector. The state, too, can benefit from private self-regulation. Outsourcing regulation saves the state money, and produces regulation in line with the sector's own perceptions of its needs. There are also negotiating advantages for a state to engage with a single collective industry representative rather than with all the

[145] Emiliano Grossman, "European Banking Policy : Between Multi-Level Governance and Europeanization," in , eds. Andrew Baker, David Hudson and Richard Woodward, Vol. 16 (London ;New York: Routledge, 2005), 130., 137.
[146] Anke Hassel, "Multi-Level Governance and Organized Interests," in , eds. Henrik Enderlein, Sonja Wälti and Michael Zürn (Cheltenham, UK ;Northampton, MA: Edward Elgar, 2010), 153., 156.
[147] M. E. Price and S. G. Verhulst, "In Search of the Self: Charting the Course of Self-Regulation on the Internet in a Global Environment," in *Regulating the Global Information Society*, ed. Christopher T. Marsden (New York: Routledge, 2000), 65.; Lawton, McGuire and Walzenbach, *Polycentric Governane Meets the New Economy: The United States, the European Union and Transnational Regulation*, 35

individual members of a sector.[148] Solving such coordination problems is one of the advantages Hooghe and Marks cite from a multi-level governance system.[149] Of course, there are trade-offs as well. In essence, the state trades a solution to the coordination problem for the creation of principal-agent problems. A private governance institution will serve the interests of its constituent private actor members primarily, and the interests of the state only secondarily or under pressure.

Inevitably, therefore, the presence or absence of private governance networks as an additional "level" of governance will have consequences in how the state engages with the sector. Especially in crucial sectors such as finance, those consequences can be of great magnitude. Therefore, it behooves both students of finance and of multi-level governance to explore the role of private governance. Two questions dominate such an examination: in what circumstances do private governance networks emerge, and what effects do such networks have? Examining the politics of financial intervention offers a way to explore both questions. Finance is a crucial case, as an area of 'high politics' with immense economic importance, not only due to the size of the financial sector in an advanced capitalist economy, but its central role in the economy and potential to cause wider economic distress. Bache and Flinders suggests multi-level governance is less likely to form in such high politics circumstances, so if MLG can be seen to play a factor, it indicates the real strength of the approach.[150] Moreover, examining private governance provides an opportunity to examine the potential for private rescues, organized and

[148] Tanja A. Börzel and Karen Heard-Lauréote, "Networks in EU Multi-Level Governance: Concepts and Contributions," *Journal of Public Policy* 29, no. 2 (2009), 135-151., 142.
[149] Marks and Hooghe, *Unraveling the Central State, but how? Types of Multi-Level Governance*, 233-243, 239.
[150] Bache and Flinders, *Multi-Level Governance: Conclusions and Implications*, 195, 198-199.

funded by private actors, as well as to examine if private governance networks play a role in shaping the state's response.

Chapter 3: A Theory of State and Private Responses to Financial Crises

Financial Governance and the Literatures

Combining the insights of the comparative capitalism and multi-level governance literatures offers a way to recast comparative capitalisms in a multi-level governance framework. Coordinated capitalism, with private bank-based financial systems, can be understood as capitalism organized around private governance networks. Such private governance provides an exemplar of Hooghe and Marks' Type II MLG, oriented on task-specific lines and precisely on the public-private frontier where Hooghe and Marks predict such governance will emerge.[151]

Finance is in many ways an essential utility to the functioning of modern capitalism, performing the central function of distributing capital resources. It also, however, is generally dominated by profit-seeking private actors, and how those actors organize themselves can have great impact on how states respond to crises. In turn, how the sector organizes itself will be chiefly determined by how financial actors perceive their interests relative to each other, and to the state. Comparative capitalism identifies three major ways of organizing access to capital, each largely historically contingent in its origins.[152] The first, state-owned banking systems, has been virtually abandoned globally since the French banking privatization in the late 1980s. The other two models are the stock-market-based system found in the liberal Anglo-American states and the private bank-based system found in Germany, Japan, and other corporatist economies. The two

[151] Liesbet Hooghe and Gary Marks, *Multi-Level Governance and European Integration* (Lanham, MD: Rowman & Littlefield Publishers, 2001), xvi, 251 p., 10.
[152] Franklin Allen and Douglas Gale, *Comparing Financial Systems* (Cambridge, Mass: MIT Press, 2000), x, 507 p., 24-44.

sources of capital produce substantially different relationships both between clients and banks, and among banks.

In stock-market-based systems, firms sell stock directly to investors to raise capital.[153] Banks may serve as investment managers, and are also a source of loans, or liquidity, to firms. Because stock can rapidly be bought and sold, relationships between firms and investors are necessarily shallow and short-term. Firms will be reluctant to share private information with investors who can easily sell their stock and share that information with competitors. Investors must therefore rely on publically-provided information on firms, such as public earnings reports or stock price. That both firms and investors can easily end their relationship affects the relationship between banks. Easily-severed firm-bank ties make it relatively easy for banks to poach each others' clients, and they will expend considerably energy attempting to do so. The zero-sum relationship between banks moreover means that any measure which aids one bank harms its competitors. Little space for cooperation exists, unless the relative gains are in the bank's favor, or dwarfed by the absolute gains. Interbank relationships in capital market systems, therefore, tend to be extremely limited. Banks will still lend to each other and engage in other cross-bank activities, but always from an arms-length distance. Interbank lending will only occur at rates favorable to the lending bank, and on good collateral. Far from being interested in supporting an ailing peer, healthy banks will see opportunities in the collapse of a rival, as that failing bank's clients will be up for grabs. In such an environment, banks will collaborate only rarely, and little space will exist for the emergence of private governance institutions.

[153] Ibid., 46-48.

Private bank-based systems, however, have different relationships between firms and banks, and thus different relationships among the banks. While relationships between banks and firms in stock-market systems are short-term and shallow, in private bank systems relationships are long-term and difficult to break. Individual investors provide money to banks, which in turn are the chief investors in firms. In such systems, the private information problem is solved by making banks intimate confidants of firms. Because the bank cannot easily sever its connection with the firm, their fortunes are bound together, and the bank will not risk harm to itself by releasing private information. This has advantages for both firms and investors, as a long-term relationship enables more long-term planning. It also alters the relationship among banks. Because the relationship between bank and firm is hard for either to break, it is extremely difficult for banks to poach each others' clients. Therefore the direct competition between banks is diminished.[154] With less to gain by undermining one's banking peers, the importance of absolute gains increases, and greater space exists for cooperation and private governance. Interbank linkages will be thicker, and may even take the form of cross-shareholding between banks. This, in turn, means that while bank failures in capital market systems create opportunities for rivals, bank failures in private bank systems can do more harm than good for other banks, by bringing them down along with the initially-distressed peer. This space for cooperation allows for the formation of private governance networks to advance banks' common interest. Private governance offers several substantial benefits for banks over the public governance that must mange zero-sum competition capital market systems. Being less focused on relative advantage over rivals, cooperative banks can better organize self-regulation, gaining greater autonomy from state regulators.

[154] Ibid., 235.

Private governance also allows banks to compete as a group against rival banking groups both domestically and internationally. This is the basis of the *Gruppenwettbewerb*, the "group competition" in German banking, wherein the private banks work together to compete against the Landesbanken, and each are able to respond as a group to international pressures.[155] Members of each banking group can, through such networks, gain the advantages of being a large bank without sacrificing their individual autonomy.

Relevant Actors

The presence or absence of private governance networks will also shape the patterns of public and private responses in financial crises. Policy responses to financial crises must be understood primarily as political, rather than economic, challenges, so patterns of responses within countries will be determined in no small part by the interests and resources of relevant actors. Because of the centrality of financial systems to the functioning of capitalist economies, a wide range of actors will have a stake in the resolution of financial crises. However, many of these actors, both in the domestic real economy and internationally, will have similar positions and clout across states, and therefore bring common pressures. Explaining different patterns of response, therefore, requires examining how interests differ across cases. Here the organization of the national financial system will play a crucial role, as healthy banks will have different interests in different systems, and the presence or absence of private governance networks will shape their access and influence on the policy process.

Common Pressures

[155] Richard Deeg, *Finance Capitalism Unveiled: Banks and the German Political Economy* (Ann Arbor: University of Michigan Press, 1999), 19.

The three most prominent groups with interest in the resolution of financial crises common across systems are the general public, the failing bank or banks, and foreign investors, banks, and states. The actors with the most direct stake in financial crisis response patterns will be the failing banks themselves. Their preferences will be clear, although their influence may vary from case to case. Failing banks will want to be saved on terms that minimize losses to shareholders, loss of independence, and dismissals of management. They therefore will favor aid on generous terms which either preserve bank independence while insulating shareholders from losses, or if a sale is necessary, commands as high a sale price as possible. The preferences will be for liquidity support at a low rate of interest and with low collateral and capital support which generates a better-than-market profit for shareholders. Plausibly shareholders and management may have divergent interests, but the widespread practice of paying management in shares or stock options means that in practice management will share the shareholder focus on preserving the value of stock prices. Management may have a greater interest in preserving firm independence, and thus preserving their own jobs, and in this will enjoy an organizational advantage, as they will already be in position to negotiate those terms, while shareholder boards would need to be assembled, and actions requiring the vote of a quorum of shareholders will be quite time-consuming and costly to assemble.

Despite this clear interest in the outcome of financial rescue policy debates, however, the influence of failing firms will vary substantially. Since they will only survive with the support of either other firms or the state, the failing firms themselves will be in a weak position to negotiate favorable terms. At best, they may be able to threaten to go into bankruptcy if the aid terms are too harsh, but because bankruptcy

would impose something approaching a total loss to the firm, this is not a credible threat in most cases. Their ability to influence the outcome, therefore, will depend on whether they have the support of allies who retain their own influence, the presence or absence of whom will be shaped by the shape of the national financial system, as detailed below.

By far the largest of the relevant groups are the general public, understood as all members of a society apart from the financial sectors. They will have interest in the resolution of financial crises both as taxpayers and economic actors. Although such a broad group will have many diverse elements, the general public in any advanced capitalist society can be expected to have certain common preferences. As economic actors, whether consumers, workers, or employers, the general public will want to limit the damage to the real economy as much as possible, and therefore will favor rapid state action to contain the effects of the crisis. At the same time, as taxpayers, the general public will resist the use of large amounts of state funds to contain the crisis, preferring lower-cost rescues. Obviously these two pressures can work at cross-purposes, but do produce some common response patterns. The general public's first preference will be for privately-funded solutions, which contain the costs of the crisis without using state funds. Failing that however, the general public will prefer action which contains the crisis over inaction. The general public's preference will be for resolutions which limit redistribution of taxpayer funds to financial actors. Given that financial crises typically generate broader economic distress, the public will resist a policy response which insulates financial actors from losses, when those actors will be seen as the source of the problems. Typically, this antipathy includes all financial actors, not just those firms and individuals directly responsible.

The public will be more concerned with issues of fairness in assigning costs than in potential market distortions from state aid. Although this leads to resistance to moral hazard-creating policies, it also means that the general public may be more concerned with punishing high-profile financiers and issues of compensation than subtler questions of penalty rates for state aid, which impose costs on firms but enable them to continue to function. As such, the general public will favor policies which minimize moral hazard, but be more concerned with enabling private market solutions, or with issues such as executive compensation, which have relatively limited moral hazard implications but affect the public's sense of whether justice is being done. The general public will also tend to be fairly unsophisticated in its evaluation of state response programs, focusing more on the total up-front money provided rather than likelihood of repayment or costs imposed on aid recipients.[156] Therefore, a smaller plan which insulates financial actors from losses may attract less ire than a larger plan which imposes severe costs on aid recipients.

The domestic general public will by far outnumber financial actors, but will suffer organizational and informational disadvantages. Financial actors will be concentrated in at most a few hundred firms, of which a bare handful will be of central significance. Those firms, however, will have a very strong interest in the shaping of financial policy, and generally will already have access to policymakers in charge of shaping that policy. Moreover, they will have a clear informational advantage over a general public which

[156] Sukhdev Johal, Michael Moran and Karel Williams, "Post-Crisis Financial Regulation in Britain," in *Crisis and Control: Institutional Change in Financial Market Regulation*, ed. Renate Mayntz, Vol. Bd. 75. (Frankfurt: Campus Verlag, 2012), 67.; Guillermo Rosas and Nathan M. Jensen, "After the Storm : The Long-Run Impact of Bank Bailouts," in *Bailouts: Public Money, Private Profit*, ed. Robert E. Wright (New York: Columbia University Press, 2010), 108.; Donald F. Kettl, "The Savings-and-Loan Bailout: The Mismatch between the Headlines and the Issues," *PS: Political Science and Politics* 24, no. 3 (1991), 441-447.

will generally not closely follow issues of financial policy in good times. As such, they will have little direct influence on policy debates, with their influence chiefly felt through the pressure they will bring on policymakers in the next election. This influence, therefore, will be large but blunt, and concerns over perverse redistribution or moral hazard may be smoothed-over by elite framing of the debate, or by linked but not directly relevant policy programs, such as relief for mortgage-owing homeowners.[157]

Finally, in an increasingly integrated international financial system, foreigners increasingly may have a stake in the resolution of financial crises. Foreign banks will fear international contagion, so want action to contain crises, but also will fear competing against state-subsidized rivals, so will favor harsh terms for failing firms. Foreign actors in the general public, like their domestic counterparts, will want damage to the real economy contained and their deposits protected, but not being taxpayers, will care less about the costs to the state. Finally, other states, the foreign actors with the greatest influence, will focus on advancing the interests of their banks and citizens, and therefore also favor state aid which limits the crisis while avoiding subsidizing would-be rivals to their banks. It is important to note that foreign states may themselves be significant creditors to at-risk institutions, and therefore have a direct stake in wanting to avoid losses themselves. In the 2007-2009 crisis, for instance, China held a large amount of bonds issued by US mortgage lenders Fannie Mae and Freddie Mac, and therefore faced a threat of losses to the Chinese state directly if the resolution of those firms imposed losses on bondholders.

[157] Guillermo Rosas, "Bagehot Or Bailout? an Analysis of Government Responses to Banking Crises," *American Journal of Political Science* 50, no. 1 (2006), 175-191.

The cumulative effect of these pressures is that, until the interests of domestic banks and financial institutions are taken into account, policymakers across advanced capitalist states should have common pressures toward resolving financial crises in a way that minimizes contagion and damage to the real economy while minimizing the degree to which private banks benefit from those policies. The failing banks themselves will of course oppose this, but have little clout in their decline, especially set against the interests of the general public and foreign states.

Divergent Actors: The Banks and the National Financial Systems

The chief way in which interests differ across capitalist states in financial crises will be in the interests of the healthy financial institutions. As outlined above, the short- or long-term nature of provision of capital shapes not only the bank-firm relationship, but also interbank relationships. In stock market-based systems, where banks and other firms can easily break their relationships, banks can easily poach each other's clients, intensifying competition and leaving little space for private governance to form. In private bank capital-based systems, bank-firm relationships are costly to exit, making it harder for banks to poach each other's clients. This diminished inter-bank competition creates a space tighter inter-bank relationships, and for private governance networks to form, to promote the mutual interests of the banking sector.

The presence or absence of a private governance network also has implications for how a banking system confronts financial crises. In stock-market-based systems, with atomized, competitive relationships between banks, the failure of a rival creates opportunities for healthy banks. They can poach clients from the failing bank, and hope to gain market share from the collapse of a rival. Banking associations will be weak,

with little power to coordinate a joint rescue, and banks will focus on their narrow self-interest over the broader interests of the sector or national economy. What private rescues exist will therefore be in the narrow self-interest of the rescuing bank. Liquidity support, cash loans to failing banks, will only occur at high rates of interest and backed by good collateral, to maximize gains and minimize risks. Capital support will generally only be through "fire sale" purchases of assets, taking advantage of rival's distress to purchase assets, or even the entire bank, at a bargain price.

In such systems, the state will have a relatively free hand in shaping rescue policies. However politically powerful a failing bank may have been while healthy, it will lose that clout as it fails. Other banks, far from wanting to advocate for generous state terms, will actively oppose generous rescues, not wanting a rival to receive a state subsidy. Without the possibility of a private rescue, the failing bank will have little alternative other than to accept whatever terms the state offers or fail. Therefore, policymakers will have latitude to offer aid on terms that will maximize the state's goals of maintaining systemic stability while minimizing losses to the state.

In private bank-based systems, with private governance networks, banks will be peers more than rivals, and more likely to see dangers rather than opportunities from a peer's fall. Interdependence between banks, both because of direct cross-ownership and joint ownership in other firms, means that healthy banks will feel costs directly if a peer fails. Less-intense interbank competition means that the costs of another bank's failure, chiefly general loss of faith in the financial sector, likely outweigh the benefits from gaining market share left open by a bank failure. Moreover, the private governance network can rapidly organize a joint private rescue, distributing the burden of rescuing

the bank across the sector, providing a solution to collective action problems of private rescues. Such rescues may be more desirable than state-funded rescues, because they avoid an expansion of state control into the interdependent networks of banks. This provides a benefit to the state as well. Rather than negotiating with all major banks as individuals, the state can negotiate with a single representative of an organization with the ability to speak for and make commitments on behalf of a wide range of banks.

This therefore produces a higher threshold before state assistance is required for banks. However, when state aid is required, it should generally be on less-favorable terms for the state than in the more atomized stock market systems. In stock market systems, failing banks have few allies in time of distress, and are forced to accept whatever terms the state offers. Failing banks in networked, private bank systems, however, will retain allies through the private governance network. Although the bank itself may lose political clout along with its economic strength, the private governance network will remain a highly influential player. Indeed, because of its role in self-regulation, the private governance institution may already have substantial political clout, including a formal role in the financial policymaking process.[158] It will serve as an ally to the bank in negotiating the terms of any state rescue, lobbying for more favorable terms from the state. The state, which is primarily concerned with preventing broader economic damage, will accept these terms in order to prevent a broader crisis, even if it increases the costs to the state.

Predictions

[158] Bundesverband deutscher Banken representatives, Interview by Author, 2011.; Tanja A. Börzel and Karen Heard-Lauréote, "Networks in EU Multi-Level Governance: Concepts and Contributions," *Journal of Public Policy* 29, no. 2 (2009), 135-151, 142

This understanding of the different interests of financial actors across different capitalist systems predicts different dynamics for the policy responses across those systems. In liberal systems, with atomized financial systems and weak or nonexistent private governance networks, the process is relatively simple. As banks fail, they lose their influence, and other banks are either indifferent to their fate or outright hostile to any state aid that would reinforce a competitor. Banks will only provide assistance to failing firms if they can get a good price, such as fire-sale asset purchases or loans with high interest rates and collateral of unquestionably high value. The state, therefore, will be the primary source of emergency assistance, but free of influence from the banking sector and therefore able to impose terms as harsh as policymakers believe are appropriate. Given the pressure to appease domestic and foreign interests pushing for harsh terms, these may be quite stringent.

In organized capitalist systems, with private bank-based financial systems, banks will be much more interdependent, with strong private governance networks that have close relationships to policymakers. This creates a more complicated, two-stage pattern of responses. Because healthy banks have a direct stake in preserving failing banks, if a failing bank's problems are relatively minor, a private rescue will be more forthcoming. This is made all the easier by the presence of private governance networks to organize the rescue and prevent "free-riding" from banks that want the crisis resolved, but would prefer to let other banks bear the burden. Therefore, for relatively minor incidents, private bank-based systems resolve crises with minimal state involvement or investment, relative to liberal systems where the state is not only the last resort, but frequently the first resort for a distressed bank. However, should the crisis exceed the capacity or will

of the private banks to manage, the healthy banks will have both means and desire to lobby the state for more favorable treatment than in liberal systems. Therefore, there will be a higher threshold for state involvement, but when the state does get involved, it will be on terms more favorable to the failing banks and more expensive to taxpayers. These dynamics can be modeled to create two testable hypotheses:

H1) Private Rescues will be easier to organize, and therefore more common, in states with private bank-based financial systems than in states with liberal stock market-based financial systems.

H1A) With private rescues less forthcoming, state intervention will be more common in states with liberal, stock market-based financial system.

States will presumably prefer solutions which minimize the cost to taxpayers, so long as the crisis can be contained in a rapid fashion and in the absence of countervailing pressures from interest groups seeking generous terms. Any form of state assistance to the financial sector, regardless of the punitive or moral hazard-containing measures attached, produces deep hostility from the general public, especially if the real economy experiences a downturn as a result of the crisis. Therefore, the ideal solution for states is always for private actors solve the problems with private funds. To that end, the state will attempt to orchestrate such a private sector-funded rescue, if possible. However, the success of such an approach depends not only on the exposure of other financial institutions to the crisis, but also on their willingness to spend their own money to contain its effects.

At-risk firms also have constant preferences, favoring a rescue in whatever manner best protects shareholder and manager interests. The interest of healthy firms in

intervention, and their ability to intervene, will vary from system to system, however. In private bank-based financial systems, extensive interdependence means other firms will feel costs directly if a firm fails, giving them a strong incentive to intervene. They may have cross-ownership, or joint ownership in a third firm. Additionally, because their relationship is less competitive than in liberal systems, the advantages in seeing a competitor falter, relative to the risks of contagion, are less clear. Therefore, firms are more likely to see it in their own interest to contribute to a rescue effort.

Organizationally, firms in a private governance network are better positioned to support their peers as well. A strong and pre-existing private governance association can provide a mechanism for the pooling of resources in a consortium rescue, as well as a way to censure those healthy firms which chose not to participate. This organizational difference not only makes it easier for firms to intervene, but also makes it easier for the state to prod the sector to intervene.

In liberal systems, firms will lack both the means and the incentive to intervene on behalf of their ailing peers. Being in a more directly-competitive relationship, healthy firms will see more of an advantage in letting their rivals suffer, potentially gaining market share at their expense. Moreover, should a rival fall far enough, it may be possible to buy their still-valuable assets at fire-sale prices either in the aftermath of a bankruptcy or in a last-ditch attempt to avoid such a bankruptcy. Therefore, most private rescues in a liberal financial system will be via a stronger firm purchasing all or part of a distressed firm at a discount. Consortium rescues will present great difficulties in a liberal system. Without a pre-existing framework, consortium negotiations must be conducted on an ad hoc basis, and it may be difficult to enact barriers to firms defecting, and 'free riding' on others'

efforts to contain the crisis. Moreover, the lack of pre-existing organization means that the state will not have an obvious negotiating partner speaking for the whole industry, and must instead negotiate one-on-one with firms that may be in a position to help. Therefore, private rescues should be rarer in liberal economies than in coordinated ones. One corollary of this greater propensity for private rescues in private bank systems is that state intervention will be more common in liberal systems. Actors in both systems will have strong reason to want to see financial crises contained, but while in private bank systems, the state can rely to some degree on private action to contain the crisis, in liberal systems, the state may find itself the only actor capable of and willing to act. Therefore, the state will find itself in a position where it must act, or the crisis will not be contained, more often in a liberal system than a private bank system.

H2) When states intervene with public funds, the terms will be more generous to firms in private bank-based financial systems than firms in liberal systems. The precise terms will manifest themselves in several ways:

- *Liquidity support, including loans, loan guarantees, and regulatory relief will be provided at lower rates and/or on more generous collateral in private bank-based systems. Regulatory relief will be more common in states with private bank-based systems*
- *Capital injections will be more likely to take the form of toxic asset purchases in private bank-based systems and more likely to take the form of full or partial nationalizations in liberal systems.*

- *The pricing of capital injections, whether through toxic asset purchase, capital injection, or full nationalization will be closer to market rates in liberal systems than in private bank-based systems*

In liberal systems, healthy firms will be indifferent as to the manner of the rescue of a distressed firm, so long as the crisis is contained. Without pressure from healthy firms, policymakers will have a relatively free hand to set terms which contain moral hazard and limit the politically-damaging transfer of taxpayer wealth to shareholders. Healthy firms will in fact oppose generous aid to distressed firms, not wanting their rivals to gain competitive advantage through state assistance. In networked, private bank-based systems, high interdependence means that healthy firms will have a clear interest in the fate of distressed firms. Firms will be more concerned with ensuring generous terms for the industry than in a rival gaining a competitive advantage from state assistance. This will manifest itself as a preference for state aid on generous terms. Therefore, healthy firms will have incentive to use their clout to shape policy outcomes in pursuit of these two objectives.

Moreover, in networked private bank-based systems, the strong private governance associations will allow firms to coordinate their political activities, giving them greater clout than the atomized firms in a liberal system. Healthy firms in both systems may have substantial political clout, especially given the specialized knowledge required to understand financial policy and the economic importance of the financial sector in advanced capitalist economies. Private governance networks may even be part of the regulatory structure, partnering with state regulators to identify and manage problem

institutions. This, in turn, will give those private governance networks a seat at the table in policy deliberations over crisis rescue policies.

However, in liberal systems, distressed firms will lose their influence quickly. The consequences of their fall may be grave enough to require state assistance, but they will lack the standing to shape the form that assistance takes. Healthy firms will retain their influence, but their interests will focus on securing a good deal for themselves, and not the preservation of their distressed rivals. In coordinated systems, however, failing firms will retain some influence as members of sector-wide associations, and those associations will retain a voice in the policymaking process. Moreover, the superior organizational strength of a united industry association rather than the particular interests of individual banks will mean that the sector as a whole has a greater voice in how the rescue is designed and implemented. As a result of these factors, while the private sector may be called upon to invest their own funds in a rescue effort, for reasons outlined in H1, the terms of state assistance will be more generous in coordinated systems than in liberal ones.

Liquidity aid and direct capital injections, therefore, will be on more favorable terms in private bank-based systems than in liberal ones. Healthy firms will have a greater interest in pressuring the state to pay above-market rates. Insulating their partners from losses will help the healthy firms themselves. Moreover, because they have less to fear from state subsidies of other firms, the advantage in establishing an above-market precedent over avoiding subsidy of the competition will be greater for coordinated firms than liberal ones. Healthy firms will also resist state ownership stakes, which will entangle the state in their own private networks. Consequently, they will pressure the

state to solve capital injections through bad banks, rather than through direct injections. Doing so is both advantageous to private firms and avoids the state taking ownership of an ongoing financial concern. Rather, the state will simply take possession of bad assets, and hold them until they either lose their value or are sold back. The state will not, however, emerge as a competitor for private firms.

Finally, as financial markets become increasingly integrated, foreign actors will be of increasing importance in deliberations over responses to financial crises. Therefore:

H3) Regardless of financial system, greater international exposure produces pressure to adopt solutions which minimize moral hazard.

Contrary to the predictions of the globalization thesis, international financial integration has not produced convergence upon a single financial system model, and national models display considerable persistence. International integration has, however, increased the salience of foreign financial actors in states' economic policymaking. An increase in transnational deposit banking increases the importance of foreign depositors, while increased financial flows mean that firms based in other countries may be central financial actors. Foreign firms may lobby policymakers directly, but both of these types of actors will make their interests felt indirectly, by lobbying their home state to put state-to-state pressure on the target state's policymakers. Whatever their differences at home may be, in regards to another state's financial rescue policies, these disparate actors will have a common interest in a resolution to the crisis on non-discriminatory terms. Foreign depositors will want the same protections as their domestic counterparts, and foreign

firms will resist any rescue which puts them at a competitive disadvantage versus their domestic rivals.

In states with all but the smallest financial markets, foreign influence will be less than domestic actors, but may nevertheless play a key role in shaping financial policy outcomes. This is especially likely in cases where the political influence of firms is closely balanced by the influence of the general public. Moreover, the influence of other states may extend to limiting the ability of policymakers to negotiate private-market solutions involving foreign firms or to providing decisive pressure on questions of including foreign firms in domestic rescue schemes. Additionally, greater financial integration has increasingly meant increased involvement with international financial institutions. Such institutions, like other states, will push for rescues on non-discriminatory terms. Their influence may be more direct, especially in a European Union context, where competitiveness and non-discrimination policies may create legal barriers to certain kinds of rescue operations, or require the consent of relevant international institutions, such as the European Commission or the European Central Bank. Contrary to the globalization thesis, this will not necessarily lead to a reshaping of the orientation of the national financial system, but will affect the terms on which aid is provided to the system.

Alternative Arguments

In addition to the arguments suggested by a reading of the comparative capitalisms and governance literatures, there are some alternative arguments to consider. As noted above, there is a current in the literature on comparative capitalisms which examines the interrelation between institutions of capitalism and those of government,

and how each may shape the other. The above argument examines how the institutions of capitalism, especially the presence or absence of private governance networks, shape the politics of state response to financial crises. By the same token, the institutions of government, especially the form of the state, may also play a role in shaping state responses, and should be examined as well. Additionally, while the emphasis in the above outline is on the interests and organizational strength of financial actors, treating politicians as having essentially constant preferences in resolving banking crises, political ideology and party may also play a role in shaping state responses to financial crises. There are two sets of arguments to be made about state structure:

H4) Unitary states will be less likely to intervene than federal ones, and more likely to impose stringent conditions when they do intervene.

One trend in the comparative capitalisms literature that considers this possibility argues that federal states produce distinct patterns of financial development from unitary ones. Katzenstein argued that federalism in the United States and Germany in the 19th century led to fragmentation in the drafting of economic policy, with consequences for both the domestic and international orientation of state economic policy. This fragmentation of authority made the rise of private governance a necessity if the fragmented state could not provide effective public governance.[159] Therefore, federalism led to the development of corporatism in both states, although, as Gourevitch and Shinn trace, American corporatism did not survive the economic and financial disruptions of the early 20th century.[160] While Katzenstein argues that federalism led to corporatism, Verdier's

[159] Peter J. Katzenstein, *Between Power and Plenty: Foreign Economic Policies of Advanced Industrial States* (Madison: University of Wisconsin Press, 1978).
[160] Peter Alexis Gourevitch and James Shinn, *Political Power and Corporate Control: The New Global Politics of Corporate Governance* (Princeton: Princeton University Press, 2005).

complementary argument holds that unitary states are more likely to develop stock market-based systems.[161] In federal states, the various federal units have incentives to maintain their own regional financial markets, to address their local concerns. For instance, the German Landesbanken had their origins as the development banks of the various German Länder. In a unitary system, however, the central government has incentive to pool financial resources in a single center, emphasizing the benefits of the concentration of capital in a single market over those of many regionally-attuned smaller markets. This concentration, in turn, allows for the development of stock markets, rather than the private banks that dominate in smaller markets.

Both of these arguments suggest that the federal or unitary nature of the state will govern in part the long-term development of financial markets. It follows that the structure of the state may also play a role in how states respond in the short term to financial crises. A unitary state, without a delegation of powers to federal units, will be more powerful vis-à-vis the banks, having both a broader electoral base and greater economic resources than the central state of a federal system would. Therefore, it may be in a better position to dictate terms to the banks. Conversely, in a federal system, not only is the central state weaker than a unitary state would be, but the federal units may also play a role in shaping responses. The federal units may have their own reasons to favor more generous terms to the banks, especially if a bank is a primary economic actor in that region. A bank may be large enough to dominate economic activity in a federal region, but only be a relatively small part of the national economy, so its ability to influence policymakers, especially at the federal unit level, may be magnified by federalism. Therefore, federal systems may

[161] Daniel Verdier, *Moving Money: Banking and Finance in the Industrialized World* (Cambridge, UK: Cambridge University Press, 2002).

produce more generous terms of assistance for banks, both because the state will be weaker vis-à-vis the banks and because the central and federal units may work at cross-purposes, with the banks favoring whichever is more generous.

H5) Parliamentary states will be less likely to intervene and more likely to impose stringent conditions when they do intervene than Presidential states.

Banks' access to policymakers may also be shaped by whether a state is a presidential or parliamentary system. The ability of financial actors to shape the policy process is a question not only of size and resources, but also of access. A state with a relatively closed decision-making process will have fewer access points, and therefore less opportunity for outside actors to make their influence felt. In such a closed process, politicians will be relatively insulated from special-interest pressure. A plethora of access points should therefore be to the advantage of the banks, which can use the relatively greater access provided to lobby for more favorable treatment. Moreover, the centralized interests of the banks, concentrated in a few major institutions or even in a single private governance institution, will give them advantages in such systems over the relatively disorganized and disaggregated interests of the general public.[162] Numerous access points would allow financial interests to both promote their own arguments more effectively and block potentially disadvantageous policies from implementation. Conversely, a more closed policymaking process should enable states to act with a freer hand, enabling the state to more easily impose stringent terms. Therefore, the more centralized decision-making is, the less financial-actor friendly the outcomes should be. In a presidential system, the executive is forced to engage in bargaining with the

[162] Mancur Olson, *The Rise and Decline of Nations: Economic Growth, Stagflation, and Social Rigidities* (New Haven: Yale University Press, 1982).

legislature to enact major policy, a step largely absent from parliamentary systems. The opportunity to lobby the executive branch and legislators separately provides potentially greater access for private interests to advance their preferences.[163] Because of this, Weaver and Rockman suggest that presidential systems should be more permeable to outside influences, including the financial sector, than parliamentary systems.[164]

A logical third set of state-structure variables concern electoral system design. Here, however, the predictions out of the literature are much more mixed. Several scholars in the comparative capitalisms literature argue that proportional-representation systems are more commonly associated with organized capitalism, and thus with private bank-based systems, making it difficult to separate predictions deriving from electoral systems from those deriving from financial systems.[165] Moreover, while proportional representation will affect the number of parties in a system, it is not clear how this should affect patterns of response to financial crises.

H6) State intervention will be more likely when left parties are in control of government

H7) State intervention will be less generous to banks when left parties are in control of government

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[163] Bert A. Rockman and R. Kent Weaver, *Do Institutions Matter?: Government Capabilities in the United States and Abroad* (Washington, D.C: The Brookings Institution, 1993).

[164] Ibid.

[165] Gourevitch and Shinn, *Political Power and Corporate Control: The New Global Politics of Corporate Governance*; Marco Pagano and Paolo F. Volpin, "The Political Economy of Corporate Governance," *The American Economic Review* 95, no. 4 (2005), 1005-1005.; Torben Iversen, *Capitalism, Democracy, and Welfare* (New York: Cambridge University Press, 2005).; Thomas R. Cusack, Torben Iversen and David W. Soskice, "Economic Interests and the Origins of Electoral Systems," *American Political Science Review* 101, no. 3 (2007), 373.; Helen Callaghan, "Insiders, Outsiders, and the Politics of Corporate Governance how Ownership Structure Shapes Party Positions in Britain, Germany, and France," *Comparative Political Studies* 42, no. 6 (2009), 733-762.; Enrico C. Perotti and Ernst-Ludwig von Thadden, "The Political Economy of Corporate Control and Labor Rents," *The Journal of Political Economy* 114, no. 1 (2006), 145-174.; Cathie Jo Martin, "Sectional Parties, Divided Business," *Studies in American Political Development* 20, no. 02 (2006), 160-184.

A final political variable to consider is party ideology. Regardless of the financial or political structure of the state, political actors will have varying degrees of comfort with state intervention in markets, and potentially divergent opinions on the normative good of state ownership and the necessity of shielding social actors from the negative consequences of market actions. This can be generally reflected in the party affiliation of political actors. Left parties will be more comfortable with steps that expand state ownership or state regulation of the economy than right parties, regardless of the measures of intervention. Indeed, many left parties in both the advanced and developing states have called for nationalization of the financial sector not merely as a response to banking crises, but as an end in itself, while right parties routinely call for a relaxation of the state role in managing the economy, both in finance and elsewhere.

What is less clear is the position of right parties toward state aid to banks. The left's position reflects not only a greater ideological comfort with state management of the economy, but also that major financial actors are generally part of the right's base, and therefore opposing them carries less political costs to the left.[166] Right parties here might bifurcate, between laissez-faire market advocates and pro-business right parties. The former may favor letting banks fail, on the grounds that any aid to private industry is market-distorting. The latter, however, may favor generous subsidies to weak banks, the better to maintain an active private sector and to support their base in the financial sector. Nevertheless, it seems likely that, regardless of the position of the right party, left parties will favor intervention more readily than right parties, and on terms which impose

[166] John W. Cioffi and Martin Höpner, "The Political Paradox of Finance Capitalism: Interests, Preferences, and Center-Left Party Politics in Corporate Governance Reform," *Politics & Society* 34, no. 4 (2006), 463-502.; Callaghan, *Insiders, Outsiders, and the Politics of Corporate Governance how Ownership Structure Shapes Party Positions in Britain, Germany, and France*, 733-762

harsher terms on banks. Intervention generally, and nationalizations specifically, should be more common when left parties dominate, as left parties will be less likely to oppose expansion of state ownership on normative grounds. Additionally, recapitalization recovery will be more likely if the left is in control, as the left will be more likely to favor harsh terms of intervention than the pro-business right. However, this effect may be less pronounced, as the laissez-faire right wing, while opposing state intervention generally, may favor harsh terms when the state does intervene. In the United States, for instance, libertarians reluctantly conceding the need for state intervention were among those calling for the harshest terms for that intervention, so as to best approximate market discipline while still containing the crisis.[167]

Research Design

These dynamics are explored in a combination of quantitative and qualitative methodologies. Quantitative analysis allows for an illustration of broad trends and a demonstration of the statistically significant relationship between the nature of the financial system and state policies adopted to manage financial crises. Qualitative analysis, meanwhile, both allows for an exploration of private rescues and the terms of public and a deeper analysis of the politics leading to those policies ultimately adopted.

Quantitative analysis relies on a database of state responses to financial crises from 1974 to 2009, drawn primarily from Laeven & Valencia's 2012 Systemic Banking Crises Database, expanded by including those crises included in Caprio et al.'s 2005 Banking Crisis Database and Reinhart & Rogoff's 2009 Historical Summaries of

[167] William Poole, "A Libertarian Perspective on the Financial Crisis and Financial Reform," *The SAIS Review of International Affairs* 30, no. 1 (2010), 17.

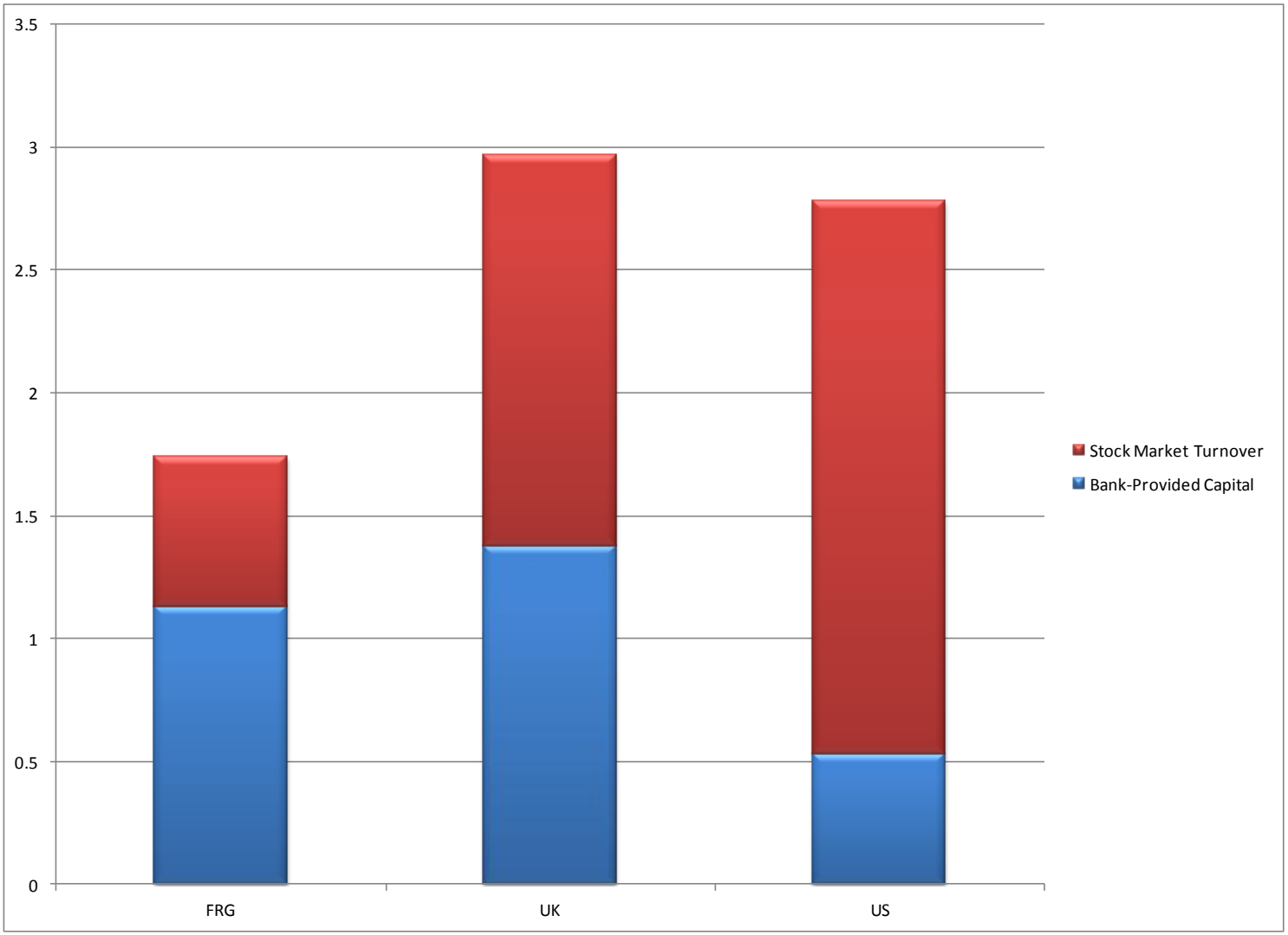
Banking Crises for the relevant time and income levels.[168] Cases are limited to those counted as "Upper Middle Income" or "High Income" by the World Bank World Development Indicators, as a greater dominance by foreign actors and weaker faith by investors may substantially alter the dynamics of response in poorer states.[169] Cases are also limited to the post-Bretton Woods environment, as the elimination of capital controls similarly substantially altered the dynamics of financial crises and state responses to them. Because the specific terms of state response, in terms of price paid and conditions set, are frequently not publically available, state responses are reduced to dummy variables, where liquidity support, capital support, and nationalization are either provided or not. Within this measure, certain clear patterns do emerge, indicating that nationalizations and recovery of state investments are both more common in liberal, stock market-based systems. Federalism and party ideology have no significant effect, however, while the presidential/parliamentary control interestingly produces results opposite of predictions.

Case study work explores the dynamics of state response to financial crises across Germany, the United Kingdom, and the United States in their responses to the 2007-2009 financial crisis. All three of these are crucial cases, both because of their international importance and also because they are the most commonly-cited exemplars of the

[168] Luc Laeven and Fabian Valencia, *Systemic Banking Crises Database: An Update* (Washington, D.C: International Monetary Fund,[2012]).; Gerald Caprio, Daniela Klingebiel and Guillermo Noguera, "Banking Crisis Database," in *Systemic Financial Crises : Containment and Resolution*, eds. Patrick Honohan and Luc Laeven (Cambridge, U.K. ;New York, NY: Cambridge University Press, 2005), 307.; Carmen M. Reinhart and Kenneth S. Rogoff, *This Time is Different: Eight Centuries of Financial Folly* (Princeton: Princeton University Press, 2009).

[169] Thorsten Beck, Asli Demirgüç-Kunt and Ross Levine, "Financial Institutions and Markets Across Countries and Over Time-Data and Analysis," *World Bank Policy Research Working Paper Series, Vol* (2009).

Figure 3.1: Sources of Capital in Germany, the UK, and the US



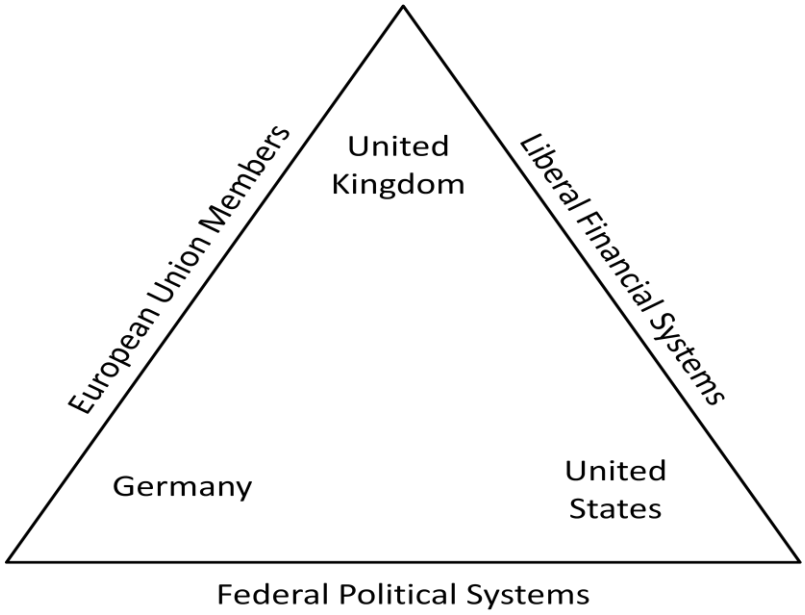
organized capitalist and liberal systems in the literature. Figure 3.1 depicts the ratio of stock market turnover to private bank-supplied capital in these three cases, showing the relative importance of each sector. In Germany, bank capital dwarfs that supplied by stock markets, making banks the key source of capital for firms. In the UK, private banks provide a roughly equivalent amount of capital as a percentage of GDP, but a much larger stock market means that firms have much greater opportunity to rely on stock market sources of capital. In the US, meanwhile, the massive stock market turnover overwhelms private banks as a source of capital.

Additionally, all three of these cases are large advanced economies. Focusing on large advanced economies in a common crisis minimizes variation on a number of potentially significant dimensions, enabling a focus on the key independent variable under examination, the organization of the financial system. The focus on large advanced economies minimizes differences in vulnerability to capital flight and fiscal limits on financial rescue policies. Developing states are generally much more vulnerable to capital flight than their advanced counterparts. Smaller advanced states, too, have different dynamics in times of crisis. The smaller size of their overall economies means they are both more vulnerable to capital flight than larger more diverse economies and will sooner run into budgetary constraints on rescue policies. State guarantees and other intervention policies are generally regarded as risk-free by markets, on the assumption that states are more capable of running long-term deficits than firms. This holds until the state's debt-GDP ratio rises enough to call that into question. The smaller economies of smaller states or developing states mean that they run into debt-related constrains more quickly than large advanced economies.

The cases selected also control for cause of crisis. In all three cases, financial institutions ran into trouble based on essentially the same twin problems: the collapse of a global bubble in sub-prime mortgage securities and the attendant contraction of global credit markets. The housing bubble was largely centered on American sub-prime mortgages, although Spanish and Eastern European housing markets saw similar dynamics. In any event, since the derivative securities from those mortgages were traded globally, the point of origin mattered very little in the actual unfolding of the crisis. Moreover, even those banks which did not trade in subprime securities felt the effects from the credit crunch once banks exposed to those securities started to run into difficulties. Controlling for the cause of crisis, therefore, means that the essential problems were essentially the same in all cases, and obviates concerns that different types of crisis may produce different dynamics, and so explain variation in responses.

The cases selected also allow for a control on European Union membership and federalism. The European Union, far more than any other international organization, can play a significant role in shaping state economic policies. The European Commission has significant authority, under its Competitive Directive, to restrict state responses seen as providing undue state aid. Comparing a major economy outside of the European Union with two within it allows for a control on the influence of the European Union. If the British and German responses closely resemble each other, this suggests that EU factors play a crucial role, while if the American and British responses have more in common with each other, this indicates where the national financial system, and the influence of banks, played a determinative role in shaping policy. Finally, whether a state is federal or unitary may affect the capacity of that state to respond, as power may be more

Figure 3.2: Case Selection



decentralized in a federal system, and banks may be able to turn to sub-national units as alternate sources of assistance, weakening the bargaining power of the central state. The US and Germany are both federal, while the British state is unitary, allowing for an examination of the impact of state structure. Similar US and German responses and a divergent British response would therefore suggest that state structure may be more important than either financial system structure or EU membership.

Conclusion

Financial crises and their responses are obviously of immense importance from a policy perspective. Financial crises are tremendously expensive, and whether states adopt policies which insulate financial sector actors from losses or impose costs on them may play a significant role in determining the risk tolerance of those actors, and thus the likelihood of future crises. Moreover, the costs of containing financial crises may themselves be great, and choices in policy design may increase or decrease the likelihood

of the state recovering some of its money, or even making a profit, to say nothing of the potential for perverse redistribution of wealth from taxpayers to financiers. Therefore, the politics surrounding crisis response policies are of immense practical interest.

Remarkably, however, they have been largely overlooked by the literature. This is all the more regrettable given the potential for the study of financial crises to offer immense value to the development of the comparative capitalisms and governance literatures. For the comparative capitalisms literature, examining the ability of financial systems to self-replicate at critical junctions goes a long way to developing the literature beyond relatively passive theories of continuity and an implied status quo bias. The theories outlined above suggest that the organizational structure of corporatism provides private bank-based systems with superior resources to preserve that structure, by giving the still-healthy and still-influential banks a stake in ensuring that the system continues as before. Conversely, the more atomized inter-bank relationships of liberal, stock market-based systems creates greater space for an expansion of state ownership, and suggests that while corporatist systems are relatively stable, statist and liberal capitalist systems may more easily transition from one mode to the other. This also has the advantage of shifting comparative capitalisms away from economism and functionalism, and toward a theory that emphasizes the political consequences of the organization of financial systems. It also gives firmer microfoundations to the literature by emphasizing how framing organized capitalism in the governance literature allows for a greater focus on the key underlying mechanisms.

Financial crises are also valuable for the multi-level governance literature, by moving governance away from description or normative prescription and toward a theory

with empirically-testable hypotheses. Specifically, a comparative examination of the responses to financial crises of corporatist and liberal systems provides a test of the political importance of the presence of private governance structures. The following chapters will illustrate how the presence of private governance structures substantially alter then dynamics of crisis response by changing the interests and access of healthy financial actors in times of crisis. This produces in Germany and other private bank-based systems a greater propensity toward privately-funded rescues and a tendency toward more generous public assistance than in the liberal cases such as the US and UK, where private rescues were virtually non-existent and state responses considerably harsher than in Germany.

Chapter 4: Banking Crises in the Advanced Capitalist States, 1974-2009

As outlined in the previous chapters, capitalist financial systems can take several different forms, which produce different patterns of private governance and ultimately different patterns of state response when the national financial system experiences a crisis. The comparative capitalism literature broadly divides national financial systems into three models: a stock-market-based system, in which the economy's needs are largely met by direct capital investment, and two forms of bank-based systems, in which firms meet their capital needs chiefly by relying on banks or other financial intermediaries. Such bank-based systems may be publically-owned, as in *dirigiste* France, or privately-owned. These three systems generate different relationships between banks, shaping the capacity and incentives of private institutions in responding to banking crises. State ownership in public-bank-based systems generates the most radically divergent response patterns, as the relationship between state and bank is much different. Because of this, and because public-bank-based systems have become increasingly rare since the French abandoned *dirigisme*, such response patterns are outside of the scope of analysis here. Market-based and private bank-based systems, however, while having similarly privately-owned financial systems, nevertheless have sharply different internal organization and political dynamics as well. In market-based systems, an emphasis on short-term capital means that firm-bank relationships are far more temporary, and easily changed. As such, banks are in constant competition with each other over clients, including attempts to woo clients away from rivals. This direct and intense competition makes inter-bank relationships largely zero-sum, with one bank's gain another's loss. Therefore, cooperation will be rare, and banks will be largely

atomized and independent of one another. In contrast, in private-bank-based systems, bank-firm relationships are more intense, involving greater information-sharing and even cross-shareholding. The costs of breaking a firm-bank relationship and establishing a new one will be considerably greater accordingly, so that inter-bank competition over clients will be less intense. This diminished direct competition creates in turn a greater space for inter-bank relationships to develop, the better to focus on goals common to all banks in the system. In this greater space, private governance institutions will develop, with a far greater role than the relatively insignificant equivalents in market-based systems. Such institutions can lobby for favorable treatment from the state, and even serve a self-regulatory function, avoiding state oversight by providing such oversight themselves. Thus, for instance, the German BdB, the association of private banks, is both a lobbying group for the banking sector and a key partner of the German financial authorities, the BaFin, in identifying problems in the banking sector and maintaining the overall stability of the system.

These different inter-bank relationships will have significant consequences when banks run into problems. In atomized market-based systems, other banks can reap clear benefits from the failure of a rival, filling the space in the market that failed bank held. Therefore, when a bank fails in an atomized system, it will have few allies, and be forced to turn to the state as the only actor with an interest in systemic stability that overshadows its own narrow self-interest. However, bereft of allies and in a position of distress, that bank will lose whatever political clout it held prior to the crisis, and, approaching the state cap-in-hand, find it necessary to take state aid on whatever terms the state offers. In contrast, in a networked, private-bank-based system, healthy banks will have a clear

interest in the fate of failing banks. Not only will there be less space to benefit from a bank's failure, but the closer relationship made possible by less direct competition means that the costs to healthy banks from another bank's failure will be greater than any potential gains. Therefore, other banks will have a clear interest in helping that failing bank, both in providing support directly and in using their own political influence to lobby for favorable terms of state aid. Moreover, the more intensive inter-bank network will create additional resource for failing banks, both to use the access provided to lobby for favorable terms and to organize other banks to act on their behalf.

Although this theoretical framework focuses on the dynamics of negotiations among firms and between firms and the state, it does generate several predictions amenable to quantitative analysis. State interventions in networked financial systems should be rarer, because of the greater availability of private solutions, and state interventions should be on more favorable terms to banks in networked systems when they do occur, because of the greater retained influence of ailing banks. These finding should generate readily observable results, as detailed below. Other potential results, however, are more difficult to measure, and are best studied through case studies. It is difficult to capture systemically, for instance, whether the prices paid by for state aid are above- or below-market, as evaluating individual aid programs requires an understanding of the contemporary market conditions and the condition of the bank receiving the assistance. Private assistance is also difficult to capture. Although state intervention is typically, though not always, publically visible, private bank-to-bank assistance is frequently secret. Secrecy can be a powerful advantage in aid to distressed banks, by supporting the bank without publicizing the bank's weakness the way that a visible

acceptance of aid, public or private, would. Although a publically-announced provision of aid may restore some confidence if a bank is already generally seen as distressed, it also sends a powerful signal that the bank needs such assistance. State aid is nevertheless frequently subject to public disclosure provisions. Private banks typically have considerably fewer disclosure requirements, and therefore have both the ability and the motive to provide bank-to-bank aid on more covert terms. Therefore private aid to banks is difficult to observe systematically.

Another implication of the theory is that bank failure should be more common in atomized financial systems. This is because the risks of such a failure dragging down other banks are lower in the more atomized environment and therefore private assistance will be less forthcoming. However, it is hard to discern a priori whether a bank failure is a result of a conscious choice by the state, a lack of legal or practical means to intervene, the collapse of a private solution, or some other cause. Moreover, it can be hard to separate bank mergers between two healthy banks and bank mergers which are the result of a failing bank selling itself to a healthier one. Therefore, this dynamic is better explored through case study analysis.

Nevertheless, several observable and testable hypotheses can be generated, as detailed below:

State intervention through monetary support will be more common in states with atomized financial systems

H1) Liquidity support will be more common in states with atomized systems

H2) Capital support will be more common in states with atomized systems

State monetary assistance to financial institutions can take two forms, addressing two different problems a bank may face. In a *liquidity crisis*, a bank's long-term balance sheet may be in good shape, but it may find itself nevertheless unable to meet its immediate cash requirements. This is a frequent problem in banking, as borrowers may take decades to repay loans and assets may be difficult to unload quickly, but depositors and creditors may demand immediate repayment. So long as credit markets are functioning and the bank's long term outlook is good, it can typically borrow readily from other banks for its immediate cash needs. However, this arrangement relies on the bank's need for liquidity and cost of borrowing to remain stable. In a bank run, depositors and creditors seeking to get their money out before the bank runs short of cash can drain even massive liquidity reserves in an extremely short period of time. Alternately, the cost to the bank of short-term borrowing to maintain liquidity reserves may increase, either because others are reluctant to lend to that bank or because a general financial panic increases the cost of liquidity across all banks. In such cases, the bank needs additional cash support, but does not need capital support to reform its underlying asset sheet. State liquidity support, therefore, will take the form either of a direct loan from the state treasury or central bank to the failing bank, or a guarantee of the failing bank's borrowing to encourage other private banks to resume lending to the failing bank. Such assistance need not involve an ownership stake, although ownership stakes may be taken as collateral for the loan, as in the US Federal Reserve loan to AIG.

Conventional wisdom has held since the 19th century that the state has a vital role to play as a lender of last resort, providing liquidity support to banks which are otherwise solvent. Without such a lender of last resort otherwise healthy banks may fail because of

liquidity problems beyond their control. The combination of long-term loans and short-term deposits means that banks are vulnerable to a relatively small wave of panicked depositors withdrawing funds or of short-term lenders raising the costs of lending. Since banking inevitably has this time-lag problem, and letting well-run banks fail would have high consequences, someone must provide emergency liquidity. Central banks, with their deep assets and long-term vision, have generally been the only reliable lenders of last resort.[170] As outlined in Bagehot's 1873 treatise *Lombard Street*, the traditional formula to limit moral hazard has been that central banks should lend freely to solvent banks, on good collateral and at a penalty rate. More recently, however, the conventional wisdom has shifted to relaxing these conditions, lending freely and on generous terms in both rate and collateral. This shift is designed to stave off so-called "gambling for resurrection," wherein a bank digs itself into a deeper hole in an attempt to avoid taking public assistance on stringent conditions, and in doing so requires greater public assistance if such gambles fail.[171]

The other way in which a bank can fail is through a *solvency crisis*. Unlike in a liquidity crisis, in a solvency crisis, the bank's long-term liabilities exceed its assets. In simple terms, the bank owes more than it is worth. Liquidity support loans can delay a failure due to solvency problems, potentially buying time for a successful restructuring, but cannot on their own prevent an insolvent bank from failing. An insolvent bank can only be saved through capital support, which alters the balance between assets and liabilities by either increasing a bank's underlying assets or purchasing its existing assets at an

[170] Private bankers have occasionally fulfilled this function, as in John Pierpont Morgan's bailout of other US banks in the 1907 crash. However, such private lending is unreliable, requiring a banker with both the assets and the long-term vision necessary to serve this function.

[171] Xavier Freixas et al., "Lender of Last Resort: What have we Learned since Bagehot?" *Journal of Financial Services Research* 18, no. 1 (2000), 63-84.

above-market price. The former strategy involves a third party taking a direct ownership stake in the bank, providing additional cash assets in exchange for a share of future profits. Such a stake may be full ownership, as in a private purchase or state full nationalization, or a partial stake, through a capital infusion which dilutes existing shareholders by the purchase of newly-issued shares. Such purchases may be ordinary shares, paying a divided determined by the bank's underlying profits and carrying full voting rights, or some form of preferred shares, which pay a fixed dividend, typically higher than ordinary shares, but carry only limited voting rights. In such support, the moral hazard of intervention will be determined by the price paid. If the price is above market value, the dilution of existing shareholders will be minimized and the state will only see a positive return if the bank becomes more profitable than the above-market price paid. If the price is below market value, however, the dilution of shareholders will be increased, but because the state will capture a greater share of future profits, it is more likely to see a positive return. The same logic applies to a full nationalization: a low price paid to expropriated shareholders means the state will need a lower threshold of future profitability to see a positive return on its investment.

The other way in which a bank's solvency problems may be addressed is by purchasing assets which have lost substantial value, with deleterious effects on balance sheets. Such assets may be so-called "toxic," or distressed, assets, which have lost substantial value but are nevertheless believed to be undervalued by the market. A struggling bank may lack the ability to hold onto such assets until they regain value, but the state, with its longer time horizons, could purchase them and hold them in a "bad bank" in the hope that they would increase in value. Such a purchase creates the potential for severe moral

hazard problems, however. If the purchase price for the distressed assets is high, the state essentially insulates the bank from losses for purchasing those assets. On the other hand, if the price is low, removing the distressed assets may remove uncertainty from the bank, but does little to actually solve its solvency problems.

Distinguishing between banks experiencing solvency problems those experiencing liquidity problems may be difficult or impossible, especially given the incentive of banks to misrepresent solvency problems, which are ultimately of their own making, as liquidity problems, which may be blamed on irrational market panics. However, distinguishing between liquidity support and solvency support is much easier. If state aid takes the form of loans or loan guarantees, which provide cash assistance but do not change the underlying asset structure, that aid is liquidity support. Conversely, if the state takes ownership stakes, that is capital support. "Hybrid capital" instruments, such as preferred stock, resemble loans in some ways, such as defined repayment terms and limited voting rights, but are generally considered a form of capital support, and can be distinguished from loans by the terms outlined by the Basel Committee on Banking Supervision, which categorizes such instruments as "Tier 2 Capital." One way in which preferred stock may be distinguished from loans is that banks must pay a fixed dividend on preferred stock indefinitely, while payments on loans are only made until the principle and interest are repaid. Additionally, many forms of preferred stock contain provisions whereby they convert into ordinary shares under certain circumstances.

Provision of either form of monetary support should differ across national financial systems. In coordinated systems, healthy banks feel more direct and higher costs from the failure of another bank, as they are more likely to have a more interdependent

relationship. Additionally, a less-directly-competitive relationship means that the benefits of a rival failing are smaller relative to the risks of a systemic crisis. This direct risk to the healthy banks themselves should make such banks more willing to provide private money in order to prevent or contain crises. The German Landesbanken provide a clear example of this dynamic. They are tightly interdependent, sharing a common national clearing bank and governing organization, and with substantial cross-holding between the Landesbanken and both the national DSGV and the sub-regional Sparkassen. They are also in a non-competitive relationship with the other Landesbanken, dividing Germany into regional territories, and dividing those territories between the Ländesbank and the Sparkassen functionally, with the Landesbanken targeting larger firms and the Sparkassen smaller ones. In 2007, when Ländesbank Sachsen LB ran into trouble, the other Landesbanken, with little to gain and much to lose from Sachsen's fall, pooled their resources into a joint provision of liquidity support.

Conversely, in atomized systems, when a bank fails, other banks will have no clear incentive to help it. Relationships will be more arms-length, so the direct costs to a healthy bank will be lower. Moreover, a more adversarial relationship means that, despite the risk of a systemic crisis, healthy banks will see some advantages from the collapse of a rival. As such, the only option for a bank in distress in an atomized system is to turn to the state. The state may also prefer a privately-funded solution, but will have a harder time convincing other banks to contribute. By example, despite the joint efforts of the US Treasury and the Federal Reserve, attempts to organize a consortium rescue akin to that of the Landesbanken rescue of Sachsen for Lehman Brothers proved

unsuccessful. Similar attempts by the UK to organize a consortium to support Northern Rock also failed.

Both states with coordinated systems and with atomized systems will have a clear interest in containing financial crises. However, because private alternatives will be less forthcoming, states with atomized financial systems will have fewer alternatives to providing public monetary assistance in some form. Therefore, both state liquidity support and state capital support should be more forthcoming in such systems.

States with atomized financial systems will provide state assistance on more stringent terms than states with networked financial systems

H3) Nationalizations will be more common in states with atomized financial systems

H4) States with atomized financial systems will be more likely to recover money from recapitalizations

While state capital support should be more likely in states with atomized systems, when failing banks in such systems turn to the state for assistance, they will have little political clout themselves and few allies lobbying on their behalf. They will be essentially reduced to begging for assistance. Therefore, policymakers will have a freer hand to construct policy in the state's, and the taxpayer's, interest, by imposing conditions that will impose higher costs on private bankers, both limiting moral hazard and the degree to which private actors can profit from state aid and increasing the chances of the state recouping the money it provides to the banks.

One way to maximize the chance of the state recouping the capital support it provides is to take full ownership of failing banks. Once the state owns the bank, it can either sell it

off to other banks, potentially at a profit, or it can run the bank as a state-owned enterprise, keeping bank profits for the state coffers. In either case, all future returns until reprivatization will flow to the state. The terms of nationalization, especially the amount of compensation paid to the old owners, can vary substantially, and with it the potential moral hazard effects. Above-market compensation for expropriated shareholders will insulate them from losses, while at- or below-market compensation imposes the full measure of losses on the old shareholders. Nevertheless, because old shareholders will lose any share of future profits, nationalizations will generally be harsher on those shareholders than other forms of recapitalization. Because of this, those shareholders will generally oppose nationalization, and favor terms of intervention which enable them to retain partial ownership, and thus a chance to profit from the bank's restoration.

Here the nature of the financial system should make a decisive difference. In an atomized system, those shareholders may oppose nationalization, but with their own influence diminished along with their bank's fortunes and allies in short supply due to the weak interbank ties, they will have little clout in their opposition. Thus, for instance, the US Federal Deposit Insurance Corporation (FDIC) was able to nationalize over three hundred mostly small banks from 2007 to 2011, at no compensation to existing bank shareholders. Those banks were typically immediately reprivatized that weekend and sold from the state to another bank, with the profits going to the FDIC. In a networked financial system, by contrast, those shareholders would have allies more willing to use their leverage to oppose nationalization. Such allies may fear the precedent set by the use of nationalization. Additionally, the effects of nationalizing a bank will be more far-reaching in a networked environment, as the newly state-owned bank potentially inherits

the firm's institutional affiliations and cross-shareholding positions. With healthy banks and industry organizations retaining their clout and lobbying on behalf of failing banks, it will be more difficult for states to nationalize in such financial systems. Therefore, for instance, while the US relies primarily on temporary nationalization to resolve insolvent banks, Hypo Real Estate was the first German bank nationalized since 1931. Even that nationalization, in contrast to the rapid action possible in the United States, took place only after a months-long debate and substantial capital support short of nationalization. If the state provides capital support short of taking full ownership, the terms of that support can vary considerably. The state can chose to provide "cheap" capital, in which the share of profits it will take will be relatively low, by overpaying for common stock or accepting preferred stock with a low guaranteed dividend.[172] Alternately, the state could make capital support "expensive," by paying below-market rates for common stock or insisting on high dividends for preferred stock. Although these terms and rates are not available in a systematic, cross-country fashion, it is possible to measure whether the state sees a return on investment in its recapitalizations. If the state does see a positive return, this indicates that the state imposed more stringent terms. Note that this is not entirely conclusive. The state could apply stringent terms but the bank could fail to return to profitability, meaning the state sees no profit despite the stringent terms. On the other hand, if the state imposes lax terms, it is unlikely to see a significant return no matter how profitable the bank may become. Stringent terms mean that the state may see a profit on its recapitalization even if the macroeconomic conditions continue to languish. For example, the US has seen a profit on its partial nationalizations under TARP and

[172] Preferred stock is a form of hybrid capital which pays a higher, generally fixed, dividend than common stock, but which, unlike common stock, carries no voting rights.

other related programs from 2008 despite unremarkable economic growth.[173] Conversely, if the state's terms are lenient, even a robust recovery may not produce positive returns for the state. This may be because the state aid was so generous that the threshold for a return to profitability is high, or because the terms of that aid allow repayment before a positive return is reached. For instance, a bank could be allowed to buy back stock at a lower price than the purchase price, or the state may be pressured to sell its stake at a loss rather than hold it until it became profitable. The later was the case for Germany, which sold its stake in IKB early and at a loss, under pressure from the BdB banking association and other banking interests to minimize state ownership of the financial sector. Recovery of recapitalization funds, therefore, indicates an ability by the state to impose and maintain terms which extract resources from the financial sector, either through initial terms or ability to resist pressure to sell. This, in turn, is more likely in atomized financial systems. Rival banks will favor stringent terms on failing banks, so as to avoid undue subsidization of the competition. Conversely, in networked systems banks may lobby for generous terms for their peers.

Alternate Hypotheses

H5) Parliamentary states will be less likely to intervene in banking crises than presidential states

H6) Central states will be less likely to intervene in banking crises than presidential states

H7) Parliamentary states will impose more stringent conditions than presidential states

H7a) Nationalizations will be more common in parliamentary states

[173] U.S. Department of the Treasury, *Troubled Asset Relief Program (TARP) Monthly Report to Congress – December 2012* (Washington, DC: United States Department of the Treasury,[2013]).

H7b) Parliamentary states will be more likely to recover money from recapitalizations

H8) Central states will impose more stringent conditions than federal states

H8a) Nationalizations will be more common in central states

H8b) Central states will be more likely to recover money from recapitalizations

It is also worth considering several alternate hypotheses that might explain patterns of state response. The first is that state structure may determine patterns of response. A state with a relatively closed decision-making process, absent significant checks and balances, will have fewer access points, where outside actors could make their influence felt. A plethora of access points should be to the advantage of the banks, which can use the relatively greater access to more effectively lobby for favorable treatment. A more closed policymaking process, however, should enable states to act with a freer hand, enabling the state to more easily impose stringent terms. In a presidential system, the executive is forced to engage in bargaining with the legislature to enact major policy, a step largely absent from parliamentary systems. The opportunity to lobby the executive branch and legislators separately provides potentially greater access for private interests to advance their preferences.[174] Similarly, in a federal system, the existence of independent sub-national authorities offer an additional venue for private interests to advance their preferences, again producing a greater likelihood of favorable treatment.[175]

H9) Interventions of all forms will be more common in states in which left parties control the executive and/or legislature.

[174] R. Kent Weaver and Bert A. Rockman, "Assessing the Effects of Institutions," in *Do Institutions Matter?: Government Capabilities in the United States and Abroad*, eds. Bert A. Rockman and R. Kent Weaver (Washington, D.C: The Brookings Institution, 1993).
[175] Ibid., pp. 31-32.

H10) Terms of intervention will be more common in states in which left parties control the executive and/or legislature.

H10a) Nationalizations should be more common when left parties control the executive and/or legislature.

H10b) States are more likely to recover money from recapitalization when left parties control the executive or legislature.

A final alternative hypothesis to consider is ideology. By definition, left parties will be more comfortable with steps that expand state ownership or state regulation of the economy than right parties. This should be true regardless of the measures of intervention, as left parties are likely to see a greater role for the state in managing the economy generally than right parties. Indeed, many left parties in both the advanced and developing states have called for nationalization of the financial sector not merely as a response to banking crises, but as an end in itself, while right parties routinely call for a relaxation of the state role in managing the economy, both in finance and elsewhere. What is less clear is the position of right parties toward state aid to banks. Right parties here might bifurcate, between laissez-faire small-government market advocates and pro-business right parties. The former may favor letting banks fail, on the grounds that any aid to private industry is market-distorting or an undesirable expansion of the state. The latter, however, may favor generous subsidies to weak banks, the better to maintain an active private sector. Nevertheless, it seems likely that, regardless of the position of the right party, the left party will favor intervention on terms which impose harsher terms on banks. Nationalization, therefore, should be more common when left parties dominate, as

Table 4.1: Summary of Hypotheses

State intervention through monetary support will be more common in states with atomized financial systems

H1) Liquidity support will be more common in states with atomized systems

H2) Capital support will be more common in states with atomized systems

States with atomized financial systems will provide state assistance on more stringent terms than states with networked financial systems

H3) Nationalizations will be more common in states with atomized financial systems

H4) States with atomized financial systems will be more likely to recover money from recapitalizations

Alternate Hypotheses

H5) Parliamentary states will be less likely to intervene in banking crises than presidential states

H6) Central states will be less likely to intervene in banking crises than presidential states

H7) Parliamentary states will impose more stringent conditions than presidential states

H7a) Nationalizations will be more common in parliamentary states

H7b) Parliamentary states will be more likely to recover money from recapitalizations

H8) Central states will impose more stringent conditions than federal states

H8a) Nationalizations will be more common in central states

H8b) Central states will be more likely to recover money from recapitalizations

H9) Interventions of all forms will be more common in states in which left parties control the executive and/or legislature.

H10) Terms of intervention will be more stringent in states in which left parties control the executive and/or legislature.

H10a) Nationalizations will be more common when left parties control the executive and/or legislature.

H10b) States will be more likely to recover money from recapitalization when left parties control the executive or legislature.

left parties will be less likely to oppose expansion of state ownership on normative grounds. Additionally, recapitalization recovery will be more likely if the left is in control, as the left will be more likely to favor harsh terms of intervention than the pro-business right. However, this effect may be less pronounced, as the laissez-faire right, while opposing state intervention generally, may favor harsh terms when the state does intervene. In the United States, for instance, libertarians reluctantly conceding the need for state intervention were among those calling for the harshest terms for that intervention, so as to best approximate market discipline while still containing the crisis.[176]

Data Description

Database

The database used is based on Laeven & Valencia's 2012 Systemic Banking Crises Database, expanded by including those crises included in Caprio et al.'s 2005 Banking Crisis Database and Reinhart & Rogoff's 2009 Historical Summaries of Banking Crises for the relevant time and income levels.[177] For the cases included from Caprio et al. or Reinhart & Rogoff beyond those in Laeven & Valencia, government documents and contemporary press accounts were used to determine the terms of intervention used by states. This database captures the terms of state intervention by a series of dummy variables on a variety of forms of state intervention described below.

[176] William Poole, "A Libertarian Perspective on the Financial Crisis and Financial Reform," *The SAIS Review of International Affairs* 30, no. 1 (2010), 17.
[177] Luc Laeven and Fabian Valencia, *Systemic Banking Crises Database: An Update* (Washington, D.C: International Monetary Fund,[2012]).; Gerald Caprio, Daniela Klingebiel and Guillermo Noguera, "Banking Crisis Database," in *Systemic Financial Crises : Containment and Resolution*, eds. Patrick Honohan and Luc Laeven (Cambridge, U.K. ;New York, NY: Cambridge University Press, 2005), 307.; Carmen M. Reinhart and Kenneth S. Rogoff, *This Time is Different: Eight Centuries of Financial Folly* (Princeton: Princeton University Press, 2009).

The database covers upper-income countries from 1974 to 2009, with "upper income" defined as countries deemed "Upper Middle Income" or "High Income" by the World Bank World Development Indicators.[178] These thresholds were drawn to capture those cases where comparable dynamics of intervention may be expected. The income threshold limits cases to banking crises in industrialized or otherwise advanced capitalist states, excluding those poorer states which are either pre-industrial or at the very early stages of industrialization. In such poorer states, banking crises may have substantially different dynamics, given the relative lack of state resources, the different dynamics of development banking, and the greater influence of foreign actors, whether states, foreign firms, or international financial institutions such as the IMF or World Bank.

Cases were limited to 1974 and after to define the range of crises as after the collapse of the Bretton Woods system. The shift from a world of global capital controls to one of widespread abandonment of controls dramatically changed the dynamics of banking crises. In the post-Bretton Woods system even the most advanced capitalist states could become vulnerable to issues of capital flight and contagion, wherein banking crises can spill across state borders.

Dependent Variables

The database captures methods of state intervention in banking crises as a series of dummy variables, which can be broadly divided into three categories: regulatory responses, liquidity support, and capital support. Each of these is coded as a "yes" if used by the state in any of the at-risk banks.

[178] Thorsten Beck, Asli Demirgüç-Kunt and Ross Levine, "Financial Institutions and Markets Across Countries and Over Time-Data and Analysis," *World Bank Policy Research Working Paper Series, Vol* (2009).

The first set of measures, regulatory responses, involves those measures which neither directly nor indirectly commit state funds to a rescue effort. Such measures here include *Deposit Freezes* and *Bank Holidays*, but may also include relaxation of regulations or requirements concerning levels of liquidity which may be kept on hand, or temporary bans on short-sales or other kinds of trading that involves betting that a bank will fail. Such additional measures are difficult to measure systematically, as they involve relaxation of non-comparable regulatory standards. However, both deposit freezes and bank holidays are more directly comparable across states. In a *Deposit Freeze*, customers' access to their deposits is temporarily restricted until a panic passes, preventing a bank run and attendant liquidity crisis by preventing depositors from depleting the bank's liquidity reserves. The hope is that the panic will pass, people will regain faith in the health of the bank, and the freeze can be lifted. A *Bank Holiday* uses the same essential logic of restricting banking activity until the panic passes, but freezes activity more generally, encompassing all banking activities, limiting the ability of both depositors and creditors to make claims, and the ability of the bank itself to make more loans.

The second set of measures involve those interventions aiming to increase a bank's ability to solve liquidity problems, either by supporting its ability to access private interbank lending or by lending directly to at-risk banks. In *Guarantees* of bank liabilities, the state attempts to restore a bank's ability to access private sources of liquidity by promising to pay any of the bank's debts the bank itself is unable to cover. Doing so potentially solves a bank's liquidity problems without directly involving state funds, by enabling the distressed bank to again access private sources of liquidity. Of

course, the state can also provide *Liquidity* support directly, by lending to the bank either from the central bank or state treasury. As per hypothesis H1, both should be more common in states with atomized systems, as private liquidity should be less forthcoming, requiring the state to serve as lender of last resort more frequently.

A final set of measures covers the various ways in which a state can attempt to address capital problems at distressed banks. *Capital Support* captures any intervention in which the state addressed banks' capital shortfalls through some form of public capital support, and may be subdivided by the terms of that support. *Nationalization* captures situations in which the state takes complete ownership of distressed banks, either temporarily or permanently, while *Recapitalization* captures those instances where the state provides capital in return for a partial ownership stake, leaving the bank at least partially in private hands. There are also a series of measures to capture state attempts to support banks by purchasing distressed assets, in so-called "bad bank" measures. *Asset Buy* captures whether the state engages in distressed-asset purchases of any type, while *Bad Bank* captures whether those asset purchases involve setting up a separate institution to manage those distressed assets. *Central Bad Bank* captures whether the state pools its newly-acquired distressed assets in a central institution, or keeps them in separate bad banks. Note that these variables are not exclusive. If the state nationalizes one bank, recapitalizes another, and lets others fail, a "Yes" will be recorded for both nationalization and recapitalization. Per hypothesis H2, capital support of all forms should be more common in states with atomized financial systems, as, as with liquidity support above, a lower likelihood of private capital support means that the state will more likely need to provide capital support to insolvent banks.

Support, whether through capital or liquidity measures, may be above or below market rates, with significantly different moral hazard and punitive effects. There are, however, a pair of measures that capture some of the effects of state intervention. Nationalizations, in which the state reserves for itself 100% of future profits, can vary substantially by price paid, but are generally more stringent than other forms of capital support. An additional measure, *Recap Recovery* captures whether the state is able to make a full or partial recovery of the support it provided in recapitalization. Per hypotheses H3 and H4, both nationalizations and recapitalization recovery should be more common in states with atomized financial systems, where failing banks will have less influence and healthy banks will be less willing to lobby for favorable terms of assistance.

Independent Variables:

Measures of Financial Structure

Although numerous measures have been introduced in the literature to differentiate national financial systems, the most relevant for this project is Demirgüç-Kunt & Levine's measure of whether systems are bank-based or stock-market based.[179] Unlike some other measures, Demirgüç-Kunt & Levine's focuses narrowly on financial systems, and not the broader orientation of the national economy. It therefore focuses directly on the phenomenon of interest. Additionally, their measure is easily calculated for a wide range of countries and time periods. Demirgüç-Kunt & Levine rely on the ratio of the capital supplied by the stock market to capital provided from private bank sources. They calculate this in two ways, using two different measures of stock market

[179] Asli Demirgüç-Kunt and Ross Levine, *Bank-Based and Market-Based Financial Systems: Cross-Country Comparisons*, Vol. 2143World Bank Publications, 1999).

capital. The first, *Structure-Size*, uses the ratio of stock market capitalization to private bank capital, a measure which determines the degree to which capital is received from banks, or directly from investors. The second measure, *Structure-Activity*, relies on the ratio of stock market activity to private bank capital. This is the more relevant measure for the arguments evaluated here. The key causal mechanism driving different response patterns is the degree of competition or coordination between banks. In a system with a stagnant stock market, regardless of the size of that market relative to private bank capital, investors buy and sell only rarely. Therefore, the relationship of investors to firms is a long-term one, and as with bank-capital-based systems, marked by relatively little direct, short-term competition. By contrast, a large active stock market provides a ready source of alternate capital to firms, forcing banks into a more directly-competitive relationship which inhibits the development of relationships and institutions of coordination and interdependence. This is reflected in the classifications provided by the two measures; *Structure-Activity* produces a classification of firms broadly in keeping with the classifications found in the coordinated capitalism literature, as illustrated in Table 1.

The values for private bank capital and stock market activity are provided by the World Bank Financial Structure Dataset.[180] *Structure-Activity* has been reduced to a dummy variable based on whether a state is above or below the median ratio of private bank capital to stock market activity. Dummy variables are superior to yearly-calculated ratios for two reasons. The first is simply data availability. Information on stock market activity is extremely limited prior to 1989, especially for networked systems. However,

[180] Beck, Demirgüç-Kunt and Levine, *Financial Institutions and Markets Across Countries and Over Time-Data and Analysis*

Table 4.2: Classification of National Financial Systems

Networked Financial Systems		Atomized Financial Systems
Upper-Middle Income	High Income	Upper-Middle Income
Argentina (pres.)	Austria (parl.)	Brazil (pres.)
Botswana (parl.)	Belgium (parl.)	Malaysia (parl.)
Bulgaria (mixed)	Canada (parl.)	Mexico (pres.)
Chile (pres.)	Croatia (mixed)	Russian Federation (pres.)
Colombia (pres.)	Czech Republic (parl.)	South Africa (mixed)
Costa Rica (pres.)	Denmark (parl.)	Turkey (mixed)
Jamaica (parl.)	Estonia (mixed)	High-Income
Kazakhstan (pres.)	France (parl.)	Australia (parl.)
Lithuania (pres.)	Germany (parl.)	Finland (parl.)
Macedonia, FYR (parl.)	Greece (mixed)	Korea, Republic Of (mixed)
Mauritius (parl.)	Hungary (parl.)	Kuwait (pres.)
Panama (pres.)	Iceland (parl.)	Netherlands (parl.)
Peru (pres.)	Ireland (parl.)	Singapore (parl.)
Uruguay (pres.)	Israel (mixed)	Spain (parl.)
Venezuela (pres.)	Italy (parl.)	Sweden (parl.)
	Japan (parl.)	Switzerland (parl.)
	Latvia (parl.)	United Kingdom (parl.)
	Luxembourg (parl.)	United States (pres.)
	New Zealand (parl.)	
	Norway (parl.)	
	Poland (pres.)	
	Portugal (mixed)	
	Slovakia (parl.)	
	Slovenia (parl.)	
	Trinidad And Tobago (parl.)	

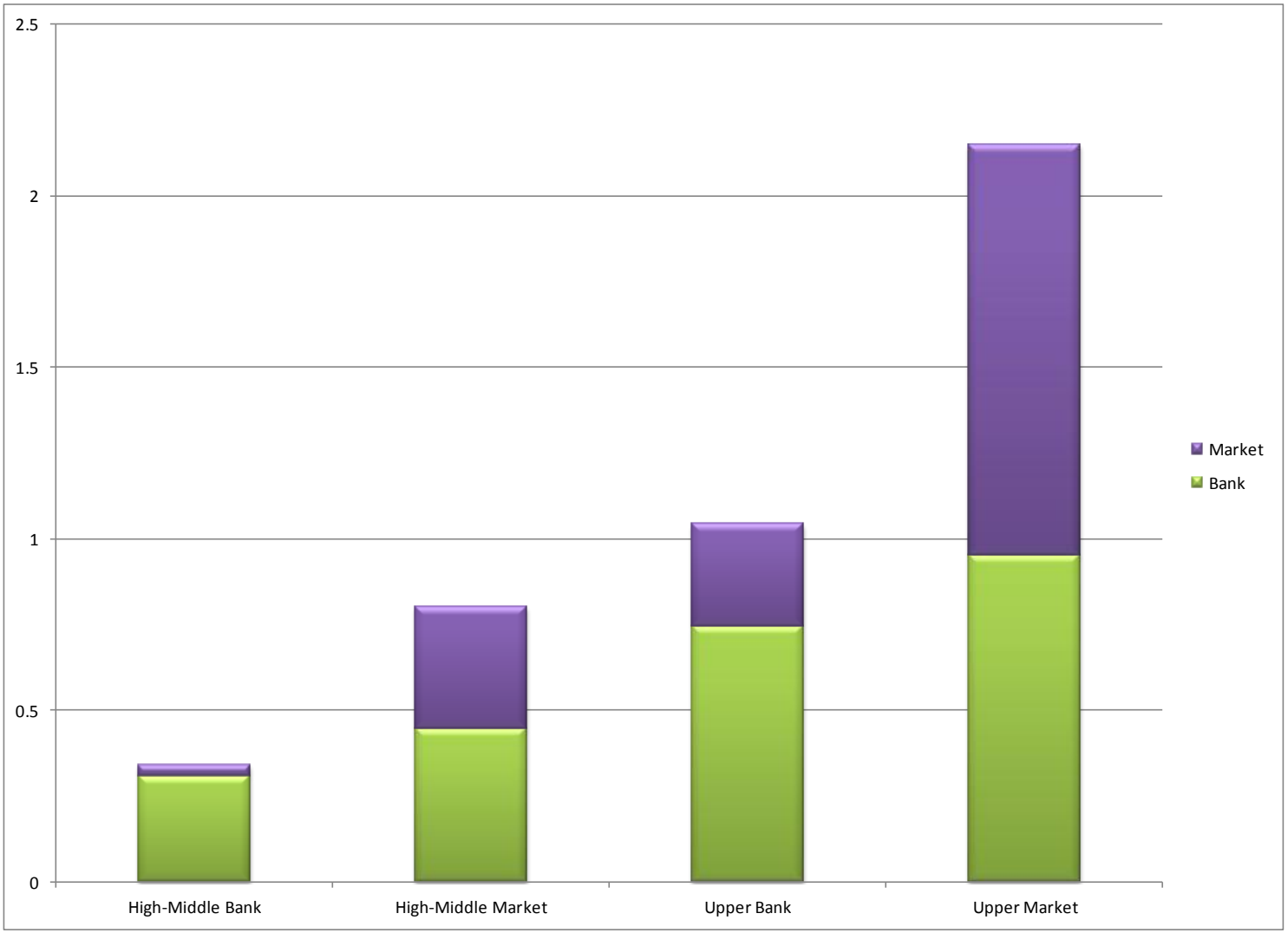
while the specific ratios shift constantly, the overall orientation of the financial system shifts only in extremely rare circumstance. For instance, the German bank-based system survived not only several political upheavals, the Great Depression and the two World Wars, but also the shift from the Bretton Woods system to the modern global financial system. Therefore, a system which is liberal in the 1990s and 2000s can be assumed to have been liberal in the 1970s and 80s as well, and the same holds for networked systems. The second advantage of using a dummy variable is avoiding the inevitable distortion of both stock market activity and private bank capital that surrounds a banking crisis by looking at a country's structure over a broader time period.

Following Demirgüç-Kunt & Levine, I calculate a separate dummy for high income states and for upper-middle income states, reflecting the different levels of financial market development in the respective income levels.[181] Figure 4.1 illustrates the mean bank-market ratios for the four categories thus generated. As can be seen, levels of private bank capital are roughly comparable across upper-middle-income states, and across high-income states. What separates the stock-market-based systems from those relying primarily on banks as financial intermediaries, therefore, is the size of the stock market, which is almost non-existent in upper-middle-income bank-based states and immense in high-income market-based states.

The literature on comparative capitalisms, and comparative financial systems, frequently recognizes a third major type of national financial system, one dominated by

[181] Demirgüç-Kunt and Levine, *Bank-Based and Market-Based Financial Systems: Cross-Country Comparisons*, p. 3.

Figure 4.1: Sources of Capital in the Advanced Capitalist States as a % of GDP



state-owned banks, as in *dirigiste* France. This model does not separate such systems into a third type, but classifies them according to the ratio of their stock market to whatever private banking exists. State policies supporting state-owned banks in distress will obviously follow a considerably different dynamic, given the different relationship than between the state and private firms. In those cases with a significant share of state-owned banks, analysis is still focused on patterns of assistance to private banks, so it remains more important how a state's private financial sector is organized.

Alternate Hypotheses

In order to address the alternate hypotheses, a series of political controls are considered, all taken from Beck et al.'s Database of Political Institutions.[182] Different political systems will offer different levels of access to societal actors. States more open to societal actors should theoretically be more likely to provide assistance on favorable terms to banks, given the greater opportunity for banks to influence the political system. Therefore, controls are introduces for *Presidential/Parliamentary* and *Central/Federal*, as presidential systems and federal systems both contain greater checks on the central executive than systems which are parliamentary or centralized. As per hypotheses H7 and H8, Parliamentary systems and Central systems, with their smaller number of access points, should be associated with more stringent terms of assistance, captured by a greater propensity for nationalization and a greater likelihood of recapitalization recovery. Controls are also introduced for ideology, with party in power in both the *Executive* and *Legislative* branches coded as right, central, or left, as taken from Beck et al. Hypothesis

[182] Thorsten Beck et al., "New Tools in Comparative Political Economy: The Database of Political Institutions," *The World Bank Economic Review* 15, no. 1 (2001), 165-176.; Philip Keefer, "DPI2000 Database of Political Institutions: Changes and Variable Definitions," *Development Research Group, the World Bank* (2002).

H9 holds that the greater willingness of left parties to intervene generally means that across all measured dependent variables, left party control should be associated with a greater propensity for intervention. Finally, as per hypotheses H10, left party control should also be associated with more stringent terms of assistance, as captured by the nationalization and recapitalization recovery measures.

Controls

While the key independent variable is financial system structure, numerous other controls are considered. Two controls for country wealth are considered, *GDP* and *GDP per capita*, both in constant 2000 US dollars and both from the World Bank World Development Indicators database.[183] These each potentially impact state financial responses in different ways. The size of a country's GDP in absolute terms will affect the range of policies it can deploy, by setting a limit on the resources available to the state to fund financial interventions. GDP per capita, meanwhile, captures how, regardless of the resources available to the state in absolute terms, states with less wealth per capita may be more reluctant to make the significant financial contributions that may be required to intervene in a banking crisis.

In addition to the structure of the financial and political systems, other structural controls may be important. *Central Bank Independence* (CBI) will change the underlying dynamics of state intervention, by increasing the autonomy of one of the major sources of liquidity support. Cukierman's measure of CBI is used, as updated to 2000 by Polillo & Guillén and to 2003 by Crowe & Meade, with Arnone's list of major reforms to central banking laws used as a check that no major shifts have occurred since 2003 that would

[183] World Bank, "World Development Indicators," The World Bank, http://data.worldbank.org/data-catalog/world-development-indicators (accessed July 23, 2012).

necessitate an updating of their CBI measure.[184] Cukierman's measure offers advantages over other available measures, both in the time period covered (beginning in 1975) and in breadth of countries for which the index is calculated. The model also considers the presence of *IMF Assistance*, whether through direct support, standby facilities, or technical assistance. The IMF may have an important role in shaping state response policies, both directly, through conditions placed on states receiving IMF support, and indirectly, in its capacity as a source of technical advice for states experiencing crises.

The model also includes controls on international exposure, measured in *Trade* (exports plus imports) as a percentage of GDP.[185] This is not only a standard control in the literature on financial crises, but captures how the relevance of an international dimension may change a state's calculations. A state with greater international exposure can expect banking crises to produce more substantial effects, by impacting its ability to export and import, and so may increase the domestic pressure for the state to intervene. Additionally, international exposure increases the danger to other states of contagion from an uncontrolled banking crisis panic. These other states, therefore, provide an additional source of pressure on the crisis state's policymakers. Such pressure will be for states to conform with global trading norms of non-discrimination, such that state aid either be given to domestic firms on terms which do not subsidize them against foreign competition, or that aid be available to all comers, whether foreign or domestic banks. In practice, states will likely prefer to provide stringent terms to their domestic banks rather

[184] Alex Cukierman, "Central Bank Independence and Monetary Policymaking institutions—Past, Present and Future," *European Journal of Political Economy* 24, no. 4 (2008), 722-736.; Simone Polillo and Mauro F. Guillén, "Globalization Pressures and the State: The Worldwide Spread of Central Bank Independence," *The American Journal of Sociology* 110, no. 6 (2005), 1764-1802.; Christopher Crowe and Ellen E. Meade, "The Evolution of Central Bank Governance Around the World," *The Journal of Economic Perspectives* (2007), 69-90.; Marco Arnone, "Central Bank Law," sites.google.com/site/marcoarnone/centralbanklaws (accessed August 3, 2012).

[185] World Bank, *World Development Indicators*

than generous terms to foreign banks, if forced by international pressure to chose only between those two options, regardless of national financial system.

A final control introduced is the presence of a *Sovereign Debt Crisis*. Since this is a database of banking crises, any case in the database with a sovereign debt crisis is also necessarily a "twin crisis," where both banking crisis and sovereign debt crisis occur simultaneously. As might be expected, the literature suggests that a sovereign debt crisis will have a significant impact on a state's ability and willingness to intervene, though how that will manifest itself in policy terms may be less clear.[186] On the one hand, the presence of a sovereign debt crisis increases the urgency of containing a banking crisis, so as to avoid further degradation of the national economy. On the other hand, a sovereign debt crisis may also have severe impacts on the ability of a state to fund a potentially-expensive intervention in the banking and financial system.

The Model

The binary nature of the response variables makes a probit analysis the most appropriate approach. Analysis is run across all the relevant dependent variables using four different models.[187] Common to all of these models are several independent variables. The key variable of interest is *Structure-Activity*, capturing how national financial systems fall on a spectrum from highly bank-based to highly financial-market based. Additionally, two alternate sets of hypotheses are considered. The first concerns state centralization, captured both by whether the state is presidential or parliamentary, and whether it is a central or federal state. The second concerns ideology, measuring whether the party controlling the executive and/or controlling the legislature is left or

[186] Graciela L. Kaminsky and Carmen M. Reinhart, "The Twin Crises: The Causes of Banking and Balance-of-Payments Problems," *The American Economic Review* 89, no. 3 (1999), 473-500.
[187] Additional models were also used, and available in the appendix.

right. In addition, several other variables describing the broad economic structure are common across the models: the relative importance of trade to the economy, the independence of the central bank, and whether the state is receiving IMF assistance.

The first of the four models contains only the above listed controls, and assumes that wealth effects and sovereign crises do not fundamentally alter the underlying dynamics of state response policies. The second model adds GDP per capita as a control for the wealth of the country, while the third adds both GDP per capita and the presence of a sovereign crisis. Finally, the fourth model includes a control for GDP, in addition to GDP per capita, on the assumption that, independent of the per-capita wealth of a state, the raw resources available to the state may have an independent effect on a state's response policies.

As a robustness check, these models were also run with two alternate forms of the financial structure variable. The first alternative further divided both the stock market-based and private bank-based systems into a four-part dummy variable. For the private bank-based systems, the median Structure-Activity ratio of the private bank-based systems is taken, and those in the lower half assigned a value of 1 and those in the upper half a value of 2. The same procedure is done for the stock market-based ones, with the lower value of 3 and a higher value of 4. This produces a 4-part classification of banking systems. The second alternative involves using the Structure-Activity ratio itself as the independent variable. This is a less comfortable theoretical fit, as the Structure-Activity ratio is calculated over the entire time period, and therefore does not capture year-to-year variations. Although the dummy variables can be assumed to be unchanged, this is a substantially greater assumption for the Structure-Activity ratio itself. Regardless, both

of these alternate measures produce results which are substantially similar to those produced with the dummy variable outlined above. Results for both are available in the Appendix.

Results

Analyses of implementation of bank holidays, bank freezes, and all bad bank or asset purchase measures failed to produce significant results, and are not reported here.[188] For holidays and freezes, this probably is due to these measures being relatively easy and cheap to implement. They are therefore common tools of first resort at the start of a banking crisis across not only varying financial systems, but also across national income levels. Moreover, banks should not have any significant opposition to such measures, meaning there is likely to be little difference in the political response of banks across systems. Bad banks and asset purchases generally come later in the process, but can take a vast array of forms, varying not just in the relatively coarse structural terms captured here, but in many other ways as well. Asset transfers may be straightforward purchases, state-held trust arrangements, assets-for-bonds exchanges, or many other forms, to say nothing of how they may vary in terms of price paid, duration held, or myriad other dimensions. Therefore, although a wide variety of states may use some form of asset purchase or bad bank, the actual form may vary in more subtle ways than the dataset can capture. It may still be that states with liberal financial systems favor harsher bad bank terms, but evaluating such terms requires greater sensitivity to individual conditions than the available data can provide.

[188] Regression results are presented in the appendix

Liquidity Provision

Hypothesis H1 holds that provision of liquidity should be more common in states with atomized financial systems, as the relative lack of private sources of liquidity aid will force the state to play a more active role in confronting liquidity issues. The data contains measures of two models of liquidity provision: direct liquidity provision and provision of guarantees designed to encourage private liquidity support.

Guarantees

Across model specifications, states with atomized financial systems, left-controlled executives, and greater GDP per capita are more likely to issue state guarantees of bank liabilities. That atomized systems provide guarantees more frequently follows from the predictions of hypothesis H1, that the state must act if private sources of liquidity are not forthcoming. States in which left parties control the executive are also more likely to provide guarantees, most likely indicating a greater willingness by left parties to intervene early in banking crises, as suggested by hypothesis H9. Guarantees are a relatively inexpensive way to support banks early in the crisis, when a simple promise of support may be sufficient. More extensive support will come later, if guarantees or other relatively 'light-touch' measures are insufficient. Left parties, being more comfortable with state intervention, will be more willing to take interventionist steps such as guarantees early, while right parties may prefer a more hands-off approach until the crisis reaches a head, and guarantees would no longer be sufficient to restore confidence.

Under Model I, which omits a control for wealth, trade exposure and parliamentary systems are both significantly associated with a greater propensity to issue

guarantees, but this effect vanishes with the introduction of a control for GDP per capita. Since both greater international trade and parliamentary systems are strongly correlated with greater wealth, these effects likely reflect the effect of wealth in the absence of a GDP per capita control. Greater wealth, as measured in per capita terms, does have

Table 4.3 - Guarantees				
	(I)	(II)	(III)	(IV)
System	0.896**	0.832*	0.872*	0.815*
(0=corporatist,1=liberal)	(0.399)	(0.435)	(0.452)	(0.448)
Trade as % of GDP	8.17E-03	7.75E-03	7.43E-03	7.90E-03
	(5.18E-03)	(5.70E-03)	(5.67E-03)	(5.77E-03)
Central Bank Independence	1.188	1.134	1.005	1.109
	(0.924)	(0.983)	(0.995)	(0.996)
IMF Program	0.155	0.529	0.643	0.533
	(0.427)	(0.501)	(0.514)	(0.501)
System	0.543**	0.243	0.243	0.261
(0=pres.,1=mixed,2=parl.)	(0.229)	(0.270)	(0.276)	(0.296)
Federal/Central State	0.068	-0.333	-0.219	-0.326
(0=federal,1=mixed,2=central)	(0.265)	(0.312)	(0.321)	(0.315)
Executive Party	0.370**	0.393**	0.454**	0.397**
(0=left,1=center,2=right)	(0.184)	(0.198)	(0.206)	(0.200)
Legislative Majority Party	-1.45E-03	1.96E-03	1.86E-03	1.90E-03
(0=left,1=center,2=right)	(1.22E-03)	(0.017)	(0.016)	(0.016)
GDP per capita		7.22E-05**	6.75E-05***	6.92E-05**
(Constant USD)		(2.48E-05)	(2.48E-05)	(3.17E-05)
GDP				2.46E-14
(constant USD)				(1.63E-13)
Sovereign Debt Crisis?			.	
(No = 0, Yes = 1)			.	
Constant	-2.951**	-3.103**	-3.202**	-3.116**
	(0.862)	(0.941)	(0.960)	(0.946)
Observations	69	68	68	68
Pseudo-R^2	0.3281	0.4401	0.4414	0.4403
*=p<0.1, **=p<0.05, ***=p<0.01				

consistent effects across model specifications. This is unsurprising, as greater wealth both makes guarantees more affordable, and, by making them more affordable, makes them more effective. It is true that guarantees impose no direct immediate costs on the state, but a guarantee which market actors know the state cannot afford to honor would be useless, so guarantees should only be expected from a state capable of honoring such promises. Interestingly, however, wealth measured in absolute terms has no significant effect on the propensity of the state to issue guarantees.

Direct Liquidity

The results for liquidity support tell a relatively straightforward story, though one contrary to predictions. Neither atomized financial systems, nor state structure or party in power

have significant effect on the willingness of the state to provide direct liquidity support, contrary to several hypotheses. Nothing is significant except central bank independence and IMF assistance, both of which are strongly significant. That these two variables are significant should come as no surprise. One of the key arguments for central bank independence is that an independent central bank, insulated from short-term political considerations, will be more readily able to fulfill its lender of last resort function of providing a distressed banking system with liquidity. Similarly, although the IMF may provide technical support or other forms of assistance, its primary function in the post-Bretton Woods era is to be a global lender of last resort, providing liquidity to states unable to serve as their own lenders of last resort.

That nothing else is significant is contrary to expectations, but does reflect the widespread use of liquidity as a tool of first resort. That central bank independence

affects liquidity provision while financial system does not suggests that independence insulates central banks from financial industry pressure as well as political pressure, leaving them free to act as they see fit. Conventional wisdom on banking crises since at least Bagehot in the late 19th century is that states should meet banking crises with

Table 4.4 - Liquidity				
	(I)	(II)	(III)	(IV)
System	0.369	0.345	0.364	0.535
(0=corporatist,1=liberal)	(0.428)	(0.431)	(0.444)	(0.476)
Trade as % of GDP	1.24E-03	1.41E-03	1.09E-03	1.92E-05
	(6.54E-03)	(6.63E-03)	(6.69E-03)	(6.77E-03)
Central Bank Independence	2.891**	2.901**	2.832**	3.410**
	(1.222)	(1.238)	(1.266)	(1.381)
IMF Program	1.045**	1.101**	1.396**	0.993*
	(0.530)	(0.544)	(0.633)	(0.546)
System	0.116	0.038	0.058	-0.180
(0=pres.,1=mixed,2=parl.)	(0.229)	(0.266)	(0.272)	(0.320)
Federal/Central State	-0.450	-0.508	-0.418	-0.571
(0=federal,1=mixed,2=central)	(0.388)	(0.401)	(0.421)	(0.414)
Executive Party	-1.72E-03	-1.49E-03	-1.35E-03	-7.98E-04
(0=left,1=center,2=right)	(8.67E-03)	(8.67E-03)	(7.10E-03)	(0.010)
Legislative Majority Party	-1.54E-03	-8.65E-04	-6.13E-04	-6.54E-04
(0=left,1=center,2=right)	(6.16E-03)	(6.43E-03)	(5.99E-03)	(6.44E-03)
GDP per capita		1.39E-05	1.06E-05	4.26E-05
(Constant USD)		(2.34E-05)	(2.38E-05)	(3.52E-05)
GDP				-1.90E-13
(constant USD)				(1.60E-13)
Sovereign Debt Crisis?			-1.402	
(No = 0, Yes = 1)			(0.970)	
Constant	-0.455	-0.487	-0.536	-0.530
	(0.867)	(0.877)	(0.895)	(0.903)
Observations	66	65	65	65
Pseudo-R^2	0.2535	0.2529	0.2848	0.2724
*=p<0.1, **=p<0.05, ***=p<0.01				

generous provision of liquidity, a conventional wisdom that holds across financial and political systems, and across wealth levels.[189] The lower-income countries, outside of this dataset, may have difficulty serving as lender of last resort, but all of the higher-income countries have the reserves and cause to at least make an initial provision of liquidity, whether or not they need later turn to the IMF for support. Unfortunately, this dataset does not capture the terms of liquidity support. Whether states follow Bagehot's aphorism that liquidity should be provided at penalty rates in exchange for good collateral, or instead provide cheap, poorly-collateralized liquidity, may vary substantially based on the structure, and thus relative influence, of the financial system, but that is outside of what this data can evaluate.

Capital Provision

All Capital Support

Capital support as a general measure captures any form of state intervention aimed at addressing solvency issues, including nationalization, capital support through share purchases, and toxic asset purchase bad band systems. Hypothesis H2 holds that capital support, like liquidity support, will be more common in states with atomized financial systems, as private sources of capital support will be less forthcoming, and banks with solvency issues will have no choice but to fail or turn to the state for assistance. Hypothesis H5 further holds that states with presidential systems will be more likely to provide capital support, as a greater number of access points will enable banks to better lobby for support from the state.

[189] Walter Bagehot, *Lombard Street : A Description of the Money Market* (New York: Charles Scribner's Sons, 1892), viii, 359 p. WRLC no., p. 78.

As predicted, capital support is more common in states with atomized financial systems and with presidential systems. For atomized financial systems states, this is in keeping with the theory, as a diminished ability to rely on private sources of capital support forces banks with solvency issues to turn to the states for support. It also stands

Table 4.5 - All Capital Support				
	(I)	(II)	(III)	(IV)
System	0.527	0.770*	1.107**	0.783*
(0=corporatist,1=liberal)	(0.405)	(0.467)	(0.545)	(0.469)
Trade as % of GDP	5.70E-03	6.77E-03	8.43E-03	6.37E-03
	(5.01E-03)	(5.69E-03)	(5.98E-03)	(5.81E-03)
Central Bank Independence	1.604*	2.034*	2.817**	2.037*
	(0.956)	(1.133)	(1.307)	(1.128)
IMF Program	-0.261	-0.135	-0.206	-0.138
	(0.426)	(0.472)	(0.499)	(0.474)
System	-0.509**	-1.076**	-1.362**	-1.079**
(0=pres.,1=mixed,2=parl.)	(0.221)	(0.328)	(0.402)	(0.327)
Federal/Central State	0.178	-0.148	-0.332	-0.139
(0=federal,1=mixed,2=central)	(0.270)	(0.316)	(0.346)	(0.318)
Executive Party	-1.66E-03	9.09E-05	3.70E-04	2.20E-04
(0=left,1=center,2=right)	(9.11E-03)	(9.08E-03)	(0.016)	(9.42E-03)
Legislative Majority Party	-2.56E-03	-1.77E-03	-1.68E-03	-1.77E-03
(0=left,1=center,2=right)	(7.39E-03)	(6.93E-03)	(7.89E-03)	(7.04E-03)
GDP per capita		8.06E-05**	1.02E-04**	8.58E-05**
(Constant USD)		(3.11E-05)	(3.56E-05)	(3.52E-05)
GDP				-1.18E-13
(constant USD)				(3.18E-13)
Sovereign Debt Crisis?			.	
(No = 0, Yes = 1)			.	
Constant	-0.123	-0.309	-0.543	-0.308
	(0.762)	(0.874)	(0.946)	(0.878)
Observations	67	66	66	66
Pseudo-R^2	0.1469	0.2543	0.3098	0.256
*=p<0.1, **=p<0.05, ***=p<0.01				

to reason that presidential states should be more likely to provide capital support, as the logic of access points suggests that presidential states should be more receptive to petitions from the banking sector for support than the more closed parliamentary systems. Regardless of financial system, therefore, parliamentary systems may be more willing to let banks fail from solvency problems. Finally, wealthy states, as measured in GDP per capita, are also more likely to supply capital support, though GDP measured in absolute terms has no effect. As with guarantees, greater wealth per capita likely creates greater space for policymakers to act, as the state will be able to act without imposing as great a burden on its citizens.

Recapitalization

Capital support may take several different forms, including nationalization, recapitalization short of nationalization, and asset-purchase support. As noted above, examination of asset purchases produces no significant results. Direct capital support short of nationalization produces some significant results, although financial system has no significant impact. This is not unexpected, as banks in both atomized and networked systems may require state capital support in a severe crisis. States with atomized systems may need to provide capital support more frequently, given less forthcoming sources of private assistance, but also will be able to use nationalization, a less firm-friendly form of capital support, more easily than their networked-system counterparts. States with networked financial systems are less likely to provide capital support overall, but are as likely as states with atomized systems to provide recapitalization narrowly defined to exclude nationalization. Since the latter are more likely to address capital issues through nationalization, this suggests that states with networked systems are more likely to

address capital issues with recapitalization when they do address capital issues, but address capital issues at all less frequently. This, therefore, fits with the overall predictions of the model.

Table 4.6 - Recapitalization				
	(I)	**(II)**	**(III)**	**(IV)**
System	-0.112	-0.105	-0.102	0.085
(0=corporatist,1=liberal)	(0.383)	(0.403)	(0.403)	(0.439)
Trade as % of GDP	0.012**	0.013**	0.013**	0.013**
	(5.53E-03)	(5.91E-03)	(5.91E-03)	(6.15E-03)
Central Bank Independence	0.629	0.661	0.701	1.098
	(0.942)	(1.019)	(1.036)	(1.114)
IMF Program	-0.136	9.85E-03	-0.012	-0.085
	(0.415)	(0.449)	(0.458)	(0.469)
System	-0.092	-0.487*	-0.487*	-0.705**
(0=pres.,1=mixed,2=parl.)	(0.212)	(0.278)	(0.278)	(0.322)
Federal/Central State	0.358	0.125	0.107	0.112
(0=federal,1=mixed,2=central)	(0.268)	(0.295)	(0.304)	(0.302)
Executive Party	-0.461	-0.428	-0.447	-0.535
(0=left,1=center,2=right)	(0.472)	(0.492)	(0.499)	(0.489)
Legislative Majority Party	0.792*	0.819	0.826	0.926*
(0=left,1=center,2=right)	(0.479)	(0.506)	(0.507)	(0.494)
GDP per capita		6.05E-05**	6.11E-05**	9.97E-05**
(Constant USD)		(2.65E-05)	(2.66E-05)	(3.96E-05)
GDP				-3.44E-13*
(constant USD)				(1.91E-13)
Sovereign Debt Crisis?			0.200	
(No = 0, Yes = 1)			(0.851)	
Constant	-1.556	-1.801	-1.786	-1.978
	(0.798)	(0.871)	(0.872)	(0.930)
Observations	68	67	67	67
Pseudo-R^2	0.212	0.2627	0.2633	0.2984
Cross-section time series analysis; *=p<0.1, **=p<0.05				

Trading states are more likely to provide solvency support short of nationalization as well as nationalization. This reflects how solvency crises are more likely to cause problems in an open system, where capital flight is a more real concern. It also likely reflects international pressure, as solvency crises in open systems are more likely to spread across borders, giving other states incentive to pressure the home state to address solvency concerns. Wealth also is correlated with recapitalization, again likely because greater wealth gives states greater policy space, and poorer states are simply less able to afford recapitalizations, whether policymakers regard them as desirable policies or not.

Terms of Capital Support

Nationalization

Unlike with liquidity support, it is possible to parse the terms of recapitalization to some degree using this data. Hypothesis H3 holds that nationalizations should be more common in states with atomized financial systems, as the weaker political position of failing banks absent allies among the healthy banks will leave them less able to lobby for favorable treatment. Similarly, as per hypothesis H7a, the more closed policy-making process in parliamentary systems means that outside forces, such as banks, should be less able to shape the policy process to their advantage. The nationalization measure does not capture the terms of nationalization, which may be either punitive and below market value, or loss-absorbing and above market value. Nevertheless, because the nationalizing state captures 100% of any future profits, whether through operating the bank as a state-owned enterprise or by selling it, previous private shareholders will see none of that profit, and nationalizations can generally be considered harsher to shareholders than other forms of recapitalization which retain a private stake.

Results bear out Hypothesis H3, as states with atomized systems are more likely to nationalize across all model specifications. However, contrary to expectations, presidential states are more likely than parliamentary states to nationalize, despite a theoretically greater ability of banks to lobby for favorable terms. This finding is

Table 4.7 - Nationalization				
	(I)	(II)	(III)	(IV)
System	0.469	0.816*	0.837*	0.830*
(0=corporatist,1=liberal)	(0.354)	(0.429)	(0.433)	(0.437)
Trade as % of GDP	8.43E-03**	0.011**	0.011**	0.013**
	(4.21E-03)	(5.24E-03)	(5.25E-03)	(5.68E-03)
Central Bank Independence	-0.176	-0.019	0.099	-0.061
	(0.855)	(0.976)	(0.984)	(0.982)
IMF Program	0.046	0.146	0.084	0.172
	(0.374)	(0.424)	(0.431)	(0.426)
System	-0.451**	-1.150***	-1.148***	-1.178***
(0=pres.,1=mixed,2=parl.)	(0.204)	(0.324)	(0.322)	(0.337)
Federal/Central State	0.242	-0.071	-0.121	-0.094
(0=federal,1=mixed,2=central)	(0.240)	(0.274)	(0.280)	(0.278)
Executive Party	0.049	0.109	0.069	0.130
(0=left,1=center,2=right)	(0.168)	(0.188)	(0.194)	(0.194)
Legislative Majority Party	1.43E-04	-3.57E-03	-3.44E-03	-3.60E-03
(0=left,1=center,2=right)	(9.48E-04)	(0.020)	(0.017)	(0.020)
GDP per capita		8.28E-05***	8.41E-05***	7.82E-05***
(Constant USD)		(2.63E-05)	(2.61E-05)	(2.77E-05)
GDP				1.69E-13
(constant USD)				(3.23E-13)
Sovereign Debt Crisis?			0.928	
(No = 0, Yes = 1)			(1.081)	
Constant	-0.540	-0.892	-0.856	-0.947
	(0.669)	(0.763)	(0.767)	(0.771)
Observations	67	66	66	66
Pseudo-R^2	0.1155	0.3006	0.3091	0.3038
*=p<0.1, **=p<0.05, ***=p<0.01				

difficult to explain in terms of institutional biases, but given that most of the presidential systems in this dataset are Latin American, and most of the parliamentary systems European, it is possible that system is here serving as a proxy for some regional cultural preference or other omitted regional variable.

Trading states are also more likely to nationalize, which is in keeping with global norms of non-discrimination. Increased international exposure means that foreign states will be more affected by a state's banking crisis response policies, and more likely to press for state aid which does not have distorting effects on international exchanges. Therefore, when recapitalization is necessary, forms of recapitalization which avoid subsidizing loss-making firms and shareholders, such as nationalization, may be more in keeping with principles of non-discrimination than recapitalizations which help insulate private shareholders from losses. Finally, wealth per capita again is associated with a greater willingness to intervene here, likely again a product of how a greater ability to afford intervention increases the space states have to act, including to nationalize.

Recapitalization Recovery

If a state provides capital support short of full nationalization, the terms can still vary dramatically, from extremely generous provision of capital making it unlikely that the state will recover its investment to stricter terms, increasing the likelihood that the state will recover its funds even in sub-optimal economic conditions. Whether or not the state recovers funds from a recapitalization is an imperfect measure, as states can impose extremely stringent terms of recapitalization but their banks may simply be so distressed that they cannot recover their funds. For instance, the UK in the 2007-2009 crisis imposed extremely stringent terms on RBS, but the severe problems at the bank mean

that it is possible the state will nevertheless fail to recover much of its money. However, stringent terms increase the likelihood that recapitalization funds will be recovered, meaning that states which manage to recover such funds can be assumed to have imposed more stringent terms of assistance.

Table 4.8 - Recapitalization Recovery

	(I)	(II)	(III)	(IV)
System	1.064*	1.695*	1.660*	1.700*
(0=corporatist,1=liberal)	(0.586)	(0.879)	(0.885)	(0.883)
Trade as % of GDP	1.63E-03	0.012	0.011	0.013
	(8.79E-03)	(0.011)	(0.011)	(0.011)
Central Bank Independence	-1.908	1.928	1.888	2.161
	(1.962)	(3.223)	(3.183)	(3.240)
IMF Program	-0.169	-0.011	0.103	-0.046
	(0.604)	(0.680)	(0.693)	(0.686)
System	0.012	-1.177	-1.200	-1.194
(0=pres.,1=mixed,2=parl.)	(0.314)	(0.760)	(0.767)	(0.768)
Federal/Central State	-0.144	-0.601	-0.569	-0.615
(0=federal,1=mixed,2=central)	(0.453)	(0.530)	(0.524)	(0.522)
Executive Party	-2.97E-03	1.18E-03	1.21E-03	8.46E-04
(0=left,1=center,2=right)	(9.08E-03)	(0.011)	(0.011)	(0.011)
Legislative Majority Party	0.059	0.212	0.217	0.242
(0=left,1=center,2=right)	(0.286)	(0.341)	(0.339)	(0.351)
GDP per capita		1.50E-04**	1.52E-04**	1.38E-04*
(Constant USD)		(7.64E-05)	(7.68E-05)	(7.90E-05)
GDP				3.15E-13
(constant USD)				(5.89E-13)
Sovereign Debt Crisis?			.	
(No = 0, Yes = 1)			.	
Constant	0.355	-1.991	-2.000	-2.134
	(1.367)	(2.136)	(2.128)	(2.164)
Observations	30	29	29	29
Pseudo-R^2	0.2407	0.3634	0.3583	0.3724

*=p<0.1, **=p<0.05, ***=p<0.01

Because recapitalization recovery is assumed to indicate more stringent terms of recapitalization, states with atomized financial systems are expected to be more likely to recover funds. As per Hypothesis H4, the weaker political position of failing atomized banks means that they will be less able to negotiate for favorable terms. Similarly, hypothesis H7a holds that the more closed policymaking space of parliamentary systems means that such states will be better able to impose harsher terms, in keeping with the state's interest in containing the crisis while recovering its funds.

Here, in keeping with the theory, states with atomized financial systems are more likely to recover funds from recapitalization. The relatively weak ability of distressed firms to lobby for favorable treatment means that, when such states recapitalize, they are better able to structure the recapitalization programs in a way to recover their investment. Wealthy states are also correlated with recapitalization recovery, though this may speak more to either the advantages of being able to fund a larger support program or to the greater ability of such states to hold an investment until it realizes a positive return. Wealthier states may be able to infuse failing banks with sufficient capital to not only keep them from failing, but also to return them to robust health, leaving them in a better position to repay the state. Alternately, poorer states may face greater pressure to take an early loss on investments to free up capital in the short term.

Interpretation

Several controls have limited or no effect. Central bank independence and IMF intervention only affect liquidity, but are the only variables which affect liquidity. This is generally intuitive, especially with regards to central banks. The role of a central bank in a crisis is to provide liquidity, and there is no clear reason to expect an independent

central bank to be more or less likely to favor or oppose other forms of state intervention. The IMF might reasonably be expected to have an influence on recapitalization and nationalization decisions, as in its role as a technical advisor, the IMF does promote a model for states to follow in responding to banking crises. However, as the data shows, the IMF's actual influence in such decisions is insignificant. Unsurprisingly, however, its function as a global lender of last resort means that it is strongly associated with liquidity support.

Somewhat more surprisingly, the presence of a simultaneous sovereign debt crisis has no significant effect. Rather than meaning that sovereign debt crises have no effect, which would be an unlikely finding, this likely indicates that the effects of twin crises are too complex to be captured by this model. Theoretically, there are two arguments as to how the presence of a sovereign debt crisis will affect a state's response to a banking crisis, which make contrary predictions. On the one hand, a twin crisis increases the necessity of resolving the banking crisis quickly, so as to be able to deal with the sovereign debt crisis divorced from additional domestic financial issues. This would therefore lead to the state adopting more ambitious interventionist policies. On the other hand, confronting a sovereign debt crisis and a banking crisis would strain the state's fiscal resources, limiting the funds available to address the banking crisis. If a twin crisis produces both effects, of increasing the pressure to resolve a banking crisis while simultaneously curtailing its ability to do so, the net result may be that the two effects cancel themselves out in a regression analysis. Separating these dual but countervailing effects would require a more subtle parsing of effects outside of the scope of this project and model.

Wealth, as measured in GDP per capita, unsurprisingly has significant effect on a wide range of policy choices. The logic here is fairly straightforward: states with a wealthier population have greater latitude to embark on ambitious fiscal programs, as the cost of those programs presents a proportionally lighter burden on individual citizens. In turn, this means that domestic resistance to short-term fiscal costs will be lower, enabling the state to enact more ambitious policies in addressing banking crises. A first prerequisite for nationalizing, recapitalizing, or even guaranteeing banks is having the money to do so. What is somewhat more interesting is that wealthier states are better able to recover funds invested in recapitalization efforts. Several potential explanations suggest themselves for this phenomenon. The first is that wealthier states are better able to resist the demands of their banking sectors, because their stronger fiscal position enables them to negotiate with banks on better terms than their poorer peers. The second is that, being less in need of cash immediately, wealthier states can afford to hold on to investments until they realize a profit, rather than offloading them at a loss to free up money. The third is that wealthier states are able to afford more expansive recapitalization programs. A smaller recapitalization program may keep banks fom failing and impose smaller short-term costs on the state, but may provide only enough capital to keep banks afloat, and not enough to allow them to restructure in a way that would return them to sufficient profitability to pay back the state's investment. A larger recapitalization program, conversely, may impose higher short-term costs, but allow for a scale of investment that maximizes the chances of the state recovering its funds. Parsing these two differences would require a measure of scale of support, which is not difficult

to obtain, but also a measure of scale of need, which would be harder to construct, in both practical and theoretical terms.

However, while wealth in per capita terms is an important predictor of state policies, GDP unweighted by population has no significant effect. This indicates that the chief limit on the state's fiscal ability to respond is relative, rather than absolute. In other words, what matters is the degree of costs borne by members of society, and not the absolute dollar value of the costs of rescue operations. States are unable to afford ambitious policy options because they would require too great a burden on the individual citizens, and not because the wealth is not there to be extracted.

Trade as a percentage of GDP indicates a greater propensity to address solvency concerns, as measured by a greater likelihood of both nationalization and recapitalization. Greater international exposure both increases the potential costs of an uncontrolled banking crisis and, by potentially spreading the contagion effects to a state's trading partners, increases the pressure for the state to act to contain such a crisis. Therefore, increased international exposure increases political pressure to provide support from both domestic sources, through greater potential domestic costs, and international sources, through foreign governments and even general populations applying pressure for the crisis state to resolve its crisis quickly.

Turning to independent variables concerned explicitly with theoretical predictions, the structure of the national financial system generally has the predicted effects, except as pertains to direct state provision of liquidity. As per the hypotheses, states with atomized financial systems are more likely to provide capital support, and more likely to provide that capital support on harsher terms, increasing the cost to bank shareholders and the

likelihood of the state recovering its investment. Banks in coordinated systems can avoid these terms, and negotiate more favorable terms, because having allies both among the healthy banks and the industry associations means that they have greater political resources than their atomized-system peers. They therefore are better able to secure favorable terms when they do need state assistance.

However, contrary to predictions, the structure of the national financial system has no significant effect on direct provision of liquidity. This reflects the conventional wisdom that, regardless of system, states should respond to banking crises by providing ample liquidity support. It may be possible to discern a difference in terms of liquidity support, with one type of system more strongly associated with generous liquidity support, and the other with more Bagehot-conforming expensive and well-collateralized liquidity support, but not with the data available at present. Moreover, the general conventional wisdom across systems has shifted from a Bagehot-derived model of ample liquidity on punitive rates with good collateral to a more generous position of cheap liquidity with more minimal collateralization, which may hold across financial systems.[190]

Note, however, that the other way in which states can address liquidity problems, a guarantee of private liquidity support, is significantly associated with atomized financial systems. This likely is due to the greater need for such support in atomized systems. As can be seen in the private liquidity support provided by the German Landesbanken for their struggling peers, in a networked system, private sources of liquidity may be readily available even without a state guarantee. Therefore, states with a networked system have less need to need to incentivize such lending. In this understanding, therefore, there is a comparable amount of private liquidity support available in both systems, but will only

[190] Freixas et al., *Lender of Last Resort: What have we Learned since Bagehot?*, 63-84

be supplied to ailing banks in atomized systems with an incentive from the state. However, such support may not be sufficient to address the extent of the liquidity needs of a full financial panic regardless of incentives. Once such private liquidity support is exhausted, both networked and atomized system states, and their central banks, become the only viable source of liquidity support.

Two alternate hypotheses are also considered. The first, ideology, has surprisingly little effect. Despite predictions that left parties would be both more willing to intervene, and more willing to impose harsh terms when they intervened, left control of the executive and legislature has virtually no significant effect on state response patterns. There is a tendency by left executives to intervene with guarantees, but no effect by left parties on other provisions of liquidity or capital support, or the nationalization or recapitalization recovery, the measures of intervention stringency. The lack of a significant effect on the terms of solvency support indicate that other factors, most notably the structure of the financial system, and thus the lobbying strength of the banks, overwhelm any role for ideology in decision-making. That right parties would be as interested in securing terms which maximize the likelihood of a return on the state's investment in recapitalization efforts is not terribly surprising, as subsidizing banks is unpopular across the political spectrum, and a positive return can insulate policymakers from critics regardless of ideology. The lack of a significantly greater left support for nationalization is a bit more surprising, although less so when one considers how financial actors have acted to support parties across the political spectrum. In the most prominent stock-market-based states, for instance, Wall Street gives campaign donations in roughly equal proportion to

both the Democrats and Republicans, while in the UK, the big banks have, since the rise of New Labour, favored Labour over the Conservatives.

It would be interesting to extend the analysis of the effect of party to a time period outside of the neoliberal consensus of the late 1970s to present. Margaret Thatcher's aphorism that "There Is No Alternative" to neoliberalism captures the general depoliticization of financial policies in the last three decades, in which more statist approaches were seen as discredited by both left and right parties in much of the advanced capitalist world. As such, the terms of state intervention have been understood in more technocratic terms, and stripped of ideological resonance, such that a Republican Administration in the US adopted strikingly similar programs to a Labour Government in the UK. An examination of the pre-neoliberal consensus, pre-"TINA" environment may show a greater effect of ideology. Such an analysis, however, would require stretching the analysis to the pre-World War II cases to produce significant results, given the relative scarcity of banking crises in the Bretton Woods era.

The final alternative hypothesis, regarding state strength, produces less clear results. The federal/central control produces no significance in its own right, though removing it from the model causes other controls, especially financial structure, to lose significance, suggesting that a larger dataset would see a significant effect from whether a state was federal or central. Presidential/parliamentary does produce significant results, and somewhat contrary to initial theoretical predictions. Initial predictions held that the more closed policymaking process in parliamentary states would limit the ability of banks to shape policy outcomes, resulting in harsher terms the better to secure the state's fiscal interests.

Like ideology or financial structure, political structure has no effect on state liquidity provision. As expected, parliamentary states are less likely to provide capital support, suggesting a greater impermeability to lobbying for state support in the more closed policymaking process of parliamentary states. Parliamentary states, in other words, are more able to resist calls by the financial sector to intervene, and more willing to let a financial crisis "burn itself out." However, contrary to expectations, presidential systems are more likely than parliamentary systems to nationalize once the state does provide capital support. This is surprising, as state ownership is generally opposed by private sector actors, who would have been expected to make use of the greater number of access points to bar such a move. Given that, in the time and income level considered, presidential systems are most common in the Americas, this may serve as a proxy for some other variable, such as a Latin American political ideology more amenable to state ownership of banks.

Conclusion

Statistical analysis provides strong support for the argument that the structure of the financial system plays a dominant role in shaping state responses to financial crises. Although financial structure had no impact on liquidity provision, and little impact on regulatory responses, states with atomized financial systems are more likely to provide capital support, and more likely to impose more stringent terms on capital support, whether through nationalizations or through recapitalizations which are more likely to produce a recovery of investment. This finding is more consistent than alternative hypotheses. Ideology has almost surprisingly little effect, while the effects of state

structure support are mixed. Federalism has no direct effect, while presidentialism produces an unexpected greater tendency toward nationalization as a policy response. The case studies will explore the interaction between these dynamics in greater detail. The analysis also suggests several potentially fruitful venues for future research, requiring a database parsing in greater detail the specific terms of intervention. Given both the variable availability of these terms of intervention, and the necessity of interpreting the relative harshness or generosity of terms in their specific context, the availability and utility of a more detailed database may be limited. Case studies may therefore be the most fruitful way to parse some of these subtler nuances. Nevertheless, the findings here provide strong support for the central argument, that the structure of the financial system plays a key determinant role in the response patterns of states. Stock-market-based states provide aid both more readily and on more stringent terms than their networked peers, indicating that the organization of the banking system shapes policy responses. The specific method of how organization translates into influence is a question to be explored in greater depth in the case studies which follow.

Chapter 5: Germany and the 2007-2009 Crisis

Germany, along with the United States and most of the major European economies, experienced severe effects from the global collapse of mortgage-backed securities prices and subsequent financial crisis. German real estate itself escaped the boom-and-bust cycle felt elsewhere, but German banks held significant exposure to real estate busts in the United States, as well as in Ireland, Spain, and Eastern Europe. Consequently, confronted with bank failures of systemic importance, Germany, like the US and the UK, responded with a massive state support program for its banks. However, while the US and UK plans resembled each other closely both in the terms of intervention and the attention to moral hazard concerns, the German plan differed greatly. The Germans, to a far greater extent than their Anglo-American counterparts, favored support on generous terms, with relatively inexpensive provision of liquidity and consistently below-market capital injections. The Germans also proved far less willing to use nationalization as a policy tool, fully nationalizing only one institution and taking direct stakes in only two more. Moreover, the dynamics of bank-state relations were considerably different. German aid was voluntary in nature. While US and UK firms were largely presented with non-negotiable terms for state aid, German banks could negotiate the terms of their assistance, and in some cases seek alternate public sources of aid from the Federal states, or Länder. Conversely, however, the Germans were able to extract a relatively large private contribution toward bank rescues, with banks contributing billions to their peers. The key difference between the German and US/UK experience lies in the different structure of their financial systems. German finance is highly organized and relatively interdependent. This gives banks an incentive and means to support their peers, but also

a means by which to influence state aid policies. Private consortium rescues could be more easily organized in Germany, enabling the German state to lean on private associations to extract private contributions toward containing the financial crisis. Conversely, these stronger sectoral institutions increased the political clout of the German financial sector, giving it greater leverage to shape the terms on which state aid was offered. Unlike in the US and UK plans, the German financial sector, including banks which would receive state aid, participated in drafting response plans, resulting in more generous state aid terms than in liberal systems.

Structure of German Banking

The comparative capitalisms literature holds Germany up as an exemplar of private bank-based finance, in which private banks provide the key source of capital to businesses in the real economy. This can be overstated somewhat; like in financial market-based systems, companies' chief source of capital is their own retained earnings.[191] However, in Germany, banks play a considerably more important role in financing companies than financial markets, which have been relatively small in Germany. The relationship between firms and banks, known as the *hausbank* system, involves the long term provision of loans from banks to firms, as well as the bank taking an ownership stake in the firm. By law this ownership is capped at 25%+1 of a firm, short of a controlling interest but large enough to hold a veto under German corporate law.[192]

This system offers a way to solve the information problem inherent in the provision of finance to firms. Lenders want to ensure their loans go to firms with a high likelihood of

[191] Franklin Allen and Douglas Gale, *Comparing Financial Systems* (Cambridge, Mass: MIT Press, 2000), x, 507 p.
[192] Richard Deeg, *Finance Capitalism Unveiled: Banks and the German Political Economy* (Ann Arbor: University of Michigan Press, 1999).

repayment, but that information is largely private, and known most clearly to the firm seeking a loan. That firm, if at risk, has an incentive to misrepresent itself as healthier than it is, to gain more access to capital at better rates. In a financial market system, this problem is addressed by firms seeking short-term capital from financial markets, selling shares and taking short-term loans. The price of a share in the open market provides a good sense of how the population of investors as a whole values the firm, circumventing the private information problem by relying on the collective judgment of the crowd. This method is, of course, imprecise, and as a consequence, provision of capital in market systems tends to be short-term and more favorable to firms with established reputations. The *hausbank* system solves the private information problem through ownership stakes. As part owner, the bank gains access to the firm's private information, as well as the ability to use its stake to help shape the direction of the firm. In this manner, the bank can safeguard its investment to a greater degree than the hands-off, limited access available to investors in financial market systems. The firm, in turn, gets a source of capital committed to the firm in the long term, and unlikely to rapidly withdraw its support.

The hausbank system shapes both the nature of the German economy and the politics of finance in Germany. The more intensive bank-firm relationship is inherently a more long-term one, as disentangling the two is a much more complicated and costly process than selling shares in a financial market. This makes it easier for smaller and newer firms to survive than in a financial market system, where the relative lack of information available to capital markets puts them at a disadvantage relative to large firms with well-established histories of share values. In the German economy, therefore, the *hausbank*

system is generally cited as explaining the success of the Mittelstand, Germany's small and medium-sized enterprises.[193] Such firms have typically outperformed their equivalents in liberal systems, as large firms lose some of the comparative advantage in obtaining financing. It also is cited as an explanation for the success of Germany's diversified-quality production approach, which is made possible because of an emphasis on long-term profits, rather than the next-quarter returns that preoccupy investors in financial market systems. It also diminishes the competition between banks somewhat. Once a bank and firm establish a *hausbank* relationship, it is relatively more difficult for other banks to poach that client away from their rivals. As such, competition is directed more toward new business than to acquiring rivals' clients. The hausbank system is only one aspect of an extensive network of cross-holdings, among firms, between firms and banks, and between banks and other financial institutions, such as insurance companies. Although two banks are rarely both investors in a single firm, their interests will overlap insofar as they will both be investors in firms which are interconnected through cross-holding.[194] As such, banks are less directly competitive with each other, giving them more space for collaborative action in their mutual interest. Less-intense competition diminishes the incentives to defect from collective arrangements for short term gains. Because of this, bank competition in Germany is far more between banking categories, or 'pillars,' than between individual firms.

German finance, like in the United States, has traditionally been divided between different types of firms. However, while US banking has been divided functionally,

[193] Allen and Gale, *Comparing Financial Systems*, x, 507 p.
[194] For a detailed explanation of patterns of German cross-holdings, see Martin Hopner and Lothar Krempel, "The Politics of the German Company Network," *Competition and Change* 8, no. 4 (2004), 339-356.

between investment and commercial banking, German banking is divided by ownership. German banking has, since the 19th century, been divided between three pillars: the privately-owned commercial banks, the Land- and municipality-owned savings bank system, and the mutually-owned cooperative banks.[195] Each of the three pillars has traditionally focused on different segments of the market. The cooperatives have focused on the needs of agriculture and small rural industry, the savings banks have focused on the Mittelstand, and the commercial banks have generally served the needs of larger industry. This division is by no means absolute, and the savings banks and commercial banks have competed intensely over the larger firms of the Mittelstand. The overlap between the markets of the commercial and savings banks has only grown in recent decades, increasing competition between the pillars.

The various pillars differ not only in their ownership, but also in their organization. The private banks are independent and privately-owned, although coordinated through a stronger sectoral organization than their liberal equivalents. The savings and cooperative banks, however, exist within their pillars in what can best be described as a federal organization.[196] Banking within the savings bank and cooperative pillars is hierarchically structured, with local banks under regional banks, all overseen by a national-level sectoral association. Individual banks, at all levels, retain significant autonomy to themselves, however, making the relationship best described as federal, rather than as a single hierarchical bank. The individual banks are independent, but also non-competitive, dividing markets along geographic lines, and in some cases along functional lines as well. Within the savings banks pillar, the local or municipal banks, known as

[195]Deeg, *Finance Capitalism Unveiled: Banks and the German Political Economy*
[196] Ibid.

Sparkassen, are in this federal relationship with the Land-level *Landesbanken* and the national DekaBank. The Landesbanken serve as wholesale banks for the Sparkassen, while also engaging in their own banking operations, especially focused on larger businesses and international investment. This relationship is marked by extensive cross-ownership, with the Sparkassen often significant owners of the Landesbanken and vice versa. The other chief owners of the Landesbanken are the Länder themselves. Traditionally, each Land had its own Landesbanken, although by the eve of the 2007-2009 crisis, consolidations had brought the total number of Landesbanken to nine. At that time, all but one of them were entirely owned by a mix of Sparkassen and Länder.[197] Each of these pillars, including the commercial banks, is overseen by its own peak association. In the cases of the savings banks and the cooperatives, the *Deutscher Sparkassen- und Giroverband* ("German Savings Banks Association", abbreviated DSGV) and *Bundesverband der Deutschen Volksbanken und Raiffeisenbanken* ("Federal Association of German Co-operative Banks, abbreviated BVR) are the peak associations of their respective federal systems. The commercial bank association, the *Bundesverband deutscher Banken* (Federal Association of German Banks, abbreviated BdB) serves a similar role for the commercial banks, although the commercial banks lack the hierarchical federal structure of the other two pillars.

Because of this division, competition in German banking has generally not been between banks directly, but between the pillars as a whole, in what is termed *Gruppenwettbewerb* ("group competition").[198] In the case of the cooperatives and the savings banks, their

[197] That one exception was HSH Nordbank, which in 2007 was 25%-owned by American private equity firm JC Flowers & Co. (Andrew Bulkeley, "HSH Takes Lehman - Related Write - Down," *Daily Deal/the Deal*, September 25, 2008d.)

[198] Deeg, *Finance Capitalism Unveiled: Banks and the German Political Economy*

federal organization means there is no direct competition within the pillar. The commercial banks, lacking this federal structure, do compete directly with each other. However, the hausbank system and the reliance on coordination mechanisms through cross-ownership and the BdB mean that this competition is considerably less intense than the competition between American or British banks. Competition between the savings bank and commercial bank pillars in particular, however, can be intense. This competition gains an additional layer of complexity due to the legal protections enjoyed by the savings banks. Unlike in private bank competition, the commercial banks cannot overcome their rivals by buying them, as ownership of the Landesbanken is generally restricted to the Länder and the Sparkassen and not publically traded.[199] Landesbanken can, however, purchase private banks. Therefore, the commercial banks must compete purely in terms of market share, and not by buying up rivals. Moreover, until 2005, the Landesbanken enjoyed additional advantages in the form of guaranteed support from their Länder. This took the form of both a guarantee that the Länder would honor the Landesbank's obligations if it were to default (*Gewährträgerhaftung*) and a guarantee that the Länder would provide capital or liquidity support to enable the Landesbank to maintain its financial obligations (*Anstaltslast*).[200] In practice, the Länder preferred merging a failing Landesbank with a healthier peer, but these twin guarantees of state support provided the Landesbanken with a significant structural advantage in conflict with the commercial banks. In 2001, however, the European Commission ruled that

[199] Ibid.
[200] Ibid.

Gewährträgerhaftung and *Anstaltslast* constituted illegal state aid, and that the guarantees must be removed by 2005.[201]

Each of the pillars of German finance is marked by a substantially greater degree of self-regulation than their liberal peers in the US and the UK. Each peak association runs a private deposit insurance scheme for its members, and all of them have some provision to provide emergency liquidity support to their members. This gives the associations a financial stake in maintaining the stability of their respective banks. Moreover, each association plays a semi-formal role in monitoring their member banks, and reporting problems as necessary to the Bundesbank or to BaFin, the German central financial regulator.[202] BdB representatives would describe this role as making the associations "almost equal" partners with state regulators in monitoring and regulating the banks.[203] Each association is also the chief lobbying organization for the respective pillars.

The commercial banks' industry association, the BdB, although not the head of a federal association like the DGSV or BVR, nevertheless is considerably stronger than its liberal equivalents. In part, this is due to the hausbank system, which diminishes the direct competition between banks for commercial business. In part, this also reflects the nature of *Gruppenwettbewerb*. Since the savings banks and mutuals enjoy the benefits of federal organization, the commercial banks also have an incentive to promote a strong association. Given the institutional and legal advantages enjoyed by the Landesbanken, the competition between the pillars is often as much in the political realm as the economic. The commercial banks in particular have historically focused a great deal of

[201] European Commission, *Press Statement After the Meeting of Commissioner Monti and State Secretary Koch-Weser on 17.7.2001* (Brussels: European Commission,[2001]).
[202] Bundesverband deutscher Banken representatives, Interview by Author, 2011.
[203] Ibid.

attention on rolling back the prerogatives of the Landesbanken. This conflict goes back as far as the Great Depression, when the commercial banks attempted to use the pressure for banking reform and rescues to remove the Landesbanks' traditional privileges.[204] The three-pillar bank-based financial system in Germany has endured in some form for the duration of the 20th century and beyond. It has, however, undergone some changes in that time. The most significant changes leading up to the 2007-2009 crisis have been driven by the opening of international financial markets and integration into the European Union. The *hausbank* system developed in the context of Germany's industrialization in the late 19th century, as a way to circumvent capital scarcity problems.[205] Once in place, it served as a viable and sustainable source of financing, such that German financial markets remained small, and most firms still needed to rely on bank financing. This began to change in the 1970s, as international capital markets became increasingly accessible. Access to these markets was, however, by no means uniform across all elements of the German economy. Large firms, with some international presence and reputation, found international capital markets to be a fruitful alternative to bank financing, and would in fact play a role in pressing for further opening of capital markets.[206] Smaller firms found their access considerably more limited, such that the opening of international finance actually increased the importance of the *hausbank* system to the Mittelstand.[207]

[204] Deeg, *Finance Capitalism Unveiled: Banks and the German Political Economy*
[205] Alexander Gerschenkron, *Economic Backwardness in Historical Perspective: A Book of Essays* (New York: F. Praeger, 1965).
[206] Jürgen Beyer and Martin Höpner, "The Disintegration of Organised Capitalism: German Corporate Governance in the 1990s," *West European Politics* 26, no. 4 (2003), 179-198.; Deeg, *Finance Capitalism Unveiled: Banks and the German Political Economy*
[207] Ibid.

This change in turn altered the balance between the commercial banks and the Landesbanken. They had always competed for the business at the upper end of the Mittelstand, but the commercial banks' core business has been Germany's large firms. As the large firms came to rely less upon the banks, the commercial banks turned more of their attention to the Mittelstand, increasing their competition with the Landesbanken. The commercial banks shifted their focus to what became known as the Allfinanz strategy, in which the banks provided not only financing, but also expanding their financial services to include consulting, investment banking, and equity investing, shifting to more of a universal banking model.[208] This strategy not only enabled the commercial banks to present themselves to the Mittelstand as a sort of financial one-stop supermarket for all of their financial needs, but also allowed the banks to better assess their risk exposure. The Landesbanken responded in kind, expanding their own business models to move closer to a universal banking model.

Increased international exposure also brought increased international risk for German banking, with the Herstatt crisis of 1974 deepening German banking pillars' institutional structures to respond collectively to firm distress. Historically, German finance has experienced relatively few firm failures. This is broadly typical of corporatist financial systems, as the integrated nature of their financial systems means that banks are both well-connected to private sources of assistance and less likely than their liberal counterparts to over-leverage or take risky positions to gain a short-term competitive advantage. Correspondingly, however, when a coordinated system does run into problems, the problems will be significantly greater, as a single bank's failure will

[208] Ibid.

directly and severely impact a much wider range of financial and non-financial firms than the relatively atomized firms of a liberal system.[209]

The last major financial firm failure prior to 2007 in Germany was the failure of Herstatt in 1974. Herstatt, a medium-sized commercial bank, experienced severe difficulties related to its exposure to the so-called Secondary Banking Crisis in the UK. The German state attempted to broker a private consortium rescue of the other commercial banks, but that consortium ultimately fell apart. Herstatt was subsequently wound down by the German state, causing global disruptions, but ultimately not a global financial crisis.[210] This relatively mild outcome suggests why the German banks failed to come together to rescue Herstatt: they simply didn't have enough self-interest in helping the bank. Nevertheless, the aftermath of the Herstatt crisis would lead to substantial reforms in the commercial banking pillar aimed at increasing the cooperative response capability of the sector. The first major reform was the creation of the Liquidity Consortium Bank (the LIKO Bank), a standing institution funded by the commercial banks to provide emergency liquidity support to commercial banks experiencing liquidity problems.[211] Although the LIKO Bank was not used in the 2007-2009 crisis, due to both the relative size of the need and the nature of the problems (solvency more than liquidity), it nevertheless demonstrates a capacity of German commercial banks to act to protect their peers without equivalent in the US or UK. In those liberal systems, consortium rescues are not unheard-of, but are always ad-hoc, and typically organized by a regulatory

[209] Falko Fecht, "On the Stability of Different Financial Systems," *Journal of the European Economic Association* 2, no. 6 (2004), 969-1014.
[210] Joseph Becker, "International Insolvency: The Case of Herstatt," *American Bar Association Journal* 62 (-10-01, 1976), 1290.
[211] Thorsten Beck, "Deposit Insurance as Private Club: Is Germany a Model?" *Quarterly Review of Economics and Finance* 42, no. 4 (2002), 701-719.

agency. In Germany, the LIKO Bank exists as a permanent structure, administered by the BdB and funded by its members, ready to provide support to those members as necessary.[212]

The second major reform to come out of the Herstatt crisis was the creation of the commercial banks' privately-funded deposit insurance program. After the Herstatt crisis, it became clear that the German state would move to provide a public deposit insurance program, as found in the US, UK, and most advanced capitalist systems. Such a public program, however, would come with expanded public oversight. In order to prevent this state interference in private banking, the commercial banks, under the auspices of the BdB, organized their own deposit insurance program.[213] Like the LIKO Bank, it would be self-funded by BdB members and administered by the BdB. It also was not called-upon in the 2007-2009 financial crisis, as it was superseded by the German state's own blanket guarantee, but had been used successfully in resolving minor bank failures since its creation.[214] Both of these reforms proved highly successful at providing private management of financial crises, and until 2007 few bank failures rose to the level of attracting the attention of the Chancellor or other national political actors.[215]

The savings banks and cooperative banks created similar private deposit insurance funds in the aftermath of the Herstatt crisis, again aiming to head off the creation of a state-designed and state-run deposit insurance scheme.[216] The savings banks already also enjoyed unlimited guarantees from their Länder. As noted above, however, neither guarantee was typically called upon. Instead, the preferred method used by the savings

[212] Ibid.
[213] Ibid.
[214] The largest of these was Schröder, Münchmeyer, Hengst, & Co. in 1983. (Ibid., 16)
[215] Foreign Ministry representative, Interview by author, 2011.
[216] Beck, *Deposit Insurance as Private Club: Is Germany a Model?*, 701-719

banks was to support distressed Sparkassen from their relevant Landesbank, and to confront broader problems, including Landesbanken in distress, through mergers. Being even less competitive than the commercial banks, the savings banks could readily support each other without fear of subsidizing a rival.

In 2001, the European Union's Competition Commission ruled that the Länder's longstanding guarantees of the Landesbanken's obligations, the *Gewährträgerhaftung* and *Anstaltslast*, constituted illegal state aid, providing the Landesbanken with an unfair competitive advantage. Since suddenly removing this support would negatively impact the Landesbanken's credit ratings, the Commission gave the Länder until 2005 to remove these protections.[217] The Commission intended for the Landesbanken to use this time to consolidate in preparation for tighter requirements. Instead, the Landesbanken responded to this window by expanding rapidly, taking advantage of their remaining years of unlimited state guarantees to borrow extensively. Supporters of the Landesbanken saw this as a strategy to maximize their remaining years of guarantees to put them in as strong a position as possible. Critics argued that the Landesbanken were stepping up their abuse of the guarantees now that their removal was a certainty.[218] In any event, by 2006, on the eve of the financial crisis, this approach left the Landesbanken considerably larger and more leveraged, with a rapidly acquired international portfolio of assets, including substantial mortgage-backed security holdings in the United States, Spain, and Eastern Europe.

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[217] European Commission, *Press Statement After the Meeting of Commissioner Monti and State Secretary Koch-Weser on 17.7.2001*

[218] Foreign Ministry representative, *Interview by Author*; Stefan Handke and Hubert Zimmermann, "Institutional Change in German Financial Regulation," in *Crisis and Control: Institutional Change in Financial Market Regulation*, ed. Renate Mayntz, Vol. Bd. 75. (Frankfurt: Campus Verlag, 2012), 119.

Systemic Approaches

In the 2007-2009 crisis, the Landesbanken would be among the first German banks to run in to difficulties, and among the largest recipients of state aid. The crisis, however, would begin in a commercial bank, IKB. Initially, as in the US and the UK, the Germans attempted to address the failure of banks on an individual basis. Some of these rescues involved the Federal Republic contributing directly, in partnership with private sources, as in the rescues of commercial banks IKB and Hypo Real Estate. In others, the Federal Republic played no more than an advisory or coordinating role, and funding for rescues came either from the other banks or the Länder. This was the case in the initial Landesbanken failures. SachsenLB was rescued predominantly with money from the other Landesbanken and a small contribution from Saxony, while WestLB was initially rescued with funds from North Rhine-Westphalia and its Sparkassen shareholders.

As the number and scale of failures grew, however, Germany began to feel pressure to respond systemically, especially from the Irish and French governments. The Irish, feeling the brunt of the collapse in housing prices, were straining to protect their own banks, and urged the Germans to do more to shore up German banks with Irish subsidiaries. Merkel, however, rejected the Irish pressure, maintaining that German banks were not substantially at risk.[219] Nikolas Sarkozy, the French President, attempted to orchestrate a European Union-wide bailout, which would see member states contributing to a common pool to rescue European banks. The Germans steadfastly rejected this plan over concerns that they would be the primary source of funds in a pool they would not have control over, effectively placing Germany in the position of funding

[219] Edward Cody, "No Joint European Strategy on Banks ; 4 Top Economies Seek World Summit," *The Washington Post*, sec. A-SECTION, October 5, 2008.

bank bailouts in their neighbors.[220] More important was pressure from domestic sources. Representatives from Deutsche Bank, the Bundesbank, and the Economic Ministry all came "knocking on the Chancellor's door" the same day, demanding action on the growing crisis.[221]

The German state resisted pressure for a systemic plan longer than the British or Americans, but on October 6, 2008, Merkel and Finance Minister Peer Steinbrück announced a complete guarantee of German bank deposits, a day after Merkel condemned the equivalent Irish deposit guarantee.[222] Although both Merkel and Steinbrück would subsequently walk back their guarantee as "symbolic" and "political," rather than legal, it nevertheless was a radical about-face.[223] It also created significant moral hazard problems, by offering an unlimited guarantee to banks and depositors at taxpayers' expense. The subsequent walk-back, making the guarantee symbolic rather than legal, increased uncertainty around the guarantees, and thus diminished their effectiveness, but did not resolve the moral hazard problems associated with them.

The Germans unveiled their guarantees not only as a way to prevent runs system-wide, but as a part of negotiations between the state and the commercial banks over the public-private rescue of Hypo Real Estate. As discussed in more detail below, Merkel and her negotiating team managed to extract a significant private contribution to a public-private consortium rescue of Hypo Real Estate, a distressed commercial property lender large enough to have systemic implications if it fell. Merkel managed to increase the

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[220] Jamie Smyth, "German Finance Minister Dismisses Proposed Pan -European Rescue Fund," *The Irish Times*, sec. FINANCE; Global Financial Crisis, October 3, 2008.
[221] Foreign Ministry representative, *Interview by Author*
[222] "Germany in Euro 50bn Rescue of Lender." *Belfast Telegraph*, October 6, 2008h.
[223] Aiden Corkery, "Shares Plunge as Rescue Plans Fail ; Irish Stocks are Hammered as Bailouts have Little Impact," *Daily Mail (London)*October 7, 2008.; John Lichfield and Tony Paterson, "From Iceland to Greece, Europe Marches Out of Step ; Leaders Attempt to show Unity as Market Crisis Raises Threat of New Political Rifts," *The Independent (London)*, sec. NEWS, October 7, 2008.

commercial banks' contribution to the Hypo rescue from an initially proposed €3 billion to €8.5 billion in direct negotiations with Deutsche Bank CEO Josef Ackermann.[224] In those same meetings, Ackermann pressed Merkel to implement a system-wide approach.[225] Neither acknowledges that the open-ended guarantees were linked to the €5.5 billion increase in private contributions to the Hypo rescue, but the two were announced within hours of each other. Although neither party acknowledges a quid pro quo, it appears highly likely that the guarantees were a concession by Merkel to extract a private contribution to the Hypo rescue.

The most significant system-wide response by the German state, however, would be the creation of the Sonderfonds Finanzmarktstabilisierung (Special Financial Market Stabilization Funds), known as SoFFin. The equivalent of the US and UK systemic rescue plans, SoFFin established a €500 billion pool and conditions for the German state to provide liquidity and capital support to distressed German banks.[226] In the US and the UK, these plans were constructed by regulators and politicians, with bank input limited to technical advice from not-at-risk banks. In Germany banks that would likely need to call upon the plan were integral to the drafting process. This would be reflected in the form the plan ultimately took.

Primary negotiations were headed by Joerg Rasmussen, the state secretary of the Finance Ministry, in collaboration with Jens Weidmann from the Federal Chancellery's Department of Economics and Bundesbank chief Axel Weber. Weber, along with

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[224] Derek Scally, "German MPs Grapple with Dublin Bank's Financial Woes," *The Irish Times*, sec. FINANCE; Business Agenda, August 7, 2009c.

[225] Ambrose Evans-Pritchard, "LENDING; Eurozone Agrees to an Emergency Bailout Plan," *The Daily Telegraph (London)*, sec. CITY, October 13, 2008b.

[226] "German Chancellor Defends Financial Market Rescue Package." *BBC Monitoring Europe - Political Supplied by BBC Worldwide Monitoring*, October 13, 2008d.

European Central Bank agents, pressed for the Federal Republic to take direct stakes in banks to address solvency issues. Unlike in the US and UK, where industry associations had no presence, both Deutsche Bank CEO Josef Ackermann and Commerzbank CEO Martin Blessing took an active role in the negotiations, representing not only their own banks, but also the BdB and German banks more generally.[227] Blessing's presence is especially noteworthy, as Commerzbank's share prices were beginning to fall due to its similar profile to Hypo and other struggling banks.[228] Therefore, Commerzbank was widely expected to need state aid to survive, and Blessing was able to use his institutional access as a BdB representative to negotiate directly with the state over the general terms for aid.

SoFFin as originally constructed consisted primarily of money for liquidity support, in the form of loan guarantees. Smaller pools of money were set aside for capital injections and guarantees of state securities. €400 billion was marked for loan guarantees, in which repayment of loans made to at-risk banks would be guaranteed by the state. Such guarantees were to carry a minimum 2% per annum cost for banks taking them, and no bank would be allowed to guarantee more than €5 billion.[229] An additional €80 billion was set aside for capital injections to address solvency issues. Such assistance was to take the form of silent participation, providing capital to distressed banks but not diluting shareholder control of the institutions. As originally constructed, such silent participation

[227] "German Government Plans to Rush Bank Rescue Package through Parliament - Paper." *BBC Monitoring Europe - Political Supplied by BBC Worldwide Monitoring,* October 12, 2008f.
[228] Carter Dougherty, "Authorities Aid Banks in Europe," *The New York Times*, sec. C; Business/Financial Desk, September 30, 2008a.
[229] Marcus Walker, Sara Schaefer Munoz and David Gauthier-Villars, "Bailout Price Tags Raise the Question : How?; as World Markets Rise, Economists Fret Over Cost to Taxpayers and Governments," *The Globe and Mail (Canada)*, sec. REPORT ON BUSINESS: INTERNATIONAL; GLOBAL FINANCIAL CRISIS: EUROPEAN PLANS, October 14, 2008.; Jonathan Braude, "Germany , Sweden Detail New Bailouts," *Daily Deal/the Deal,* October 21, 2008.

was to pay a dividend of no less than 10% of the amount provided, and no firm would be allowed to take more than €10 billion in capital injections.[230] Finally, €20 billion was set aside under SoFFin to guarantee state securities. Additional conditions were set on banks accepting state aid, including restrictions on paying dividends to shareholders and a €500,000 cap on executive pay.[231]

In theory, the conditions placed on SoFFin aid were fairly stringent, although the emphasis on liquidity support over solvency support reflected a widespread belief among banking association representatives and bankers that German banks were essentially solvent and only distressed because of fallout over the collapse of Lehman Brothers. This narrative, placing primary blame on US banks and policymakers, absolved the German banks of much of the blame for their fate, and was promoted by, among others, Ackermann and the BdB.[232] This narrative, in turn, could be used to justify liquidity provisions on non-punitive terms. As such, capital support was more expensive than liquidity support. Nevertheless, the terms on-paper were fairly stringent, reflecting the role played by the European Commission in setting out the terms necessary to ensure compliance with EU competitiveness directives. EC representatives would give ex ante approval of the plan even before its approval by the Bundestag.[233] In practice, however, both liquidity support and capital support would be provided on far more generous terms than drafted in the original legislation, and in both cases, limits on maximum aid to firms

[230] Ibid.; European Commission, "Communication from the Commission — the Recapitalisation of Financial Institutions in the Current Financial Crisis: Limitation of Aid to the Minimum Necessary and Safeguards Against Undue Distortions of Competition," *Official Journal of the European Union* C 10 (May 10, 2009d), 2.

[231] "German Finance Minister Says Crisis Not Over Yet." *BBC Monitoring Europe - Political Supplied by BBC Worldwide Monitoring*, October 27, 2008e.

[232] Mark Landler and Katrin Bennhold, "Bold Pledges from World Leaders , but Investors Await the Details," *The New York Times*, sec. A; Business/Financial Desk, October 13, 2008.; Bundesverband deutscher Banken representatives, *Interview by Author*

[233] Foreign Ministry representative, *Interview by Author*

would be disregarded. Moreover, other restrictions on firm activities, such as the cap on executive compensation, would be similarly waived.

The core of the weakness of SoFFin in practice lay in its voluntary nature. In the US, Treasury officials made TARP injections essentially mandatory for all major US firms by insisting that all accept part-nationalization before any funds would be released. Therefore, firms were forced to accept injections on state terms, or risk deepening the financial crisis.[234] In the UK, capital raises were made mandatory by raising regulatory capital requirements; firms could then chose between meeting new capital requirements by accepting state aid on non-negotiable terms or seeking alternate private sources.[235] In Germany, however, no mandatory capital raisings were introduced, and firms were allowed to choose whether to accept any aid at all. Paradoxically, this created a scenario where the state wanted firms to accept aid, and the firms themselves wanted to refuse it. The state, which wanted to contain the crisis at a minimal cost to itself, wanted banks to take assistance early, while their losses were still relatively small. Moreover, the state wanted firms to take enough aid that they would rapidly be restored to profitability, and ideally could repay the state sooner than they could if they took the minimum required to survive. If the banks waited until their losses were so immense that they could not survive without state aid, they would turn to the state as a last resort. By waiting, however, the firm's position would have deteriorated, and the cost to the state needed to save the bank would be much greater. The banks, meanwhile, while their losses were

[234] Andrew Ross Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves* (New York: Viking, 2009).; Henry M. Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System* (New York: Business Plus, 2010).

[235] Alistair Darling, *Back from the Brink: 1000 Days at Number 11* (London: Atlantic Books, Limited, 2012).

relatively small, could continue without state assistance for a time, and avoid both the conditions attached to state aid and the market costs of signaling distress by taking state aid. In such a maneuver, known as "gambling for resurrection," banks resist taking aid until the last possible moment, hoping to escape without stigma or state conditions but knowing that, if they fail, they can tap the state for aid.[236] Individual firms' goals, minimizing the costs to the firm of aid, and the state's goals, stabilizing the system as a whole while ensuring timely repayment, thus contradicted, leaving the state urging banks to take aid before problems became immense, and banks preferring to gamble for resurrection.

The dangers of a voluntary plan were known in advance by German policymakers, and some elements, especially in the Bundesbank, lobbied for a mandatory plan.[237] The banks, on the other hand, strongly opposed a mandatory plan, and although the BdB never formally took a position on the issue, its representatives would press for a voluntary plan behind the scenes.[238] Ultimately, a combination of bank pressure and legal issues in establishing new mandatory policies for banks that had met their microprudential requirements led to the adoption of a voluntary plan.[239]

This created a situation where the German state had an incentive to encourage banks to take money early and in large amounts, while the banks sought to resist, holding out for more generous terms and taking only the bare necessity they needed if the aid would be expensive or come with conditions. The state's problem was made worse by the organized nature of German finance. The DGSV, the association of Landesbanken and

[236] Guillermo Rosas, *Curbing Bailouts: Bank Crises and Democratic Accountability in Comparative Perspective* (Ann Arbor: University of Michigan Press, 2009).
[237] Bundesbank representative, 2011.
[238] Bundesverband deutscher Banken representatives, *Interview by Author*
[239] Bundesbank representative, ; Foreign Ministry representative, *Interview by Author*

Sparkassen, proposed a joint Landesbanken take up state aid, which would both minimize the stigma associated with aid by providing it even to healthier banks, and enable the association to negotiate the terms of aid for the banks as a whole.[240] In doing so, it would have greater clout to negotiate more favorable terms. Although this joint take-up never occurred, it nevertheless illustrated the organizational advantages enjoyed by the Landesbanken in their negotiations with SoFFin and shaped the negotiating context for those Landesbanken which did seek state aid.

The commercial banks had no such joint take-up proposal, and leaked comments by Ackermann to the effect that he would be "ashamed" if Deutsche Bank took state money served to reinforce the stigma.[241] Ackermann's comments were intended to be heard only by internal Deutsche Bank staff, and BdB representatives would lament that they were made public, increasing pressure on the other commercial banks.[242] Regardless, the comments had a chilling effect, and commercial banks in need of aid were even more reluctant to take state aid. The state, meanwhile, grew increasingly nervous at the possibility of having to provide still greater aid later for institutions as large as Hypo Real Estate or Dresdner Bank, at the time Germany's third largest financial institution. As the commercial banks refused to line up to accept SoFFin aid, the German state responded by lowering the costs associated with the assistance, in one-on-one negotiations with the relevant banks.[243] Those banks which took state aid, therefore, received it on far more generous terms than specified in the plan as written, as will be discussed in depth below.

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[240] Braude, *Germany , Sweden Detail New Bailouts*
[241] Ibid.
[242] Bundesverband deutscher Banken representatives, *Interview by Author*
[243] Carter Dougherty, "Few Takers so Far as Europeans make Financial Rescue Packages Available," *The New York Times*, sec. B; Business/Financial Desk, October 18, 2008b.; Judy Dempsey, "Germany Loosens Limit on Executive Pay at Banks that use its Bailout Fund," *The New York Times*, sec. B; Business/Financial Desk, October 21, 2008.

This is in sharp contrast to the US and UK approaches, where the state could take advantage of its position to offer assistance on essentially non-negotiable terms.

Even after lowering the cost of assistance, German banks continued to struggle, and increasingly called for a bad bank to remove their toxic assets. Here again, the influence of the German banks on the policy-making process is demonstrated. The proposal for a bad band originated with the BdB, which presented a bad bank proposal in its consultations with state regulators.[244] The BdB plan would be adopted by the state with only slight modifications.[245] As discussed above, bad banks inevitably create moral hazard, as they work by taking distressed assets from the banks at above-market rates. In the case of the German bad bank plan, German banks would be able to buy state bonds in exchange for toxic assets valued at 90% of their book value, a value much higher than the current market value and above the value they could reasonably hope to recover to post-crisis. The banks would then be obligated to buy back their assets at that value in 20 years.[246] If, however, the bank failed in that intervening time, the state would be left holding a potentially worthless asset. This plan, therefore, offered banks a way to get much more than they could from the market for their toxic assets, and left the state exposed to the risk of a fall in asset value if the bank failed to survive the intervening period. It failed, however, to ultimately remove the toxic assets from the banks permanently, as they would eventually be returned to the bank if it survived. In contrast, if the state had simply purchased the assets, the moral hazard problem would have been

[244] Bundesverband deutscher Banken representatives, *Interview by Author*

[245] The chief difference between the BdB's proposal and the bad bank plan as created was in the number of bad banks created. The BdB favored a single bad bank pooling all participants' bad assets, while the ultimate plan set up individual bad banks for each participating firm. Ibid.; Derek Scally, "German Move to Establish 'Bad Bank'," *The Irish Times*, sec. FINANCE; Business News, April 22, 2009b.

[246] Derek Scally, "German 'Bad Bank' Sees the First Step in Revolution," *The Irish Times*, sec. FINANCE; Business News, May 16, 2009a.

more nakedly exposed, but the banks could have actually offloaded their toxic assets. Instead, the bad bank proposal was largely received by markets as an accounting sleight-of-hand, albeit one that increased the state's risk exposure.[247]

German banks would continue to struggle generally into 2012, especially as the European sovereign debt crisis unfolded. German banks were among the largest holders of sovereign debt in the so-called "PIIGS" (Portugal, Italy, Ireland, Greece, and Spain). Therefore, as with mortgage-backed securities in 2007-2009, the banks were forced to chose between holding assets of questionable value and taking significant write-downs. As of early 2012, Germany had renewed the SoFFin fund to confront continued weaknesses in the German banking system.[248]

Germany's systemic responses to the financial crisis illustrate the permeability of policymaking to financial interests. In both the initial creation of the SoFFin fund and its later bad bank revision, industry representatives, including likely recipients of the state aid being discussed, had a greater role in shaping policy than in the US or UK. In no small part this was due to the structure of German banking: the peak associations, while serving as representatives of their respective pillars, also served a quasi-public function as self-monitoring adjunct to the regulatory agencies.[249] This is most clearly demonstrated in the German banks' private deposit insurance schemes, but extends beyond that. The BdB and DSGV serve as self-regulators, alerting the Bundesbank and BaFin to problems in their members.[250] As shall be seen below, the association may also play a key role in funding rescue efforts, at times at their own initiative. As such, the

[247] "German Banks Get Stressed Out." *Euromoney*, June, 2009a, .
[248] Emily Ford, "Germany to Resurrect Beefed - Up Bank Bailout Fund," *The Times (London)*, sec. BUSINESS, December 15, 2011.
[249] Bundesverband deutscher Banken representatives, *Interview by Author*
[250] Ibid.

peak associations have access to the financial policymaking process, but can also use that quasi-public position to advocate for their members' interests. In the 2007-2009 crisis, this meant both securing a voluntary rescue plan based on liquidity and silent participation, and obtaining a bad bank plan based very closely on the BdB's own proposal.

The combination of strong industry associations and a voluntary state aid plan shaped the individual rescue plans in both the commercial banks and the Landesbanken. In both pillars, strong industry associations enabled the state to extract a bank-funded component of rescues initially. Early on, therefore, corporatist banking structures served the taxpayers' interest. Later in the crisis, however, securing a voluntary rescue plan gave both the commercial banks and the Landesbanken a significant advantage. By threatening to gamble for resurrection, and by relying on leverage from industry association access, both classes of banks secured negotiating advantages, which they used to extract greater concessions from the German state and Länder than their liberal peers could obtain.

Private Bank Rescues

IKB

The first German bank to run into trouble, and the first to receive assistance from the state, was the commercial bank IKB (Industrialkreditbank). The case of IKB demonstrates the way in which a corporatist financial system enables rapid private responses to financial crises. In its later developments, however, IKB illustrates how those private institutions may push the state to intervene in increasingly industry-favorable ways, as well as the extreme reluctance of the German state to take ownership

of a financial institution. Initial aid to IKB came through a public-private consortium, demonstrating how bank interdependence can lead to private contributions to rescues. However, the state's stake in IKB would ultimately be sold at a loss, rather than held until profitability as comparable stakes in US and UK institutions would be. This loss-making sale, under pressure from the German banks and a German public reluctant to extend state ownership, illustrates the limited capacity of the German state to use nationalization as a policy tool, especially as a policy tool at minimal cost to the state.

As would be the case for many later bank failures, IKB's problems began in a subsidiary's heavy losses in subprime mortgage assets. In IKB's case, its Rhinebridge subsidiary faced heavy losses from US mortgage assets, with losses approaching €24 billion, representing about 20% of IKB's total value.[251] IKB was not generally regarded as large enough to be systemically important, but its distress threatened to impose losses directly upon the German government. At the start of the crises, IKB was 38% owned by Kreditanstalt für Weideraufbau (KfW), the state-owned development bank.[252] Although IKB's failure didn't threaten the German economy more generally, it did threaten to impose high, potentially disastrous losses on KfW. Accordingly, KfW acted to preserve its own interest by rescuing IKB, and initiated negotiations for a public-private rescue. At the same time, initial aid to IKB included a significant private component, through a

[251] European Commission, "COMMISSION DECISION of 21 October 2008 on State Aid Measure C 10/08 (Ex NN 7/08) Implemented by Germany for the Restructuring of IKB Deutsche Industriebank AG (Notified Under Document C(2008) 6022)," *Official Journal of the European Union* L 278 (October 23, 2009b), 32.; Ron Scherer, "US Debt Jolts World Markets," *Christian Science Monitor,* August 17, 2007.
[252] European Commission, *COMMISSION DECISION of 21 October 2008 on State Aid Measure C 10/08 (Ex NN 7/08) Implemented by Germany for the Restructuring of IKB Deutsche Industriebank AG (Notified Under Document C(2008) 6022)*, 32

rapidly-organized €8.1 billion risk shield provided jointly by KfW and the peak associations the three pillars of German banking.[253]

The first wave of aid to IKB came in the form of a risk shield provided by a consortium of German banking associations and the German state, and was organized with remarkable speed. On July 27, 2007, a German bank informed BaFin, the German financial regulator, that it would be suspending credit lines to IKB.[254] BaFin, in turn, convened a meeting of the Finance Ministry, KfW, the Economics Ministry (KfW's owner), and representatives of the three banking associations, the BdB, DGSV, and BVR.[255] In just four days, the group produced a risk shield for IKB, covering €8.1 billion of losses from the Rhinebridge subsidiary and an additional €1 billion of related losses at IKB proper. Of this, the private associations agreed to cover 30% of losses up to €1 billion, split 50% to the BdB, 33.3% to the DGSV, and 16.7% to the BVR. KfW would cover 70% of expected losses until the banking associations reached €1 billion in coverage, and then 100% of losses above that. Expected losses, split between the four consortium partners, were expected to be €3.5 billion.[256]

This plan both was assembled with great speed and spread the burden of the rescue broadly across both public and private actors. KfW and the BdB shouldered disproportional shares of the burden, but both also faced direct exposure in the event of an IKB collapse. In KfW's case, as a 38% shareholder, it faced significant direct losses. This fact led the Economics Ministry to argue that KfW was simply acting as a

[253] Ibid.
[254] Ibid.
[255] Economics Ministry representatives, 2011.; European Commission, *COMMISSION DECISION of 21 October 2008 on State Aid Measure C 10/08 (Ex NN 7/08) Implemented by Germany for the Restructuring of IKB Deutsche Industriebank AG (Notified Under Document C(2008) 6022)*, 32, p. 35
[256] EC IKB Decision (2009/775/EC), p. 35; Rainer Buergin, "German Minister Suggests Sale of Stake in IKB; MARKETPLACE by Bloomberg," *The International Herald Tribune*, sec. FINANCE, August 9, 2007.

shareholder, and that a private actor would have taken comparable steps.[257] Subsequent aid, however, would exceed what would have been expected of a private owner. The BdB, meanwhile, faced losses as the guarantor of the commercial banks' privately-run and -funded deposit insurance scheme. Both, therefore, had clear interest in avoiding the collapse of IKB.[258] The other two organizations, however, had no such direct exposure, and faced only the indirect costs from the collapse of a large, but not systemically crucial, German bank. Nevertheless, the German state was able to prevail upon them to contribute to IKB's rescue by appealing to the banking associations to act to contain a systemic crisis, and not "start the [global] financial crisis on German soil."[259] Not only did the IKB rescue extract support from the industry broadly, it was assembled quickly. While comparable rescues in liberal systems would take a great deal of time and effort to assemble, the IKB rescue was constructed over a single weekend. Requiring only three representatives of the banking sector made the process of constructing such a rescue considerably simpler than it would have been in the US, where heads of all the relevant major banks would need to both be present and in agreement. Acting through the private organizations avoided the problem of individual bank defection, making the only risk that of association defection. Once the respective association heads were convinced of the need, the plan could be implemented relatively simply.

Once this initial rescue proved insufficient, a second rescue, extending an additional €350 million of coverage, was assembled with comparable rapidity, and with comparable cost-sharing. In this second rescue, KfW and the BdB each provided €150

[257] Economics Ministry representatives,
[258] European Commission, *COMMISSION DECISION of 21 October 2008 on State Aid Measure C 10/08 (Ex NN 7/08) Implemented by Germany for the Restructuring of IKB Deutsche Industriebank AG (Notified Under Document C(2008) 6022)*, 32, p. 36.
[259] Bundesverband deutscher Banken representatives, *Interview by Author*

million, while the BVR and DSGV together contributed €50 million.[260] These first rescues are somewhat difficult to evaluate from a moral hazard standpoint. Undeniably, the German government, through KfW, provided the majority of the support IKB received through 2007. However, as IKB was 38% state-owned, there is some credence to the Economics Ministry's claim that KfW was simply acting as a self-interested shareholder. Moreover, given the size of KfW's stake in IKB, it could credibly argue that it needed to prevent IKB's failure to minimize costs to the state. Additionally, securing aid from the banking associations reinforced the precedent of public-private cost sharing. If banking associations believed it likely that they would need to contribute to future bank rescues, they would have an incentive avoid the need for such rescues. Thus, they would encourage their members to adopt prudential practices, rather than simply relying on state assistance.

Future rescues of IKB, however, would prove more problematic. While the banking associations were willing to contribute through 2007, they balked once additional problems became apparent in February 2008. To cover these additional losses, Finance Minister Peter Steinbrück sought an additional €1.5 billion for IKB, this time in the form of capital injections rather than loans. Steinbrück envisioned this aid as being 1/3 private and 2/3 public.[261] The banking associations, however, balked at additional support for IKB. This left the German government in an extremely difficult position. KfW's losses on IKB had already reached €5 billion, and KfW no longer had sufficient reserves to fund

[260] European Commission, *COMMISSION DECISION of 21 October 2008 on State Aid Measure C 10/08 (Ex NN 7/08) Implemented by Germany for the Restructuring of IKB Deutsche Industriebank AG (Notified Under Document C(2008) 6022)*, 32, p. 36.
[261] Ambrose Evans-Pritchard, "Berlin Rescues IKB to Avoid a 'Banking Tsunami'," *The Daily Telegraph (LONDON)*, sec. CITY; GERMAN ECONOMY, February 14, 2008a.

further aid without additional money from the state.[262] More problematically, losses on IKB had reached a level at which IKB's failure risked bringing down KfW as well.[263] In such an environment, the state's position relative to the banking associations weakened. IKB was not a systemic risk, but was a risk to KfW. Therefore, the other banks could withstand its fall, but KfW might not be able to. As such, KfW needed to provide assistance to IKB, while the banking associations felt much less pressure to act. Although they did ultimately provide a relatively paltry €300 million between the three associations, the vast majority of this capital injection (€2.3 billion) came from KfW. €1.25 billion took the form of direct shares, bringing KfW's ownership stake to 90.8%. The remaining €1.05 billion took the form of loans, but loans with repayment subject to a better fortune clause, making repayment immediately waived until such time as the bank was in better shape.[264]

Even this assistance failed to secure IKB, and as losses continued to mount, KfW faced a choice. It could either continue to hold IKB as an all-but-fully nationalized firm, until such time as it returned to profitability, and the state could recover its stake. Alternately, it could sell the bank immediately, which would avoid further losses from future capital injections, but would guarantee substantial losses for KfW. In the US and UK, confronted with similar choices on their fully- or partially-nationalized banks, policymakers chose to hold their banks until the state could realize a profit. In Germany, however, political pressure against state ownership pushed strongly for the second

[262] Ibid.
[263] Ibid.
[264] European Commission, *COMMISSION DECISION of 21 October 2008 on State Aid Measure C 10/08 (Ex NN 7/08) Implemented by Germany for the Restructuring of IKB Deutsche Industriebank AG (Notified Under Document C(2008) 6022)*, 32, p. 36.

option.[265] From the beginning of the crisis, forces both within and outside of the government pushed for the state to release its stake in IKB. Economics Minister Michael Glos urged in August 2007 that KfW sells its stake as soon as IKB recovered.[266] The Landesbanken similarly pressured the German state to abandon its ownership in IKB, both through the DGSV and by applying pressure through the Länder. Early in IKB's struggles, the Landesbanken even proposed a Länder purchase of the bank, until its troubles became more apparent.[267] In this environment, Economics Ministry officials never seriously considered holding the bank to profitability, arguing that the political will was almost uniformly toward a sale at a loss.[268] In August 2008, Germany did just that, selling its 91% stake to American private equity firm Lone Star Funds for €100 million, well below the €800 million KfW hoped to get for the bank. Moreover, the deal required KfW to retain €1 billion of IKB's bad assets and to waive repayment of the €1.05 billion loan made in February.[269] All told, the sale resulted in a €14.8 billion loss for KfW.[270] Even after the sale, however, IKB would seek state aid, tapping the SoFFin fund for €7 billion in loan guarantees spread across four separate requests in 2009.[271]

The case of IKB reveals both the willingness of German private actors to act to save a distressed firm, and the state's reluctance to take direct ownership of financial institutions. The first two waves of aid to IKB demonstrated how the state could use the

[265] Economics Ministry representatives,
[266] Jonathan Gould, "Subprime Woes to Cost Germany's IKB $1-Billion," *The Globe and Mail (Canada)*, sec. REPORT ON BUSINESS: INTERNATIONAL; FINANCIAL SERVICES, September 4, 2007.
[267] "IKB Repeats Losses could Hit EUR 700m." *The Irish Times*, sec. FINANCE; Other Stories, September 29, 2007.
[268] Economics Ministry representatives,
[269] European Commission, *COMMISSION DECISION of 21 October 2008 on State Aid Measure C 10/08 (Ex NN 7/08) Implemented by Germany for the Restructuring of IKB Deutsche Industriebank AG (Notified Under Document C(2008) 6022)*, 32, pp. 37-38.
[270] "Europe's Banks Face More Pain , Too." *The Sunday Times (London)*, sec. BUSINESS; Business, September 14, 2008c.
[271] Sonderfonds Finanzmarktstabilisierung, "Massnahmen Aktuell," Deutsche Bundesbank, http://www.soffin.de/de/soffin/leistungen/massnahmen-aktuell/index.html (accessed April 30, 2011).

organized nature of German financial interests to rapidly assemble a consortium rescue for a distressed bank, even extracting support from sectors of German finance without a direct stake in IKB. That pressure, however, had its limits. IKB's initial rescue was a public-private mix, but a mix in which the state provided the majority of support. Although the KfW would defend its actions as those of a self-interested shareholder, the European Commission would find against it, and hold that this represented state aid in violation of EU Competition Directives.

Subsequent aid to IKB showed how organization of the financial sector can create pressures preventing the state from maximizing its returns by holding a nationalized firm. The attempted third consortium failed because the DSGV withdrew its support. A liberal consortium, being assembled from many constituent banks, can weather the defection of a single bank, so long as the others remain in place. Bear Stearns' defection from the Long-Term Capital Management rescue in 1998, for instance, did not precipitate that consortium's collapse.[272] The DGSV, however, could withdraw the support of the Landesbanken *en masse*, producing a defection that virtually guaranteed that the commercial banks and the cooperative banks would also defect. To remain in the consortium at that point would disadvantage an entire sector of German banks against their Landesbank rivals. This pressure would be especially acute for the commercial banks, which since the 1970s had been in increasingly direct competition with the Landesbanken. The organized nature of German banking interests also produced pressure for KfW to sell its stake in IKB at a loss. Here again the DGSV played a key role, pressuring the Federal Republic government both directly and through the Länder to

[272] Roger Lowenstein, *When Genius Failed: The Rise and Fall of Long-Term Capital Management* (New York: Random House, 2000).

sell IKB. The Landesbanken had no desire to compete against a rival subsidized by the Federal Republic. The consequence for the taxpayer, however, was to realize a €14.8 billion loss on KfW's investment and subsequent aid to IKB. In contrast, both the US and UK would demonstrate a willingness to hold stakes in financial firms until they realized a positive return on investment. Thus, the US held its stakes in AIG and in TARP recipients until both were profitable, and the UK continues to hold stakes in several institutions, most notably the wholly-nationalized Northern Rock and the part-nationalized RBS and Lloyds/HBOS, until they can be sold at a profit to the taxpayer.[273]

Hypo Real Estate

The failure of IKB demonstrated the willingness to take a significant loss rather than maintain ownership of a bank by the German state. This reluctance is demonstrated throughout the financial crisis. In only one case did the German state take full ownership of a financial institution in the 2007 crisis. The nationalization of Hypo Real Estate (HRE) would be the first nationalization of a German bank since Darmstädter & National in 1931, and would be done in a way and at an above-market price that illustrated the extreme reluctance of the German state to nationalize a financial institution.[274] Rather than take a hard line with shareholders, which would have both limited state losses and contained moral hazard problems, this approach insulated shareholders from losses to soften the blow of nationalization, at a cost to the state. It therefore illustrates how the German financial sector retains significant power to assure above-market state aid even

[273] TARP as a whole remains unprofitable for the US, but that is a product of TARP money used to aid automotive manufacturers General Motors and Chrysler. U.S. Department of the Treasury, *Troubled Asset Relief Program (TARP) Monthly Report to Congress – December 2012* (Washington, DC: United States Department of the Treasury,[2013]).

[274] Derek Scally, "Shares in Hypo Jump 70% as Merkel Approves Draft Expropriation Bill," *The Irish Times*, sec. FINANCE; Business Today, February 19, 2009f.; "Germany Moves to Nationalise Hypo Bank." *The Irish Times*, sec. FINANCE; Business News, March 21, 2009f.

for a firm with virtually no value or chance for survival without state aid. The Hypo case, however, also illustrates how rival firms in corporatist financial systems may come together to assist their peers, and how the state may lean on healthy firms' exposure and ability to organize to extract greater private aid than would be available in liberal systems. Before it was nationalized at above-market rates, Hypo enjoyed a consortium rescue on a greater scale and with greater reach than the rescue of IKB, and on terms more favorable to the state.

Prior to running into difficulties in 2007, Hypo Real Estate (HRE) was one of the largest of Germany's commercial banks, specializing in commercial property lending. It also held about 10% of the German covered bond, or Pfandbrief, market.[275] As would be the case for several Landesbanken which ran into trouble, Hypo's problems originated in its exposure to foreign real estate markets. In Hypo's case, the troubles originated in its Irish-based Depfa subsidiary, which experienced major losses when the Irish housing bubble collapsed in late 2007 and early 2008.[276] Depfa's failure has been attributed in part to regulatory gaps, between the various German regulators and between the German and Irish regulators. BaFin, the German financial regulator, would later claimed to have seen problems as early as spring 2008, but had no authority over a bank holding company

[275] A covered bond is a bond with recourse to a pool of assets. In other words, the issuer guarantees to repay the bond, but if the issue fails, the bondholder can seek repayment directly from that pool of assets. Because of this added assurance of repayment, covered bonds are thought to be safer than conventional corporate bonds. (European Commission, "COMMISSION DECISION of 18 July 2011 on State Aid C 15/09 (Ex N 196/09), which Germany Implemented and is Planning to Implement for Hypo Real Estate (Notified Under Document C(2011) 5157)," *Official Journal of the European Union* L 60 (March 1, 2012), 1.; Philip Aldrick, "Germany Edges Closer to Hypo Nationalisation," *The Daily Telegraph (London)*, sec. CITY, April 10, 2009.; Derek Scally, "Hypo Shareholders to Consider EUR 321m State Takeover," *The Irish Times*, sec. FINANCE; Business News, April 18, 2009e.)

[276] European Commission, *COMMISSION DECISION of 18 July 2011 on State Aid C 15/09 (Ex N 196/09), which Germany Implemented and is Planning to Implement for Hypo Real Estate (Notified Under Document C(2011) 5157)*, 1p.3.

operating in Ireland.[277] The Bundesbank and Irish regulators, meanwhile, each argued that Depfa was the other's responsibility.[278] Slipping through the regulatory gap, Depfa was able to accumulate substantial exposure to Irish real estate markets, and its sharp decline threatened to bring down the parent company as well.

Unlike IKB or SachsenLB, the first German financial institutions to run into trouble, Hypo was indisputably of systemic importance. A failure of Hypo was widely regarded by both private and state actors of being potentially more devastating than the collapse of Lehman Brothers.[279] This was true not only because of its significant size, but also because Hypo held approximately 10% of the Pfandbrief market.[280] The German Pfandbriefen had not experienced a default in 100 years, and consequently enjoyed extremely good credit ratings.[281] A failure of such scale in the Pfandbriefen market, therefore, could have significant systemic effects. In addition, the *Verband deutscher Pfandbriefbanken* (VdP), the association of German Pfandbrief banks, had substantial links both within the financial industry, and to political actors, being generally considered one of the most powerful financial lobbies. The VdB, therefore, had both a strong interest in seeing Hypo rescued, and the organizational means to press for such a rescue.[282]

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[277] David Crawford and Marcus Walker, "Germany Ignored Regulator's Hypo Warning ; Documents show Market Watchdog Bafin Raised Alarm Bells Six Months before Massive Government Bailout," *The Globe and Mail (Canada)*, sec. REPORT ON BUSINESS: INTERNATIONAL; CREDIT CRISIS, May 28, 2009.
[278] William Tinning, "Pressure on Darling as Germany Guarantees all Savings," *The Herald (Glasgow)*, sec. NEWS, October 6, 2008.
[279] Derek Scally, "Top Banker Said Depfa Crisis nearly Collapsed System," *The Irish Times*, sec. FINANCE; Business News, July 8, 2009g.
[280] "Shares in German Mortgage Lender"
[281] "Germany edges closer to Hypo nationalisation", "Hypo shareholders to consider EUR 321m state takeover"
[282] Jethro Wookey, "Pfandbrief: The Sincerest Form of Flattery," *Euromoney*, November, 2008, .

As with IKB, the German government initially sought to organize a public-private consortium rescue for Hypo. BaFin and the Bundesbank organized a meeting with the heads of the major German commercial banks and the BdB, with the private negotiators chiefly represented by Josef Ackermann, CEO of Deutsche Bank, member of the BdB board, and chair of the Institute of International Finance.[283] As with IKB, the speed with which the consortium was assembled illustrates the way in which the preexisting organizational structures and interdependent nature of corporatist finance enables the rapid assembly of a consortium rescue. The other commercial banks faced even greater losses than the American banks faced after Lehman, and moreover did not have as much to gain in market share from Hypo's collapse. They therefore would be much more willing to contribute to a rescue than in the aborted Lehman consortium rescue. Moreover, they were able to coordinate more easily, by having a single representative of the industry as a whole in Ackermann.

However, the actual outcome of the consortium rescue also illustrates how these organizational structures can work in the state's favor. The German state was able to lean on the private organizations to extract private aid more easily than in a liberal system. When the banks initially met, they hoped to contribute only €3 billion in any rescue effort, with the rest to be provided by the Federal Republic.[284] The state, however, refused these terms. BaFin and the Bundesbank declined to even send a representative to the first day of formal negotiations. Representatives would later describe this move as strategic on their part, illustrating the state's willingness to lean heavily on the private

[283] Scally, *Top Banker Said Depfa Crisis nearly Collapsed System*, 18; Roger Boyes, "Every Country for itself as European Unity Collapses in an Attack of Jitters," *The Times (London)*, sec. HOME NEWS, October 6, 2008.; Bundesbank representative,

[284] Boyes, *Every Country for itself as European Unity Collapses in an Attack of Jitters*, 6

sector, even at the cost of risking the collapse of a systemically-important institution.[285] Although the negotiations failed to produce the 55% privately-funded rescue the German state wanted, the move did convince Ackermann to increase the contribution from the banks to €7 billion. Subsequent direct negotiations with Chancellor Merkel would raise the banks' contribution to €8.5 billion.[286] The ultimate rescue plan, revealed on September 28, 2008, consisted of €35 billion in guarantees to Hypo in two tranches, the first of €14 billion and the second of €21 billion. The first tranche would be 60% privately-funded, while the second would be entirely public. Therefore, if Hypo's losses came in under €17 billion, the rescue would be majority privately funded.[287] This is by no means an entirely privately-funded rescue, but significantly more than the US or UK could extract from their own financial sectors.

The Federal Republic would soon prove able to extract even greater aid from the private sector. When Hypo's losses proved substantially greater than expected, the private banks announced their intention to withdraw from the rescue plan entirely. Direct negotiations between Merkel and Ackermann, however, not only convinced Ackermann to retain a private element in the rescue, but to actually increase the private contribution by €15 billion, resulting in an ultimate consortium rescue plan of €50 billion, split €23.5 billion private and €26.5 billion public, a 47% privately-funded rescue.[288]

The successful orchestration of a nearly 50%-private rescue of a private sector bank illustrates how the organizational structure of the German financial system can serve to

[285] Ibid.; Bundesbank representative,
[286] Scally, *Top Banker Said Depfa Crisis nearly Collapsed System*, 18; Boyes, *Every Country for itself as European Unity Collapses in an Attack of Jitters*, 6
[287] Andrew Bulkeley, "German Government Bails Out Hypo," *Daily Deal/the Deal*, September 30, 2008c.
[288] Laura Board, "Germany Revives Hypo Real Bailout," *Daily Deal/the Deal*, October 6, 2008.; Richard Tyler, "Brown is Urged to Guarantee Deposits ; Banking Crisis the Contagion Spreads; Pressure on Prime Minister Grows as Germany Bails Out Bank," *The Daily Telegraph (London)*, sec. CITY, October 6, 2008.

empower the state to press for a privately-funded rescue. While in the US and the UK, negotiations with the financial sector involves discussions with as many as a dozen or more different bank heads with different interests in the financial crisis, in Germany, state regulators could negotiate with a single point person, who had the authority to make concrete aid contributions on behalf of his member banks. This made negotiations significantly faster. Both the initial consortium plan and the subsequent revision were negotiated over a single weekend. It also meant that defections by individual banks were less of a danger than in liberal systems. This enabled the state to credibly threaten to walk away from any rescue, knowing that the private sector could, in extremis, negotiate its own private rescue. Not only could the banks bluff the state, but the state could bluff the banking association as well.

Subsequent rescue efforts for Hypo, however, illustrate how the organizational strength of the German financial sector limits the ability of the state to take a hard line with failing banks. After the October 6 increased private contribution, no more private aid for Hypo would be forthcoming. Once €50 billion in loss guarantees proved insufficient to save Hypo, the chances of restoring the bank to health dimmed considerably. Instead, aid focused increasingly on "soft-landing" Hypo, of winding down its operations in an orderly fashion such that its disruption to the broader economy may be minimized. At this point, the private banks saw less of an incentive to be involved, and could instead rely on the state to handle Hypo's rescue. Moreover, as of October 17, 2008, the SoFFin fund had been established, and Hypo could simply tap state aid directly, without the need for an emergency *ad hoc* rescue. Unlike in the UK and the US, therefore, the creation of

a system-wide aid mechanism actually worsened the state's ability to provide aid to banks on state-favorable terms.

Once Hypo began relying exclusively on state aid, the terms of that aid would be consistently at moral hazard-generating levels, with guarantees provided at below-market rates and share purchases at above-market rates. On October 29, 2008, Hypo became the first commercial bank to tap the SoFFin fund for €15 billion in loan guarantees.[289] The rates it paid for those guarantees, 0.1% for unused guarantees and 0.5% for called-upon guarantees, were both well below market rates for such guarantees, and below the legal requirements for fees under the FMSA (the Financial Market Stabilization Act), the SoFFin-creating legislation. Under the FMSA, guarantees were to come with a fee of at least 2% per year, and the European Commission required guarantees to be above market rates.[290] Nevertheless, by January 2009, when nationalization began to be discussed in earnest, Hypo would call upon a total of €102 billion in SoFFin guarantees, all at below-market rates and well in excess of the €5 billion cap on guarantees to any single bank in the original legislation.[291]

Hypo was able to extract such generous terms because of the voluntary nature of the SoFFin plan. As discussed above, the state wanted the banks to take the aid while the banks resisted it. No bank wanted to be the first to signal distress by taking state aid. All preferred to "gamble for resurrection," attempting to find a less onerous solution, knowing that the state would still pick up the much higher costs of rescuing them later.

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[289] "German Lender Hypo Granted First Liquidity Aid Amounting to 15bn Euros." *BBC Monitoring Europe - Political Supplied by BBC Worldwide Monitoring,* October 31, 2008g.

[290] Walker, Schaefer Munoz and Gauthier-Villars, *Bailout Price Tags Raise the Question : How?; as World Markets Rise, Economists Fret Over Cost to Taxpayers and Governments,* B11; Governing Council of the European Central Bank, *Recommendations of the Governing Council of the European Central Bank on Government Guarantees for Bank Debt* (Brussels: European Central Bank,[2008]).

[291] "Shares in German Mortgage Lender Surge as Government Unveils Rescue - Daily." *BBC Monitoring Europe - Political Supplied by BBC Worldwide Monitoring,* March 30, 2009g.

Hypo, as the most distressed commercial bank, and the one most likely to fall soon without assistance, both needed aid first but also presented the clearest costs to Germany if it refused aid for much longer. Therefore, in order to induce Hypo to take aid, and in doing so to diminish the stigma for commercial banks of taking aid, SoFFin removed or lessened many of the conditions of that aid, including restrictions on firm activities and costs for loan guarantees.

Guarantees, however, proved to be insufficient to rescue Hypo. Increased losses on Depfa made it clear that Hypo's problem was fundamentally about solvency, and not liquidity. Moreover, the capital needs at Hypo were such that, if the state provided the needed capital, it would almost inevitably become the majority owner of the bank. Therefore, by January 2009, discussions began about the need to nationalize Hypo, in what would be the first nationalization of a German bank since 1931.[292] Such a nationalization produced significant resistance both for cultural reasons and because of the resistance of the financial sector to state ownership.

Culturally, nationalization, or *Enteignung*, was strongly associated in national memory with the Nazi expropriation of Jewish property. Moreover, the last nationalization of a German bank had happened under Nazi rule.[293] At the same time, the prospects of an uncontained financial crisis were prompting other segments of the German elite and public to recall the Nazi period in other ways. Interior Minister Wolfgang Schäuble, in discussing the need to rescue Hypo, warned that a financial crisis had caused the Great Depression, and that "the consequences of that Depression were Adolf Hitler and

[292] Marcus Walker, "Germany Weighs Hypo Seizure," *Wall Street Journal Abstracts*, sec. C, January 28, 2009.; Andrew Bulkeley, "Germany may Take Majority of Hypo," *Daily Deal/the Deal*, January 29, 2009g.
[293] Rowena Mason, "New German Law Paves Way for State Ownership of Banks," *The Daily Telegraph (London)*, sec. CITY, February 19, 2009.

indirectly World War II and Auschwitz."[294] Therefore, debates over nationalization, and over state aid to banks, became highly contentious, as they rapidly became connected to rival narratives of the rise of the Nazis, and the Holocaust and Second World War.

More prosaically, shareholders in Hypo wanted to ensure state aid on generous terms. In this, they had allies in the rest of the commercial banking sector, as other banks seeking aid could hope for a precedent of generous state aid. *Deutsche Schutzvereinigung für Wertpapierbesitz* (DSW), the German association for private investors, therefore pressured the German state to take only a 75% stake in Hypo, preserving private owners who could see their shares increase in value with the injection of state capital.[295] Especially prominent among Hypo shareholders was American investor JC Flowers, whose private equity firm JC Flowers & Co. had in April 2008 purchased a 24% stake in Hypo for €1.1 billion.[296] Together with his losses on a 27% stake in HSH Nordbank purchased for €1.85 billion, Flowers faced losses from the German financial crisis approaching €3 billion.[297] Eager to avoid massive losses on his investment, Flowers argued that nationalization should take place at a price of €5 a share, Hypo's price in January before nationalization came under serious discussion, and refused to accept less than €3 a share.[298] Moreover, Flowers wanted the state to only take a 90% stake, preserving an opportunity for private shareholders to see a return on their investment.[299] As a major shareholder, Flowers was able to negotiate directly with Merkel over the

[294]Boyes, *Every Country for itself as European Unity Collapses in an Attack of Jitters*, 6
[295] Andrew Bulkeley, "Critics Challenge German Bank Bailout," *Daily Deal/the Deal,* February 19, 2009d.
[296] Bulkeley, *Germany may Take Majority of Hypo*
[297] Bulkeley, *HSH Takes Lehman - Related Write - Down*
[298] Aldrick, *Germany Edges Closer to Hypo Nationalisation*, 8; Paul Whitfield, "Germany Launches Hypo Takeover," *Daily Deal/the Deal,* April 20, 2009.
[299] Andrew Bulkeley, "Hypo Gets New State Aid," *Daily Deal/the Deal,* February 12, 2009j.

nationalization of Hypo, and attempt to build a political coalition for a shareholder-favoring nationalization.[300]

On February 18, 2009, the German cabinet drafted legislation giving it authority to nationalize Hypo by fiat.[301] On March 31, it passed the Bundestag and on April 3 the Bundesrat approved the measure.[302] The state could take ownership without the consent of shareholders, and pay compensation as determined after the fact. This would be comparable to the authority possessed by the American FDIC and that used by the UK to nationalize Northern Rock and Bradford & Bingley. Unlike the broader authority held by the FDIC and obtained by the UK government, the German nationalization powers were severely restricted, with an expiration date designed to ensure that the authority would only be available for use on Hypo.[303] Even within these limitations, the German state showed extreme reluctance to use its authority, preferring to use the threat of expropriation to negotiate a voluntary sale by shareholders to the state. The chosen strategy of the German state would be to purchase a majority of existing shares, and then use its position as majority shareholder to issue new shares. Such shares would be purchased exclusively by the German state, diluting other shareholders until the state's share reached 90%. At that point, under German corporate law, the state as 90% shareholder could compel the remaining shareholders to sell their stakes to the state.[304] This strategy promised to be more expensive and time-consuming than an expropriation,

[300] "German Business Leaders Warn Chancellor Not to Harm Competition." *BBC Monitoring Europe - Political Supplied by BBC Worldwide Monitoring,* March 17, 2009b.
[301] "German Cabinet Approves Bill Enabling Nationalization of Beleaguered Banks." *BBC Monitoring Europe - Political Supplied by BBC Worldwide Monitoring,* February 18, 2009c.
[302] Andrew Bulkeley, "Germany Reels in Hypo RE," *Daily Deal/the Deal,* March 31, 2009h.; "German Upper House Approves Bank Expropriation Law - News Agency." *BBC Monitoring Europe - Political Supplied by BBC Worldwide Monitoring,* April 3, 2009e.
[303] "Germany Moves to Nationalise Hypo Bank." , 19
[304] Andrew Bulkeley, "Path Cleared for Hypo Nationalization," *Daily Deal/the Deal,* May 7, 2009k.

but memories of 1930s expropriations and the lobbying strength of the financial sector combined to make the new nationalization law too politically costly to use.

Given the state's unwillingness to actually use its new legal authority, the new law's value as a threat to induce sale was also limited. As such, the state would consistently pay above-market prices to induce shareholders to sell. In its first purchase of shares, on March 30, 2009, the state through SoFFin purchased 20 million shares for €60 million, giving it an 8.7% stake in Hypo. The €3/share price was significantly above the €1.52/share trading value of Hypo shares at that point, meaning the state overpaid by €29.6 million.[305] On April 4, the state would announce a broader purchase plan, in an effort to induce shareholders to voluntarily sell it a majority stake. As such, it offered to pay a 16% premium on the Hypo share price for any would-be sellers, offering €1.62/share for shares that had already fallen to €1.39/share. This meant that the state was paying €290 million, a €40 million premium over market value, in order to obtain a voluntary sale, despite possessing the legal authority to compel a sale.[306] This approach was endorsed by the Hypo management, which urged shareholders to sell to the state rather than risk expropriation.[307] It was described by market observers as "a gift to shareholders" whose bank had "no value anymore."[308] Other observers would describe the offer as "a good deal for Hypo, but a bad one for taxpayers."[309]

[305] Bulkeley, *Germany Reels in Hypo RE*
[306] Andrew Bulkeley, "Germany Launches Hypo Buyout," *Daily Deal/the Deal*, April 10, 2009f.
[307] Carter Dougherty, "U.S. Investor Lacks Allies in German Bank Battle ; Financier Threatens Suit if Government Buys Up Hypo Real Estate," *The International Herald Tribune*, sec. FINANCE, April 27, 2009.
[308] Ibid.
[309] Gary Duncan and Carol Lewis, "Nationalisation of Hypo Bank Proposed as the First Move in Radical German Plan to Ease Banks Crisis," *The Times (London)*, sec. BUSINESS, April 10, 2009.

Despite a premium which would have netted him €12 million above market value, however, Flowers would resist pressure to sell.[310] Instead, he continued to lobby for a €5/share price, and for the bank to take only a majority stake and not full ownership.[311] In doing so, he alienated the majority of German politicians. It was widely reported that German politicians "despised" Flowers.[312] Across the political spectrum, politicians would publically rail against the American investor, Finance Minister Steinbrück among them. Nevertheless, Flowers retained enough clout to ensure that the state would not nationalize Hypo by fiat. Instead, the state would spend the next month cobbling together a voluntary sale of a majority stake.

Having obtained a majority, the state issued €5.6 billion in new shares at the still-above-market rate of €1.50/share and purchased them immediately.[313] Doing so brought the state to a 90% share, and enabled it to compel the sale of the remaining shareholders. Even at this point, the state continued to pay an above-market rate. The remaining shareholders, squeezed out on October 5, 2009, were paid 1.30 for shares technically valued at €0.[314] Flowers's tactics ultimately failed to produce a profit on his share, but despite delaying the nationalization by eight months and increasing the cost to the German state still ultimately received an above-market rate for his stake.

Once in public ownership, Hypo, now rebranded Deutsche Pfandbriefbank, would still require significant amounts of state aid. A further €3 billion of capital would be injected

[310] Whitfield, *Germany Launches Hypo Takeover*
[311] Ibid.
[312] Dougherty, *U.S. Investor Lacks Allies in German Bank Battle ; Financier Threatens Suit if Government Buys Up Hypo Real Estate*, 14
[313] Derek Scally, "German Property Lender HRE Agrees Nationalisation Amid Angry Scenes," *The Irish Times*, sec. FINANCE; Business Today, October 6, 2009d.
[314] Ibid.

by the state, and new guarantees of €52 billion would be extended.[315] Despite this aid, and total guarantees as of May 2010 of €103.5 billion, the bank would continue to struggle.[316] Exposure to sovereign debt in the PIIGS would cause the bank to fail European stress tests in 2011, and the bank would continue to struggle into 2012.[317]

The case of Hypo Real Estate illustrates paradoxically both the strength and weakness of the German state vis-à-vis the financial sector. Early in the crisis, when it looked like Hypo's problems could be addressed with liquidity support, the organized nature of commercial banking in Germany worked in the state's favor. As will be seen below, the organizational structure of the Landesbanken would enable the state to orchestrate an entirely bank-funded rescue of distressed Landesbanken. Although unable to induce the commercial banks to provide an entirely bank-funded rescue, the state was able to lean on the united German banks to provide a 47%-private initial €50 billion rescue package for Hypo. The common interest and organization of the German banks worked against them, and for the state, as the state could more easily threaten to walk away from any rescue effort, leaving the banks themselves to orchestrate aid. This threat, made credible by the ability of the banks to organize such a rescue, enabled Merkel to extract an additional €15 billion from the banks without matching state aid after the initial €35 billion proved insufficient.

Once it became clear that Hypo's problems required significant capital injections beyond liquidity support, however, the superior organizational strength of the German commercial banks worked against the state. Of all the distressed German banks, Hypo

[315] Andrew Bulkeley, "Berlin Injects More Capital into Hypo Real Estate," *Daily Deal/the Deal,* November 5, 2009a.
[316] "German Guarantees for Hypo Increased." *The Irish Times*, sec. FINANCE; Business Today, May 29, 2010.
[317] Andrew Bulkeley, "Seven European Banks Fail Stress Test," *Daily Deal/the Deal,* July 23, 2010.

perhaps most clearly illustrates the weaknesses of a voluntary state aid plan. Although the BdB and the other commercial banks would not play a significant direct role in the resolution of Hypo after the initial consortium rescue, they did play a key role in structuring the terms of the SoFFin plan, especially in securing its nature as a voluntary plan. They then indirectly bolstered Hypo's position in negotiating terms of aid with the state by increasing the stigma associated with taking such aid. The state was forced to offer generous terms to induce Hypo to take aid, even as its need increased steadily. Once nationalization became discussed, the German private investors' association DSW would play a role in lobbying for a voluntary above-market nationalization. Such a voluntary nationalization stands in sharp contrast both in terms of the costs paid by the state and the speed with which it occurred to the processes in the US and the UK. In the US, a standing nationalization authority by the FDIC allowed for rapid resolution of distressed banks. In the UK, where an emergency authority was required, debate only occurred before the law was passed. Once the legal authority was in place, nationalization took place immediately. In Germany, by contrast, once legal authority was obtained, it not used, but only held out as a half-credible threat to induce shareholders to sell at an above-market rate.

Commerzbank

Commerzbank, as the second largest bank in Germany after Deutsche Bank, was the largest bank to face severe distress in the 2007-2009 crisis, and in some ways the most important. It was far more important than IKB, a relatively small bank of no systemic importance but for KfW's exposure to it. It also differs from Hypo Real Estate, both by being considerably larger and more central to German finance, and because its problems

were less severe, meaning that Commerzbank could survive outside of majority-public ownership more readily than Hypo. The case of Commerzbank, therefore, shows how a struggling but not collapsing firm can use its position to extract favorable aid from Germany.

Commerzbank has traditionally been one of the Big Three commercial banks of Germany, together with Deutsche Bank and Dresdner Bank. At the beginning of the financial crisis, Commerzbank trailed Deutsche Bank in size and was negotiating the purchase of Dresdner from insurance company Allianz.[318] Both Commerzbank and Dresdner, however, would soon run into troubles. Despite a net productive year for the bank as a whole, Commerzbank's Eurohypo subsidiary would record €1.4 billion in losses in 2008, due to losses on real estate securities.[319] Dresdner would run into far greater problems. In February 2008, Dresdner was forced to inject €18.8 billion into its own real estate special investment vehicle to keep it solvent.[320] Dresdner would struggle through 2008, and by September Allianz would stake its hopes of addressing those problems on selling Dresdner to Commerzbank. Commerzbank faced its own problems, chiefly from Eurohypo, but those problems were generally regarded as not insurmountable.[321] A Commerzbank-Dresdner merger was therefore analogous to the merger of Lloyds and HBOS in the UK, where a struggling but essentially healthy bank

[318] David Jolly, "Commerzbank to Acquire Allianz's Banking Arm for $14 Billion," *The New York Times*, sec. C; Business/Financial Desk, September 1, 2008.
[319] European Commission, *State Aid N 244/2009 – Commerzbank - Germany* (Brussels: European Commission,[2009e])., p. 3.
[320] "Dresdner Rescues $ 19 - Billion SIV , Standard Chartered Bails." *The Gazette (Montreal)*, sec. BUSINESS, February 22, 2008b. A Special Investment Vehicle (SIV) is an investment portfolio kept separate from the main accounts so that its profits and losses are not reflected on main balance sheets, but nevertheless remains under the control of the main institution.
[321] Nick Clark, "German Government Injects Euro 10bn into Commerzbank ; State to Take 25 Per Cent Stake to Preserve Merger Deal with Dresdner Bank," *The Independent (London)*, sec. BUSINESS, January 9, 2009.

would take on a failing one, propping it up in the short term and hopefully making the united banking group stronger in the long run.

Shortly after the merger was announced, however, Commerzbank's troubles increased. As Hypo Real Estate's problems became widely known, banks seen as having similar profiles also took a fall in share price. Commerzbank, with its heavy reliance on overnight financing, was seen as Hypo-like by investors, and its share price began to fall.[322] It soon became seen as the bank most likely to next follow Hypo into distress. Through October 2008 speculation grew that Commerzbank would turn to the German state for assistance. As with other German banks, however, it resisted pressures to tap the SoFFin fund for fear of signaling its distress to other market actors. This problem was compounded by Deutsche Bank CEO Josef Ackermann's statement that he would be "ashamed" if Deutsche took state aid. Commerzbank CEO Martin Blessing sought to avoid this problem by lobbying the German state to change capital requirements to make capital injections effectively mandatory. In discussions with Peter Steinbrück, Blessing urged the Finance Minister to raise the capital requirements of all German banks.[323] Doing so would compel virtually all commercial banks, including Deutsche Bank, to seek out additional capital. Because other banks, including Deutsche, would be compelled to also seek out capital aid, likely from the state, the stigma of accepting such aid would be diminished. The British state would use a similar mechanism to make its own state aid plan effectively mandatory, while allowing banks the option of finding an alternative private source of capital, if possible. Steinbrück, however, refused Blessing's request, and SoFFin aid remained purely voluntary.

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[322] Dougherty, *Authorities Aid Banks in Europe*, 1

[323] "Germany Working on Plan B for Bank Rescue Plan Based on UK Model." *BBC Monitoring Europe - Political Supplied by BBC Worldwide Monitoring*, November 3, 2008i.

Blessing did, however, win generous terms from SoFFin, when, on November 3, 2008, he did ultimately seek capital assistance from the state. This first wave of capital assistance came in the form of €8.2 billion of silent participation from SoFFin. The first €4.1 billion tranche of this aid came with an 8.5% dividend, and the second carried a 5.5% dividend.[324] Both of these dividends were both well below both the market rate for silent participation and below the 10% minimum remuneration required by the European Commission.[325] Moreover, as silent participation, the Commerzbank aid carried with it no dilution of shareholder interest and no direct influence by the Federal Republic on Commerzbank's operations. In addition to this below-market capital injection, Commerzbank received €15 billion in guarantees. As with other guarantees provided by SoFFin, Commerzbank paid both below market rates and below the legally prescribed minimum of 2% annually. Commerzbank would pay 0.5% on guarantees that lasted 3-12 months, and 0.948% for guarantees over 12 months, up to a maximum of 36 months.[326] Commerzbank therefore, although unable to provide cover for its state aid by convincing Steinbrück to raise capital requirements, negotiated extremely favorable terms when it did take state aid. This was possible for several reasons. As discussed in the Hypo case, the German state preferred for banks in need to take aid earlier rather than later, in the hopes that the earlier aid would be lower. Without the capacity to compel banks to accept such aid, however, the state could only attempt to entice banks to take such aid by offering it on generous terms. Beyond this need to induce banks to take state aid,

[324] Michael Levitin, "Commerzbank Gets €8.2bn in State Cash," *The Daily Telegraph (London)*, sec. CITY, November 4, 2008.
[325] European Commission, *Communication from the Commission — the Recapitalisation of Financial Institutions in the Current Financial Crisis: Limitation of Aid to the Minimum Necessary and Safeguards Against Undue Distortions of Competition*, 2
[326] European Commission, *State Aid N 244/2009 – Commerzbank - Germany*, p. 5.

Commerzbank enjoyed additional advantages beyond those of Hypo. Most notably, Blessing, as a member of the BdB board, enjoyed significant access to the policymaking process. In fact, together with his Deutsche Bank counterpart Josef Ackermann, Blessing would play a role in advising and drafting not only the original legislation which created SoFFin, but also later revisions to the plan.[327] This gave Blessing access and influence to shape legislation in the interest of Commerzbank and the commercial banks more generally. Additionally, Commerzbank would be instrumental in saving Germany's third largest bank, Dresdner. This gave Commerzbank furter leverage, as letting Commerzbank refuse assistance might compel the state to not only pay more to save it later on, but also to take far more drastic and expensive steps to save Dresdner.

The leverage provided by the necessity of saving Dresdner Bank would help Commerzbank again in January 2009, when it sought additional state aid. In advance of the completion of the sale from Allianz to Commerzbank, Dresdner sought to tap the SoFFin fund itself.[328] This would enable Commerzbank and Dresdner to circumvent legal limits on maximum aid to individual banks by counting them as separate banks and taking aid before the merger would be completed. Commerzbank and Dresdner were unable to secure a separate injection, but by threatening to scuttle the merger, Commerzbank was able to extract an additional €10 billion in capital from SoFFin. €8.2 billion of this aid came in the form of additional silent participation, on similar terms as the money injected the previous November, and without diluting shareholder control. The final €1.8 billion, however, would be injected as ordinary shares, the first time SoFFin would take a direct stake in a financial institution, and only the second time the

[327] "German Government Plans to Rush Bank Rescue Package through Parliament - Paper." ; "Germany Working on Plan B for Bank Rescue Plan Based on UK Model."
[328] Andrew Bulkeley, "Dresdner Looks to Rescue Fund," *Daily Deal/the Deal,* January 7, 2009e.

Federal Republic would take ownership stakes since KfW increased its shareholdings in IKB. In exchange for its €1.8 billion injection, SoFFin received 25% of Commerzbank.[329] A 25% shareholding, under German corporate law, gives the holder a veto over decisions at the company. SoFFin would also receive three seats on the Commerzbank board, although both Blessing and state officials denied that the state would exert any influence over decisions made by the bank.[330] Therefore, despite owning over a quarter of Commerzbank shares, and €16.4 billion in silent participation, the state vowed not to dilute ownership control by private shareholders. Although the state would demand repayment, albeit at below-market rates, this represented an overall gain for Commerzbank shareholders. Their ownership control remained undiluted and their share value remained high, as the additional capital would keep their bank solvent. More important for the German state than avoiding the creation of moral hazard in the case of Commerzbank was avoiding the full nationalization of Dresdner Bank. Commerzbank itself could plausibly have survived the crisis without state aid, albeit with difficulties. Dresdner Bank as an independent institution would have, like Hypo Real Estate, required a full nationalization.[331] This, therefore, gave Commerzbank leverage to negotiate more favorable terms with Germany. Such a position, however, was by no means automatic. In the UK, Lloyds and HBOS presented a similar case, with Lloyds damaged but capable of surviving and HBOS likely to require full nationalization without a merger. Here the British state proved capable of pressing for the merger without the sweeteners the Germans needed to provide. In part, this is due to the voluntary nature of

[329] Andrew Bulkeley, "Commerzbank to Tap Rescue Fund Again," *Daily Deal/the Deal*, January 9, 2009c.
[330] Scally, *German 'Bad Bank' Sees the First Step in Revolution*, 19
[331] Clark, *German Government Injects Euro 10bn into Commerzbank ; State to Take 25 Per Cent Stake to Preserve Merger Deal with Dresdner Bank*, 48

German assistance. The UK, enforcing new capital requirements and offering assistance on a take-it-or-leave-it basis, could more credibly threaten than the Germans. The Germans were forced to negotiate with Commerzbank, which could credibly walk away from any deal more readily than Lloyds could. Commerzbank, moreover, enjoyed greater support from the rest of the industry than Lloyds did. Lloyds was one of several British banks competing directly with each other, so the other banks had no incentive to help it negotiate more favorable terms. To the contrary, elements of UK finance opposed the merger, fearing the new Lloyds/HBOS would be a far stronger rival, given its massive market share. Commerzbank, in comparison, existed in a far different competitive environment. Merging the second and third largest commercial banks in Germany not only helped Commerzbank and Dresdner, but also Deutsche Bank. The conditions attached to the merger meant that the new Commerzbank would withdraw from big corporate business to focus on the Mittelstand, leaving Deutsche Bank the sole German purveyor of services to Germany's largest companies.[332] Thus, far from opposing the merger, Deutsche Bank stood to gain from both a stabilization of financial markets and an elimination of competition.

The Commerzbank-Dresdner merger was completed on March 12, 2009, as Commerzbank paid €4.5 billion and a 19% share in the merged bank to Allianz.[333] Commerzbank's troubles were far from over, however, as its exposure to sovereign debt would drag it down in the subsequent years. Here again, the weakness of SoFFin's voluntary nature is exposed. Commerzbank took only what it needed to survive, and not the capital it needed to address future problems. This avoided paying the state more in

[332] Scally, *German 'Bad Bank' Sees the First Step in Revolution*, 19
[333] Andrew Bulkeley, "Commerzbank Considers Asset Sales," *Daily Deal/the Deal,* March 12, 2009b.

the short term, but necessitated greater state support later on. In late 2011, Germany revived the SoFFin legislation in preparation for additional injections into a weak Commerzbank that never recovered completely from the financial crisis. Additionally, the state support of Commerzbank remained controversial. The European Commission ruled it to be state aid, and demanded strict conditions to avoid distorting the market. Therefore, although Commerzbank was able to obtain Dresdner Bank, the EC forced it to sell its own Eurohypo wing, representing 45% of Commerzbank's total assets.[334]

Conclusions on Commercial Banks

The commercial banking sector is the pillar of German banking which most closely resembles liberal banking systems. Although the emphasis on long-term investment and the *hausbank* system changes both the relationship between the banks and other industries, and between the banks themselves, the commercial banks lack the federal organization of the savings banks or the cooperatives. Nevertheless, they showed a far greater capacity for cooperative action in the face of crises than their liberal counterparts. Initially, this worked in the state's interest: by relying on the preexisting institutional structures of commercial banking, German policymakers could construct consortium rescues for IKB and Hypo with a significant private contribution on relatively short notice. In the case of Hypo, the state even managed to secure a mostly-private rescue initially. However, once Hypo Real Estate and Commerzbank required capital support in addition to liquidity support, the organized nature of German banking worked in the banks' interest. Most important was the securing of a voluntary state aid plan, which allowed both Hypo and Commerzbank to negotiate the terms of their assistance, rather than simply take whatever terms the state offered. The banks also worked to reinforce

[334] Bulkeley, *Path Cleared for Hypo Nationalization*

the anti-nationalization norm, which resulted in above-market full nationalization for Hypo and above-market part-nationalization for Commerzbank.

Landesbank Rescues

The Landesbanken, with their stronger institutional coordination, enjoyed several advantages over their commercial bank peers in seeking aid in the financial crisis, both in their organization as a pillar and in their relationship to various elements of the German state. As a sector, the Landesbanken were even more capable of collective action than the commercial banks. The commercial banks, for various reasons discussed above, generally compete less intensely with each other than their peers in other states, but the Landesbanken, with their federal organization, do not compete with each other at all. Rather, the Landesbanken coordinated their activities through their peak association, the DSGV. The DSGV took a lead role in both coordinating assistance from Landesbanken to ailing peers and in negotiation with the German state. As such, some observers have considered the Landesbanken to more closely resemble a single decentralized national bank than a group of firms.[335] Because of a lack of direct competition and a preexisting coordinating organization, consortium rescues among the Landesbanken were even easier than among the commercial banks.

The Landesbanken also enjoyed advantages in negotiating terms of state aid because they were better able to tap multiple sources of state aid. The DSGV enabled coordinated action in dealing with the German state, and in negotiating the terms of state aid to the Landesbanken. A proposed coordinated take-up of SoFFin aid among the Landesbanken both enabled the sector to negotiate standard terms for the Landesbanken, and to diminish

[335] Andreas Hackethal and Reinhard H. Schmidt, "Structural Change in the German Banking System?" (2005).

the stigma associated with taking aid by individual Landesbanken.[336] The Landesbanken also had multiple sources of state aid. Unlike the commercial banks, which had to rely on either Berlin or private investors, the Landesbanken could negotiate aid from the Länder. Although the European Commission had barred the traditional guarantees from the Länder, they remained free to provide emergency assistance so long as the Commission ruled it did not rise to the level of unfair state aid. Moreover, the Länder, as shareholders in the Landesbanken, had a direct fiscal stake in preserving the value of their stake. This, coupled with the voluntary nature of the central state's SoFFin aid, put the Landesbanken in an advantageous position in negotiation for state aid. In short, while the commercial banks had only one source of state aid, the Landesbanken had two, and could turn to the Länder if the terms SoFFin offered were too onerous. This enabled the Landesbanken to both get more aid than they otherwise would have, and to get that aid on more generous terms.

SachsenLB

The first of the Landesbanken to run into trouble, SachsenLB, provides a clear example of how the Landesbanken will work together to support an ailing fellow Landesbank. Much like commercial banks IKB and Hypo RE, Sachsen's problems stemmed from subprime losses from an off-balance sheet subsidiary, in Sachsen's case Ormond Quay.[337] Like IKB and Hypo, Sachsen would receive aid from a consortium of banks. Unlike those commercial banks, however, Sachsen's assistance would be organized by and

[336] Braude, *Germany , Sweden Detail New Bailouts*
[337] European Commission, "COMMISSION DECISION of 4 June 2008 on State Aid C 9/08 (Ex NN 8/08, CP 244/07) Implemented by Germany for Sachsen LB (Notified Under Document Number C(2008) 2269)," *Official Journal of the European Union* L 104 (April 24, 2009c), 34., p. 34.

largely funded by the banks themselves, with no role for the Federal Republic and a relatively small role for Saxony, Sachsen's 50% owner.[338]

Immediately after Ormond Quay's inability to refinance itself threatened Sachsen, the Landesbanken and the DGSV convened to address the situation. Although regulators kept an eye on Sachsen, this meeting and subsequent action would be organized by the DSGV, and not by BaFin or other state agents. Initially, the Landesbanken and DGSV met Sachsen's needs with a €17.1 billion purchase of commercial paper on August 19, a loan for which Sachsen paid market rates.[339] The consortium and Sachsen immediately began negotiating the sale of Sachsen to another Landesbank. After BayernLB and HSH Nordbank declined to bid, Landesbank Baden-Württemberg (LBBW) agreed to purchase Sachsen on August 26.[340]

Before the sale could be completed, however, additional unexpected losses from Sachsen's Ormond Quay subsidiary caused LBBW to balk, fearing that Sachsen's losses would drag down the merged institution.[341] Once again, the Landesbanken met to negotiate a rescue package and preserve the merger. This time the Landesbanken agreed to purchase €17.5 billion in bad assets from Sachsen prior to its sale to LBBW, to be moved into a bad bank referred to as the Super SIV. LBBW would also contribute to the Super SIV, but take a junior tranche, receiving repayment last, and take no more than 50% ownership, to keep the Super SIV off LBBW's own books. Saxony, Sachsen's 50% owner, agreed additionally to guarantee the first €2.75 billion of losses from the Super

[338] Ibid., p. 35.
[339] Ibid., p. 36.
[340] Andrew Bulkeley, "Subprime Crisis Claims German Bank," *Daily Deal/the Deal*, August 28, 2007b.
[341] Andrew Bulkeley, "German Banks Save Subprime Victim," *Daily Deal/the Deal*, December 14, 2007a.

SIV.[342] With this bad bank and its Land-provided guarantee in place, the sale of SachsenLB to LBBW went ahead as planned, ending the crisis at Sachsen.

The handling of SachsenLB provides a clear illustration of how German coordinated financial markets creates both an incentive and mechanism for the private resolution of a distressed bank, as well as how that organization enables the sector to pressure the state for assistance. SachsenLB, although too small to be a systemic risk itself, nevertheless was interconnected with its fellow Landesbanken and not a direct competitor. Therefore, the Landesbanken had an incentive to contain the crisis in Sachsen, and no incentive to seek to benefit from Sachsen's fall. Moreover, through the DGSV, the Landesbanken had an institutional mechanism in place to organize a rescue quickly and share the burden among the non-distressed banks.

The rescue of Sachsen also illustrates how the Landesbanken can use their institutional advantages to extract aid from the Länder. Saxony, as a major shareholder in SachsenLB, certainly had an interest in ensuring that the value of its stake be preserved. Moreover, in light of recent losses, BaFin had ruled that Sachsen must either complete a deal to save itself or the regulator would shutter the bank.[343] Therefore, Saxony clearly had an incentive to ensure the sale went through. However, Saxony was only one owner of Sachsen, and the only one which participated in the loss guarantee.[344] The other owners, the Sparkassen of Saxony, had an institutional advantage by being members of the corporatist structure of the savings banks, as indeed was LBBW and any other potential buyers. The DGSV, therefore, represented the interests of both the potential

[342] Ibid.
[343] Ibid.;European Commission, *COMMISSION DECISION of 4 June 2008 on State Aid C 9/08 (Ex NN 8/08, CP 244/07) Implemented by Germany for Sachsen LB (Notified Under Document Number C(2008) 2269)*, 34, p. 37.
[344] Ibid., p. 44.

buyers of Sachsen and the sellers of Sachsen other than Saxony. It was thus in a highly advantageous position to control negotiations with Saxony, and to extract a Land-provided loss guarantee. Although Saxony would argue that it acted in its own interest as a part-owner of Sachsen, the European Commission would ultimately rule against it, and find that the loss guarantee constituted state aid. The case of Sachsen, therefore, illustrates how the institutional structure of the savings banks enables them to effectively and rapidly act to contain a crisis in one of their members, as well as how they can use those structures to extract state aid to supplement that otherwise self-contained action.

WestLB

The next Landesbank to run into trouble, North Rhine-Westphalia's WestLB, was considerably larger than SachsenLB. With €286.5 billion in assets, WestLB was large enough to be considered a systemic risk. Like Sachsen, WestLB's essential problem was overexposure to subprime assets, chiefly in the United States.[345] But while the resolution of Sachsen was relatively straightforward, and organized and funded by the Landesbanken and the relevant Land, the resolution of WestLB would reveal deep divisions between its Land 49% owner, North Rhine-Westphalia, its Sparkassen 51% owners, and the Federal Republic, as represented by BaFin and the Bundesbank. The bank would be able to take advantage of these divisions, and the voluntary nature and multiple sources of German state aid, to play the Land and Federal Republic off each other to its own advantage.

[345] European Commission, *2009/971/EC: Commission Decision of 12 may 2009 on State Aid which Germany Proposes to Grant Towards the Restructuring of WestLB AG (C 43/08 (Ex N 390/08)) (Notified Under Document C(2009) 3900) Text with EEA Relevance* (Brussels: European Commission,[2009a]).EC WestLB Decision (2009/971/EC), p. 3.

WestLB first ran into trouble when it realized losses of up to €2.5 billion on its subprime portfolio.[346] BaFin and the Bundesbank, which had long advocated consolidation of the Landesbanken, pushed for WestLB to be sold to another Landesbank.[347] At that time, LBBW was the most likely purchaser. WestLB's owners resisted this pressure to merge. The Sparkassen feared redundancies, while North Rhine-Westphalia's Prime Minister, Jürgen Rüttgers, was loathe to reduce his influence in the merged bank.[348] Together, WestLB's owners provided the bank with a €2 billion capital injection, proportional to their ownership stakes.[349] Since the aid came from the owners, and not the Federal Republic, WestLB was able to resist merger pressures initially.

As problems worsened, North Rhine-Westphalia's government began to advocate for a merger with Helaba, the Landesbank for Hesse and Thuringia.[350] As Helaba was considerably smaller than LBBW, North Rhine-Westphalia could hope to have a greater continued influence in a merged WestLB-Helaba than a merged WestLB-LBBW. To incentivize the merger, and to limit further damage at WestLB, North Rhine-Westphalia proposed offering an additional risk shield on losses from subprime assets. The Sparkassen, however, continued to oppose merging WestLB with any other bank, fearing that as many as 2000 of WestLB's 6000 employees would be let go.[351] With the Sparkassen refusing to shoulder any additional burden, North Rhine-Westphalia would provide an additional €3 billion in aid to WestLB alone, in the form of guarantees on

[346] Ibid.EC WestLB Decision (2009/971/EC), p. 4.
[347] Andrew Bulkeley, "German Bank Rescue Delayed," *Daily Deal/the Deal*, February 8, 2008b.
[348] Ibid.
[349] European Commission, *2009/971/EC: Commission Decision of 12 may 2009 on State Aid which Germany Proposes to Grant Towards the Restructuring of WestLB AG (C 43/08 (Ex N 390/08)) (Notified Under Document C(2009) 3900) Text with EEA Relevance*, p. 4.
[350] Bulkeley, *German Bank Rescue Delayed*
[351] Ibid.

losses.[352] This aid would come on extremely generous terms. WestLB would pay 0.1-0.2% per annum for the guarantees, a price well below market rates.[353] In addition to offering aid at below-market rates, and despite being the sole provider of aid, North Rhine-Westphalia did not immediately increase its control of WestLB. Rather, should the guarantees be called-upon, WestLB would be required to repay them either with cash or shares valued at €200/share. This high share price, above what WestLB shares would reasonably be valued at, was advantageous for the bank and disadvantageous for the Land; repaying in overvalued shares would allow WestLB to lower its burden of repayment. Moreover, the cash repayment option meant that, should shares climb above €200/share, the bank could opt to pay the lower cash value instead. Thus, WestLB's repayment maximum was capped, but its minimum was theoretically zero, as the bank could repay the Land with worthless shares if the share price fell low enough. Without increasing its ownership stake, North Rhine-Westphalia could not compel the sale of WestLB to Helaba, and the Sparkassen continued to balk at any move to threaten WestLB's independence. European Commission reports would note that this continued paralyzing division between owners itself indicated the need for WestLB to be taken into new ownership.

WestLB would therefore remain independent, although by no means healthy. Its next infusion of state aid would come in November 2009, when it decided to move €85.1 billion of assets into a bad bank, and sought a €6 billion injection from the Federal

[352] Ibid.
[353] European Commission, *2009/971/EC: Commission Decision of 12 may 2009 on State Aid which Germany Proposes to Grant Towards the Restructuring of WestLB AG (C 43/08 (Ex N 390/08)) (Notified Under Document C(2009) 3900) Text with EEA Relevance*, p. 5.

Government's SoFFin fund to facilitate that action.[354] SoFFin's price proved too expensive for the Sparkassen, however, which sought instead to lobby North Rhine-Westphalia for aid on less expensive terms. In doing so, they followed the precedent established by fellow Landesbank HSH Nordbank, which in February of that year had turned to its own Land owners when SoFFin offered aid on terms dubbed too expensive. Because neither the Federal Republic nor the Länder were willing to let systemically important banks like WestLB fail, and because neither had the authority to compel the bank to accept assistance, space was created where WestLB could bargain with both Federal and Land authorities for favorable terms. Since SoFFin wanted WestLB to accept assistance, in order to return both it and the German banking sector more generally to health, it was forced to negotiate to provide aid to WestLB on favorable terms. Ultimately, WestLB received a €3 billion capital injection from SoFFin into its new bad bank. Once again the ownership structure of WestLB remained unchanged, however, as the capital injections took the form of silent partnership. The silent partnership paid a theoretical 10% dividend, although payment was deferred until the bad bank was profitable.[355] This 10% was the minimum allowed by European Commission decisions on silent partnership. While higher than some of the dividends on UK and US silent partnerships, the deferred payment clause on a bad bank meant that it was highly unlikely that SoFFin would recoup anything close to the full value of that fee.[356] In exchange for providing aid on such generous terms, SoFFin did obtain some assistance from WestLB's owners, in the form of an additional €1 billion in guarantees, split proportionally between

[354] "German Lender Center of Bailout Battle." *Total Securitization*, November 20, 2009d, .
[355] European Commission, "State Aid C 40/09 (Ex N 555/09) — Additional Aid for WestLB AG Related to Spin-Off of Assets Invitation to Submit Comments Pursuant to Article 108(2) TFEU (Text with EEA Relevance) (2010/C 66/08)," *Official Journal of the European Union* C 66 (March 17, 2010), 15., p. 19.
[356] Ibid., p. 23.

North Rhine Westphalia and the Sparkassen. In return, however, the bad bank plan ensured a cap on Sparkassen losses of €4.5 billion.[357]

Throughout the crisis, WestLB's shareholders were able to use their multiple sources of assistance to both obtain favorable state assistance and to resist pressures from the European Commission. This aid was generous to WestLB's shareholders, in that ownership was undiluted and repayment terms were generous, but was insufficient to restore WestLB to health. Attempts to find buyers through 2010 and 2011 failed, as would-be partners either produced insufficient offers or declined to take on WestLB's obligations.[358] The Land and Sparkassen owners and the Federal Republic remained divided over how best to resolve the bank, such that when required by the European Commission to submit a restructuring plan, the lack of consensus at the EC deadline required them to submit three separate plans.[359] Ultimately, however, the bank was split into a Sparkassen-owned clearing bank, and a Land-owned financial services and management firm.[360]

The case of WestLB illustrates how the voluntary nature and multiple sources of aid available to the Landesbanken gave them an advantage in obtaining aid on favorable terms. Both the Federal Republic and North Rhine-Westphalia offered aid, though neither could compel the bank to accept it. Moreover, each had an interest in seeing the bank accept aid in amounts large enough to contain the problems decisively, but also had an interest in seeing the bank accept *their* aid. While the Federal Republic sought to use

[357] Ibid., p. 23.
[358] Derek Scally, "German Banks Agree to Radical Overhaul," *The Irish Times*, sec. FINANCE; Business Today, September 29, 2010.; Hamish Risk, "Capital Markets: Merkel Flexes Her Muscles," *Euromoney*, October, 2010, .; Jonathan Braude, "BayernLB Ends WestLB Merger Talks," *Daily Deal/the Deal*, November 4, 2010.
[359] Andrew Bulkeley, "Germany Offers Three Restructuring Options for WestLB," *Daily Deal/the Deal*, February 16, 2011a.
[360] Andrew Bulkeley, "WestLB Will Break into Two Lenders," *Daily Deal/the Deal*, June 24, 2011b.

the crisis to push Landesbanken consolidation, North Rhine-Westphalia wanted to continue to influence the direction its Landesbank would take, resisting absorption into a larger partner and favoring a merger of equals, if at all. Therefore, each sought to have WestLB accept their aid, such that they could shape the direction the bank took. WestLB, and its Sparkassen shareholders, were able to use this position to obtain favorable aid with minimal shift in control, until such time as the European Commission stepped in to dictate a break-up of the bank. In a sense, state aid to WestLB was a buyer's market, and the Sparkassen were able to defend their stake in WestLB, and cap their losses from WestLB, by taking advantage of that division.

HSH Nordbank

HSH Nordbank, the Landesbank for Hamburg and Schleswig-Holstein, did not face the same degree of existential threat from the crisis as SachsenLB and WestLB. Nevertheless, it did require state aid, and like WestLB, illustrates how the Landesbanken can use their ability to draw on aid from both the Federal Republic and the Länder to extract favorable terms. Nordbank first ran into trouble after the SoFFin fund had already been established. Therefore, it did not need to establish an emergency mechanism to draw on support. Rather, the bank tapped SoFFin for €30 billion in guarantees, which it received on January 20, 2009. As a term of this aid, Nordbank was required to keep a core capital ratio of 7%.[361] Therefore, when it needed additional capital to maintain that level in February 2009, the bank again turned to SoFFin. This time, however, SoFFin's proposed aid came at too high a cost for the bank.[362] Because the aid was voluntary, Nordbank balked at the terms, and sought instead to raise capital from the Länder. Its

[361] European Commission, *State Aid N 264/2009 (Ex-PN 59/2009) – Germany Rescue Aid (Recapitalisation and Risk Shield) to HSH Nordbank AG* (Brussels: European Commission,[2009f])., p. 3.
[362] Andrew Bulkeley, "HSH Awaits Government Bailout," *Daily Deal/the Deal*, February 24, 2009i.

Land owners, Hamburg and Schleswig-Holstein, provide willing to offer aid on more generous terms. The two Länder provided €1.5 billion each in new core capital, as well as €10 billion in new guarantees. In exchange for this new capital, the Länder received an enlarged ownership stake, at an above-market rate of €19/share. This increased their stake from 59.51% split between the two Länder to approximately 80-87%.[363] The remaining owners, the Sparkassen of Hamburg and Schleswig-Holstein and the private equity firm JC Flowers & Co. saw their ownership stakes reduced accordingly, to 4-6% and 8-10% respectively.[364] They were not, however, required to contribute to the capital injection, enjoying the benefit of an above-market injection without needing to contribute to it. Both the Federal Republic and the European Commission, therefore, considered this capital injection to be state aid above market terms. The second component of assistance to Nordbank, the €10 billion risk shield, came at a fee of 3.5% per annum, significantly above the 2-2.75% coupon on equivalent guarantees from SoFFin.[365] Like the capital injections, however, only the Länder provided the aid, and the Sparkassen and private equity shareholders did not contribute.

The case of Nordbank illustrates, as with WestLB, how multiple sources of state aid advantage the Landesbanken and their non-Land shareholders. The Sparkassen and JC Flowers, after being offered unfavorable terms from SoFFin for assistance, were able to turn to their Land co-owners for more attractive terms. The Länder's exposure to Nordbank gave them a clear interest in supporting the bank, and on terms favorable to the

[363] The uncertainty is due to a lack of precise figures in EC reports as of 2012[]
[364] European Commission, *State Aid N 264/2009 (Ex-PN 59/2009) – Germany Rescue Aid (Recapitalisation and Risk Shield) to HSH Nordbank AG*, p. 4.
[365] Ibid., p. 4.

bank. This worked to the advantage of the other owners, which received state aid on negotiated terms lower than the legal minimum required by SoFFin.

BayernLB

BayernLB, the Landesbank for Bavaria, may have been the most distressed of all of the Landesbanken.[366] In seeking assistance, it followed much the same pattern as HSH Nordbank, using its ties to Bavaria and systemic importance to play the Federal Republic and Land off each other and secure more favorable terms of aid. BayernLB, however, accomplished this to greater success than Nordbank. Therefore, it offers additional evidence that the Landesbanken received favorable treatment from the German state. As with HSH Nordbank, BayernLB first required assistance after the SoFFin fund was already in place. Its initial needs were much greater, however, and obtained €5.4 billion in SoFFin guarantees, plus 700 million from Bavaria and €300 million from its Sparkassen owners.[367] These guarantees proved insufficient, and by November 2008, Bayern sought a €3 billion capital injection from SoFFin. As was the case with the other Landesbanken, Bayern found SoFFin's conditions too expensive, and with too many strings attached.[368] Instead, Bayern lobbied Bavaria for aid from the Land. Bavaria obliged, and provided a €10 billion capital injection and €20 billion in additional guarantees.[369] As with Nordbank, Bavaria's Sparkassen shareholders were diluted, but otherwise not required to participate in an injection to save their Landesbank.

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[366] Jack Ewing, "Losses at Landesbank may Bring Changes to Banking in Germany," *The New York Times*, sec. B; Business/Financial Desk, January 12, 2010.
[367] Andrew Bulkeley, "BayernLB Calls for State Funding," *Daily Deal/the Deal*, October 23, 2008a.
[368] "Bayern Gets $ 47 - Billion Lifeline; to Cut 5,600 Jobs." *The Globe and Mail (Canada)*, sec. REPORT ON BUSINESS: INTERNATIONAL; BUSINESS TICKER: INTERNATIONAL: EUROPE: FINANCIAL SERVICES, December 2, 2008a.
[369] Ibid.

BayernLB once again illustrates how the Landesbanken can play their status and links to the Länder to their advantage, obtaining soft terms from both the Federal Republic and the Länder. The only government to treat BayernLB harshly was the Austrian state. On December 14, 2009, Austria nationalized Hypo Group Alpe Adria, an Austrian banking group which was 50% plus one share owned by BayernLB. BayernLB, which has invested €6.25 billion in the bank, received a single euro for its share.[370] Austria, therefore, performed an archetypal nationalization of a valueless firm, comparable to the UK's nationalization of Northern Rock and Bradford & Bingley, valuing the firm as worthless without state support and compensating shareholders accordingly. This stands in sharp contrast with both the Federal Republic and Bavaria, both of which continued to provide guarantees and capital to BayernLB on generous terms.

Conclusions on the Landesbanken

The Landesbanken essentially enjoyed all of the advantages of the German commercial banks and more. Like the commercial banks, the Landesbanken boasted a strong industry association which provided access to policymaking and enabled the banks to win key concessions both in the construction of the systemic rescue package and in the individual bank rescues. Like the BdB, the DGSV's quasi-public function, in self-regulating its members banks, gave it superior access to policymakers than their liberal equivalents, and like the BdB, the lack of competition among the DGSV's member institutions meant that the peak association had greater ability to organize and act in the interest of the sector as a whole. Therefore, ailing Landesbanken enjoyed the support of their fellow-banks, while in liberal systems, healthy banks stood to gain from the distress of peers, and had no incentive to help them.

[370] Ewing, *Losses at Landesbank may Bring Changes to Banking in Germany*, 3

As with the commercial banks, the structured nature of the Landesbanken served to secure a greater share of bank finance to rescue efforts, at least in early rescues. Because the Landesbanken and Sparkassen stood to lose directly if one of their members fell, they had an incentive to support their members. This is especially true because of the DGSV, which as the manager of the savings bank deposit insurance scheme, would need to pay out in event of a Landesbank failure. That payment, indirectly, would come from the DGSV member institutions. Because of their tight, federal structure, the savings banks, even more than the commercial banks, could be leaned upon to provide bank funding for rescue efforts.

The Landesbanken enjoyed additional advantages beyond their commercial bank peers. Chief among these was that the Landesbanken had two potential channels for state aid. In theory, the commercial banks could petition the Länder for assistance, but the Länder would have little reason to provide assistance the Federal Republic would not. The Landesbanken, however, had close ties to the Länder, both as politically-valuable tools of Land politicians and as partially Land-owned institutions. They were therefore analogous to the situation of IKB and the Federal Republic, where the state's partial ownership gave it a direct economic incentive to provide more favorable aid than in case of purely privately-owned banks. The Länder, similarly, had direct reasons to want to support their Landesbanken on generous terms. The Landesbanken therefore had two potential sources for state aid, the second with incentives to treat them favorably. The Landesbanken could therefore escape the more onerous limits on SoFFin aid by turning the Länder.

Alternately, if the Federal Republic wanted to pursue an agenda against the Länder, especially Landesbank consolidation, the Landesbanken could bargain with the central

state: agreeing to bank consolidation if SoFFin provided aid on more favorable terms than the Länder.

Conclusions

The German responses to the financial crisis illustrate how a corporatist financial system creates different dynamics in response to crises than a liberal system. The greater organization and interdependence of the financial sector creates two paradoxical dynamics, the first creating both the incentive and means for greater private rescues and the second creating greater pressure from the industry for state aid on terms favorable to the banks. In effect, this creates a "tipping point" model of financial crisis response in Germany: while the crisis is relatively small, the state can lean on the peak associations to develop fully- or partially-industry funded solutions, as in SachsenLB and the initial consortium rescues for IKB and Hypo RE. In all of those cases, the state was able to pressure the relevant peak associations to provide billions in support for failing banks, both by appealing to the self-interest of interconnected banks and by taking advantage of the greater ease of organizing consortium rescues provided by a more institutionalized financial sector. In smaller instances of bank failure, the peak associations even provide privately-funded automatic rescue plans, such as each association's deposit insurance scheme and the commercial banks' LIKO Bank liquidity support program. In contrast, private rescues in liberal systems are generally limited to fire-sale purchases of failing banks by healthier ones, and what consortium rescues appear are more fragile than their corporatist equivalents. Moreover, private standing support facilities such as the deposit insurance schemes and the LIKO Bank are unheard-of in the UK and the US.

Private rescues are more extensive in the German case than in the US or the UK because of the differing inter-bank relationships. There is no inter-bank competition among the Landesbanken and Sparkassen, the members of the savings bank pillar, nor among the banks in the mutual banks pillar. Rather, these institutions are organized on federal lines, with heavy coordination of activity and cross-shareholding among members, and focused instead on competition with the other pillars. Therefore, member banks have an incentive to aid their peers, to better support the pillar as a whole in the inter-pillar competition. The commercial banks lack this federal relationship, but still have substantially greater inter-bank interdependency than in the liberal systems. This in large part reflects the longer-term relationships in a private bank system, which diminishes the intensity of inter-bank competition, increasing the relative advantage of stronger private governance. Private governance benefits all of the German banks, minimizing the introduction of state regulation and allowing the banks to negotiate with the state on more advantageous terms, negotiating as a pillar, or even as a banking industry, as a whole, rather than on a bank-by-bank basis. It also makes banks more willing to provide their own funds to assist failing peers, both because they are directly at-risk from the greater interdependence in a corporatist system and to prevent the state from increasing its influence over the sector through invasive rescue policies.

The greater organization of corporatist finance also ensures that when the state does commit its resources to a financial rescue, it is on more favorable terms to the banks. The regulatory and support role of the peak associations reveals itself as a double-edged sword. The private associations self-monitor and even offer some privately-funded rescues, but that close relationship with public regulators also means that the peak

associations play a role in shaping the state's responses. In the US and UK, where consultation with financial sector experts was used, it was always from institutions judged to not be future recipients of state aid. In contrast, in Germany, the CEO of Commerzbank, as a board member of the BdB, played a direct role in shaping the state's response plan, despite Commerzbank already showing clear signs that it would ultimately require state assistance. Industry associations were able to, by this access, shape a voluntary response plan, which in turn empowered the banks to negotiate favorable terms for actual aid, whatever the letter of the law initially. Moreover, in those negotiations, industry links ensured that even failing banks retained sufficient political influence to negotiate favorable terms. Whereas representatives of failing institutions such as Lehman Brothers in the US and Northern Rock shareholders in the UK found few allies and little access as their fate was debated between state representatives and potential buyers, JC Flowers found significant institutional support from the DSW and VdP, which enabled him to lobby successfully for a higher sale price in the Hypo nationalization than its equivalents in the US and UK.

Party politics were almost entirely absent from the German debates on responses to the crisis, to a much greater degree than in either the UK or US. In part this derives from the Grand Coalition governing Germany to 2009; with both the center-right CDU-CSU and center-left SPD in government, neither was likely to be sharply critical of state responses. The two chief political actors in Germany, Chancellor Angela Merkel and Finance Minister Peer Steinbrück, came from the CDU and SPD, respectively. Although they would be the two chief rivals for the Chancellorship in 2013, in the crisis they presented a united front, and any disagreements between them were kept hidden. The smaller parties

of the left and right, outside of the governing coalition, also had very little critical to say about state responses, especially in comparison to the bitter criticisms of the opposition parties in the UK and elements on both the left and right in the less-disciplined US Democratic and Republican parties. Party politics would intrude on German crisis response debates only after the Grand Coalition was replaced by a CDU/CSU-FDP coalition in 2009. Even then, however, debate centered primarily on state aid to auto manufacturer Opel, while proposals to extend SoFFin aid to banks passed relatively uncontroversially.

A more important source of tension was between the German state and the European Commission. Although the EC was an observer in the original debates over construction of the SoFFin plan, and approved it as-written, the EC would take a more critical line on subsequent implementation of the plan. Its influence was somewhat limited, however, restricted to criticizing implementation after the fact rather than blocking action. German policymakers therefore preferred to implement their preferred policies and deal with the consequences later, rather than seek EC approval in advance.[371] Therefore, while the EC was able to insist on modifications to existing aid packages, most notably in insisting on the break-up of WestLB, it did not shape the response terms of the German state. Its most significant influence may have been its 2001 decision barring traditional aid from the Länder to the Landesbanken, a move which was designed to limit state aid but instead, in the eyes of many critics, led to the Landesbanken overleveraging themselves and deepening the extent of the crisis and need for state assistance.

German policymakers therefore both had more opportunities for private contributions to bank rescues and more constraint in developing state rescues. This meant that, when the

[371] Foreign Ministry representative, *Interview by Author*

funding needs of banks were smaller, the state could rely on the other banks to play a role in both organizing and funding a rescue, decreasing the demands on the state. However, the corollary of this greater engagement by the healthy banks and bank associations was that they also brought pressure on the state to provide more generous terms in shaping the state component of assistance. This happened in the policy-drafting stage, when representatives of the banking associations and several of the major banks were part of the body that drafted the SoFFin plan and its later revisions. It also happened in the implementation phase, when the Landesbanken used their ability to act jointly and to tap the Länder for aid to secure more favorable terms of aid. This left German policymakers far more constrained than the US or UK equivalents, who were free to chose a policy that minimized moral hazard and maximized the chance of the state seeing a positive return on its assistance.

Chapter 6: The United Kingdom and the 2007-2009 Crisis

Turning from corporatist Germany to more liberal systems reveals strikingly different patterns in response to the financial crisis. In broad strokes, Germany and the UK are comparable, being of similar size in terms of both population and GDP. Moreover, both are European Union members, meaning that not only are their economies closely integrated, but that in the 2007-2009 crisis, their national response patterns were constrained by the same European Commission directives on the terms of state aid. Nevertheless, clear differences between the patterns of response emerge. Whereas the German state took a "soft touch" approach, favoring voluntary and generous aid to its failing banks, in the UK state assistance consistently came at an extremely high cost to bank shareholders, who were given little to no choice on accepting state aid, and frequently either all but wiped out entirely or severely diluted. Moreover, while the German state showed extreme reluctance to use nationalization and state control, in the UK state ownership and control were both advocated and used early on in the crisis. Germany would wholly-nationalize only one firm, Hypo RE, and would be quick to sell its shares in the firm it held the largest partial stake in, IKB, choosing to take a loss rather than continue to hold an ownership stake. By contrast, the UK would turn to compulsory nationalization and part-nationalization early in the crisis, and would show a willingness to hold full or significant stakes in banks for an indefinite period until they could be sold at a profit to the state.

The key variable explaining these different patterns is the structure of the two countries' respective banking systems. Whereas the German banks are tightly-integrated, the UK banks hold each other at an arm's-length distance, lending to each other only on

good collateral and zealously avoiding any actions that would aid a competitor at their own expense. As such, the UK banks lacked both the strong collective-action institutions of their German equivalents and the will to act in the interest of failing banks. Whereas the German banks would both organized private and public-private rescues and lobby the state for favorable state rescue terms, in the UK the healthy banks refused to participate in private consortium rescues, save one small rescue under heavy state pressure, and would only offer to absorb failing firms on generous terms to the purchasing bank. As importantly, the healthy banks took no advocacy role on behalf of the failing banks over the terms of state intervention, and in fact protested when they saw state aid as overly-generous. Moreover, the lack of private governance institutions meant that bank representatives had no formal role in the regulatory process and thus no seat at the table in policy discussions. This left British policymakers free to develop state responses independent from industry influence, and they therefore chose policy tools which minimized moral hazard and maximized the chance of a positive return on taxpayer assistance.

The United Kingdom is on the surface both the case where an observer would most expect and least expect to see nationalization used as a policy tool. On the one hand, nationalization in the UK is less politically charged than in Germany, where it is closely tied up with the expropriation of Jewish property in the 1930s, or in the United States, which has a far weaker tradition of state-owned enterprises than elsewhere in the advanced capitalist world. In contrast, in the UK, state ownership of banks had long been part of the political discourse. Historically, the Labour Party had called for state ownership of banks, though the 'New Labour' Party of Tony Blair and Gordon Brown

rejected state ownership as a goal in itself. This history of public calls for state ownership of banks meant that nationalization produced less normative resistance than it would in the US or Germany, cases where bank nationalization never had much popular appeal. Both major parties in the UK had, in times of distress, relied on nationalizations of failing industries in the past. The most recent bank nationalization in the UK prior to the 2007-2009 crisis took place in 1984, when Conservative Prime Minister Margaret Thatcher oversaw the nationalization of Johnson Matthey Bank. On the other hand, the financial sector in the UK plays a more central role in the UK than elsewhere. Finance accounts for a larger share of GDP than in either Germany or the United States, and successive Conservative and Labour governments have emphasized the importance of maintaining the City of London as a major global financial hub in driving economic growth in the UK.[372] Gordon Brown would, once out of office, testify as to the political clout of UK finance in the run-up to the financial crisis, ruing the political pressure of the banks that led him to embark on a disastrous program of deregulation.[373]

This clout, however, was chiefly felt in good economic times, when the banks were healthy. Ultimately, the UK proved to be among the states willing to take the hardest line in rescuing its banks. The Bank of England resisted pressure to supply markets with emergency liquidity longer than the US Federal Reserve or the European Central Bank, and when it did provide liquidity, it did so at penalty rates. The United Kingdom also proved willing to use compulsory nationalization at minimal compensation as a policy tool once it became necessary to address solvency issues. The UK would

[372] Thorsten Beck, Asli Demirgüç-Kunt and Ross Levine, "Financial Institutions and Markets Across Countries and Over Time-Data and Analysis," *World Bank Policy Research Working Paper Series, Vol* (2009).
[373] Helen McArdle, "Brown : Financial Crisis of 2008 was just the Beginning," *The Herald (Glasgow)*, sec. HS - NEWS, May 17, 2011.

fully nationalize two smaller banks against the wishes of shareholders and for *de minimis* compensation. It would also attempt to part-nationalize two larger firms at below-market rates, failing only because of the banks' rapid collapse in value and not because of their ability to lobby for more favorable terms. Moreover, unlike in Germany, virtually all policy decisions made by the United Kingdom were made without input from the financial sector. Because UK banks rapidly lost influence once they started to fail, the failing banks were unable to persuade UK authorities to adopt more generous policies, and the healthy banks were unwilling to do so. Absent pressure from the banks, policymakers could adopt options which stabilized the financial system while minimizing costs to taxpayers and imposing costs on failing banks.

The Structure of Banking and Regulation in the United Kingdom

The key to the success of the British state in limiting moral hazard in its bank rescues lies in the structure of British banking, in which there are relatively few inter-bank linkages, and thus both less incentive and weaker mechanisms for interbank coordination in financial crises. The structure of UK banking is considerably simpler than in either the US or Germany. Unlike those countries, UK banking is neither divided by function nor by ownership. While some smaller deposit-focused mutual banks remain, most of the major banks are universal banks, engaging in both investment and retail banking. The chief division in UK banking is simply on size, with a significant gap between the largest banks, in 2007 Barclays, HBOS, HSBC, Lloyds/TSB, RBS, and Standard Chartered, and the smaller, generally more regionally-focused banks. Several of those smaller banks, including the important cases of Northern Rock and Bradford & Bingley, were formerly mutual banks which converted to conventional banks in the

aftermath of the "Big Bang" of UK banking deregulation under Margaret Thatcher in the 1980s. Relationships between UK banks tend to be arm's-length, especially following the deregulation of the Big Bang. Interbank lending plays an important role in the system, but on the basis of good collateral and risk-based interest rates, meaning that banks lent on terms that minimized their vulnerability to borrower failure. Cross-holding, both among banks, and between banks and industry, is extremely limited, with banks generally providing loans rather than equity for clients. As such, banks have little direct exposure when other banks run into distress, and have little incentive to help their failing rivals, unlike in Germany, where banks are often directly and substantially exposed to each others' decline.

This combination of competition and limited direct exposure means that there is little incentive toward collective action. There are some industry associations representing the UK banking industry, chiefly the British Banking Association, but unlike in Germany they have little clout relative to the banks themselves. This can be attributed to their differing functional roles. The German associations wield significant influence over their members by serving as not just a lobbying group, but also a clearing bank, deposit insurance provider, and even a regulator in some limited capacities. This gives them the ability to not only speak on behalf of their member banks, but also to sanction or otherwise compell their members toward joint action. The British associations, however, are limited to a lobbying function. Even in this capacity, they are less powerful than their German equivalents, as while they can represent the consensus views of the banks, they have no power to negotiate for them or compel individual banks to fall in line with

industry-wide policies. This lack of control over their members limits their usefulness as a partner in negotiations with the state both for the banks and for policymakers.

In the crisis, this meant that other banks provided only limited assistance, and only where they saw a direct economic interest. Unlike in Germany, the healthier UK banks proved largely unwilling to act in other banks' interest, with no significant consortium rescues or lobbying on behalf of distressed banks. Instead healthy banks poached clients from their weakened rivals, deepening their distress.[374] UK authorities were able to exploit this division to their advantage, persuading the healthy banks to side with the state in pressuring the weaker ones to accept compulsory part-nationalization.

The regulatory structure of the United Kingdom, following Labour reforms in the late 1990s, took the form of the "Tripartite Authorities" of the newly-independent Bank of England, the Financial Services Authority (FSA), and the Treasury. Under the system implemented in 1997, the Bank of England would take charge of maintaining the overall stability of the system, including liquidity provision, while the FSA would monitor individual banks, and the Treasury would oversee the overall regulatory structure, reporting to Parliament and providing any necessary capital injections.[375] Prior to the 2007-2009 crisis, this system appeared to work reasonably well, although it would prove considerably more unwieldy once the crisis began. Dividing responsibilities and tools among the different agencies, especially between the FSA and Bank of England, proved to be extremely destabilizing, with success depending on a good working relationship

[374] Heather Stewart and Heather Connon, "Fears Grow for British Economy as Panic Over Northern Rock Spreads : Experts Warn that a Decade-Long Borrowing Binge has Left Britain Dangerously Exposed to the Fallout from the Global Liquidity Crisis," *The Observer (England)*, sec. OBSERVER BUSINESS PAGES, September 16, 2007.
[375] HM Treasury, *Memorandum of Understanding between HM Treasury, the Bank of England and the Financial Services Authority* (London: HM Treasury,[2006]).

between the leadership of the Bank, the FSA, and the Treasury.[376] Both the Bank of England and the FSA were formally independent entities, meaning the Treasury could only pressure them to act, and not order them to comply with the Treasury's wishes. With the Bank of England as an independent central bank, the Treasury and the Brown government could not compel the Bank to release liquidity, but because much of the individual bank regulatory authority remained with the FSA, the Bank lacked many of the tools that the Federal Reserve had to compel banks to restrict their capacity to increase systemic risk.[377] In the 2007-2009 crisis, the Prime Minister's office would also play a key role in negotiating the terms of state response. Brown's involvement was driven both by his experience as the previous Chancellor of the Exchequer and a personal and political divide between Brown and his current Chancellor, Alistair Darling, a supporter of Brown's predecessor and rival Tony Blair.[378]

This division within the regulatory authorities did not, however, provide an opening for banks to exploit in pursuit of more favorable terms. To the contrary, a remarkable consensus on the importance of imposing costs on the banks, and on the viability of nationalization as a policy tool reigned over not just the Labour government, but the opposition parties as well. The Liberal Democrats and their Shadow Chancellor, Vince Cable, would be among the strongest advocates for nationalization, often pushing for nationalization before the incumbent Labour government considered the option publically. The Conservatives generally favored placing the banks in administration and letting them fail, but, like Labour and the Liberal Democrats, favored punitive terms for

[376] Alistair Darling, *Back from the Brink: 1000 Days at Number 11* (London: Atlantic Books, Limited, 2012)., p. 20.
[377] Ibid., pp. 21-22.
[378] Ibid.

failing bank shareholders. Critics of the Conservatives would assert that their rejection of nationalization was driven primarily by a desire to cast the Labour government in a bad light, as past Conservative governments had relied on nationalization when confronting the failure of systemically important firms. This consensus followed patterns of response to financial crises by both Labour and Tory governments. Banks typically have been either allowed to fail, as with BCCI in 1992, Barings Bank in 1995, and numerous small banks in the 1970s, or nationalized with minimal shareholder compensation, as was the case for Johnson Matthey Bank, nationalized by the Thatcher government for £1 in 1984.[379] Liquidity support generally has followed the prescriptions laid down by Bagehot in his discussion of the proper role of the Bank of England in 1873: that liquidity should be made freely available, but at a penalty rate of interest and only backed by good collateral, to ensure that only banks with a capacity to repay can access central bank liquidity, and that a penalty rate of interest will discourage them from doing so save as a last resort.

The one major exception to this pattern was the Secondary Banking Crisis of 1974-75, when the state was able to coordinate the major London banks into organizing a "lifeboat," a joint public-private liquidity mechanism for distressed banks.[380] This occurred, however, prior to the deregulation of the Big Bang, when the limited number of major UK banks and less-intense competition due to regulations insulating the banks from market pressures meant that inter-bank relations more closely resembled the corporatist cooperation of Germany than it would thereafter. Moreover, the Secondary

[379] Ibid.; Alex Brummer, "The Banks must be Forced to Save the Rock," *Daily Mail (London)*, sec. 1ST, January 16, 2008.
[380] Margaret I. Reid, *The Secondary Banking Crisis, 1973-75: Its Causes and Course* (London: Macmillan, 1982).

Banking Crisis was one where at-risk banks posed a substantial and direct threat to those healthier banks which participated in the rescue. Even in this instance, however, the state proved extremely unwilling to inject its own capital without obtaining a nationalizing stake, and on punitive terms. Subsequent to the Secondary Banking Crisis, and especially after the Big Bang, a dramatic increase in the number of players and access to international markets meant that UK banks no longer saw such a direct stake in each other's fate. The increased number of banks also meant that organizing a consortium rescue would be substantially more difficult. In the 2007-2009 crisis, the Treasury would fail in its attempt to organize a consortium for Northern Rock, and succeed only in organizing a small and ultimately insufficient consortium rescue for Bradford & Bingley. If the UK was unable to organize private rescues, however, it also did not encounter resistance from the healthy banks when it moved to impose stringent terms on the aid to the failing banks.

The 2007-2009 Crisis in the United Kingdom

The financial crisis in the United Kingdom began in summer 2007 with the tightening of European interbank credit markets following the distress of French bank BNP Paribas. As in other parts of the advanced capitalist world, UK banks had extremely high capital ratios, enabling them to maximize returns in good times, but leaving them extremely vulnerable in a downturn. Moreover, these highly-leveraged banks were highly dependent on overnight financing to fund operations, meaning that even a slight fluctuation in credit markets could cause disastrous results. As in Germany, the problem began in relatively small banks of relatively little systemic importance, which the UK attempted to address in an ad hoc manner. However, after a period of

relative calm in early-to-mid 2008, the crisis reached a fever pitch in September of that year. That fall, as in the United States and Germany, several major banks of systemic importance would run into trouble, compelling the state to abandon ad hoc rescue plans in favor of a systemic approach. That approach, in the UK, would take the form of mandatory partial nationalizations among distressed banks, intended to be at below-market rates to maximize the return to the state and minimize moral hazard concerns. Continued distress by major institutions would thereafter require additional assistance, again focusing on attempting to ensure the full repayment of state aid and ultimately pushing the cost of the rescue onto the financial sector itself.

The Fully-Nationalized Former Mutuals

Northern Rock

The first bank to run into trouble in the 2007-2009 crisis in the UK was Northern Rock, a midsized former mutual bank based in Newcastle. Like many smaller UK banks, Northern Rock was founded as a mutual bank, and converted into a regular commercial bank in 1997, following the deregulation of the Big Bang.[381] Typical of many of the banks which ran into trouble in the Crisis, Northern Rock was highly leveraged and strongly dependent on overnight financing to fund its daily operations. On the eve of its distress, Northern Rock's loan:deposit ratio was at 323.1%, the third-highest of any European bank.[382] As such, Northern Rock was highly vulnerable to any disruption of its access to overnight funding. On August 9, 2007, overnight markets experienced such a

[381] Comptroller and Auditor General National Audit Office (UK), *The Nationalisation of Northern Rock* (London: National Audit Office,[2009c])., p. 13.
[382] Allister Heath, Helen Dunne and Tom Burroughes, "Between a Rock and a Hard Place; as the Credit Crunch Comes to a Head , the World s Leading Financial Institutions are Beginning to Count the Cost, Say Allister Heath, Helen Dunne and Tom Burroughes," *The Business*, September 15, 2007.

disruption, stemming from the decision by BNP Paribas to suspend investment funds.[383] Given its well-known vulnerability to such a disruption, Northern Rock became targeted by skittish investors, and began to come under pressure. Its fellow UK banks, rather than seeking to assist their peer, as the German Landesbanken did when SachsenLB came under distress, turned their attention to attempts to poach Northern Rock clients, looking to profit from Northern Rock's distress.[384] Whereas the Landesbanken saw substantial risk and little gain, being exposed to the risk of contagion and to losses to the national banking association and not competing for SachsenLB's client base, the UK banks had far less exposure, and saw a chance to compete for Northern Rock's client base. In this fashion, the liberal UK banks exacerbated the crisis at Northern Rock, while their German equivalents helped to resolve Sachsen's distress.

Unable to secure private funding, Northern Rock instead turned to the Bank of England for assistance. From the beginning, however, British officials, especially Bank of England Governor Mervyn King, showed extreme reluctance to extend state aid to banks, and a willingness to only do so on punitive terms. King initially resisted providing any extraordinary assistance to Northern Rock, until pressured by Chancellor of the Exchequer Alistair Darling.[385] Even at that point, King only offered aid to Northern Rock on punitive terms, offering loans at a penalty rate of 1% over the London interbank

[383] Jamie Doward et al., "PANIC ? QUEUE HERE: Emergency Loans from the Bank of England . Worried Customers Waiting in Line Across the Country to Rescue their Savings. Pleas for the Country to 'Stay Calm'. as Britain is Finally Caught in the Financial Crisis that Started in Small-Town America with Reckless Lending to People Who could Not Afford Mortgage Repayments, what Next in the Battle to Keep the Globe Afloat?" *The Observer (England)*, sec. OBSERVER FOCUS PAGES, September 16, 2007.
[384] Stewart and Connon, *Fears Grow for British Economy as Panic Over Northern Rock Spreads : Experts Warn that a Decade-Long Borrowing Binge has Left Britain Dangerously Exposed to the Fallout from the Global Liquidity Crisis*, 1; European Commission, "COMMISSION DECISION of 4 June 2008 on State Aid C 9/08 (Ex NN 8/08, CP 244/07) Implemented by Germany for Sachsen LB (Notified Under Document Number C(2008) 2269)," *Official Journal of the European Union* L 104 (April 24, 2009a), p. 34.
[385] Darling, *Back from the Brink: 1000 Days at Number 11*, pp. 22-24.

base rate. At the time, the base rate was 5.75%, meaning the Bank offered funding to Northern Rock at 6.75%.[386] In doing so, King hoped to keep Northern Rock running, but in a market-conforming way.[387] Northern Rock, unable to find an alternative source of aid or persuade King to be more lenient, had no alternative to but to accept the Bank's terms of aid. This demonstrates early on an unwillingness of UK state officials to respond to bank distress with generous provisions, and an early willingness to only provide emergency assistance on punitive terms, as well as the inability of Northern Rock to lobby for more favorable terms.

This aid proved insufficient to stem a panic, however, and may have worsened the situation for Northern Rock by publicizing its distress more widely. On September 13, depositors started lining up en masse to withdraw their funds, a classic bank run not seen in the United Kingdom on such a scale since the 19th century.[388] Several factors contributed to this run. As noted above, seeking Bank of England assistance broadly publicized the bank's distress. King would later lament that, prior to new disclosure rules, the Bank of England could have secretly funded Northern Rock, and that might have diminished the likelihood of a run.[389] A second factor was the nature of the British deposit insurance scheme, which covered only 90% of an individual's deposits.[390] In theory, by leaving some risk with the depositor, this compelled individuals to evaluate the soundness of banks, but in practice it left an incentive to still participate in a run that the

[386] Comptroller and Auditor General National Audit Office (UK), *The Nationalisation of Northern Rock*; David Smith, "Hammer Blow for the Boom," *The Sunday Times (London)*, sec. FEATURES; News, September 16, 2007.
[387] Ibid.
[388] "Soft-Touch Regulation; Northern Rock." *The Economist,* October 11, 2007d.; "Lessons of the Fall: Northern Rock
." *The Economist,* October 17, 2007c.
[389] Peter Wilson, "UK Laws Tied My Hands , Says Embattled Bank of England Governor," *The Australian (Australia)*, sec. FINANCE, September 21, 2007.
[390] Federal Deposit Insurance Corporation representatives, Interview by author, July 7, 2011.; Comptroller and Auditor General National Audit Office (UK), *The Nationalisation of Northern Rock*, p. 53.

100% guarantee up to a fixed amount guarantee of the US FDIC did not.[391] Finally, Northern Rock's account-closure procedures were time-consuming and non-automated, meaning that it didn't take long for a queue to run out the door, attracting television cameras, and escalating the pressures for depositors to participate in the run.[392]

Faced with the first major UK bank run in over a century, the Tripartite Authorities hurriedly responded with a 100% guarantee of Northern Rock deposits.[393] The disruption from the Northern Rock panic were severe enough to cause a 0.5% overnight fall in the British pound against the dollar following the announcement of emergency liquidity assistance, convincing policymakers of the necessity of immediate action.[394] Such a guarantee did introduce moral hazard problems, but was judged to be necessary to contain the immediate panic. The other UK banks, again focused more on their own interests rather than broader systemic concerns, critiqued the guarantee as giving a rival an unfair advantage. Indeed, UK banks had long resisted an FDIC-style guarantee system, not wanting to pay into a pool to guarantee the assets of other banks.[395] Here, early in the crisis, UK banks show their focus on their narrow self-interest above systemic concerns, and their opposition to moral-hazard inducing policies for their rivals as an unfair subsidy of a competitor, as expected in a liberal banking system. Notwithstanding the banks' concerns, the guarantee was put in place, and the government began looking for a buyer for Northern Rock.

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[391] Federal Deposit Insurance Corporation representatives, *Interview by Author*
[392] Darling, *Back from the Brink: 1000 Days at Number 11*, pp. 24-25.
[393] Ben Livesey and Jon Menon, "British Lender's Shares Plummet ; Seven - Year Low . Hundreds Withdraw Savings Despite Assurances," *The Gazette (Montreal)*, sec. BUSINESS, September 18, 2007.
[394] "FTSE's Fall Accelerates." *Investors Chronicle - Magazine and Web Content*, September 14, 2007a, .
[395] Anatole Kaletsky, "Another Black Wednesday was a Whisker Away," *The Times (London)*, sec. FEATURES, September 20, 2007.

Northern Rock itself also resisted state policies. Pressure for a rapid sale met pushback from Northern Rock shareholders, especially large investment firms SRM and RAB Captial, which feared losses from a fire sale on Northern Rock.[396] However, initial attempts at finding a buyer proved unsuccessful. The bank's management sounded out over a dozen buyers, including all of the "Big Five" of UK banking and several foreign banks, including Santander, Crédit Agricole, and Citigroup.[397] All of them passed, however, save for Lloyds/TSB, which expressed interest only if the Bank of England would extend a £30 billion bridge loan for two years.[398] This would have kept Northern Rock from failing, and kept it in private hands, but only by providing a subsidy to a private firm, in a manner comparable to the state-subsidized purchase of Bear Stearns by JP Morgan-Chase in the US. FSA head Hector Sants would later claim that he advocated accepting the Lloyds offer, but was overruled by King in the Bank of England and Darling in the Treasury.[399] UK policymakers again demonstrated their unwillingness to subsidize private losses, and rejected Lloyds' proposal. While Sants supported subsidizing Lloyds' purchase, King would support a rapid and early nationalization of Northern Rock, to secure the taxpayers' interest and minimize uncertainty and disruption. Lack of existing legal authority and reluctance by Brown and Darling to be seen as

[396] Simon Duke, "Branson Takes the Lead in Multi - Billion Race to Rescue Rock," *Daily Mail (London)*, sec. 2ND, November 26, 2007.
[397] "High Street Giants Turn Backs on Crisis - Hit Northern Rock ; BANKING." *Birmingham Post*, sec. BUSINESS, September 24, 2007b.
[398] Simon Watkins, Lisa Buckingham and Dan Atkinson, "Subprime Panic on the High St; Special Report After the Northern Rock Debacle, Barclays could Now be Facing Meltdown as Shares Crash 9% in One Day," *Mail on Sunday (London)*, sec. C1, November 11, 2007.; Darling, *Back from the Brink: 1000 Days at Number 11*, p. 22.
[399] It is worth noting that Sants only made this position public upon his resignation in June 2012, well after the consequences of failing to take Lloyds' offer became clear. Public statements at the time indicated a unified position by the Tripartite Authorities. (Daniel Bentley, "Northern Rock Bank Run could have been Avoided , Says Hector Sants," *Independent.Co.Uk*, June 13, 2012.)

returning to 'Old Labour' practices meant, however, that the search for an alternative to state ownership would continue for several months.[400]

The Treasury also attempted to orchestrate a consortium rescue, along the lines of the "lifeboat" rescue of the secondary banking sector in the 1970s, in which the major banks provided a facility to assist small distressed banks.[401] This time, however, the banks balked at such a move, having little direct exposure to Northern Rock. HSBC chairman Stephen Greene told Darling that it simply was not in the banks' commercial interest.[402] This again illustrates the unwillingness of UK banks to act in support of their ailing peers, and demonstrates the dynamics of liberal financial systems. Greene was right insofar as HSBC's narrow interests were better-served by not participating in a consortium rescue. A healthy Northern Rock would be a rival, and moreover if any other bank declined to participate in the consortium, that bank could free-ride on the others' participation. In a coordinated system, with mechanisms to ensure all banks participate, consortium rescues offer some advantages, such as avoiding encroaching state ownership in the financial sector. In a liberal system, however, the dominant strategy for all banks is to free-ride, and hope that either other banks or the state rescues the ailing institution. The Lifeboat in the Secondary Banking Crisis had only worked because the relevant banks faced significant direct losses if they didn't act, while the other UK banks actually saw opportunities to expand their market share if Northern Rock fell.

[400] David Wighton, "' Your Guy Mervyn has a High Pain Threshold' ; Northern Rock was Heading for Collapse, but as Britain's Economy was Struck by Panic, there was Only Inertia at the Bank. David Wighton Reports," *The Times (London)*, sec. NEWS, March 13, 2012.
[401] Darling, *Back from the Brink: 1000 Days at Number 11*, p. 54.
[402] Ibid., p. 54.

Without a potential buyer by the end of September, British officials began to consider nationalization of Northern Rock.[403] Increasingly, politicians both within the Labour Party and in the opposition Liberal Democratic Party criticized the unlimited guarantee of Northern Rock deposits as a nationalization of the bank's liabilities that left its assets still in private hands.[404] On October 9, the guarantee was extended from deposits prior to September 19th to include new deposits as well.[405] As more of Northern Rock's liabilities were effectively nationalized, increasing the risks to taxpayers, calls increased for its assets to be nationalized as well.[406]

Since continuing to subsidize losses was deeply unpopular publically, and since no force other than the severely weakened Northern Rock shareholders advocated such a course, British officials met to consider potential ways to resolve the bank. This would be a closed debate, involving representatives of the Tripartite Authorities and Brown, and not open to either Northern Rock or representatives of the other banks. Ultimately they considered three ways to deal with the ailing Northern Rock: administration, nationalization, and a private sale.[407] In an administration, the bank would be run down, with its assets sold off to pay for its liabilities. Doing so would cost the government £10 billion, according to NAO estimates, given the fire sale prices Northern Rock's assets

[403] Comptroller and Auditor General National Audit Office (UK), *The Nationalisation of Northern Rock*, p. 7.
[404] Will Hutton, "Comment : Any More Mistakes and we Follow the US into Crisis : Our Politicians' Blind Trust in Market Forces Increases the Possibility of a Recession . we could See the Values of our Homes Slashed," *The Observer (England)*, sec. OBSERVER COMMENT PAGES, November 25, 2007.
[405] Comptroller and Auditor General National Audit Office (UK), *The Nationalisation of Northern Rock*, p. 16.
[406] Hutton, *Comment : Any More Mistakes and we Follow the US into Crisis : Our Politicians' Blind Trust in Market Forces Increases the Possibility of a Recession . we could See the Values of our Homes Slashed*, 31; Hamish McRae, "When it Comes to Finance , Nationalised Companies seem to be Doing the Best," *The Independent (London)*, sec. COMMENT, November 28, 2007.
[407] Comptroller and Auditor General National Audit Office (UK), *The Nationalisation of Northern Rock*, p. 20.

would command.[408] Moreover, once put into administration, the bank could no longer borrow on the interbank market, requiring the Bank of England to increase its loan to £100 billion.[409] Therefore, despite being the course of action advocated by the opposition Conservative Party, administration received only cursory consideration by British officials.[410]

Nationalization, the course ultimately taken, was always discussed solely as a temporary nationalization, and always with *de minimis* compensation to Northern Rock shareholders. Such an approach would rescue the bank, and contain the threat to the rest of the UK financial system, and even to the strength of the pound. However, by granting virtually no compensation to the shareholders, moral hazard would be minimized. Shareholders would take a loss just as if the bank had collapsed, but nationalization would enable the state to contain external costs from such a failure. Additionally, if the bank could be restored to health, the state could hope to recoup the aid it gave Northern Rock through profits at a restored bank and eventually the proceeds of a sale back to private hands. This course of action was supported strongly by Vince Cable, the Liberal Democrat shadow chancellor, and only weakly opposed by the Conservatives, who favored administration, and elements of Labour, who feared being criticized for a return to 'Old Labour' practices.[411] Given the de minimis compensation to be expected, nationalization understandably attracted the opposition of Northern Rock shareholders,

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[408] Ibid., p. 21.
[409] Hutton, *Comment : Any More Mistakes and we Follow the US into Crisis : Our Politicians' Blind Trust in Market Forces Increases the Possibility of a Recession . we could See the Values of our Homes Slashed*, 31
[410] Comptroller and Auditor General National Audit Office (UK), *The Nationalisation of Northern Rock*, p. 21;
[411] Hutton, *Comment : Any More Mistakes and we Follow the US into Crisis : Our Politicians' Blind Trust in Market Forces Increases the Possibility of a Recession . we could See the Values of our Homes Slashed*, 31

and their allies in the UK Shareholder Association.[412] The other UK banks, however, offered no resistance to the nationalization of Northern Rock.

The first choice of government officials, however, and of Northern Rock shareholders, was the sale of the bank to another private bank.[413] As discussed above, initial attempts at finding a buyer met no success, unless the state was willing to provide years of continued assistance to the bank. The search for a buyer was handicapped by the need to address the largely contrary interests of Northern Rock shareholders and the British government. While the Northern Rock shareholders sought to maximize the value of their stock, the British government above all wanted to ensure the repayment of the sizeable aid provided to Northern Rock. By January 1, 2008, this had reached £57 billion.[414] The government maintained the right to veto any potential sale, in order to safeguard its repayment, but was reluctant to take a lead role in negotiating the sale. The Treasury feared that taking such a lead role would open it up to litigation by Northern Rock shareholders, upset that their rights had been overrun by the state.[415] These contradictory interests created a scenario where the Northern Rock management was in charge of the bidding process, and seeking to maximize the initial sale price, but with the Treasury retaining a right of veto and favoring whatever plan would maximize the longer-term likelihood and speed of repayment of state aid.

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[412] Benedict Brogan, "Rock's Investors Line Up to Block a State Takeover," *Daily Mail (London)*, sec. 1ST, January 14, 2008.; "Northern Rock Battle Lines Drawn." *Investors Chronicle - Magazine and Web Content*, January 14, 2008d, .

[413] Tony McDonough, "No End in Prospect for the Northern Rock Nightmare ; Tony McDonough Reviews the Collapse of Northern Rock, and Asks what the Future Holds IN ASSOCIATION WITH Rensburg Sheppards," *Daily Post (Liverpool)*, sec. BUSINESS, January 2, 2008.; Comptroller and Auditor General National Audit Office (UK), *The Nationalisation of Northern Rock*, pp. 21-22

[414] McDonough, *No End in Prospect for the Northern Rock Nightmare ; Tony McDonough Reviews the Collapse of Northern Rock, and Asks what the Future Holds IN ASSOCIATION WITH Rensburg Sheppards*, 3

[415] Comptroller and Auditor General National Audit Office (UK), *The Nationalisation of Northern Rock*, p. 22.

Given these constrains, and the bank's distressed position, those bidders which did emerge did not provide tremendously compelling offers. All of them were below Northern Rock's market value, and all of them required continued government support for several years. American private investment firm JC Flowers fielded an offer that would have provided shareholders under 10 p a share, followed by a £10 billion injection that together would have essentially wiped out any existing shareholders.[416] Olivant Ltd., a British investment group, proposed injecting £800 million of equity from a consortium of investors, including £150 million directly from Olivant, in conjunction with a £450-£650 million sale of new shares.[417] Northern Rock's management proposed a shareholder-financed internal rescue, which would have required existing shareholders to contribute an additional £400 million.[418] The offer initially favored by the British government came from Virgin Money, which valued Northern Rock at 25 p a share, and would have immediately repaid £10 billion to the Bank of England and injected £1.3 billion into the bank.[419] However, major shareholders SRM and RAB Capital strongly opposed Virgin's bid, which they argued undervalued the bank.[420] They initially supported Olivant's offer, and after Olivant ultimately declined to put forward a formal bid, the shareholder-funded management rescue, which would have left their holdings

[416] Nils Pratley, "Financial : Viewpoint : By Rights Rock should Come Clean," *The Guardian (London) - Final Edition*, sec. GUARDIAN FINANCIAL PAGES, November 21, 2007.
[417] William Lyons, "Branson Poised to Up Bid as Rock Mulls Arnold Plan," *Scotland on Sunday*, December 9, 2007.
[418] Steve Slater and Clara Ferreira Marques, "Olivant Quits Northern Rock Rescue Race," *National Post's Financial Post & FP Investing (Canada)*, sec. FINANCIAL POST, February 5, 2008.
[419] Sarah Thompson, "Banks and Insurers Pace Market Retreat ; EUROPE; MARKETPLACE by Bloomberg," *The International Herald Tribune*, sec. FINANCE, November 27, 2007.; Comptroller and Auditor General National Audit Office (UK), *The Nationalisation of Northern Rock*, p. 24
[420] Tony McDonough, "Northern Rock had to be Bailed Out , Says Darling ; Market Watch Comment," *Daily Post (Liverpool)*, sec. BUSINESS, November 28, 2007.

undiluted.[421] The government too became increasingly dissatisfied with the Virgin Money bid, especially over the terms of warrants to be issued to ensure taxpayer benefit from the bank's return to profitability. Under the offer Virgin put forward, Northern Rock would need to grow to £2.75 billion from a current market value of £380 million before the warrants would kick in and taxpayers would see a benefit.[422] The Virgin offer, therefore, failed to meet both shareholders hopes and the state's requirement that the taxpayer's aid be repaid.

By December 19, government guarantees on Northern Rock had been extended to wholesale liabilities, meaning that the state now guaranteed all of Northern Rock's liabilities, but controlled none of its assets.[423] Additionally, Northern Rock by this point owed the British government £55 billion in loans and guarantees.[424] Although the search for a private buyer continued until early February 2008, a consensus increasingly formed that nationalization was the "least bad" option.[425] In addition to a growing political consensus, Treasury advisor Goldman Sachs, after evaluating the bid offers, recommended nationalization as the best way to protect taxpayer interests.[426] Therefore, on February 18, 2008, Darling stopped negotiation with the remaining bidders, and Labour passed legislation authorizing the nationalization of Northern Rock. This

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[421] McDonough, *No End in Prospect for the Northern Rock Nightmare ; Tony McDonough Reviews the Collapse of Northern Rock, and Asks what the Future Holds IN ASSOCIATION WITH Rensburg Sheppards*, 3

[422] Katherine Griffiths and Philip Aldrick, "Long Line of Suitors but None was Right for Rock," *The Daily Telegraph (LONDON)*, sec. CITY, February 18, 2008.

[423] Miles Neligan, "Rock Proves Hard Place for PM ; BANKING," *Birmingham Post*, sec. BUSINESS, December 19, 2007.

[424] Benedict Brogan and James Chapman, "£55billion; Taxpayers' Bill to Support Northern Rock Outstrips the Education Budget," *Daily Mail (London)*, sec. 1ST, December 19, 2007.

[425] Philip Aldrick, "Taxpayer's Rock Risk ' Disguised' Government Accused of Trickery Over Bank Nationalisation Plan Amid Growing Fears of Damage to Public Funds. Philip Aldrick Reports," *The Daily Telegraph (LONDON)*, sec. CITY; CREDIT CRISIS, January 15, 2008.

[426] Comptroller and Auditor General National Audit Office (UK), *The Nationalisation of Northern Rock*, pp. 27-29.

legislation, the Banking (Special Provisions) Act 2008, became law on February 21, and Northern Rock was nationalized under this new authority the following day.[427] Unlike in Germany, where the state acquiring the authority to nationalize triggered additional months of negotiation in an attempt to cajole a private sale, in the UK once the legislation was in place, Northern Rock was immediately nationalized. Nationalization was involuntary, with shareholders to receive compensation to be calculated at a later date. The Treasury warned that such compensation would be low at best, based on a valuation of what shares would have been worth had Northern Rock not received any state aid.[428]

Predictably, Northern Rock shareholders strongly opposed the move, and demanded compensation between £4.25 a share, the price when the bank was nationalized, and £9.60 a share, the pre-collapse share price.[429] Outside of Northern Rock shareholders, and the UK Shareholders Association (UKSA), which promised to launch a legal challenge for greater compensation, the nationalization received a positive reaction, with only muted criticism. Brown and Darling defended their actions as best serving the interests of taxpayers, and Liberal Democrat Cable agreed that "belatedly, the government has made the right decision."[430] Richard Branson of Virgin Money expressed disappointment that his offer was not accepted.[431] The rest of the banking industry, however, showed very little reaction to the decision, apart from a few slightly positive statements. The West Bromwich Building Society CEO, for instance, argued that nationalization was better than other options, while hoping that it wouldn't set a

[427] Ibid., p. 29.
[428] Christine Seib and Amanda Andrews, "'Our Shares are Worthless' Say the Rock's Furious Investors," *The Times (London)*, sec. BUSINESS, February 18, 2008.
[429] Jonathan Russell, Katherine Griffiths and Philip Aldrick, "Fury as ' Thieving' Chancellor Nationalises Northern Rock," *The Daily Telegraph (LONDON)*, sec. CITY, February 18, 2008.
[430] Nigel Morris, "Branson Rebuffed as Darling Nationalises Northern Rock ; NORTHERN ROCK," *The Independent (London)*, sec. NEWS, February 18, 2008.
[431] Ibid.

precedent. Similarly, a spokesman for the Confederation of British Industry conceded that nationalisation was the "least bad" option for Northern Rock. [432]

Among the most vocal critics was Conservative Shadow Chancellor George Osborne, who reiterated his argument that a Bank of England-led administration would have been superior to nationalization, both by avoiding state ownership and by ensuring that Northern Rock shareholders bore the full price for the failure of their bank.[433] Even Osborne, however, did not argue for a subsidization of a privately-owned Northern Rock, and in fact argued that administration was superior precisely because it offered even less danger of moral hazard by guaranteeing virtually no compensation to shareholders.

Ultimately, the nationalization of Northern Rock fits the predicted pattern for liberal responses to financial crises. Northern Rock's shareholders and management had very little leeway in negotiating the terms on which the state provided aid, essentially taking Bank of England aid on whatever terms the Bank offered it, and with very little recourse or input in the debate over nationalization. Once the bank owed the UK considerable sums of money, Northern Rock's management's own bid to recapitalize itself and repay the state was vetoed by the Treasury. Therefore, once Northern Rock began to fall, it lost whatever political clout it may have had prior. The other UK banks, moreover, showed little interest in its fate, and had no interest in rescuing the bank absent continued state aid to guarantee a profitable return on investment. Darling's attempt to orchestrate a consortium rescue fell apart quickly, as he lacked the ability to compel them to participate, and the banks saw no commercial interest in participation, especially given

[432] Duncan Tift and John Cranage, "Darling was Right to Act on Rock , Say Top Bosses ; BANKING," *Birmingham Post*, sec. BUSINESS, February 19, 2008.
[433] James Chapman, "Protests Over the ' Blank Cheque' for Northern Rock," *Daily Mail (London)*, sec. 1ST, February 20, 2008.

the likelihood that other rivals would decline to participate. Similarly, absent a clear opportunity for profits, no major banks expressed any interest in purchasing Northern Rock except Lloyds, and only then with a generous subsidy from the Bank of England. Even the smaller institutions which made later bids only did so on the promise of state aid to ensure profitability. No UK institutions except the shareholder advocacy group UKSA made any attempt to oppose the state's decision to nationalize Northern Rock or otherwise influence the decision-making process. This left UK policymakers free to enact whatever policy they felt best addressed the short- and long-term concerns of stabilizing the UK financial system. In the eyes of the Labour government, nationalization on the terms the state ultimately provided the best middle ground for taxpayers between preserving moral hazard by wiping out shareholders and both protecting depositors and containing contagion by keeping the bank a going concern. State ownership offered the best path for the state to recover its aid investment, and both at the time and later Treasury officials suggested that the nationalization may ultimately turn a profit for taxpayers. Even the most prominent alternate vision proposed, the Conservatives' proposed Bank of England-led administration, focused centrally on limiting moral hazard to banks, and therefore was as punitive as nationalization to Northern Rock shareholders. With the Northern Rock management and shareholders shut out of the policymaking process, and the healthy banks indifferent to Northern Rock's fate, policymakers were free to adopt policies which maximized the likelihood of the taxpayer's assistance being repaid by imposing steep costs on Northern Rock shareholders.

Bradford & Bingley

When Bradford & Bingley, another former mutual bank turned commercial bank, ran into trouble in summer 2008, the state's pattern of response would closely follow the Northern Rock precedent. As with Northern Rock, the state initially attempted to rely on private market solutions, but when those proved insufficient, turned to an involuntary nationalization with de minimis shareholder compensation. As with Northern Rock, Bradford & Bingley failed to attract support from other industry actors, who were neither willing to support their peer economically nor to lobby politically for more advantageous terms. Moreover, as with Northern Rock, the state at no point considered a subsidized form of assistance, and opted to foreground concerns of moral hazard and repayment of taxpayer funds.

Bradford & Bingley first ran into trouble when its spring 2008 losses proved higher than expected, losing £8 million in the first four months of 2008, versus a profit of £108 million the previous year.[434] The bank initially responded to this downturn by seeking capital injections from both its own shareholders and outside sources. A planned sale of a £179 million stake to American equity company Texas Pacific Group collapsed after existing shareholders objected to the new investors being offered shares on more favorable terms than existing shareholders. [435] Therefore, Bradford & Bingley was forced to rely on a £258 million capital raise from its own shareholders. This raise had been negotiated simultaneous with the sale to Texas Pacific Group, and involved the FSA organizing the major UK banks to underwrite the capital raise, promising to purchase any

[434] John Waples, "The Six Days that almost Broke the Bank," *The Sunday Times (London)*, sec. BUSINESS; Business, June 8, 2008.
[435] Ibid.; Yvette Essen, "BANKING B & B Charm Offensive to Promote Pounds 400m Rescue," *The Daily Telegraph (LONDON)*, sec. CITY, June 9, 2008.; Hugo Duncan, "Shares in B & B Dive on Fears for its Future," *The Evening Standard (London)*, sec. C, July 4, 2008.

share that the existing shareholders declined to purchase.[436] Therefore Bradford's capital raise is the lone example of a consortium rescue in the UK 2007-2009 crisis. It occurred under the direct pressure of the FSA, and involved only £20 million each from the five major UK banks. [437] Even then, their role was merely as underwriters, only purchasing that portion of the capital raise not purchased by existing shareholders. After Texas Pacific Group backed out, the FSA attempted unsuccessfully to convince either Lloyds or HSBC to purchase Bradford & Bingley outright, but to no avail.[438] HBOS, which itself was struggling and desperate for the cash reserves Bradford & Bingley held, made an offer, but was rejected by state officials. Alistair Darling judged that HBOS's bid was one of desperation, and that it was too weak to save itself or Bradford & Bingley through a merger.[439] Ultimately, as Bradford & Bingley share price collapsed below the offering price for the capital raise, very few shareholders took up the offer, and the underwriters were forced to contribute the bulk of the £258 million injection.[440]

The disappointing capital raise meant that Bradford & Bingley's value continued to fall, and the Tripartite Authorities soon began to consider nationalization of the troubled bank. As with Northern Rock, public support to keep the private bank running was never considered, and the choice was between administration, nationalization, and a private sale.[441] Administration, as with Northern Rock, was a deeply problematic option, as it would take months and risk another UK bank run while the bank's assets and

[436] Patrick Hosking and Christine Seib, "FSA Put Pressure on Top Five Banks to Support Bradford & Bingley Rights Issue," *The Times (London)*, sec. BUSINESS, June 10, 2008.
[437] Ibid.
[438] Lucy Farndon, "FSA Wanted British Banks to Buy B & B," *Daily Mail (London)*July 12, 2008.
[439] Darling, *Back from the Brink: 1000 Days at Number 11*, p. 65.
[440] Patrick Hosking and Miles Costello, "Bradford & Bingley Arrears Levels and Repossessions Soar," *The Times (London)*, sec. BUSINESS, August 30, 2008.
[441] Darling, *Back from the Brink: 1000 Days at Number 11*, pp. 133-134.

liabilities were processed.[442] As with Northern Rock, the Tripartite Authorities favored a private sale, but found no takers. Even after they offered Bradford & Bingley for nothing, and backed by a consortium of other UK banks, no buyer stepped forward.[443] As Bradford & Bingley continued to fall, the FSA ultimately decided that the bank could no longer continue to function as a deposit-taker.[444] Without a buyer, and facing closure without a rescue, the bank was nationalized under the state authority gained in the Northern Rock nationalization legislation. The ensuing process closely resembled the US FDIC procedure for resolving a failed commercial bank, where the bank was nationalized and the good assets immediately sold by the state to a third party. Bradford & Bingley's shares were cancelled, with shareholders to receive a state-determined compensation level after the fact.[445] This was expected to be quite low, as the price at nationalization was 25 p a share.[446] Once nationalized, the state immediately split Bradford & Bingley into a "good bank" of its quality assets and a "bad bank" of the more troubled assets. The good bank, including the deposit book and branches, the state immediately sold to Abbey National, a UK subsidiary of Spanish bank Santander, for £612 million, realizing an immediate return on the still-saleable assets of the newly-nationalized bank.[447] The remaining "bad bank," consisting chiefly of Bradford & Bingley's mortgage book, would be run down in state ownership, hopefully returning an ultimate profit to the taxpayer.[448]

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[442] Ibid., p. 133.
[443] Ibid., p. 65.
[444] Russell Lynch, "B&B Bank is Nationalised to Ease Crisis; Government Pledge as it Takes Over £41bn in Mortgages A Camera Crew Outside a Bradford & Bingley Branch Yesterday," *Belfast Telegraph*, , sec. September 29, 2008.
[445] Ibid.
[446] Becky Barrow, "Bank Bail - Out Costs UK Taxpayer Billions," *Daily Mail (London)*September 29, 2008a.
[447] Comptroller and Auditor General National Audit Office (UK), *The Nationalisation of Northern Rock*, p. 54.
[448] Ibid., p. 54.

Government officials would justify their actions, as with Northern Rock, as the best available option for protecting both taxpayers' interests and overall stability of the British banking system.[449] As with Northern Rock, the action was generally hailed as the "least bad" option by actors outside of the government, including the Liberal Democrats.[450] The other UK banks made no criticism of the move, and the chief voices of opposition came from Bradford & Bingley shareholders, who were slated to receive only minimal compensation for their shares in the now-nationalized bank.[451] The shareholders, however, lacked the clout to win more favorable terms. More criticism came from those who favored letting the bank fail, and who feared the greater risk to the taxpayer, especially the Conservatives, who again argued that administration would have been a preferable option.[452] As with Northern Rock, the chief concern of state officials in rescuing Bradford & Bingley was containing taxpayer exposure and minimizing moral hazard. The Conservative opposition likewise agreed that the bank should be taken out of private hands, although they advocated a Bank of England administration. Additionally, the other UK banks took no action to defend the interests of Bradford & Bingley shareholders, and showed only slight interest in aiding the bank economically. As with Northern Rock, none of them were willing to purchase Bradford & Bingley, based on their own individual economic self interest. Therefore, Bradford & Bingley closely followed the precedent set by Northern Rock.

Evaluating Initial Responses to the Crisis

[449] Darling, *Back from the Brink: 1000 Days at Number 11*, p. 68.
[450] "Bradford & Bingley Facing Nationalisation." *Bristol Evening Post*, September 29, 2008a.
[451] Ibid.
[452] Ibid.

The two small former mutuals demonstrate a pattern of response by both the state and the other banks consistent with expectations from a liberal system. The other banks showed no willingness to contribute to a rescue of their smaller rivals except in the case of the consortium underwriting Bradford & Bingley's share raise. Even in this instance, the direct pressure of the FSA and the clear and present threat of Bradford's collapse destabilizing UK banking only extracted approximately £20 million in underwriting from each of the banks, a meager provision given the size of their operations. The other banks also showed no inclination to oppose the state's ultimate decision to force nationalization at de minimis compensation, a move which ensured the stability of the system but did not require the other banks to contribute to that effort. From the state's perspective, nationalization was an optimal strategy, as it both guaranteed systemic stability and, because shareholders in the two banks received virtually no compensation, minimized moral hazard problems by punishing shareholders for their bank's failure. Letting the banks fail would have accomplished a similar shareholder-punishing function, but the extremely panicked condition of financial markets at the time meant that such a move would have credibly threatened to precipitate an even larger crisis, despite the banks' relatively small size. Although as of 2012, the state continues to be in the red on both banks, both the relevant policymakers and the National Audit Office remain optimistic that the nationalized mortgage operations of the two banks will ultimately net a profit for the British taxpayer.[453]

[453] Comptroller and Auditor General National Audit Office (UK), *The Creation and Sale of Northern Rock Plc* (London: National Audit Office,[2010c]).

Moving Toward A Systemic Approach: the Special Liquidity Scheme and Mandatory Capital Injections

Both Northern Rock and Bradford & Bingley were relatively small institutions, and Northern Rock ran into distress well before other institutions in the UK or elsewhere. By spring 2008, however, it had become clear that the banking crisis would be broader than one small northern institution, and the UK began looking at systemic solutions. Although the ultimate UK plan would be praised as one of the boldest state responses to financial crisis, initially the British were extremely reluctant to move toward a general solution. As in the US and Germany, in the UK officials sought to confront bank failures on an *ad hoc* basis for as long as possible. The Bank of England, in particular, resisted pressure to provide emergency liquidity assistance much longer than either the US Federal Reserve or the European Central Bank. This reflected Bank of England chair Mervyn King's deep aversion to any intervention that might increase moral hazard, fearing that any such intervention would, in his own words, "sow the seeds of a future crisis."[454] King only offered liquidity support to Northern Rock after being pressured by Darling, and even then at a punitive rate. In offering liquidity more generally, the Bank of England's terms remained expensive, a point above the LIBOR base rate.[455] King's moral hazard stance was undermined, however, by the ability of British banks to access European Central Bank liquidity. By providing an alternate lender of last resort, the ECB undercut the Bank of England's bargaining power and complicated King's attempts to use access to liquidity as a means to entice UK banks to increase their capital reserves. Additionally,

[454] Ian McConnell, "No Bailout for Lenders - King; Bank of England Governor Raises Hopes that Interest Rates have Peaked - for Now," *The Herald (Glasgow)*, sec. BUSINESS, September 13, 2007.
[455] Christina Fincher, "Bank of England Keeps a Stiff Upper Lip ; no Bailouts," *National Post's Financial Post & FP Investing (Canada)*, sec. FINANCIAL POST, August 17, 2007.; Alex Brummer, "A Real Failure of Leadership," *Daily Mail (London)*, sec. 1ST, August 31, 2007.

the ECB made such funds available at a lower rate, in October 2007 at 4.63% versus 6.75% from the Bank of England, although much of that savings was wiped out in currency exchanges.[456] The chief advantage of ECB funding, however, was anonymity. Banks could tap ECB liquidity without fear of signaling their distress to market observers, potentially exacerbating their distress.[457] By contrast, taking UK aid, on the punitive terms the Bank of England offered, would signal a need for liquidity despite the costs. This desire to avoid signaling distress by the banks would continue to bedevil King's efforts to cajole banks into reinforcing their liquidity and capital positions. Following a March 2008 public statement by King urging banks to recapitalize themselves, several responded instead by further depleting their reserves by paying dividends.[458] In doing so, they hoped to send a strong signal to markets that they were in a good position, even if sending that position in fact weakened an already precarious capital position. Unlike in Germany, there was no discussion of a joint bank take-up of liquidity to alleviate these signaling concerns.

The Special Liquidity Scheme

By late April 2008, however, the heads of Barclays, RBS, HBOS, Lloyds, HSBC, and 30 other UK financial institutions met with Gordon Brown.[459] They urged the British government to act to provide greater liquidity to the banks on less punitive terms, but continued to insist that their problems were rooted in liquidity, and therefore external, and not in a capital shortfall, and therefore problems of their own making. After the May

[456] Christine Seib, "Banks Seek Secret Loans After Rock Ruin," *The Times (London)*, sec. BUSINESS, October 3, 2007.
[457] Ibid.
[458] Jeremy Warner, "Bear Fire Sale Marks Start of Capitulation ; OUTLOOK," *The Independent (London)*, sec. BUSINESS, March 18, 2008a.
[459] Iain Dey and David Smith, "Fred the Shred in the Line of Fire," *The Sunday Times (London)*, sec. BUSINESS; Business, April 20, 2008.

20 meeting with the banking heads, UK policymakers began debating a new liquidity program. Although spurred to action in part by the lobbying of the banks, the actual debate over shaping the policy was restricted to the Cabinet, the Treasury, and the Bank of England.[460] Mervyn King continued to zealously defend the principles of moral hazard, stating that any central bank intervention must be driven by two principles: that the risk of loss remains with shareholders and that any longer-term solution must focus on the overhang of existing assets, and not simply serve as a means of subsidizing new asset purchases.[461] Without the presence of banking industry representatives, the ultimate plan presented would conform to King's principles.

The plan agreed to was the Special Liquidity Scheme (SLS), under which banks would provide collateral in exchange for access to Bank of England Treasuries. Under the terms of the SLS, banks would pledge AAA-rated assets to the Bank of England in exchange for Treasury bills, discounted 10-30%. Therefore, £100 in AAA assets would be pledged for every £70-90 lent, insulating the Bank of England against losses so long as the highly-rated assets kept their value. Moreover, banks would pay a penalty rate of interest of 1% over base rate.[462] Therefore, the terms of the SLS were as strict as earlier Bank of England programs, and considerably harsher than comparable Federal Reserve or ECB programs. The SLS nevertheless carried two advantages for the banks. The first was the scale of the program. Earlier Bank of England liquidity auctions were relatively small, on the order of £10 billion. The SLS's initially announced scale was £50 billion, but did not have a fixed upper limit and was widely believed at the time of announcement

[460] Darling, *Back from the Brink: 1000 Days at Number 11*, p. 94.
[461] Dey and Smith, *Fred the Shred in the Line of Fire*, 6
[462] Sam Fleming, "The Bank Unveils the King of all U - Turns ; City FOCUS," *Daily Mail (London)*, sec. 1ST, April 22, 2008a.

to reach as high as £100 billion.[463] In doing so, policymakers hoped to ensure that no bank with acceptable AAA-rated collateral would fail from lack of liquidity, however punitive the terms of access. The second key advantage over earlier Bank of England programs was the agreement of all UK banks to participate in the SLS, in order to remove the stigma of accepting state liquidity.[464] This served the interests of the banks, as it provided cover for accepting state aid, but also helped insulate taxpayers from losses. Although it increased the amount of taxpayer funds injected, banks that took liquidity for political reasons could be expected to repay in full, and at relatively costly terms. Therefore, healthy banks participating in the SLS increased the potential profits for taxpayers from SLS money.

The SLS, dubbed a "giant pawn broking operation" by media sources, was designed as a way to provide banks liquidity with a minimum of moral hazard effects.[465] The terms of the aid, a punitive 1% above Libor rates, meant that although the state was providing liquidity that markets were not, it was not giving the banks generous terms. The required collateral, AAA-rated assets of greater value than the liquidity provided a reasonable assurance that the Bank would be repaid without loss. The SLS proved widely popular with UK banks, although they soon lobbied King to both accept a wider range of collateral and to extend the duration of the SLS.[466] Through 2008, King steadfastly refused to extend the duration of the SLS, maintaining that the window for

[463] Nils Pratley, "Financial : Viewpoint : King's Saved the Banks but Will He Save Homebuyers ?" *The Guardian (London) - Final Edition*, sec. GUARDIAN FINANCIAL PAGES, April 22, 2008.
[464] Comptroller and Auditor General National Audit Office (UK), *Maintaining Financial Stability Across the United Kingdom's Banking System Appendix* (London: National Audit Office,[2009b])., p. 2.
[465] Ashley Seager, Larry Elliott and Jill Treanor, "Financial: Banking Crisis: Bank Governor Insists Bail - Out Will Not be a Bottomless Pit : Credit Line Expected to be Tapped for £50bn: Sub-Prime Securities Will Not be Accepted," *The Guardian (London) - Final Edition*, sec. GUARDIAN FINANCIAL PAGES, April 22, 2008.
[466] Matt Dickinson, "Banks Ask for More ' Rescue' Money," *Press Association Mediapoint,* July 11, 2008.

pledging assets would close in October, as originally designated. He argued that the purpose of the program was to deal with the legacy of existing illiquid assets, and not to confront broader credit tightening.[467] In doing so, King again demonstrated his hard-line position on moral hazard, and his conviction that the fundamental problem in UK banks was one of capital, and not merely of liquidity. On October 4, 2008, however King did widen the scope of acceptable collateral to include AAA corporate and consumer loans, in a sign that markets took to mean that banks were running out of top-grade assets to pledge to the program, and the window for the SLS was ultimately extended as part of the broader systemic rescue of October 8, 2008.[468] These extensions, however, did not change the costs of SLS participation, which still aimed to only provide liquidity for good assets on punitive rates, in the classical Bagehot formula.

If King would not publically extend the SLS, however, he nevertheless proved willing to provide secret funding to both RBS and HBOS at the same time. Under the terms of this program, the two banks, the most distressed of the Big Five of UK banking, pledged collateral to the Bank of England in exchange for liquidity support. RBS's usage peaked at £36.6 billion on October 17, while HBOS peaked at £25.4 billion on December 13. The terms for both were more stringent than other Bank of England loans, paying 1.7 percentage points above the base rate and requiring over £100 billion in collateral between the two banks.[469] Both would pay back these loans in their entirety by January 16 of 2009, but in both cases no disclosure was made to the public until November

[467] "King Warns Banks : Bailout Window Will Soon Slam Shut." *EuroWeek,* August 15, 2008c.
[468] Karl West, "BoE Move Boosts Finance Shares," *Daily Mail (London)*October 4, 2008.
[469] Kathryn Hopkins and Jill Treanor, "Financial : King Reveals Secret HBOS and RBS Bailout : Bank of England Boss Tells of £62bn Emergency Loans: Revelation Prompts City Confusion and Shocks MPs," *The Guardian (London) - Final Edition*, sec. GUARDIAN FINANCIAL PAGES, November 25, 2009.

2009.[470] Moreover, such disclosure was only made because their subsequent part-nationalization compelled public access to their books. Bank of England representatives refused to confirm or deny the participation of other financial institutions.[471] This program, extending support while minimizing publicity, demonstrates again the attention UK officials paid to fears of stigmatizing participants in state aid. In Germany, this fear would ultimately cause state officials to provide aid to distressed banks on terms generous enough to overcome the costs of this stigmatization. In the UK, however, where banks had a less direct line on influencing policymakers, it would culminate in the state dictating compulsory assistance on non-negotiable terms, rather than allowing banks to voluntarily accept or decline state assistance.

Mandatory Capital Injections

By October 2008, it had become clear to UK officials that the problem facing the banks was fundamentally about capital, and could not be addressed by liquidity support alone. The failure to find a buyer for Northern Rock or Bradford & Bingley illustrated that a privately-funded solution was unlikely. Additionally, both cases illustrated the limits of a private consortium rescue. UK banks refused to assemble a consortium for Northern Rock, and in the case of Bradford & Bingley, could only be prevailed upon to provide a small consortium, insufficient to prevent that bank's failure. Some elements within the Treasury favored simply letting the banks fall, citing the precedent of Barings in 1995, BCCI in 1991, and a series of smaller bank failures in the 1970s.[472] This was also the course of action publically advocated by the opposition Conservatives. The

[470] Kelly MacNamara and Russell Lynch, "Bailout by Bank of England Revealed," *Belfast Telegraph*, November 25, 2009.; Hopkins and Treanor, *Financial : King Reveals Secret HBOS and RBS Bailout : Bank of England Boss Tells of £62bn Emergency Loans: Revelation Prompts City Confusion and Shocks MPs*, 28
[471] Gerri Peev, "Scottish Banks' Secret GBP 62bn Bailout," *The Scotsman*, November 25, 2009.
[472] Darling, *Back from the Brink: 1000 Days at Number 11*, p. 141.

heads of the Tripartite Authorities and Gordon Brown, however, felt that the cost of allowing UK banks to fail was too high, and the likelihood of a private solution appearing was too low, meaning that no "do nothing" option existed.[473] Mervyn King, with the backing of FSA chairman Adair Turner, argued that the optimal solution was compulsory injections of capital by the state. The banks had demonstrated their earlier reluctance both to raise more capital and to accept state liquidity assistance for fear of signaling their weakness to markets, so King argued that a program could both provide the necessary capital and avoid severe moral hazard issues by compelling banks to accept the necessary assistance.[474] Brown advocated a similar position, while Darling agreed in principle, with some reservations about its practical viability.[475]

Therefore, UK policymakers came to an agreement that some form of state recapitalization would be necessary. Temporary full nationalization, as used in Northern Rock and Bradford & Bingley, was seen as an option that should be used only as a last resort, for both political and practical reasons. Politically, Gordon Brown's "New Labour" government was determined to avoid being seen as returning to the "Old Labour" advocacy of state-owned banking.[476] The British public was sensitive to moral hazard concerns, but also generally opposed to a general nationalization of the financial sector. Perhaps more important, however, were practical concerns: banks such as RBS, HBOS, and Barclays were much larger than the relatively small Northern Rock and Bradford & Bingley, and a full nationalization would strain the UK budget. Given the size of their liabilities, even full nationalization could not guarantee that these banks'

[473] Comptroller and Auditor General National Audit Office (UK), *Maintaining Financial Stability Across the United Kingdom's Banking System* (London: National Audit Office,[2009a])., p. 20.
[474] Darling, *Back from the Brink: 1000 Days at Number 11*, p. 140.
[475] Ibid., pp. 140, 142.
[476] Ibid., p. 54.

collapse could be avoided, and might inflict serious damage on state finances in the process.[477] Therefore, policymakers favored some way to inject capital without taking full ownership.

This meant two basic options: a toxic-asset purchase into a "bad bank" or state ownership stakes in the banks themselves.[478] The former option, at the time being pursued in the US under the original version of the TARP program, was unpopular for a number of reasons. Most problematically, bad banks succeed precisely by creating moral hazard: by taking risky assets away from banks and placing them with the state. Either such operations overvalue the assets, helping the banks but subsidizing their losses, or value the assets at close to market value, in which case the banks gain a cleaner balance sheet but are forced to realize losses on the assets, diminishing the effectiveness of the program. A successfully-implemented toxic asset purchase scheme, therefore, hinged on a valuation of assets that imposed losses on firms to limit moral hazard problems but also valued them highly enough that the program helped prevent the banks' fall more than simply unloading the assets on the market would. It necessitated a reasonably accurate estimation of the assets' future value, a time-consuming operation that made an asset-purchase scheme impossible to rapidly implement without introducing severe moral hazard.[479] Therefore, state officials rejected an asset purchase scheme as an immediate solution, although did not dismiss the possibility of such a program later on, when greater due diligence might be possible.[480]

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[477] Ibid., p. 128.
[478] Ibid.; Comptroller and Auditor General National Audit Office (UK), *Maintaining Financial Stability Across the United Kingdom's Banking System Appendix*, p. 5.
[479] Ibid., p. 5.
[480] Ibid., p. 5.

State officials therefore much more strongly favored direct capital injections into banks. This offered the virtue of far greater simplicity: the state could simply purchase shares of a bank, providing capital without worrying about the specific structure of the underlying assets. Properly priced, such a purchase would minimize moral hazard problems by transferring both risk and reward to the state. The state would take some risk from the bank, but also enjoy a share of the profits if the bank returned to profitability. This would also impose costs on the shareholders, by diluting their control and their share of any future profits. Minimizing losses and maximizing returns to taxpayers became a key factor in the state's design of the capital injection program.[481] Under the initial recapitalization program, therefore, capital injections were to primarily take the form of preferred stock paying a punitively high dividend. That dividend, 12%, was well above comparable German or American programs, although the American preferred stock would rise to a more comparable 9% if not repaid in 5 years.[482] Moreover, preferred stock was senior to other claims, meaning that any losses would be felt by ordinary shareholders before the state.

British officials chose ultimately to pair their capital injection with loan guarantees to stimulate interbank lending, calculating that such a move would lower the total amount of required capital injected, and thus the potential risk for taxpayers.[483] Such loan guarantees would be provided at market rates, unlike the under-market German loan

[481] Darling, *Back from the Brink: 1000 Days at Number 11*; Comptroller and Auditor General National Audit Office (UK), *Maintaining Financial Stability Across the United Kingdom's Banking System*, p. 15.
[482] Comptroller and Auditor General National Audit Office (UK), *Maintaining Financial Stability Across the United Kingdom's Banking System Appendix*; United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011* (Washington: U.S. G.P.O, 2011).
[483] Darling, *Back from the Brink: 1000 Days at Number 11*, p. 157.

guarantees.[484] Therefore, the final form of the loan recapitalization program consisted of £50 billion in recapitalization, £250 billion in loan guarantees, £100 billion in short-term loans, and an extension of the existing £100 billion Special Liquidity Scheme.[485] The capital injections would come from the state underwriting a private capital raise, in which shares would first be offered to existing shareholders but the state purchasing any shares the shareholders declined to take up. This method would allow shareholders to take on a portion of the costs of the rescue directly, reducing the costs to the state and the dilution of their own stake in the bank.

The plan was not negotiated with the banks, but presented as a *fait accompli* to representatives in a special meeting on October 7, 2008 that came to be dubbed the "Balti Bailout," after the Indian food served as the meeting ran late into the night.[486] Banks were presented with specific capital raising requirements, with the worst-off banks, RBS and HBOS, presented with the highest capital requirements, and the healthiest banks allowed to avoid mandatory recapitalization.[487] Such levels were to be set by the FSA, based on stress tests of the banks' existing capital positions.[488] Those levels moreover would be non-negotiable, though banks would be free to substitute private capital for state capital, if such a source could be found. Without a private alternative, however, banks would be compelled to accept part-nationalization on the state's terms.

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[484] Comptroller and Auditor General National Audit Office (UK), *Maintaining Financial Stability Across the United Kingdom's Banking System Appendix*, p. 11.
[485] Darling, *Back from the Brink: 1000 Days at Number 11*, p. 156.
[486] Louise Armitstead, Philip Aldrick and Katherine Griffiths, "Inside Story of Brown's Rescue Mission to Save British Banks ; the Taxpayer-Funded Rescue of Three High Street Banks Represents Gordon Brown's Biggest Gamble. Louise Armitstead and Philip Aldrick Report on an Unprecedented Bail-Out," *The Sunday Telegraph (London)*, sec. CITY, October 19, 2008.
[487] Comptroller and Auditor General National Audit Office (UK), *Maintaining Financial Stability Across the United Kingdom's Banking System Appendix*, pp. 6-7.
[488] Ibid., pp. 6-7.

In the run-up to the meeting, distressed banks had steadfastly maintained their problem was one of liquidity, not capital. This narrative served the banks' interests, as liquidity was a problem which could be blamed on market externalities and not mismanagement of risks. Therefore, those banks being compelled to accept new capital requirements responded strongly and negatively, unsurprisingly given both the involuntary nature and stiff costs of the recapitalization.[489] British officials, however, were able to take advantage of the narrow self-interest of British banks by making the liquidity provision, which all banks wanted, available only if the package as a whole was accepted by the major banks. This, therefore, created a situation where the healthy banks, especially Standard Chartered and HSBC, had an incentive to pressure the weaker banks, especially RBS and HBOS, to accept the terms as offered.[490] Those banks were judged by the FSA to not need significant recapitalization, but did want to avail themselves of the loan guarantees and liquidity provisions of the state assistance package. The British government, therefore, was able to use the divided nature of British banking to its advantage, making temporary allies of the healthier banks against the weaker banks. The stronger banks had no incentive to lobby for more favorable terms for their rivals, which would not benefit their own shareholders, but did want the panic contained and access to liquidity for themselves. Therefore, they joined the state authorities in pressuring the distressed banks into accepting the terms as they stood, so that the state would release liquidity. Unlike in Germany, where the healthy banks served as allies of the failing ones, in the UK, the healthy banks took the side of the state against the failing ones. This culminated that night with another banker turning to RBS CEO Sir Fred Goodwin and

[489] Darling, *Back from the Brink: 1000 Days at Number 11*, pp. 159-161.
[490] Ibid., p. 162.

angrily exclaiming that the crisis was "all [his] fault."[491] While the Germans were able to use the networked nature of their banking system to obtain private aid early in the crisis, the British were able to use the atomized nature of *their* banking system to turn the banks against each other and press for more punitive terms.

The terms were moreover presented without space for modification or debate, making the October 7 meeting an exercise in convincing the banks that they had no alternative rather than a negotiation. Those banks requiring recapitalization contested, at times bitterly, but without success. Goodwin of RBS steadfastly maintained that his problems were purely liquidity-based, and not capital-related, and would later compare the meeting to a drive-by shooting.[492] Representatives of Lloyds and HBOS were similarly upset, but also could not prevail on policymakers to change the terms of recapitalization.[493] The only bank to win a concession was Barclays. Barclays' chief executive, John Varley, according to reports, was "almost on his knees" pleading that he could raise the required capital without participation in the government scheme.[494] With the understanding that Barclays would still be compelled to raise the capital from some source, the bank escaped compulsory state recapitalization in a move that would ultimately spare the British taxpayers but cost Barclays shareholders more than the state recapitalization would have.

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[491] Katherine Griffiths, "'We Came Close to Not being Able to Get Money from Bank Machines'; Exactly a Year Ago, Britain's Banking System Died and had to be Shocked Back to Life. Katherine Griffiths Relives the Hour-by-Hour Drama," *The Times (London)*, sec. BUSINESS, October 10, 2009.

[492] "The Weekend Brown Saved the Banks from the Abyss : THE 'LONG WEEKEND' WHEN BRITAIN WENT TO THE BRINK: The Prime Minister's Leadership Qualities were to the Fore on the Weekend in October 2008 when Financial Calamity was so Close." *The Observer (England)*, sec. OBSERVER IN FOCUS PAGES, February 21, 2010.

[493] Darling, *Back from the Brink: 1000 Days at Number 11*, pp. 171, 173.

[494] Gordon Rayner, "The Pounds 37bn Deal with so Much Riding on it ; Gordon Rayner Examines the Agreement and its Implications for the Public, Government and Financial World," *The Daily Telegraph (London)*, sec. NEWS; THE DEAL, October 14, 2008.; Darling, *Back from the Brink: 1000 Days at Number 11*, p. 173

Reaction to the plan outside of the affected banks was generally positive. As with the nationalizations of Northern Rock and Bradford & Bingley, reaction in most quarters was that the partial nationalization was not ideal, but was the best available option. Even those elements that might be expected to be the strongest sources of resistance, the other banks and the opposition Conservatives, gave the plan grudging support. HSBC CEO Michael Geoghan stated "I don't think it is right that the British taxpayer should need to bail out banks…it sets a bad precedent, but the Government had no alternative."[495] Conservative shadow chancellor George Osborne also accepted part-nationalization as a necessary step, although argued that it was only necessary because of earlier errors by the Labour government.[496] Therefore, the failed banks, forced to accept terms much more harsh than state aid elsewhere in Europe, found few defenders either in the drafting of the policy or after its implementation.

Reaction outside of the Conservatives and the banks was more generally positive. Liberal Democrat leader Nick Clegg praised nationalization, but called for broader stimulative measures, especially a tax cut.[497] Other critiques would similarly call on the state to go further, either taking ordinary shares or outright nationalizing the banks.[498] Apart from people arguing that the banks should be allowed to fail, there was no serious critique of the approach of nationalization, unlike in the US and Germany, where some

[495] Chris Blackhurst, "The Bankers' Banker Who Put Safety First and Came Out Ahead; PROFILE: Mike Geoghegan's HSBC used to be seen as a Plodder. but He Didn'T Get His Knuckles Rapped by Ministers and it Doesn'T Need our Money. its Rivals are Still Smarting," *The Evening Standard (London)*October 22, 2008.

[496] Michael Settle, "Banking on a New Era; Giants ' Nationalised' in Taxpayers' GBP37bn Bailout ; Bonus Culture Hit as Bosses Go without Payoffs; Shares Up 8per Cent as City Reacts to Momentous Day," *The Herald (Glasgow)*, sec. NEWS, October 14, 2008a.

[497] Nick Clegg, "Britain Needs Tax Cuts - Not just a Bank Bailout," *The Independent (London)*, sec. COMMENT, October 9, 2008.

[498] "State Ownership of Banks should be Strictly Temporary." *The Sunday Telegraph (London)*, sec. FEATURES; Leading Article, October 12, 2008f.

prominent voices called for state aid that would keep shareholders undiluted. Internationally, the plan attracted significant praise, both in the op-ed pages of major newspapers, and among policymakers.[499] Henry Paulson would credit the UK approach as a factor guiding him towards a similar mandatory state recapitalization in the United States, and other international leaders would also move toward part-nationalizations after the British action.[500]

State Aid To Individual Institutions Under the Systemic Response Programs

Barclays

Alone among the major UK banks singled out for recapitalization, Barclays was able to avoid part-nationalization. This was not due to a stronger position, however. Barclays early on had been one of the banks seen as most vulnerable. As of February 2008, most of the UK's £5 billion in subprime losses were concentrated in Barclays and RBS.[501] In October 2007, both Barclays and RBS tapped the US Federal Reserve for a combined $30 billion in liquidity.[502] Barclays was also widely rumored to be the unidentified other bank which had tapped the emergency fund the Bank of England set up for Northern Rock in November 2007.[503] By April of 2008, JP Morgan estimated Barclays had a capital shortfall of £8 billion.[504] In September 2008, the UK Treasury and FSA refused to grant a waiver allowing a rapid purchase of Lehman Brothers by

[499] Paul Krugman, "Gordon does Good," *The New York Times*, sec. A; Editorial Desk; OP-ED COLUMNIST, October 13, 2008.
[500] Darling, *Back from the Brink: 1000 Days at Number 11*, p. 168.
[501] Nick Goodway, "UK Banking has Avoided Worst of Subprime Crisis ; ANALYSIS," *The Evening Standard (London)*, sec. A, February 29, 2008c.
[502] Iain Dey, "Barclays and RBS Line Up Fed for Pounds 15bn Credit Line Arranged to Provide 'Short-Term Liquidity' for Banks' American Customers," *The Sunday Telegraph (LONDON)*, sec. CITY, October 21, 2007.
[503] Phillip Inman, "City Fears Second Bank is Heading for Credit Crisis : Northern Rock Points to Other Rescue Fund User: Barclays Shares Hit by Financial Stability Fears," *The Guardian (London) - Final Edition*, sec. GUARDIAN HOME PAGES, November 3, 2007.
[504] Patrick Hosking, Christine Seib and Siobhan Kennedy, "RBS Will be ' First of Many' UK Banks to Raise Funds from its Shareholders," *The Times (London)*, sec. BUSINESS, April 22, 2008.

Barclays, fearing that Barclays was too weak to save the US investment bank, and that the purchase would simply bring both banks down.[505]

Therefore, it was not surprising that Barclays was identified as requiring recapitalization by the FSA when the compulsory recapitalizations were announced.[506] However, as noted above, Barclays CEO John Varley was able to convince UK officials that his bank could raise the required funds from private sources, and should therefore not be required to accept state capital. A private injection was preferable for Barclays for two reasons. The first was avoiding the stigmatization of requiring public assistance, allowing Barclays to claim it was not as distressed as RBS or HBOS. The second advantage was avoiding the additional restrictions that came with state capital. In addition to dilution of existing shareholders and the 12% fixed dividend required for government preferred stock, banks accepting aid were subject to lending target requirements and to a ban on payment of dividends or bonuses until the state was repaid.[507] Through these provisions, the state hoped to encourage rapid payback of state aid. In the case of Barclays, it convinced the bank to accept private aid on even more costly terms to avoid these restrictions on dividends and bonuses.

Barclays avoided state aid through a £7.3 billion capital injection from a mix of its own shareholders and a consortium of investors from Qatar and Abu Dhabi.[508] £3 billion of the Middle Eastern consortium's investment would come in the form of Reserve Capital Instruments, a kind of preferred share paying 14% interest. £2.8 billion

[505] Darling, *Back from the Brink: 1000 Days at Number 11*, pp. 123-4.
[506] Ibid., p. 173.
[507] Comptroller and Auditor General National Audit Office (UK), *Maintaining Financial Stability Across the United Kingdom's Banking System Appendix*, p. 41.
[508] Nick Goodway, "Barclays Rounds Up £ 7.3bn of New Funds ; BANKING," *The Evening Standard (London)*October 31, 2008a.

of the Middle Eastern investors' money and £1.5 billion from Barclays' existing shareholders would be Mandatory Convertible Notes, preferred shares paying 9.75% interest until June 2009, when they would convert to ordinary shares at a share price of 153 p. This aid, therefore, came at a higher cost than £3 billion of government preferred shares, which charged only a 12% dividend, and diluted existing shareholders to a greater extent than the terms of state assistance would have.

From a government perspective, this was ideal. Barclays was recapitalized above the FSA's requirements, and at no cost or risk to the taxpayer. It was also welcomed by the UKSA for avoiding another expansion of state ownership.[509] Barclays management benefitted by avoiding the ban on bonuses. Existing Barclays shareholders, however, had less to celebrate. Not only were their shareholdings diluted, but their rights of preemption were violated. By offering the Middle Eastern consortium a deal that was not offered to existing shareholders, the deal violated City rules that shareholders be offered rights on equal terms.[510] Several legal firms and shareholder advisors urged Barclays shareholders to vote down the deal, but Barclays management refused to renegotiate the terms.[511] As a concession to contain a shareholder revolt, Barclays offered existing shareholders an opportunity to purchase £500 million in Reserve Capital Instruments at the same 14% dividend.[512] With that concession, the deal went ahead as planned.

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[509] Group,Julia Werdigier - The New York Times Media, "Barclays to Get Cash Infusion from Qatar and Abu Dhabi," *The International Herald Tribune*, sec. FINANCE, November 1, 2008.
[510] Tracey Boles, "Don'T Let Greed Drive a Sell - Out to the Sheikhs ; LEADER," *Sunday Express,* November 2, 2008.
[511] Richard Northedge, "Barclays Goes East to Raise Funds but Leaves its Existing Shareholders Fuming," *The Independent on Sunday,* November 9, 2008.; Jane Moir, "Shareholders Won'T Give Barclays Easy Ride ; but they'Re Expected to Vote for the Bank's Fund-Raising," *The Business Times Singapore,* November 20, 2008.; Peter McCusker, "Barclays in no Bonuses' Move to Pacify Investors," *The Journal (Newcastle, UK)*November 19, 2008.
[512] "UK Government , Barclays Fixes Recapitalisation Deals." *Global Banking News,* November 19, 2008g.

The terms of that deal, while good for the government and Barclays management in the short term, contained a provision largely overlooked at the time which would substantially complicate later efforts at capital raising. Under the terms of the arrangement, should Barclays raise additional capital at a lower price than the 153 p a share conversion price for Mandatory Convertible Notes before conversion to ordinary shares in June 2009, the Convertible Note holders could convert at that lower share price. This effectively blocked Barclays from participating in the second system-wide support plan the UK would introduce, the Asset Protection Scheme, discussed in more depth below. Because Barclays in January 2009 was trading at only 66 p a share, any government capital support at market value would enable the Middle Eastern shareholders to convert their MCNs at that price. Converting at such a low price would have given the consortium a 55% controlling interest in the bank, an unacceptable outcome from the perspective of existing shareholders and management. This provision therefore effectively blocked any additional support for Barclays. [513]

The state's ability to take a hard line in negotiations with the bank was crucial in driving Barclays to find a private source of investment. The terms of the private investment were harsher from a shareholder's perspective than even the UK state terms, themselves harsh relative to other states' aid terms in the 2007-2009 crisis. It is highly unlikely that Barclays would have accepted those terms if the state's terms had been more generous or less compulsory. If the state had been more generous, the costs of stigmatization as an aid-taker could have been balanced against generous capital access, leading to the bank accepting state aid. This was was the case in Germany, where state

[513] Chris Blackhurst, "Is this the Man Who Sold Barclays Down the River ?; A Rescue Deal Hailed Only Months Ago Seems Set to Put the Bank in the Hands of Arab Investors After a Run on Shares. Now CEO John Varley is being Blamed for the Humiliation," *The Evening Standard (London)*January 22, 2009.

aid was cheaper than private alternatives. If the capital raising had not been compulsory, Barclays could have gambled for resurrection, continuing to place risky bets in the hope that they would pay off and get the bank out of trouble, but reasonably confident that the state would still rescue the bank if they failed. However, with neither renegotiation nor gambling for resurrection as options, Barclays was forced to choose between costly, stigmatizing state aid and even more costly but less stigmatizing private capital. That the bank chose a private capital route was nearly ideal from a government perspective, as the bank received a capital infusion without exposing the taxpayer to additional risk. It worked out well for the Middle Eastern private investors as well, who realized a £1.4 billion profit when their Mandatory Convertible Notes converted in June 2009.[514] It did not work out so well for Barclays' existing shareholders, who saw their holdings diluted and were limited in their ability to participate in later state aid schemes. In that sense, therefore, the Barclays case was moral hazard-limiting, as existing shareholders were forced to bear the costs of rescuing their bank. The case of Barclays, therefore, illustrates an instance of the state using its ability to threaten nationalization to push a bank into a private-market solution. Although the state did not compel private investors to save Barclays, it was able to push Barclays into a willingness to pay a great deal for private capital. The state was able to do this because of its ability to dictate terms to banks, even to the point of compelling them to accept state aid on non-negotiable terms. Without allies either among politicians or fellow banks, Barclays only room for negotiation with the state was to offer to find a more expensive source of private capital, and not to bargain for cheaper state assistance.

[514] Jill Treanor, "Financial : Sheikh Exits Barclays with £ 1.4bn Profit : Share Sale Undermines Bank's Non - State Bailout : Taxpayer Sitting on £5bn Loss in RBS and Lloyds," *The Guardian (London) - Final Edition*, sec. GUARDIAN FINANCIAL PAGES, June 3, 2009a.

The Royal Bank of Scotland (RBS)

While Barclays managed to avoid state aid, the other major institutions to run into distress, RBS, Lloyds, and HBOS, would end up receiving substantial state aid, though on harsh terms. The Royal Bank of Scotland, like Barclays, was widely identified as a potential problem bank as early as 2007. It and Barclays held the majority of the UK's subprime losses.[515] Like Barclays, RBS tapped the US Federal Reserve for liquidity in October 2007 and was widely rumored to be the unidentified other bank that tapped the Bank of England's November 2007 Northern Rock liquidity fund.[516] Its losses were considerably higher, however, and in April 2008 JP Morgan estimated a capital shortfall of £13 billion.[517]

RBS, therefore, that month embarked on the largest capital raise to that point in UK history, attempting to solicit €12.6 billion from its shareholders.[518] This was speculated to be a quid pro quo negotiated in exchange for access to the Bank of England's Special Liquidity Scheme.[519] A fund manager referred to the arrangement as a "Faustian bargain," in which the state would provide liquidity, but not nationalizations, in exchange for which the bank would cut its dividends and raise additional private capital.[520] Such a bargain would serve the interests of the state, much like the later Barclays private-capital

[515] Goodway, *UK Banking has Avoided Worst of Subprime Crisis ; ANALYSIS*, 36
[516] Dey, *Barclays and RBS Line Up Fed for Pounds 15bn Credit Line Arranged to Provide 'Short-Term Liquidity' for Banks' American Customers*, 1
[517] Hosking, Seib and Kennedy, *RBS Will be ' First of Many' UK Banks to Raise Funds from its Shareholders*, 40
[518] "Royal Bank of Scotland Goes Begging for E13billion Bail-Out to Cover Losses." *Daily Mail (London)*, sec. IRE, April 19, 2008e.
[519] Heather Stewart, "Business & Media: Business: Inside Story: A HIGH PRICE TO SAVE THE BANKS: For a Long Time , Bank Governor Mervyn King Tried to Hold the Line on 'Moral Hazard'. but, as the Credit Crisis Deepens, He has had to Admit Defeat - and Take on Unwanted Assets to Get the Market Moving." *The Observer (England)*, sec. OBSERVER BUSINESS PAGES, April 20, 2008.
[520] Ian Fraser, "The Bankers' New Clothes; RBS's Refunding Move is the First Step in UK Banks Waking Up from their Self - Delusion to the Reality of the Credit Crunch," *Sunday Herald*, sec. BUSINESS, April 27, 2008.

raise, by increasing RBS's capitalization without exposing the taxpayer to risk the way state ownership would. The capital raising was generally successful in reaching its target, with 95% of the new rights issue taken up by shareholders. This was by virtue of a sharply discounted rights purchase price of 200 p, below the trading value even after a 35% fall in trading value from May 12 to 226 p a share on June 3.[521] Even after the rights issue, however, RBS would be in a weaker capital position than most of its UK peers.[522] It would also not be enough to save RBS, given its further losses and subsequent loss of faith by investors, especially after the failure of European partners. In 2007, RBS had partnered with the Dutch-Belgian bank Fortis to purchase the Dutch ABN AMRO, a massive expansion for both purchasers. ABN AMRO, however, held significant exposure to subprime assets, and as their value plummeted, losses from ABN AMRO dragged down both Fortis and RBS.[523] On September 30, 2008, the Dutch and Belgian governments nationalized the failing Fortis.[524] The failure of RBS's partner in ABN AMRO, largely driven by losses from ABN AMRO, caused a corresponding drop in RBS's share price. The potential for the imminent collapse of one of the UK's largest banks became one of the chief factors spurring the British state to launch its own state recapitalization plan.

The FSA-determined capital injection for RBS would be £20 billion, more than the bank was worth at the time. This required new capital level was presented to the bank without space for negotiation. FSA chief Hector Sants' stated goal in setting such a high

[521] Alf Young, "Warning : Light - Fingered Opportunists are Operating in this B & B ALF YOUNG ON TUESDAY," *The Herald (Glasgow)*, sec. BUSINESS, June 3, 2008.; Financial Services Authority (UK), *The Failure of the Royal Bank of Scotland: Financial Services Authority Board Report* (London: Financial Services Authority,[2011])., p. 317.
[522] Ibid., p. 196.
[523] Ibid., pp. 170-171.
[524] Lindsay McIntosh, "RBS Shares Plummet as Partner Bank is Nationalised," *The Scotsman*, September 30, 2008b.

recapitalization was to make RBS "bulletproof," removing all doubt as to the viability of the bank going forward.[525] The aid was to consist of £5 billion of preferred shares, paying an "eye-watering" 12% dividend and £15 billion of ordinary shares, to be raised via an underwriting of a shareholder capital raise.[526] Without shareholder participation, this would give the state a 58% stake in RBS, but at the time it was hoped that a significant portion of that £15 billion would come from RBS shareholders.[527] The offer price for the underwritten capital raise was 65.5 p a share, versus a trading price of 90 p a share the day the plan was announced.[528] Therefore, this offered a substantial discount for shareholders looking to increase their stake in the bank. In addition to the high dividend on the preference share, the purchase of ordinary shares would be considerably below market value, and far below the trading price of 546 p a share a year earlier.[529] Such a below-market nationalization served several purposes. It diminished the moral hazard effects of a part-nationalization. The bank would be saved by an infusion of state aid, but by paying below-market terms, the shareholders would be diluted and see the value of their own shares and any potential future dividends diminish. This dilution was compounded by the terms of the preferred shares, where, as with Barclays, no dividend

[525] Erikka Askeland, "Banks Now ' Bulletproof' and must Start Lending - Sants," *The Scotsman*, October 16, 2008.; Comptroller and Auditor General National Audit Office (UK), *Maintaining Financial Stability Across the United Kingdom's Banking System*, p. 42.
[526] Michael Forsyth, "Bail - Out Questions that must be Answered ; Michael Forsyth Says the Tories are Right to Demand More Information about Labour's Blank Cheque," *The Daily Telegraph (London)*, sec. FEATURES; Comment, October 25, 2008.; Comptroller and Auditor General National Audit Office (UK), *Maintaining Financial Stability Across the United Kingdom's Banking System*, p. 7.
[527] Nick Goodway, "RBS Warns of Job Cuts in Spite of its Bailout ; BANKING," *The Evening Standard (London)*November 4, 2008b.
[528] Sam Fleming, "Lenders Hit by £ 17bn Wipeout ; Bank Rescue Plan Revealed Green Comes Out F Ighting US Bails Out Big Business," *Daily Mail (London)*October 8, 2008b.
[529] Neil Behrmann, "RBS Nationalised as Part of Rescue Deal ; Britain to also Take Major Share in Merged HBOS-Lloyds; Bonus Culture to Go," *The Business Times Singapore*, October 14, 2008.

could be paid until the preferred shares were repaid.[530] Additionally, a below-market offer price encouraged shareholders to join in the capital raise themselves, potentially shifting some of the burden for the rescue off of the taxpayers.

As with Barclays, therefore, the terms of recapitalization to RBS were harsh. Unlike with Barclays, however, no private alternative could be found, and RBS had no choice but to submit to the recapitalization plan. However, the announcement of state aid failed to prevent a further collapse of the RBS share price. The third quarter report from RBS revealed £206 million in losses, driving the share price down.[531] Although at the time of the recapitalization announcement, the state was paying below-market rates at 65.6 p a share, RBS's share price plummeted from 90 p a share at the time of the announcement to only 55.3 p a share on November 24, the day the offer expired.[532] With an offer price above the market price, there was little incentive for RBS shareholders to participate in the capital raise, and only 0.24% was taken up. The remainder, almost the full £15 billion, was taken up by the state, producing an immediate £2.5 billion paper loss on the now above-market nationalization and leaving the state the 57.9% majority owner of RBS.[533]

The picture continued to worsen at RBS into the new year, with the bank on track for the biggest year loss in UK corporate history at £24 billion, most (£20 billion) from toxic assets.[534] At this point, with similar problems appearing at HBOS, the Tripartite

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[530] Comptroller and Auditor General National Audit Office (UK), *Maintaining Financial Stability Across the United Kingdom's Banking System Appendix*, p. 41.
[531] Goodway, *RBS Warns of Job Cuts in Spite of its Bailout ; BANKING*, 26
[532] Ian McConnell, "Government Stake in Royal Confirmed at 57.9per Cent ; Bank's Investors Reject Capital-Raising," *The Herald (Glasgow)*, sec. BUSINESS, November 29, 2008.
[533] Ibid.
[534] Jill Treanor, "National: Banking Crisis : Taxpayer may End Up with 95% of RBS After Record Loss Revealed : Chancellor Admits Risks being Taken as Bank Chief Says 20,000 Jobs Under Threat," *The Guardian (London) - Final Edition*, sec. GUARDIAN HOME PAGES, February 27, 2009b.

Authorities began to consider a second round of state aid to the banks. As with the initial capital injections, policy discussions were a closed process, without a role for industry representatives in shaping policy. Essentially, RBS would be presented with the new terms from the state, drafted without RBS input, and being majority state-owned, unlikely to be in a position to reject them. This provides a contrast to German state ownership in Commerzbank, where the state vowed not to use its influence on bank decisions, despite holding several seats on the Commerzbank board following a state capital injection.[535]
Three options were considered: a further injection of capital, a temporary full nationalization, and a scheme to underpin the value of assets on the distressed banks' balance sheets. Further recapitalization, on similar terms as the previous fall, would be the simplest to implement logistically. However, given that the £20 billion to make RBS "bulletproof" in the first round quickly proved inadequate, it would be difficult to determine how much further capital would be needed should the economy continue to deteriorate. Moreover, with the state already a 57.8% shareholder in RBS, further capitalization risked becoming effectively a full nationalization anyway.[536]
A temporary full nationalization was also discussed at that time.[537] Temporary nationalization offered the advantage of giving the state greater control over the bank's actions than even its majority shareholding did. Moreover, temporary nationalization offered a way to spread the costs to the subordinated debtholders of RBS, who had

[535] Derek Scally, "German 'Bad Bank' Sees the First Step in Revolution," *The Irish Times*, sec. FINANCE; Business News, May 16, 2009.
[536] Comptroller and Auditor General National Audit Office (UK), *The Asset Protection Scheme Appendicies Three to Seven and Glossary* (London: National Audit Office,[2010b]), 3.; Darling, *Back from the Brink: 1000 Days at Number 11*, 202.
[537] Comptroller and Auditor General National Audit Office (UK), *The Asset Protection Scheme Appendicies Three to Seven and Glossary*, pp. 3-4.

previously managed to avoid shouldering the costs of RBS's losses and state aid.[538] However, the Tripartite Authorities ultimately decided that nationalization raised too many problems. A full nationalization of a bank of the scale of RBS or HBOS risked destabilizing markets even further, which might drive investors from the UK and force even further nationalizations of UK banks, a step the state was not willing to contemplate. Even if such a panic did not occur, nationalizing RBS might erode the depositor base of the other banks, as depositors made a "flight to safety" to the state banks. This had already occurred on a smaller scale at Northern Rock, forcing the state to cap the number of new accounts the nationalized bank could open. Aditionally, again following from the Northern Rock experience, the best managers and clients might leave the nationalized bank, making it harder to return to profitability and repay the taxpayer stake. Finally, leaving RBS partially privately-owned left some of its shares publically listed, and it would be easier to both calculate the market value of the bank and eventually unload the taxpayers' stake if those shares remained publically traded. Therefore, the Tripartite Authorities concluded that temporary full nationalization was not desirable at the current time.[539] They would, however, draw up contingency plans should the bank continue to deteriorate, the objection to nationalization being practical and not a rejection of state ownership in principle. [540] It is important to note also that the state elected not to nationalize RBS because it was felt that that would not serve the state interest, and not because interests either in RBS or elsewhere in the financial system objected to such an action. RBS's remaining shareholders would have opposed nationalization, but lacked the clout to prevent it, as was seen in Northern Rock and Bradford & Bingley.

[538] Ibid., p. 4.
[539] Ibid., pp. 3-4, 6.
[540] Ibid., p. 4.

Representatives of other banks may have had the clout to oppose a nationalization, but no interest in doing so.

Ultimately, therefore, the Tripartite Authorities concluded that, if full nationalization was to be avoided, the state must act to shore up the eroding value of RBS's assets. Previous crises suggested two ways to confront such a problem. The first was a conventional bad bank or toxic asset purchase, in which the state took ownership of the toxic assets, and the second was a scheme in which the state would insure specific assets, which would remain with the bank, against losses above a certain level.[541] The former option presented the same difficulties as when it had been considered as a response the previous fall. It would be too difficult to properly price the assets to avoid substantial moral hazard problems. It would also require an immediate outlay of additional state funds.[542] An asset protection scheme, by contrast, could theoretically avoid the direct use of state funds, as the guarantee itself might be enough to staunch the erosion of asset value. Such a scheme, however, presented numerous problems in design. First and foremost, no matter how well-designed the scheme would be, its design was fundamentally one of creating a scenario where losses were shared by the taxpayers and the bank, but profits from the asset went to the bank alone. In contrast, although a bad bank insulated the bank from further losses, any potential upside would go to the taxpayer who now controlled the asset. Therefore, there would need to be associated fees for usage which would offset this moral hazard and repay the taxpayer for risk exposure. Secondly, because such a scheme relies on the bank retaining control of the asset, the bank would need sufficient incentive to attempt to maximize returns on the asset, even once the loss-

[541] Ibid., p. 5.
[542] Ibid., p. 5

guarantee scheme was activated. Finally, the scheme should be structured in such a way that the bank has an incentive to exit the scheme and eliminate taxpayer exposure as soon as possible.[543]

In order to address these concerns, the Asset Protection Scheme (APS) as drafted for RBS involved several mechanisms designed to align the bank's incentives with the taxpayers'. The bank would be responsible for all losses up to a certain level, determined by Treasury officials to be the most likely level of losses to be experienced.[544] If the Treasury estimated correctly, therefore, the bank alone would likely bear all actual losses, but the presence of a state backstop in the event of exceptionally high losses would reassure investors and lenders. As the scheme was originally devised, £325 billion of RBS assets would be protected, with RBS taking the first £42 billion of losses on that pool of assets. Losses above that point would be split between the state and the bank on a 9:1 ratio state:bank. This ratio followed the precedent set by the US in its similar arrangement with Citibank. An 8:2 ratio was also considered but rejected. Such a split would increase the cost paid by RBS if the insurance were called, but the Treasury calculated that such a split would require increasing RBS's capital injection, thus increasing the immediate cost to taxpayers.[545] Any payments from the Treasury on losses would be made two years after the loss, to provide opportunity for the asset to regain value and diminish the Treasury's payment, while providing further incentive for the bank to avoid losses. The bank would pay an annual fee for participation in the scheme of £700 million a year for the first three years and £500 million a year thereafter. In

[543] Ibid., p. 7.
[544] Comptroller and Auditor General National Audit Office (UK), *The Asset Protection Scheme* (London: National Audit Office,[2010a])., p. 6.
[545] Ibid., pp. 20-21.

order for the bank to exit the scheme and avoid these annual fees, it would need to pay no less than £2.5 billion, including annual fees paid to date, plus pay back any losses covered by the Treasury plus interest.[546] Finally, the bank would grant the state an additional £6.5 billion in shares as payment for participation, and the state would inject a further £19 billion of additional recapitalization. These new shares would be "B shares," preferred shares that would be convertible to ordinary shares if the share price climbed above 65.5 p a share.[547] Through such convertible shares, the state guaranteed itself a dividend if the bank remained unprofitable, but gained a mechanism to increase its share of profits if the bank returned to health. The construction of the APS was therefore quite complex, but designed to both impose costs on RBS for its participation and encourage RBS to exit the program as rapidly as it feasibly could. Nevertheless, if losses on the protected assets rose above £73 billion, RBS would have an economic incentive to stay in the scheme until its expiration in 2099 rather than pay to exit.[548]

Implementation was delayed until November 2009, pending approval by the European Commission.[549] In that time, the share price of RBS rebounded, briefly even climbing above the price where the state would break even on its investment. Because of this, the terms of the APS participation were readjusted somewhat. The protected pool of assets shrunk to £282 billion, while the first-loss level rose to £60 billion, reflecting the fact that the assets remaining in the pool were of poorer quality, and therefore the Treasury-estimated most likely loss scenario was higher.[550] The second recapitalization, however,

[546] Ibid., p. 23.
[547] Russell Lynch, "Taxpayers' Pounds 25bn to Rescue RBS," *Daily Record*, sec. NEWS, February 27, 2009.; Neil Behrmann, "RBS Posts Biggest Loss in UK Business History ; it Parks [GBP]325b in Asset Protection Scheme; Will Sell some Operations," *The Business Times Singapore*, February 27, 2009.
[548] Comptroller and Auditor General National Audit Office (UK), *The Asset Protection Scheme*, p. 21.
[549] Ibid., p. 17.
[550] Ibid., p. 4.

remained at £25.5 billion, and the state's share of RBS rose to 83%.[551] Finally, as part of the European Commission's approval of the APS, RBS was forced to sell off significant operations, including much of its branch network, its insurance divisions, and parts of its investment banking operations.[552]

The state ultimately invested a total of £45 billion directly in RBS, with more in loans and guarantees.[553] As of May 2012, the UK continued to hold a £22 billion paper loss on RBS, with some signs that it would require an additional bailout due to exposure to the European debt crisis.[554] The bank, therefore, consumed a substantial portion of state resources, and as of 2012 still represented a net loss to the British taxpayer.

Nevertheless, the state's actions toward RBS consistently demonstrate a concern with minimizing taxpayer losses and moral hazard concerns. The initial fall 2008 recapitalization was designed to be below market value, giving the state a share of the bank disproportional to its investment and diluting shareholders. Had RBS's share price not collapsed even lower than it had as of the drafting of the proposal, the taxpayer would have realized an immediate paper profit on the investment. That they did not was largely due to an underwriting approach designed to encourage burden-sharing by private investors, and not due to a deliberate subsidization of losses. Moreover, the punitive 12% dividend on preferred shares was substantially greater than either in Germany or the

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[551] Ibid., pp. 4, 15.

[552] Sam Fleming, "Eu Will Bring New Lenders to High St," *DAILY MAIL (London)*October 28, 2009.; European Commission, *State Aid no N 422/2009 and N 621/2009 - United Kingdom Restructuring of Royal Bank of Scotland Following its Recapitalisation by the State and its Participation in the Asset Protection Scheme* (Brussels: European Commission,[2009c]).

[553] Ibid., p. 12.

[554] Nick Goodway, "Rbs Hits Out at Claims it could Need New Bailout," *The Evening Standard (London)*October 7, 2011.; Jill Treanor, "Financial : RBS Hails Recovery ' Milestones' as First Quarter Losses Hit £1.4bn: Bank Set to Repay £163bn Borrowed from the State: Plans to Give Investors One New Share for Every Ten," *The Guardian (London) - Final Edition*, sec. GUARDIAN FINANCIAL PAGES, May 5, 2012.

United States. The Asset Protection Scheme again sought to prevent the bank from falling while limiting moral hazard concerns. By its very design, such a scheme existed to subsidize losses in the short term, but was designed to be expensive enough to both produce a taxpayer profit in the long run and to incentivize the bank to rapidly repay any losses to the taxpayer and to exit the scheme.

Most importantly in evaluating the state response to RBS is to note that the bank was wholly shut out of the policymaking process. The fall from grace of Sir Fred Goodwin, the RBS CEO at the beginning of the crisis, represents in miniature how UK banks rapidly lost their influence as their market position fell. In 2004, near the peak of his clout as the head of a dominant UK bank, Goodwin received a knighthood for "services to banking."[555] In December 2007, Goodwin had enough clout to call on Alistair Darling at his home, to urge the Treasury Secretary to pressure the Bank of England to provide additional liquidity to RBS.[556] Although he was unsuccessful in that effort, that he was able to arrange such a meeting indicates a substantial level of access to high-level policymakers. By October 2008, however, Goodwin's dismissal became one of the conditions of state aid to RBS.[557] After that, Goodwin became targeted by British politicians as emblematic of the problem with British banking, and was blamed by politicians, bankers, and the general public as one of the chief villains of the 2007-2009 crisis.[558] Ultimately, although he would avoid criminal charges, Goodwin would be

[555] "Former RBS Chief Executive Fred Goodwin Stripped of His Knighthood; Fred Goodwin, the Disgraced Former Royal Bank of Scotland Chief Executive, has been Stripped of His Knighthood." *Telegraph.Co.Uk*, February 1, 2012.
[556] Darling, *Back from the Brink: 1000 Days at Number 11*, p. 61.
[557] Andrew Porter et al., "Day of Reckoning; Darling's Pounds 50bn Bank Bail - Out no Guarantee for Savers RBS Chiefs Forced to Quit," *The Daily Telegraph (London)*, sec. NEWS, October 8, 2008.; Darling, *Back from the Brink: 1000 Days at Number 11*, p. 171
[558] Philip Aldrick, "Goodwin Repays Pounds 4.7m of Pension," *The Daily Telegraph (London)*, sec. CITY, June 19, 2009.; Bruce Walker, "Fred Sued for Pounds 9bn ; Furious Rbs Investors Vow Court Action,"

stripped of his knighthood in a move that attracted broad support across parties in Parliament.[559]

More broadly, although RBS enjoyed significant access and influence while it was strong, it soon lost influence and control over its fate once it ran into trouble. The negotiation of both the recapitalization and the asset protection scheme were closed processes, open to the Tripartite Authorities but not to the affected parties. The recapitalization plan was presented to RBS as a fait accompli, against the strenuous objections of the bank management that their problem was only one of liquidity. Not only did the other UK banks not lobby to improve RBS's terms, but, because their own access to liquidity was made contingent on RBS accepting recapitalization, the other banks actively pressured RBS to accept the state's punitive aid terms. Space was allowed to renegotiate the asset protection plan only after an improvement in the bank's fortune caused the Treasury to reevaluate its position. Even then, the revised plan lowered the amount of assets RBS put in the scheme, but raised the amount of losses it would experience on those assets. Throughout the crisis, RBS had virtually no allies. The other bankers readily turned on Goodwin, unwilling to jeopardize their own access to liquidity to help pressure the Treasury for more favorable terms. Even the Scottish National Party, which lobbied on behalf of fellow Scottish bank HBOS, did not concern itself with RBS. This lack of influence by a weakened RBS gave policymakers the space to shape whatever policy they thought best. Given this space, policymakers consistently

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Sunday Mail, sec. NEWS, October 11, 2009.; Simon Hattenstone, "Saturday : Sorry is the Hardest Word : £ 500bn of Taxpayers' Money has been Spent Bailing Out the Banks - Including RBS, which this Week Announced Record Losses. Simon Hattenstone Asks Fred Goodwin if He'Ll be the First Banker to Apologise," *The Guardian (London) - Final Edition*, sec. GUARDIAN SATURDAY COMMENT PAGES, January 24, 2009.

[559] "Former RBS Chief Executive Fred Goodwin Stripped of His Knighthood; Fred Goodwin, the Disgraced Former Royal Bank of Scotland Chief Executive, has been Stripped of His Knighthood."

foregrounded concern with protecting the taxpayer from losses and limiting moral hazard problems.

Lloyds/TSB & HBOS

The other two major banks to receive state aid in the crisis were Lloyds/TSB and HBOS.[560] Although they would remain in majority-private control, both would be provided state assistance on terms comparable to those of RBS, and with a similar lack of autonomy in dealing with the state. Prior to the peak of the 2007-2009 crisis, both Lloyds and HBOS encountered some difficulties, although Lloyds' issues were minor compared to HBOS. In April 2008, Lloyds had an estimated capital shortfall of £4 billion, while HBOS's was £11 billion.[561] The Scottish bank was widely seen as one of the most vulnerable in the UK. That spring, rumors of HBOS approaching the Bank of England for support prompted a massive collapse in share value, and drove the Bank of England to take the highly unusual step of publically refuting the rumors.[562] In order to address these issues, HBOS made several attempts to increase its cash reserves. The bank attempted to reinforce its capital position with a £4 billion raise from its shareholders.[563] However, much as happened with the state recapitalization of RBS later that year, the collapse in share price meant that the offer price fell below the market price of HBOS stock before the sale was completed. The offer price was a substantial discount at the time of

[560] HBOS formally is not an abbreviation, but the bank was formed from the merger of Halifax plc and the Bank of Scotland in 2001, so is widely presumed to stand for Halifax Bank of Scotland.
[561] Hosking, Seib and Kennedy, *RBS Will be ' First of Many' UK Banks to Raise Funds from its Shareholders*, 40
[562] Duncan Tift, "False HBOS Rumour Puts Markets into a Tailspin ; BANKING," *Birmingham Post*, sec. BUSINESS, March 20, 2008.
[563] Margareta Pagano, "New Beowulf Takesa Swipe at the City'Sover-Paid Dragons; Business Editor," *The Independent - Business & Money*, sec. BUSINESS, May 4, 2008.

unveiling, at 275 p a share versus a 500 p a share market price.[564] In the ensuing three months, from May 4 to July 20, the market price of HBOS shares dipped to 265 p a share, causing only 8.3% of the rights issue to be taken up.[565] Subsequently, HBOS would attempt to purchase the failing Bradford & Bingley in order to gain access to the smaller bank's capital reserves, but UK officials balked, fearing that HBOS could not save Bradford and that Bradford's cash reserves would be inadequate to shore up HBOS.[566] Thus, the acquisition would save neither bank.

This failed capital raising further weakened HBOS, and the government began to be concerned about finding a way to address the bank's precarious position. In September 2008 members of the Tripartite Authorities met to consider potential actions on HBOS.[567] Temporary full nationalization was considered at that time, but given the size of the bank and the potential for less radical solutions, was reserved as a last-resort option. The option soon viewed as most desirable was a managed sale to another bank.[568] If possible, this would avoid a collapse at HBOS without involving taxpayer money. It could potentially raise competitiveness issues, however. The size of HBOS meant that any UK bank large enough to acquire it would inevitably take a commanding share of the UK banking market. Purchase by a foreign bank could avoid these issues, but no such foreign buyer expressed interest.[569] Ultimately, however, letting HBOS fail would reduce competition in UK banking anyway, and a private sale was seen as preferable to state

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[564] Young, *Warning : Light - Fingered Opportunists are Operating in this B & B ALF YOUNG ON TUESDAY*, 33
[565] "HBOS Rights Issue Flops." *Guardian Unlimited*July 21, 2008b.
[566] Darling, *Back from the Brink: 1000 Days at Number 11*, p. 135.
[567] Ibid., pp. 126-129.
[568] Ibid., p. 128; Comptroller and Auditor General National Audit Office (UK), *Maintaining Financial Stability Across the United Kingdom's Banking System*, p. 18.
[569] "Update 4: BOE King : Lloyds - HBOS Merger Cannot be Undone." *Market News International/the Main Wire*November 3, 2008h.; Comptroller and Auditor General National Audit Office (UK), *Maintaining Financial Stability Across the United Kingdom's Banking System*, p. 18.

aid.[570] Therefore, policymakers began seeking a buyer for HBOS in earnest, with Gordon Brown controversially taking a central role. As in earlier cases, representatives of HBOS itself played little role in these discussions.

However, few banks expressed much interest in HBOS. Barclays indicated that it would only make such a purchase if strongarmed into it by the UK government.[571] HSBC only offered to take on HBOS essentially for free, with no compensation to HBOS shareholders, similar to the terms on which the UK unsuccessfully offered Bradford & Bingley that summer.[572] Ultimately, only one potential merger partner emerged: Lloyds/TSB, which had expressed interest in acquiring HBOS as early as July, but had been dissuaded at that time due to concerns over the market share of a merged Lloyds/HBOS.[573] By September, however, the potential benefits of such a merger outweighed the negatives in the eyes of policymakers. As mentioned above, should HBOS fail, competition in UK banking would be reduced anyway. Additionally, a merger could not only save HBOS, but also prop up Lloyds, a bank which was not as distressed as HBOS, RBS, or Barclays, but nevertheless suffering in the financial crisis. Therefore, a merger could not only avoid the potential nationalization of HBOS, but also reduce the need to provide additional taxpayer support to Lloyds. Moreover, it was precisely because of Lloyds' vulnerable but not dire position that the bank agreed to participate in the merger, seeing a greater chance for advancing its own interests than the healthier HSBC did. With those concerns in mind, policymakers would not only override

[570] Darling, *Back from the Brink: 1000 Days at Number 11*, p. 129.
[571] Jeremy Warner, "With HBOS Under Renewed Attack , Forced Takeover may be the Solution; Outlook CREDIT CRISIS," *The Independent (London)*, sec. BUSINESS, September 17, 2008b.
[572] Robert Winnett, "Business; Bank is Blown Away," *The Daily Telegraph (London)*, sec. NEWS, September 18, 2008.
[573] Jill Treanor and Larry Elliott, "Banking Crisis: War Games , Champagne and Frantic Efforts to Save HBOS : PM and Bank of England Intervene to Head Off another Banking Debacle," *The Guardian (London) - Final Edition*, sec. GUARDIAN HOME PAGES, September 18, 2008.

competition concerns, but also press strongly to convince HBOS management and shareholders to accept the merger. As such, Brown personally contacted the chairmen of both banks to convince them to begin work on a merger.[574] The initial terms offered by Lloyds consisted of an offer in shares, where HBOS shareholders would receive 0.83 of a share of Lloyds for every HBOS share they held. At current market values, this priced HBOS at £15.8 billion, 58% above its traded value but only one-fifth of its peak value in February 2007.[575]

The merger, once announced, would attract considerable controversy, especially over the personal role played by Gordon Brown. Lloyds chairman Sir Victor Blank, it was argued, used his political influence to persuade Brown to allow the merger.[576] State officials vehemently denied these claims, denying press accounts that the merger was negotiated directly between Brown and Blank, and instead arguing that Lloyds was the only interested party, and that a merger better served taxpayer interests than any available alternatives.[577] Most concerns focused on the government potentially overstepping its bounds and compelling the merger of two seemingly profitable banks into a potentially competition-distorting super-bank.[578] Scottish National Party politicians were especially critical, accusing Brown of acting in the interests of Lloyds rather than the British taxpayers. Scottish First Minister Alex Salmond even argued that pumping billions of

[574] Jonathan Prynn, "(1) Brown Orders Merger Bid to Save Hailfax (2) its an Amazing Deal for Lloyds TSB; Lloyds TSB in Talks to Create a Super-Bank," *The Evening Standard (London)*September 17, 2008.
[575] Laura Board, "HBOS Falls to Lloyds TSB," *Daily Deal/the Deal*, September 19, 2008.
[576] Iain Dey and Dominic O'Connell, "THE MEN WHO BROKE A BANK; Eric Daniels and Sir Victor Blank Took Britain's Safest Bank and Turned it into a Basketcase - and Left the Taxpayer on the Hook Too, Report Dominic O'Connell and Iain Dey," *The Sunday Times (London)*, sec. NEWS, March 8, 2009.; William Rees, "Brown Cannot Shirk the Blame for Lloyds ; the Prime Minister and the Two Top Men have Ruined a Good Bank by a Failure of due Diligence," *The Times (London)*, sec. FEATURES, March 9, 2009.; Darling, *Back from the Brink: 1000 Days at Number 11*, p. 129
[577] Ibid., p. 129.
[578] Becky Barrow, "TRUE COST OF SAVING BANK OF SCOTLAND ; Borrowers Face Prospect of Dearer Home Loans as 40,000 Workers Fear for their Jobs," *Daily Mail (London)*September 18, 2008b.

pounds of taxpayer funds into HBOS was preferable to the loss of independence of one of Scotland's most prominent banks.[579] HBOS shareholders resisted being pressured into a merger, and sought to find other banks to make rival bids.[580] Lloyds shareholders too soon had reason to complain, as a collapsing HBOS share price made the terms offered considerably less attractive. Lloyds' value fell as well, but not as sharply, such that by October 1, 13 days after the initial offer, Lloyds was offering the equivalent of £9.8 billion in shares for a bank only worth £6.4 billion at current market value.[581] This created pressure on Lloyds CEO Eric Daniels to renegotiate the terms of the merger, though HBOS shareholders, who already thought the deal was unfair to them, would have resisted any such renegotiation. Since any merger required the state to waive competition requirements, Lloyds could not alter the terms of the deal without the consent of the Treasury, which above all wanted the merger to go through to save both banks. Therefore, Lloyds CEO Eric Daniels vowed to push ahead with the original terms.[582]

Soon thereafter, both Lloyds and HBOS would be included in the list of banks compelled to accept capital injections from the UK. Lloyds would be required to accept £4.5 billion in ordinary shares and £1 billion in preference shares, while HBOS would be required to take £8.5 billion in ordinary shares and £3 billion in preference shares.[583] As with RBS, the preference shares would carry a high 12% coupon. The ordinary shares

[579] Hamish Macdonell, "Darling Rejects Salmond's Claim Bank could have been Saved," *The Scotsman,* September 22, 2008.
[580] Hamish Macdonell and Peter MacMahon, "Lloyds - HBOS Merger Still Not a done Deal , Says Top Banker," *The Scotsman,* September 22, 2008.; Sean Farrell, "Lloyds - HBOS Merger Doubts as Shares Slump ; Halifax Stock Plunges 14 Per Cent Amid Speculation that Lloyds TSB Will Renegotiate Offer," *The Independent (London),* sec. BUSINESS, October 1, 2008.; Lindsay McIntosh, "Cracks Begin to show in HBOS Buy - Out," *The Scotsman,* October 1, 2008a.
[581] Jill Treanor, "Front: HBOS Rescue in Jeopardy : Plunge in Embattled Lender's Shares Leaves Lloyds Paying Billions Too Much," *The Guardian (London) - Final Edition,* sec. GUARDIAN HOME PAGES, October 1, 2008.
[582] Ibid.
[583] Philip Aldrick and Katherine Griffiths, "Bail - Out to Change Face of Banking," *The Daily Telegraph (London),* sec. CITY; STATE CONTROL, October 14, 2008.

would be injected via an underwritten share raise, hopefully encouraging existing shareholders to take advantage of the low offer price to take some of the burden of the capital raising. In order to avoid moral hazard, and to attract private investors, the offer price was set below the then-current market value, at 173.3 p a share for Lloyds and 113.6 p a share for HBOS.[584] However, as with RBS, this strategy failed to anticipate the sudden and sharp collapse of bank share prices. Unable to withdraw or lower the offering price, the state found itself underwriting a capital raise at above market rates at both banks, 13% above market value at Lloyds and 34% above market value at HBOS.[585] As with RBS, however, this above-market part-nationalization was essentially accidental, as it was intended to be a below-market nationalization until the price collapse undermined that attempt.

The state recapitalization prompted a move to reevaluate the terms of the Lloyds-HBOS merger. Scottish First Minister Salmond continued to contest the merger, and UKSA representatives argued that only the government now seemed to gain from the merger, and not shareholders at either bank.[586] Nevertheless, government officials publically insisted that recapitalizations for both Lloyds and HBOS were contingent on the merger going forward.[587] Privately, Darling and Brown felt that, while a weakened

[584] Michael Settle, "No Golden Goodbyes as Chiefs' Heads Roll in Bank Rescue Plan ; Michael Settle Examines Exactly what the Bailout Will Mean for the Struggling Organisations Involved; THE DEAL," *The Herald (Glasgow)*, sec. NEWS, October 14, 2008b.
[585] Andrew Johnson, "Lloyds TSB Dives on Merger Doubts ; CITY AND BUSINESS EDITED BY PETER CUNLIFFE," *The Express*, October 15, 2008.
[586] Bill Jamieson and Lindsay McIntosh, "Still Time to Save 'the Bank'," *The Scotsman*, October 15, 2008.; Eddie Barnes, "Salmond Seeks HBOS Review First Minister Believes GBP 37bn Rescue Deal can Allow Bank to Remain Independent," *Scotland on Sunday*, October 19, 2008.; Simon Bain, "Revolt Against Freeze on Bank Dividends Gaining Momentum; UKSA Urges Government to Amend Bailout Conditions," *The Herald (Glasgow)*, sec. BUSINESS, October 20, 2008.
[587] Jill Treanor, David Gow Ian Traynor and Nicholas Watt, "Front : Brown Bail - Out Under Threat as Bank Seeks Better Deal : Shares Plunge as Recession Bites: Highest Jobless Rise in 17 Years: Lloyds Wants Easier Repayment: PM Calls for New Economic Rules," *The Guardian (London) - Final Edition*, sec. GUARDIAN HOME PAGES, October 16, 2008.

Lloyds might survive without the merger, the only way to save HBOS absent a merger would be a total nationalization.[588] Such a nationalization would not only be immensely costly to the state, but could not guarantee the survival of the bank, potentially exposing the UK taxpayer to billions of pounds in losses. Therefore, they would use the threat of withholding state aid to pressure the banks into going forward with the merger.

The increasingly precarious position of HBOS did allow Lloyds space to renegotiate the terms of the merger. An unmerged Lloyds would be damaged but likely survive, while an unmerged HBOS would almost certainly require nationalization. Thus, while the state could veto any proposal by Lloyds to alter the terms of the merger, Lloyds could also credibly threaten to withdraw from the merger. Therefore, in recognition of the collapsing share price and the new context of recapitalizations, Lloyds renegotiated the terms of the merger downward, now paying only .605 shares of Lloyds stock for 1 share of HBOS.[589] As the terms of the deal worsened for HBOS, an insurgent movement led by former HBOS board members Sir Peter Burt and Sir George Mathewson sought to scrap the merger and devise a plan by which HBOS could survive as an independent institution. They argued that, with the new government recapitalizations, HBOS could raise sufficient capital from its own shareholders to meet the £12 billion in new capital the FSA saw as necessary for the bank's survival. Burt & Mathewson argued that £12 billion was only £500 million above the government recapitalization, and therefore could be raised from existing shareholders.[590] This plan attracted the support of First Minister

[588] Darling, *Back from the Brink: 1000 Days at Number 11*, pp. 128, 202.
[589] Rosemary Gallagher, "HBOS Merger Reaches Point of no Return," *Scotland on Sunday*, October 19, 2008.
[590] Russell Lynch and Lucy Christie, "HBOS 'could be Nationalised' if Takeover Bid Fails," *Press Association Mediapoint*, November 15, 2008.; David Maddox, "Independent HBOS Fight ' Gaining Pace'," *The Scotsman*, November 17, 2008.

Salmond, as well as numerous Scottish public figures, including actor Sean Connery.[591] The state, however, remained extremely wary of any plan other than the Lloyds merger. Darling argued that the merger offered greater security going forward, as wholesale funders would likely stay away from an independent HBOS and the bank had only survived to this point thanks to £11 billion in funding in recent weeks from Lloyds in anticipation of the merger.[592] Moreover, an unmerged Lloyds and HBOS would together require greater taxpayer support than a single merged bank would, and would have a lower chance of repaying the rescue money in a timely fashion. Additionally, should an unmerged HBOS fail, it might be too big to save even via full nationalization. Ultimately, Darling defeated the Burt-Mathewson proposal by undercutting its central premise: that HBOS could access state capital on the same terms with or without a merger.[593] Once Darling made it clear that an independent HBOS would face more stringent conditions on any state aid, the Burt-Mathewson proposal was no longer viable, and they ultimately never submitted a formal proposal.[594] The state's power to grant or withhold aid on terms of its choosing gave the HBOS shareholders little choice but to accept state terms or fail and be nationalized at minimal compensation like Northern Rock or Bradford & Bingley. By acting in this fashion, Darling used the power of the state to compel a private bank to act in a way that served the interest of the UK taxpayer, and not the interests of HBOS shareholders.

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[591] Martin Cameron, "SALMOND : NEW HBOS RESCUE PLAN WILL SAVE JOBS ; First Minister Backs Finance Chiefs' Bank Bid," *Daily Record (PM) - UK*, sec. NEWS, November 10, 2008.; Hilary Duncanson, "Connery Backs Bid to Block HBOS Merger," *Press Association Mediapoint,* December 8, 2008.
[592] George Hay, "The Devil You Know," *Breakingviews,* November 10, 2008.
[593] Ross Lydall and Bill Jamieson, "One Rule for Lloyds , One for Everyone Else , Signals Darling," *The Scotsman*, November 19, 2008.
[594] Darling, *Back from the Brink: 1000 Days at Number 11*, p. 200.

With the Burt-Mathewson proposal eliminated, both Lloyds and HBOS shareholders had little alternative but to vote forward the merger and the recapitalization. Unfortunately for the state, as with the RBS recapitalization, the market value of shares for both Lloyds and HBOS fell below the offer price. What was intended to be a below-market nationalization therefore ended up being above-market. With an offer price above market price, very few private shareholders took part in the offering, with only 0.24% of new HBOS shares and 0.5% of new Lloyds shares taken up. Therefore, the state paid £13 billion for a 43% stake in the newly merged HBOS-Lloyds, realizing an immediate £3.5 billion paper loss. The state also took £4 billion in preferred shares, at the same 12% dividend as the RBS preferred stake.[595]

The next major wave of state aid for Lloyds-HBOS came in the context of the Asset Protection Scheme. As originally designed, both Lloyds-HBOS and RBS would have participated in the APS, with Lloyds to put £260 billion of assets in the scheme, primarily consisting of assets originating with HBOS. The bank would be responsible for the first £25 billion of losses and issue the state an additional £15.6 billion in convertible B shares, including converting £4 billion of existing preference shares to B shares. The new shares would make the state the majority owner of Lloyds-HBOS, with a 63% stake.[596] This deal looked initially to be considerably worse than that for RBS, with Lloyds paying £15.6 billion to protect £260 billion in assets, while RBS was to pay only £6.5 billion to cover £325 billion in assets.[597]

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[595] "Taxpayer Will Own Half of 'Super-Bank'." *Belfast Telegraph, ,* January 12, 2009.
[596] James Cusick and Chris Watt, "Brown's Role Questioned as Government Takes 63per Cent Stake in Lloyds; Chief Executive Daniels Under Pressure as Treasury Forces Bank to Lend GBP28bn," *Sunday Herald*, sec. NEWS, March 8, 2009.
[597] Sean Farrell, "I Don'T Think History Will be Kind to Lloyds' Bosses," *Belfast Telegraph, ,* March 10, 2009.; Comptroller and Auditor General National Audit Office (UK), *The Asset Protection Scheme*, p. 14

Much as with RBS, however, Lloyds-HBOS's value surged in summer 2009, offering the bank a way to escape participation in the APS. In June, the bank announced a below-market sale of shares with the intent of paying back the state and avoiding participation in the Scheme. This £13.5 billion rights issue was broadly successful, with 77% of shareholders participating.[598] The UK, as a Lloyds/HBOS shareholder, participated to maintain its 43.5% stake. This enabled the bank to both pay back the state a net £2.3 billion of its preferred shares and raise enough capital to avoid APS participation.[599] From the state's perspective, this was an ideal outcome. The terms of participation in the APS were onerous enough to convince the bank to offer a below-market capital raise, relying on its own shareholders to bail out the bank rather than turning to additional state assistance. As with Barclays' capital injection, the prospect of worse terms of state aid drove the bank to seek private aid on harsher terms than it would otherwise have preferred. As with Barclays, this was ideal from a state perspective. Not only did the state avoid further exposure of the taxpayer to risk, but also saw a repayment of some of the money invested in the bank.

The story of HBOS and Lloyds, therefore, is similar to the other cases in the 2007-2009 crisis. HBOS, much like RBS, Northern Rock, and Bradford & Bingley, rapidly lost control over its own destiny once it became dependent upon state aid, losing virtually all leverage to negotiate with policymakers over terms. Lloyds, too, had only limited input into the terms of state aid, although it was in a more advantageous position insofar as it could plausibly survive without assistance. Ultimately, however, this chiefly

[598] Tim Sharp, "Lloyds Secures 87per Cent Take - Up in Rights Issue to Raise GBP4bn ; Boost from First Bank to Repay Government," *The Herald (Glasgow)*, sec. BUSINESS, June 9, 2009.
[599] Suzy Jagger and Philip Webster, "Lloyds Banking Group is Set for an Early Repayment of £2.3bn," *The Times (London)*, sec. BUSINESS, June 8, 2009.

meant that the bank could refuse to merge with HBOS, while HBOS could not refuse a merger without being forced to accept state aid on more punitive terms. Considerable controversy surrounded rumored negotiations directly between Brown and Lloyds CEO Eric Daniels, alleging that Brown secured a sweetheart deal for Lloyds in the HBOS merger. British officials denied any such back-room dealings took place, maintaining that the merger was already in discussion, and that Brown played only an indirect or superficial role. Moreover, they maintained that the merger still was more advantageous for British taxpayers than any alternative that left HBOS as an independent bank. Even if true, Daniels' access reflects the pattern of political access in liberal financial systems. Healthy banks gain considerable access to policymakers, but once they fail, they lose that access rapidly. Thus, RBS CEO Sir Fred Goodwin and HBOS CEO Andy Hornby had virtually no access once they became dependent on state aid, while Daniels, who could still avoid state aid, had greater potential space for negotiation and access. Unlike Standard Chartered and HSBC, Lloyds had need of some public assistance, so could not wholly escape state influence, but it could hope to raise the FSA-required new capital without an HBOS merger. Therefore, Daniels had more space to negotiate than Hornsby.

Like RBS, HBOS had virtually no allies in the banking sector. Rival UK banks were chiefly concerned that a merged Lloyds-HBOS would be a greater competitive threat to them, but made no move to either provide an alternative source of support to HBOS or to lobby the state for more generous terms toward the bank. This again fits the pattern of liberal banking systems, in which banks have no incentive to see their rivals thrive. Even concerns over systemic risk cannot overcome the collective action problem inherent in a consortium approach. The optimal strategy for other banks, therefore, is to

allow the state to deal with systemic risks by whatever means it deems appropriate, freeing policymakers to act in a way that safeguards taxpayer funds used in assistance and minimizing moral hazard issues.

HBOS was somewhat different from RBS insofar as it had political allies in the Scottish National Party. This is anomalous among UK cases, where Liberal Democrats and Conservatives may have quibbled with the Labour government over how to safeguard taxpayer interests, but never argued for a subsidization of an independent bank. The SNP, and Scottish First Minister Salmond, however, did argue that HBOS should receive subsidization enabling it to remain independent and at least partially private. This anomalous development, however, stems not from a German-style capture by banking interests, but rather due to the broader Scottish independence ambitions of the SNP. The strength of HBOS had been used for years as an element in the campaign for Scottish independence, as evidence that Edinburgh could function as an international banking sector.[600] That, in addition to Scotland's North Sea oil wealth, was cited as proof that an independent Scotland could also be economically viable, and need not be beholden to London banks. HBOS, therefore, was central to the rhetoric of the Scottish National Party as a *Scottish* bank. RBS, the Royal Bank of Scotland, with its significant operations in England and mainland Europe, was, name notwithstanding, less clearly Scottish, and therefore did not attract the attention of the SNP the way HBOS did.[601] Moreover, RBS was always to remain independent, albeit majority nationalized, with

[600] Allan Massie, "The Bail - Out that Crushes SNP's Dream," *Daily Mail (London)*October 15, 2008.; Magnus Linklater, "Crunch has Put Paid to Scottish Independence," *The Times (London)*, sec. FEATURES; Scotland, October 15, 2008.
[601] European Commission, *State Aid no N 422/2009 and N 621/2009 - United Kingdom Restructuring of Royal Bank of Scotland Following its Recapitalisation by the State and its Participation in the Asset Protection Scheme*, pp. 2-3.

operations still headquartered in Edinburgh, while a merged Lloyds/HBOS would be headquartered in London.[602] This fear was justified in part by the fate of TSB, whose Scottish operations were gradually withdrawn to London following its merger with Lloyds. [603] Therefore, SNP support for HBOS was anomalous, but a result of the ambitions of the Scottish independence movement, and not the political clout of HBOS.

Conclusion

The UK responses to the financial crisis of 2007-2009 followed the expected pattern for states with liberal financial systems. The atomized nature of the UK financial system meant that those banks which avoided substantial distress had very little incentive to lobby on behalf of their ailing peers. Moreover, the banking industry organizations, such as the BBA, had very little ability to organized their own members toward a collective response or to influence the political process. Although individual banks were tremendously influential prior to the crisis, with great access to high-level policymakers, they rapidly lost their influence once they failed and were forced to approach the state as supplicants. Unlike in corporatist systems, where healthy banks used their own resources and political influence to both aid distressed banks directly and lobby for more favorable terms, in the UK healthy banks were either indifferent or hostile to failing ones. Healthy banks deepened the distress of Northern Rock by poaching clients and depositors as it failed, and opposed guaranteeing its deposits as state aid to a rival. They similarly would join with UK policymakers in pressuring distressed RBS and HBOS into accepting partial

[602] "What HBOS - Lloyds Deal Means to Scotland." *The Scotsman*, September 19, 2008i.
[603] Bill Jamieson, "If You Believe the Promises on HBOS , Think again You Only Need to Look at what Happened to another Scots Bank , the TSB, for a More Realistic Future Outcome," *The Scotsman*, September 26, 2008.

nationalization, rather than siding with the distressed banks and pressing to secure them more favorable terms.

This reflects the economic interests of the UK banks. The healthier banks, while vulnerable to more general systemic risk, faced few direct costs from the failure of their rivals, with whom they had an arms-length relationship. There was very little cross-holding to impose direct losses, and any loans between banks were generally well-collateralized, insulating the other banks from substantial losses. By contrast, the healthier banks even enjoyed benefits from their rivals' distress, as customers fled to safety, to both state-owned banks and to those banks which had not experienced substantial distress. These divided interests also limited the political impact of the banking industry as a whole, and of its industry organizations. The healthy banks had different interests than the failing ones, and their indifference to the fate of the failing banks gave policymakers a free hand to set policy. Therefore, when setting bank rescue policies, policymakers were largely free from the influence of the banking sector. Failing banks were at the mercy of the state, as private sources were unwilling to assist them, which in turn meant that failing banks could offer little to sway policymakers' positions. Healthy banks still were in a position to negotiate, but either were indifferent to the terms of aid for others or actively wanted state aid to be on punitive terms, which would stigmatize recipients and avoid subsidization of the competition. Therefore, free of banking sector influence, policymakers could focus on more general goals: containing systemic risk and minimizing losses to taxpayers.

The dynamics of intervention in the UK, therefore, fit a two-stage "tipping point" model. Unlike in Germany, however, the balance was not between an early reliance on

private aid and a later shift to generous public aid, but rather from allowing bank failure to later providing punitive state aid. Below a certain level of systemic risk, the dominant policy would be to let the bank fail. This was the case for BCCI and Barings, early in the 1990s. Neither failure produced significant costs across the financial system, so the state's decision to let them fail neither risked systemic collapse nor cost the taxpayers. At most, in this early stage, the Bank of England will provide liquidity in the classic Bagehot formula: on the basis of good collateral to minimize potential losses and on punitive terms to avoid moral hazard from state aid.

Once a bank failure threatens the system as a whole, however, it becomes essential for the state to become involved. The dynamics of liberal financial systems means that consortium rescues, where banks band together to aid their peers, are much harder to organize than in corporatist systems, given the stronger incentives to defect. Therefore, they typically only occur with heavy state involvement and for relatively low value. This was clear in the Lifeboat rescue in the Secondary Banking Crisis, where the Bank of England provided a substantial share of the funding, and was also the case in the Bradford & Bingley underwriting consortium, where only intense pressure from the FSA convinced the banks to contribute a relatively small amount. Private purchases are similarly problematic, as banks will only purchase other banks if they see a clear opportunity for profit. Therefore, they may only be willing to purchase other distressed banks if the state provides additional assistance, as various buyers, such as Lloyds and Virgin Money, demanded to purchase Northern Rock. The one apparent example of banks in the UK collaborating in their response to the financial crisis was the illegal conspiracy to rig the LIBOR rate, in which at least three banks but probably more

conspired to change the published interbank-lending rate in a way which was advantageous for them. However, this both predated the financial crisis and, because the interests of the involved banks were in line, did not involve the kind of generosity to a peer bank found in the healthy banks in Germany sacrificing some of their own capital to preserve an interdependent partner.[604]

This lack of a private alternative compels the state to act in instances of systemic risk, but also gives the state an upper hand in negotiating terms with the bank, as the bank's only alternative to whatever terms the state dictates may be failure. In the UK, policymakers laid out a clear hierarchy of preferred policy tools, designed to minimize costs to taxpayers. Therefore, UK state aid conditions provided the state with control, a

[604] Although a complete account of the details remains obscured, officials at several banks involved in setting the London Interbank Offer Rate (LIBOR) engaged in activity to distort the value to their banks' advantage. The LIBOR, which is supposed to reflect the cost of interbank lending for twenty top London banks, is used by banks and firms around the world to determine the rates of lending and other financial transfers. As such, an artificially high or low LIBOR, with a gap between the LIBOR and the actual cost of interbank lending, can offer substantial advantages to the banks engaged in setting the LIBOR. The LIBOR is calculated by asking the twenty banks to report the cost of their interbank lending, then averaging the middle twelve values. For some unknown period of time, but at least since 2005[], several banks, including Barclays, Swiss bank UBS, and possibly RBS, systematically misreported their cost of interbank lending. In good times, short-term manipulation of the LIBOR enabled these institutions to avoid losses or increase gains from trading positions. In the crisis, in addition to these advantages, underreporting of a bank's interbank lending sent a false signal of confidence to nervous investors, as a lower reported interbank lending rate indicates that other financial actors think the bank is a low risk. Because of this, the Bank of England sought to lower the LIBOR, both by increasing liquidity available to banks from the Bank of England and by pressuring the banks to lower their interbank lending rates through moral suasion. This may have risen to the level of suggesting that banks err on the side of lowering their estimation of their reported interbank lending rate.

The extent of the LIBOR scandal is unknown. Because the lowest and highest four reported rates are ignored in calculating the LIBOR, effectively manipulating the LIBOR to any significant degree would seem to require the cooperation of several banks. Barclays, UBS, and RBS have already been charged with criminal activity, but it is unknown at present if or how many other banks were involved. Even here, the extent of the coordination was more limited than in the German case. In the pre-crisis environment, it is unknown what sort of quid pro quo may have been provided in return for collaboration in fixing the LIBOR rate. During the crisis, the banks known to be involved, Barclays, UBS, and RBS, all were struggling banks, and therefore would all stand to benefit from a lower LIBOR rate. UBS, while not a recipient of aid from the UK, had significant subprime exposure, and received assistance from the Swiss state. Therefore, limited joint action such as this is not unsurprising, even in an atomized liberal system: all parties benefited directly, more than they would have by not cooperating, so there was no collective action dilemma. If one of the healthy banks had participated, that would be more indicative of corporatist-style joint action in the systemic interest. However, until investigations into the scandal by the US, UK, and Canada are complete, the full extent of the LIBOR scandal remains unknown.

substantial share of the profits, or both control and profits in any banks which it aided. The subsequent controversies over job cuts and foreclosures from state-owned Northern Rock and majority state-owned RBS illustrate reasons why the state may prefer a share of profits without control, to insulate elected officials from criticism over unpopular business decisions which may increase the likelihood and speed of repayment of the taxpayer assistance.

Across the UK political parties, there was a general consensus on the shape that state aid should take, in that the terms should be harsh to existing shareholders, designed to minimize the risk of losses to taxpayers, and come with some kind of ownership stake to give the state a share in a bank's return to profits. This position is generally consistent across both time and party, with the Conservatives adopting an extremely hard line on Johnson Matthey Bank in 1984, on par with the terms Labour provided to Northern Rock and Bradford & Bingley. The chief difference between the parties, therefore, was over when the UK banking crisis reached a tipping point where letting the banks fail was no longer an option, and when some form of nationalizing aid should be provided. In the 2007-2009 crisis, the Liberal Democrats argued generally that the tipping point arrived earlier than the Labour government judged, and were among the first to call for nationalization or part-nationalization of distressed banks. The Conservatives argued that the tipping point came later, and that both Northern Rock and Bradford & Bingley should have been allowed to fail into administration and been resolved through a bankruptcy procedure, rather than a nationalizing approach which exposed the taxpayer to potentially greater risks. When the crisis reached a head in 2008, however, the Conservatives generally backed the Labour bank recapitalization plan. The difference among the

parties, therefore, was not about what sort of policy tool to use, or the harshness of the terms with which the banks should be dealt, but over when it was better to let them fail or to nationalize them.

The lone exception among the UK political parties to this pattern was the Scottish National Party, which advocated substantial aid to keep HBOS independent and private. This divergence, however, is due to the SNP's Scottish independence agenda, as a merged, state-owned and London-based HBOS would be less useful in making a case for an independent Scotland than an independent, Edinburgh-based bank would be. Even in this case, though, it was not the political influence of the banking sector which drove the SNP to embrace a pro-HBOS position.

The patterns of response in the UK, therefore, are in line with the predictions for a liberal financial system. Banks which failed found themselves with virtually no allies in the rest of the financial system, either economically or politically. Without a private source of aid, failing banks had no alternative to state aid, and without the healthy banks taking a hand in shaping the aid program, the state could adopt a stern line with the failing banks, requiring capital injections and only offering capital on punitively expensive terms. This, in turn, enabled the state to force the banks to accept state aid on terms which maximized the chances of taxpayers seeing their assistance repaid, stabilizing the system on terms that potentially would even offer taxpayers a profit. In those instances where the state overpaid, chiefly the above-market part-nationalizations of RBS and Lloyds/HBOS, that overpaying was the product of a strategy to encourage shareholder participation. Ideally, this would have diminished the amount of state aid required, but the longer listing of a fixed purchase price required left the state vulnerable to those banks' shares plummeting

in value. Even this instance, therefore, was driven by a strategy of minimizing costs to the taxpayer and maximizing the degree to which shareholders would pay the price for the rescue of their banks.

This is, of course, in significant contrast to the corporatist experience, especially as observed in Germany. As in Germany, there was little division among the major political parties over the general terms of intervention. The two cases differ substantially, however, in both the role played by the healthy banks, and the outcome of the process. In Germany, the banks and their private governance associations would play a significant role in shaping the process, both by providing direct assistance and by taking part in the negotiations over the ultimate outcomes. In the UK, by contrast, the banking associations had virtually no clout, beyond public statements that had little bearing on policy debates. The healthy banks themselves were relatively hands-off, making no move to organize consortium rescues, and participating in the small Bradford & Bingley consortium only grudgingly. They were also shut out of the chief policy debates, and when they did express an opinion, it was typically to protest an unfair advantage provided by state aid.

One other key difference between the UK and Germany was the role played by the European Commission. In several instances, German aid to the banks would have been even more generous than it ultimately was, but implementation was checked by the EC's Competition Directorate, which insisted on reforms to avoid unfair state aid. UK policymakers were subject to the same anti-state aid provisions of the European Union, as laid out in the EC's memo on banking aid.[605] However, this was almost never an issue in

[605] European Commission, "Communication from the Commission — the Recapitalisation of Financial Institutions in the Current Financial Crisis: Limitation of Aid to the Minimum Necessary and Safeguards Against Undue Distortions of Competition," *Official Journal of the European Union* C 10 (May 10, 2009b), p. 2.

the UK case, where state provisions of aid were always harsher to private actors than the requirements of the Competition Directorate. Although subject to the same limits on state aid, the UK almost never ran into issues, while Germany constantly strained against the limits imposed by the EC.

The UK experience in the 2007-2009 crisis therefore shows a pattern of virtually-nonexistent private rescues and much more stringent public interventions than in Germany. This reflects the much different politics surrounding the resolution of the crisis in the two cases. In Germany, the healthy banks and the banking associations were active participants in the policymaking process, organizing and contributing to private and public-private rescues and playing key roles in shaping the public response policies. In the UK, by contrast, the other banks chose to stand by while the crisis spread, neither organizing private rescues nor attempting to influence the development of public ones. In fact, to the degree that the healthy banks expressed an opinion on state rescues, it was concern that the terms of state aid were overly-generous to the failing banks. This left state policymakers free to shape whatever response policies they thought best. While the Conservative opposition lobbied for terms which would impose costs on the banks while minimizing state ownership, such as administration, the Labour government instead established a clear pattern of responses that prioritized maximizing the likelihood of a positive return on state aid, and had no qualms about imposing penalty rates or compulsory nationalization to best ensure that positive return. Unchecked by the healthy banks, or a Tory opposition that similarly favored harsh terms to the bankers, the government's chief source of resistance were the failing banks. These banks, however, without allies among the healthy banks and with only toothless banking associations, had

no clout to resist mandatory capitalization requirements or full nationalizations as dictated by the UK state.

Chapter 7: The United States

The crisis in the United States was perhaps the most high-profile in any of the 2007-2009 crisis, given the scale of the US financial system and the centrality of that system to global markets. Although it bears some similarities to Germany, especially in also having a federal system, in its response to banking crises the US much more closely resembles the UK. Like the UK, the US has a financial system dominated by stock market capital. Both large and small banks play a significant role, but provide a minority of capital to the economy. Also like the UK, the US has a long history of both laissez-faire approaches to economic management in good times and heavy-handed and compulsory intervention when banks run into distress. Therefore, while Germany would rely on voluntary plans and avoid state ownership, nationalizing only the massive and about to collapse Hypo RE, the US, like the UK, would rely heavily on compulsory nationalization and part-nationalizations, on terms that were generally favorable to the state and onerous to the banks. Because of this, the US would be the most successful of the three cases in recovering the money it contributed to financial rescues, avoiding losses or turning a profit on the majority of its rescue operations.

The US response to the crisis would be sharply criticized, especially by domestic actors, as being far too generous and lenient to the banks and bankers. However, closer analysis of the US response, especially in comparison with responses elsewhere, casts those programs in a far more favorable light. Most of the banks dealt with in the crisis were handled by the Federal Deposit Insurance Corporation (FDIC) in a relatively low-profile manner. This obscured the fact that 335 banks and $2.65 trillion in assets were managed in a way that both protected the taxpayers and the broader economy from

losses, and imposed real costs on bankers with minimal moral hazard problems.[606] The programs outside of the FDIC, especially the Troubled Asset Relief Program (TARP) similarly imposed higher costs on bankers than were generally perceived. Moreover, despite the extremely high immediate costs, the US programs were structured in such a way that the taxpayers' money has largely been returned as of 2012.[607] In contrast, the comparably sized British and German programs remain at a loss, with the British plan not likely to produce gains for some time, and the German one predicted to produce a net loss to taxpayers.[608]

The US was able to implement such a plan in large part because the banks played an extremely small role in the drafting and implementation of rescue policies. The failing banks were shut out of the policy process almost entirely, with bank management not even kept in the loop by Treasury or Federal Reserve officials, even as those policymakers negotiated the banks' terms of sale. The healthy banks, which largely kept their access to policymakers, displayed virtually no interest in assisting their failing peers, except in circumstances where they could secure a good deal to themselves. This meant that attempts to organize private rescues, which succeeded in Germany, fell flat in the US. However, this also meant that policymakers had a free hand to draft and implement policies they felt best defended the interests of the US state, taxpayers, and broader economy. As such, the shape of US bank rescue policies reflected not the influence of

[606] Federal Deposit Insurance Corporation, "Historical Statistics on Banking," Federal Deposit Insurance Corporation, http://www2.fdic.gov/hsob/ (accessed March 7, 2013). $646 billion was from standard resolution procedures, and $635 billion from the FDIC-brokered nationalization and sale of Wachovia.
[607] The FDIC-managed procedures imposed no losses on taxpayers, while the other capital-injection programs have almost all produced positive returns. The chief outstanding losses are from the nationalization of the GSEs (Fannie Mae and Freddie Mac) and the automotive-bailout component of TARP. U.S. Department of the Treasury, *Troubled Asset Relief Program (TARP) Monthly Report to Congress – December 2012* (Washington, DC: United States Department of the Treasury,[2013]).
[608] Derek Scally, "Banks to Pay Dearly for German Bailout," *The Irish Times*, sec. FINANCE; Global Banking Crisis, October 14, 2008.

banks and bankers, but the internal policy preferences and debates of US policymakers in the regulatory agencies and Congress.

As in the UK, the limited role played by both healthy and unhealthy banks in the US can be traced to the structure of its national financial markets. The United States, to an even greater extent than the United Kingdom, is an exemplar of a stock-market-based financial system, with stock markets providing over 80% of capital to firms, and banks under 20%.[609] This is much higher than Germany's 1:2 stock market:bank capital ratio, and higher even than the UK's 1:1 ratio.[610] This, in turn, meant greater competition between US banks due to the pressures for short-term, easily broken arrangements created by a stock market capital-based system. As such, US banking has long been extremely atomized, with very little inter-firm cooperation and no significant banking associations. Lobbying groups such as the American Banking Association exist, but have significantly less clout than the individual banks and no ability to organize the banks around a common cause. At times, the major banks may even take opposite sides on an issue than the banking associations. When the FDIC debates changes to the funding rules for its bank-funded Deposit Insurance Fund, the American Banking Association and Financial Services Roundtable were opposed by several of the major US banks. In that instance, reflecting the clout of the banks over the banking associations, the banks won the day over the bank lobbies.[611]

[609] Thorsten Beck, Asli Demirgüç-Kunt and Ross Levine, "Financial Institutions and Markets Across Countries and Over Time-Data and Analysis," *World Bank Policy Research Working Paper Series, Vol* (2009).
[610] Ibid.
[611] Sheila Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself* (New York: Free Press, 2012), pp. 23-24.

In addition to being intensely competitive with each other, US banks before the crisis were functionally divided as well. British banks divide by scale, but are generally universal banks, combining both investment and commercial banking functions. From 1933 to 1999, the Glass-Steagall Act legally divided American banks between deposit-taking commercial banks and securities-managing investment banks. Commercial banks focused on retail deposits and lending, but were legally prohibited from engaging in stock market speculation, a task left to investment banks. With Glass-Steagall's repeal in 1999, the legal barriers to a single institution engaging in both commercial and investment banking disappeared, but until 2008, a practical divide between commercial and investment banks persisted. With the exception of Citigroup, banks moved to a universal banking model only timidly. The commercial banks in some cases obtained a small investment-banking arm, but remained primarily focused on commercial banking activities. Similarly, no investment bank obtained or developed a commercial banking arm of any significant size.

This divided banking is reflected in the patchwork US regulatory regime. Although the Federal Reserve is given formal authority to regulate the entire banking system, in practice regulation is divided between half a dozen federal agencies, in addition to state-level regulators. As of 2007, regulation of the national commercial banks was divided between the Office of the Comptroller of the Currency (OCC) and the Office of Thrift Supervision (OTS), independent agencies housed within the Department of the Treasury. Additionally, the Federal Deposit Insurance Corporation (FDIC) serves both as the manager of the national deposit insurance program and a "backup" regulator, with the power to second-guess the primary regulator's opinions. Investment banks were

more lightly regulated, with responsibilities divided between the Federal Reserve and the Securities and Exchange Commission (SEC). The SEC, however focused more on fraud prevention than systemic stability.[612] Because of the geographic concentration of investment banking on Wall Street, the Federal Reserve Bank of New York was especially prominent in Fed regulation of the investment banks. A final regulator relevant in the 2007-2009 crisis was the Office of Federal Housing Enterprise Oversight (OFHEO), overseeing the government-sponsored but privately-owned and -run Fannie Mae and Freddie Mac, major purchasers of mortgages and mortgage-backed securities. Beyond the federal level, state regulators were in charge of financial institutions without a national charter, though commonly took their lead from the national regulators and operated under Federal Reserve supervision.

This divided regulatory regime makes US crisis management almost inevitably a negotiation between various agencies claiming jurisdiction. In theory, this could make the US system more permeable to firm influence than Germany's single-regulator model. Prior to their merger into a single agency in 2010, the OTS and OCC in particular jealously guarded their prerogatives against each other and against the FDIC.[613] In practice, however, the limited capacity of US firms for collective action means that firms play little direct role in shaping policy, responding to state proposals rather than helping to shape them.

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[612] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011* (Washington: U.S. G.P.O, 2011), p. 66

[613] Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself,* pp. 32, 41, 77

Because of the divided nature of the US regulatory regime, there are substantially different policies and precedents in place when different types of financial institutions fall, reflecting the historical commercial-investment bank divide. Prior to 2008, the US adopted a laissez-faire attitude toward investment banks, letting distressed banks fall and assuming that their customers were 'sophisticated investors,' capable of understanding and managing the risks involved in stock market speculation.[614] Commercial bank customers, however, were not assumed to have such specialized financial risk-management expertise. Unlike sophisticated investors, these general depositors are less-able to inform themselves of risks through an in-depth understanding of market signals, and less-able to insulate themselves from the risks of bank failure through diversified investments. General depositors therefore are both more vulnerable, and because of that vulnerability, more likely to engage in panic behavior. Such bank panics and runs can exacerbate problems, and even cause healthy banks to fail on only the rumor of distress. Moreover, because general depositors are both more numerous and more likely to lose the vast majority of their savings in a bank failure, the collapse of a commercial bank could cause substantial economic catastrophe should those deposits be wiped out.

As such, the United States has long had in place a mechanism to resolve failed commercial banks through the Federal Deposit Insurance Corporation (FDIC). The FDIC guarantees that insured depositor accounts will be covered up to a set limit, $250,000 as of October 2008, insulating general depositors from fear of losses. To maintain this guarantee, the FDIC has a standing pool of money, pre-funded by levies on insured banks, and statutory authority to temporarily nationalize insured banks. As such, bank

[614] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 201*, pp. 66, 555

failures, even of large institutions or of a large number of institutions, can be handled in a predictable procedure, relying on established protocols and resources. This has the added advantage of avoiding a scramble by regulators to develop an ad hoc solution, which will likely prove to be sub-optimal given the time constraints of policymaking in a financial crisis.

The situation is quite different for the investment banks and other non-FDIC-insured financial firms. The dominant approach for firms regulated by the SEC or the Federal Reserve assumed that the typical investment bank client was a 'sophisticated investor,' presumed to be capable of understanding and absorbing the risks of financial speculation.[615] As such, while aid to unsophisticated depositors is seen as necessary to prevent panics, aid to sophisticated investors would be problematic from a moral hazard perspective, insulating them from risks they should have understood and prepared for. Moreover, until the 1990s, investment banks tended to be considerably smaller than their commercial-bank peers, meaning the potential for damage to the wider economy from their collapse was more limited.[616] Thus, for most of the period since the enactment of Glass-Steagall, US investment banks and other financial firms had no set procedures for dealing with failures. Rather, each failure was dealt with on an ad hoc basis. While the commercial banks were dealt with in a relatively straightforward fashion, regulators would scramble to find a solution to each individual investment banks or other financial firm in distress. This approach was largely sufficient from the Second World War through the 1980s, a period of relative financial stability in the United States and,

[615] Ibid., pp. 66, 555
[616] Ibid., p. 73

moreover, a period in which investment banks were considerably smaller and less interconnected than their commercial bank peers.

In the decades prior to the 2007-2009 crisis, however, the increasing size and interconnectedness of the non-FDIC-insured institutions grew more problematic, and regulators proved more willing to take more substantial steps to cushion the blow of their collapse. The 1990 collapse of Drexel Burnham Lambert, at the time the country's fifth-largest investment bank, would be the last time until 2008 that US regulators would let an investment bank simply fall into bankruptcy. The Federal Reserve would step up to provide liquidity support to the other investment banks, such that they would not fail as a result of an inability to borrow in the panic surrounding Drexel's collapse, but no measures were taken to prevent Drexel's collapse.[617] The following year, investment bank Salomon Brothers would also run into difficulties, this time related to financial malfeasance and subsequent fines imposed by the SEC. Again the US did not intervene directly, and Salomon only avoided failure by selling itself to Travelers Group, an insurance company.[618] These two failures typified the 20th century approach to managing investment bank failure in the US, with the banks either allowed to fail or pushed into mergers, and the state playing a minimal role in managing those failures.

By 1998, however, the willingness of US regulators to let a bank fail had diminished substantially. The next major failure, of hedge fund Long Term Capital Management (LTCM), produced extensive efforts by the Federal Reserve to organize a rescue. LTCM, though large for a hedge fund, was far smaller than Drexel or Solomon Brothers. Unlike those institutions, however, LTCM was highly interconnected, and its failure would

[617] Ibid., p. 73

[618] Roger Lowenstein, *When Genius Failed: The Rise and Fall of Long-Term Capital Management* (New York: Random House, 2000), pp. 114-116

impose severe losses on most of the major Wall Street firms. Federal Reserve Chairman Alan Greenspan judged that letting the firm simply collapse into bankruptcy would be too damaging to the broader economy, and therefore the Federal Reserve negotiated a rescue, in a break with the sophisticated-investor approach to financial regulation.[619] This rescue, organized by the Federal Reserve, was the most successful attempt at organizing a private consortium rescue in US finance. The LTCM private consortium rescue is worth examining, as it illustrates the narrow constraints under which such a private rescue is likely in the atomized US financial system. LTCM met several criteria which made such a rescue more likely. The major banks were exposed enough to LTCM that its failure would cost them significantly.[620] At the same, time, LTCM was small enough to not be a competitor to the major investment banks, such that the banks saw little opportunity to gain from its collapse. This combination, of much to gain from LTCM's failure and little to lose from its continued existence, differed from later situations, where, for instance, Lehman Brothers would have survived as a major rival to the other investment banks. Moreover, LTCM was small enough relative to the major firms that their contributions to save it would not be substantial relative to their own balance sheets.[621] Even with these three conditions met, low cost, high benefit, and low downside, the consortium could only be assembled under the heavy pressure of the Federal Reserve, as no investment

[619] Ibid.; Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, pp. 195-201; United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 88.
[620] Lowenstein, *When Genius Failed: The Rise and Fall of Long-Term Capital Management*; Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, pp. 194-195; United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 88.
[621] Lowenstein, *When Genius Failed: The Rise and Fall of Long-Term Capital Management*, pp. 207, 215

bank would step up to organize the rescue itself.[622] This therefore stands in sharp contrast to Germany, where the major banks proved willing to not only provide substantial support to firms of comparable size, but also did so of their own volition, without prompting by the state. LTCM also signaled a significant shift in US policy toward financial failure, in which the state was now far less willing to tolerate losses to 'sophisticated' investors.

Even as US regulators indicated their shift away from tolerating losses to sophisticated investors, they simultaneously rolled back the reach of financial regulations. This seeming paradox illustrates the strength of US financial actors when healthy. Although little regulation was rolled back following the 1999 repeal of the Glass-Steagall commercial/investment bank separation, regulators also declined to expand regulation to the increasingly important world of 'shadow banking,' unregulated financial actors paralleling the functions of the commercial banks, and also declined to regulate new financial instruments, such as Credit Default Swaps and Collateralized Debt Obligations, which purported to allow banks to lower their capital ratios by better-distributing risks of losses.[623]

In 2006, however, the Bush Administration appointed a series of new heads of the regulatory agencies with a greater concern for systemic risk. A new Federal Reserve Chair and a new Treasury Secretary, Ben Bernanke and Henry Paulson, respectively, began to take steps toward organizing a systemic response policy for the investment

[622] Ibid., p. 183

[623] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011* pp. 59, 60, 89; David Wessel, *In Fed we Trust: Ben Bernanke's War on the Great Panic* (New York: Three Rivers Press, 2010), p. 64; Joseph E. Stiglitz, *Freefall: America, Free Markets, and the Sinking of the World Economy* (New York: W.W. Norton & Co, 2010), p. 141.

banks and other non-FDIC institutions. New heads of the FDIC and OFHEO, Sheila Bair and James Lockhart, began to also look seriously at systemic risk. Federal Reserve Chair Bernanke, who was more concerned about the dangers of speculative bubbles than his predecessor Alan Greenspan, soon took action to decrease the free flow of money, and raised the rate at which the Federal Reserve lent short-term to banks.[624] The new Secretary of the Treasury, Henry Paulson, a former CEO of investment bank Goldman Sachs, anticipated the threat of a financial crisis in the investment banks, though by his own admission neither the scale nor the proximate cause.[625] The increased size and interconnectedness of the investment banks, however, meant that simply letting them fail, as Drexel was allowed to fail in 1990, would now bring unacceptable consequences to the broader economy. Paulson therefore took initial steps toward developing a systemic response plan for investment bank failure, hoping to give the Treasury as clear a wind-down authority for investment banks as the FDIC possessed for commercial banks. This plan, dubbed "Break The Glass," proposed to provide such an authority through a government recapitalization plan.[626] In its initial form, this would have taken the form of a toxic-asset purchase, with an initial scale proposed at $500 billion. Despite initial support from Barney Frank, the Ranking Minority Member of the House Financial Services Committee, and one of the chief Democrats in financial policy negotiation, the

[624] Roger Lowenstein, *The End of Wall Street* (New York: Penguin Press, 2010), p. 69; United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 29.
[625] Henry M. Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System* (New York: Business Plus, 2010), pp. 47, 94, 139; Andrew Ross Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves* (New York: Viking, 2009), p. 83; Wessel, *In Fed we Trust: Ben Bernanke's War on the Great Panic*, p. 176.
[626] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, pp. 131-9; Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, pp. 83, 91; Wessel, *In Fed we Trust: Ben Bernanke's War on the Great Panic*, p. 176

difficulty of passing major financial reform without the pressure of a crisis meant that the plan never advanced beyond the hypothetical stage.[627]

Therefore, when the US entered the crisis, beginning in 2007, two very different response regimes were in place, depending on the type of institution in distress. For the commercial banks, a very clear regime existed under the auspices of the FDIC, with a large pool of money at the FDIC's disposal for just such an occasion, paid by a levy on the FDIC-insured institutions. Until the scale of the crisis became extremely large, the FDIC encountered relatively little difficulty in resolving those firms under its purview. The non-FDIC-insured institutions, however, had no such clear authority. Despite Paulson's proposal, the regulatory regime had not substantially evolved beyond where it was when Drexel failed in 1990, and reflected neither the increased size and interconnectedness of the investment banks, nor the wider range of increasingly-unsophisticated investors exposed to the consequences of investment bank failure. This would create, therefore, two very different dynamics of policy response between the two types of banks. Each can be evaluated separated, but since both responses were implemented simultaneously, a brief overview of the timeline of events in the US crisis is necessary.

Timeline

The first major US institution to run into trouble was Countrywide Financial, which was an FDIC-insured institution heavily invested in sub-prime mortgages. When those assets began to lose value, Countrywide also fell into distress, and was ultimately resolved by being purchased by Bank of America in January of 2008 without the

[627] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 139

involvement of policymakers.[628] The next major institution, and the first investment bank to run into problems, was Bear Stearns, the smallest of the five major investment houses. In March 2008, Bear would be sold to JP Morgan-Chase, a large commercial bank, in a deal in which $29 billion of Bear Stearns' anticipated losses from subprime assets would be absorbed by the Federal Reserve. This would be the only example of the US government directly subsidizing a purchase, and the most naked demonstration of moral hazard in the US response. The $29 billion deal, which came to be known as a "Jamie Deal" after JP Morgan CEO Jamie Dimon, would set a precedent complicating future efforts by US policymakers to negotiate mergers, as other would-be buyers would demand their own "Jamie Deals."

On July 14, IndyMac, a major commercial bank, would be resolved through the FDIC's temporary-nationalization procedure. The following month, Fannie Mae and Freddie Mac, two firms central to the mortgage industry with private ownership but a quasi-public function, would both be put into conservatorship, a form of nationalization, by their regulators. September would be the apex of the crisis in the United States, with the near-simultaneous distress of the third- and fourth-largest investment banks, Merrill Lynch and Lehman Brothers, as well as the collapse of massive insurance company AIG. AIG would be part-nationalized, Merrill Lynch sold to Bank of America, and Lehman Brothers allowed to fail into bankruptcy, all in the same week. In the aftermath of these events, the last remaining major investment banks, Morgan Stanley and Goldman Sachs, would reorganized themselves as bank holding companies, which increased oversight but allowed them to borrow from the Federal Reserve. Two more massive commercial banks would also fail with the next few weeks, as Washington Mutual ("WaMu") would be

[628] Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 76

seized by the FDIC and sold to JP Morgan, and Wachovia would be sold to another major commercial bank, Wells Fargo, in a sale negotiated by the FDIC.

Following this tumultuous month, the US would organize a systemic response plan, the Troubled Asset Relief Plan (TARP). TARP as initially proposed was a toxic-asset purchase plan modeled on "Break The Glass," but as implemented involved direct investment, or partial nationalization, in both investment and commercial banks. It would begin with the mandatory partial nationalization of the nine largest US banks, and after that would become a voluntary plan. Major firms to accept TARP injections after the initial announcement included AIG, Citigroup, and Bank of America. TARP would also subsequently be used to provide support to Chrysler and General Motors, two of the Big Three US automakers.

The Commercial Banks and the FDIC

Unsurprisingly, much of the attention given to US response policies in the 2007-2009 crisis focused on the ad hoc rescues of the investment banks and other major financial institutions. These rescues produced the greatest drama, given the scramble for policymakers to respond quickly and in unprecedented ways. They are also are the instances where policymakers could most credibly be accused of bending to financial interests or providing an undeserved bailout to the financial industry.

Overlooked in much of the discussion of the US responses to the banking crisis were the failures of the commercial banks, and the role the FDIC played in resolving those failures. Although it didn't get the attention of the other agencies, the FDIC oversaw the resolution of by far the majority of institutions in crisis, and a significant portion of the

assets involved as well, resolving 335 banks and $2.65 trillion in assets.[629] Among the banks which failed were several of systemic importance. Independent National Mortgage Corporation ("IndyMac"), with $30 billion in assets was, at the time of its failure, the second largest bankruptcy in US history.[630] Washington Mutual ("WaMu") held $307 billion in assets, making it comparable to Bear Stearns in size.[631] Wachovia, resolved through an FDIC-brokered sale to Bank of America rather than receivership, rivaled Lehman Brothers in size, with $635 billion in assets to Lehman's $639 billion.[632]

The Federal Deposit Insurance Corporation (FDIC) resolved these banks on what is essentially a temporary nationalization model. If a member bank falls below a certain capital threshold, and the judgment is made by the bank's regulators that the firm is no longer solvent, the FDIC puts that bank into conservatorship or receivership. This means the agency takes ownership of the bank, wiping out the existing owners' value, and resolving the bank's assets and liabilities. The remaining property of the bank, including physical property and financial assets, are sold whole (in a conservatorship) or piecemeal (in a receivership) to other banks. Depositor accounts are, if possible, sold to another commercial bank, typically in a process arranged in advance of the nationalization to minimize market disruptions and the time the bank is in public hands.[633] In the absence of a buyer, depositors are paid up to a set amount on their accounts, $250,000 as of October 3, 2008. Debts to creditors are settled on basis of seniority as in a bankruptcy proceeding. What capital is needed to manage this process is drawn from the FDIC's

[629] Federal Deposit Insurance Corporation, *Historical Statistics on Banking*
[630] Lowenstein, *The End of Wall Street*, p. 144.
[631] Federal Deposit Insurance Corporation, *Historical Statistics on Banking*
[632] Federal Deposit Insurance Corporation, "Statistics on Banking," Federal Deposit Insurance Corporation, http://www2.fdic.gov/sdi/sob/ (accessed March 7, 2013).
[633] Federal Deposit Insurance Corporation representatives, Interview by author, July 7, 2011.

Deposit Insurance Fund, which all insured banks pay into. Any profits realized from the resolution of a failed bank go back into the Fund.

This is a highly effective model for resolving the failure of commercial banks, solving a number of problems arising from bank failure. It is predictable, having been established policy for decades. There is little uncertainty surrounding enactment of policies, and little of the time-consuming political debate which surrounds the failure of other institutions. Market investors react poorly to the uncertainty surrounding the distress of an American investment bank or a German universal bank, but can anticipate what will happen when an FDIC-insured bank fails.[634] Timely resolution also contains the costs of a bank failure. The longer a bank lingers in limbo, the greater the costs of resolving it, as more and more investors desert it. Acting quickly can avoid the most extreme of these losses. Most importantly, FDIC nationalization minimizes damage to the broader economy. Depositors are covered up to a set, high, amount, and other creditors can expect an orderly resolution of their situations. This is all done with a minimum of moral hazard. Depositors are made essentially whole, as are creditors if the sale price allows it. The bank owners, however, still bear the costs of their firm's failure, receiving at best a fraction of the firm's value. Because the nationalization is explicitly temporary, the FDIC rarely finds itself owning a substantial share of the banking industry for long.[635] Thus, the potential negative effects of state ownership of a portion of the financial sector are mitigated.

In the crisis, the FDIC proved adept at managing even the failure of large and systemically-important institutions. Although it went largely unremarked-upon at the

[634] Ibid.
[635] Ibid.

time, the 335 banks with $2.65 trillion in assets resolved between 2007 and 2011 made up the vast majority of distressed institutions and, although exact asset values are difficult to calculate, a signification portion of the total assets held by distressed institutions in the crisis.[636] The FDIC resolved these institutions with a minimum of moral hazard, given its approach of mandatory nationalization at minimal compensation. Due to its industry-funded Deposit Insurance Fund, these institutions were resolved at no cost to the taxpayer. Moreover, the disruptions caused by these resolutions were relatively minor, especially compared to the panic surrounding the major investment banks and non-bank financial institutions. Even IndyMac's closure caused relatively little concern, and occurred with a minimum of politicking.[637] Only the largest two commercial banks to fail, WaMu and Wachovia, saw intense political pressure, and even then the FDIC showed a consistent focus on resolving with a minimum of moral hazard.

Washington Mutual ("WaMu")

WaMu, with $307 in assets at the time of its closure, was the largest insured depository institution in US to fail, and comparable in size to Bear Stearns.[638] Although it was 110 years old, WaMu had only in the last three decades evolved from being a small Seattle-area community bank to one of the US's largest financial institutions.[639] Much of its rapid growth had come through its mortgage business, leaving the bank highly

[636] Federal Deposit Insurance Corporation, *Historical Statistics on Banking*
[637] Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 80; Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 190; United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011,* p. 408.
[638] Federal Deposit Insurance Corporation, *Historical Statistics on Banking*; United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 408
[639] Kirsten Grind, *The Lost Bank: The Story of Washington Mutual--the Biggest Bank Failure in American History* (New York: Simon & Schuster, 2012). p. 14

exposed to a collapse in the value of mortgage-backed assets. In the last quarter of 2007, WaMu took $1.9 billion in mortgage losses, with another $1.1 billion in losses in the first quarter of 2008.[640] Therefore, WaMu had come into trouble relatively early, though while healthy enough to win the support of its primary regulator, the Office of Thrift Supervision (OTS), it was able to resist pressure to sell itself or take other steps to avoid failure.[641] As it failed, however, it lost the support of the OTS, and eventually was forced into FDIC receivership, wiping out all shareholder value.[642] WaMu therefore illustrates how US firms' influence declines along with their health, as well as the value of a pre-established resolution policy.

WaMu had been viewed as a problem bank by the FDIC since March 2008, but the FDIC was blocked from applying direct pressure by the bank's primary regulator, the OTS.[643] With the sale of Countrywide to Bank of America and of Golden West to Wachovia, the OTS had lost two of its three largest institutions to rival national regulator the Office of the Comptroller of the Currency (OCC).[644] It was therefore reluctant to pressure WaMu into a merger that would take WaMu out of the OTS's oversight as well. Therefore, in early 2008, when JP Morgan expressed interest in buying WaMu, the OTS instead encouraged WaMu to seek a capital injection from private equity group TPG.

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[640] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011,* p. 408

[641] Grind, *The Lost Bank: The Story of Washington Mutual--the Biggest Bank Failure in American History*, p. 227; Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 86-89

[642] Ibid., p. 92; Grind, *The Lost Bank: The Story of Washington Mutual--the Biggest Bank Failure in American History*, p. 311; Lowenstein, *The End of Wall Street*, p. 239

[643] Grind, *The Lost Bank: The Story of Washington Mutual--the Biggest Bank Failure in American History*, p. 220; Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 89; United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 409.

[644] Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 76

TPG offered the better deal for WaMu shareholders, with a $7.2 billion injection at $8.75 a share, while JP Morgan offered to purchase the whole bank at $5 a share, at a time when WaMu was trading at $11 a share. The OTS declined to pressure WaMu into a sale, which would have provided the protection the FDIC saw as necessary.[645] The TPG injection, unlike the JP Morgan acquisition, kept WaMu under OTS supervision.

The OTS-FDIC feud would continue through 2008, deepening with the fall of IndyMac.[646] The OTS's support of WaMu, however, only lasted so long as WaMu could remain open without assistance. The OTS was willing to provide regulatory relief to WaMu, but lacked the ability to provide capital or liquidity support. The FDIC could provide capital support, though only by taking the bank into government ownership first. Capital support to a privately-owned bank could only be given through a "systemic risk exception," which would have required Federal Reserve approval. The FDIC did not seek such an exception for WaMu, confident in its ability to manage WaMu through receivership.[647] Instead, the FDIC began soliciting buyers for WaMu, both as an open bank under private ownership, and as a closed bank, after an FDIC seizure to put it in receivership.[648] The Federal Reserve could have expanded liquidity access to WaMu, but similarly declined, and joined the FDIC in pressuring WaMu into a sale.[649]

Ultimately, WaMu management balked at any pre-crisis sale, unwilling to accept the low prices the bank commanded in its distress, and continued to petition the state for

[645] Ibid. , p. 89; Grind, *The Lost Bank: The Story of Washington Mutual--the Biggest Bank Failure in American History*, pp. 188-189
[646] Ibid., p. 242
[647] Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, pp. 93-94
[648] Ibid. , p. 92; Lowenstein, *The End of Wall Street*, p. 239; Grind, *The Lost Bank: The Story of Washington Mutual--the Biggest Bank Failure in American History*, p. 284
[649] Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p.91; Grind, *The Lost Bank: The Story of Washington Mutual--the Biggest Bank Failure in American History*, p. 292

support to keep it open as an independent entity.[650] This culminated with WaMu CEO Alan Fishman openly admitting that WaMu had been mismanaged, though by his predecessors, and petitioning for $20 billion in Treasury loans despite the moral hazard, in order to preserve systemic stability.[651] These pleas fell on deaf ears at the Federal Reserve, Treasury, and FDIC, and plans were made to put the bank into receivership. JP Morgan, which had been rebuked by WaMu management in its efforts to buy the bank directly, gladly bought it out of receivership.[652] The FDIC concealed that the other potential buyers, Santander, Wells Fargo and Citi, declined to bid, causing JP Morgan to make a competitive offer. In contrast, knowing that they were the only potential buyer for Bear Stearns had enabled JP Morgan to win much more favorable terms. When CEO Jamie Dimon learned that JP Morgan was the only bidder for WaMu, he could only rue that, if he had known, he "would have bid a dollar."[653]

The resolution of WaMu demonstrated the strength of the FDIC resolution process. WaMu shareholders and management were wiped out, and the bank resolved at no cost to taxpayers, avoiding both moral hazard and perverse redistribution issues. However, unlike in a bankruptcy failure, WaMu was resolved in an orderly fashion, causing relatively minimal market disruption. Moreover, because the predetermined bid process enabled greater secrecy than ad hoc proceedings, the FDIC was able to prevent JP Morgan from realizing its potential leverage as the sole interested buyer. The WaMu

[650] Ibid., p. 294
[651] Ibid., p. 294
[652] Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, pp. 90, 92; Grind, *The Lost Bank: The Story of Washington Mutual--the Biggest Bank Failure in American History*, p. 246
[653] Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 92; United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 485

resolution also illustrates the limits of a bank's influence. WaMu had the ability to resist FDIC pressures to merge so long as it could sustain itself without state support, as the OTS wanted to promote WaMu as the most high-profile bank under its oversight. Once WaMu's health declined, the OTS quickly shifted position to be in line with the FDIC, and forced the bank to accept receivership. Would-be saviors, such as JP Morgan, chose to let the government resolution play out and buy WaMu out of receivership rather than petition for state aid to obtain the bank from its original private owners.

Wachovia

Shortly after WaMu's failure, Wachovia came under pressure. Through its acquisition of Golden West, Wachovia had exposed itself to the same toxic asset problems as WaMu and IndyMac before it.[654] However, Wachovia was substantially larger than even these two institutions, with twice as much asset value as WaMu and twenty times that of IndyMac.[655] As such, despite the seeming success of the WaMu resolution, both Paulson and New York Federal Reserve President Geithner expressed concern about the FDIC process going forward.[656] They feared that the losses to debtholders at WaMu were too great, and that the takeover, although relatively minor in its impact, disturbed markets to an unacceptable amount. Therefore, when Wachovia, an even larger commercial bank, ran into distress, they moved for an ad hoc emergency procedure. Even here, though, the FDIC showed a clear focus on minimizing moral hazard, resisting pressure for a subsidized sale.

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[654] Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 95
[655] Federal Deposit Insurance Corporation, *Historical Statistics on Banking*
[656] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, pp. 496-7; Wessel, *In Fed we Trust: Ben Bernanke's War on the Great Panic*, p. 220; United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 486

Although the Federal Reserve, especially New York Fed President Tim Geithner, wanted Wachovia to be sold rather than placed into receivership, Wachovia's toxic asset problems and the Bear Stearns precedent made it difficult to attract a buyer without government assistance.[657] Wachovia's own management opposed both receivership and subsidized sale, and offered instead a proposal for Wachovia to raise its own capital and remain an independent institution. This proposal was not regarded as serious by anyone in the intra-regulator debates, and was dismissed accordingly.[658] Although some in the debate, especially Geithner, wanted to keep Wachovia out of receivership, this was not due to pressure from Wachovia management or shareholders, who were ultimately largely shut out of the debate.

Instead, the FDIC would make the crucial decisions on the fate of Wachovia. Once support for a state-assisted sale was agreed-to in principle, two offers remained. Citi offered to pay $1 a share, with losses over $42 billion on a $312 billion pool of toxic assets absorbed by the FDIC. In exchange, the FDIC would receive $12 billion in preferred stock and warrants, making it a good deal for the FDIC if Citi were to remain healthy.[659] The other offer, from commercial bank Wells Fargo, was for loss protection to cover a smaller $127 billion pool of assets, with Wells taking the first $2 billion in losses, and the FDIC taking 80% of losses above that.[660] Although Wells Fargo was

[657] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, pp. 472, 495
[658] Wessel, *In Fed we Trust: Ben Bernanke's War on the Great Panic*, p. 222
[659] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 489; Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 101
[660] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 489; Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 102

healthier, Citi's proposal was better for the FDIC, which expected Wachovia's losses to be between $35 billion and $52 billion. Wells' proposal almost inevitably would cost the FDIC an estimated $5.6-7.2 billion, while the Citi proposal was estimated to cost the FDIC nothing.[661] Therefore, the FDIC supported the Citi bid, which was put to the Wachovia board as the only offer Wachovia would receive before receivership would be invoked. Given a choice between a sale to Citi and receivership, and no chance of the state supporting Wachovia as an independent institution, the Wachovia board voted to accept the Citi bid.[662]

However, before Citi and Wachovia could close the deal, Wells Fargo made a second offer. Having examined Wachovia's books in greater detail, and seeing tax advantages in being able to use Wachovia's losses to reduce taxable income, Wells Fargo made a new offer of $7 a share with no state assistantship.[663] Despite being now a proposal without government support, this new offer nevertheless met some resistance, especially from Geithner.[664] Geithner had two concerns. The first was over a loss of government credibility as a broker, if it backed down from an all-but-completed deal.[665] The second was over Citi, which Geithner hoped to help prop up through a state-backed

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[661] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 489; Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 102

[662] Ibid. , p. 102; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 317; Wessel, *In Fed we Trust: Ben Bernanke's War on the Great Panic*, p. 224

[663] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 490; Wessel, *In Fed we Trust: Ben Bernanke's War on the Great Panic*, p. 224; Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 104

[664] Wessel, *In Fed we Trust: Ben Bernanke's War on the Great Panic*, p. 226; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 327; Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 105

[665] Wessel, *In Fed we Trust: Ben Bernanke's War on the Great Panic*, p. 226; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 327

merger with Wachovia.[666] However, others within the policy debate, especially Bair and Paulson, strongly favored the Wells bid, which, by being wholly private, not only removed risk from the government, but also removed the moral hazard problem of providing another subsidized merger.[667] Citi, still wanting to purchase Wachovia, offered to raise its price to $7 a share, if it could keep the loss-sharing agreement.[668] The FDIC demurred, not wanting to help Citi win a bidding war against a rival which did not need government assistance, and the rival offer was presented to the Wachovia board.[669] Given the choice between a $7 a share bid from Wells Fargo, a $1 a share bid from Citi, and a loss of all shareholder value in receivership, the Wachovia board voted unanimously to merge with Wells Fargo.[670]

Even though receivership was not used for Wachovia, its resolution nevertheless illustrates the advantages that standing procedure gives policymakers in negotiations with firms. In contrast to the investment banks, which could threaten to go into bankruptcy and wreck massive economic damage, Wachovia's alternative to accepting the mergers the government presented to it was receivership, a procedure causing far less collateral damage. This meant that Wachovia was unable to bluff its way into a better deal than the investment banks. The same held for the would-be buyers, which knew that their threats to let the bank fall into receivership would be less motivating to policymakers than if the alternative was bankruptcy.

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[666] Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 105

[667] Ibid., p. 105; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 327

[668] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 491; Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 105

[669] Ibid., p. 105

[670] Ibid., p. 105

The Wachovia resolution also illustrates how limited the influence of bankers were on the political process. Wachovia itself had virtually no leverage in the process, with the FDIC ultimately making all the crucial decisions, and then presenting the Wachovia board with choices for which the advantages of the FDIC-approved course were overwhelming. The would-be buyers also had relatively little leverage. Wells' first proposal, which would have introduced substantial moral hazard, was rejected in favor of Citi's more favorable proposal. Citi, in turn, lacked the ability to convince the FDIC to help it buy Wachovia once Wells underbid it, despite Geithner's fears that breaking the already-negotiated deal would have real reputational costs for the US. The FDIC, moreover, again illustrated its focus on moral hazard concerns and avoiding costs, resisting Geithner's pressures and opting to embrace the Well Fargo assistance-free plan.

Ad-Hoc Rescues of the Non-FDIC-Insured Institutions

The Investment Banks

Bear Stearns

The first of the five major US investment banks to run into trouble, Bear Stearns, also provided the first major break from precedent in dealing the collapse of an investment bank. While Drexel Burnham Lambert was allowed to fall into bankruptcy, and Salomon Brothers sold without subsidy, US regulators decided early on that letting Bear go bankrupt would impose too great a cost on the broader economy.[671] However, despite a growing recognition that letting investment banks fail now entailed too-high collateral costs and Paulson's initial tentative steps to build a pre-established response

[671] Lowenstein, *The End of Wall Street*, p. 127

capacity, the fall of Bear Stearns caught US regulators off-guard.[672] Lacking the legal authority to resolve the bank through the state alone, and unable to find a buyer to take Bear Stearns without a state subsidy, US policymakers would ultimately agree to subsidize the purchase of the failing bank by large commercial bank JP Morgan-Chase. The loss-guarantee deal for Bear Stearns was therefore the most naked moral hazard in the US response, with the state providing a direct subsidy to a private bank to insulate it from losses. However, even this case illustrates the dynamics of atomized finance in the US. The deal ultimately agreed-to was bad for Bear Stearns shareholders, who took heavy losses on the sale, but a good one for the buyer, JP Morgan-Chase. JP Morgan, which remained healthy through the crisis, was able to take advantage of its continued influence and the disorganized response of US policymakers to Bear's failure to negotiate favorable terms for itself, even as it allowed heavy costs to be imposed on Bear shareholders.

Bear Stearns was the smallest of the US investment banks, and also the most highly-leveraged. In its bid for rapid growth, Bear took on some $386 billion in debts and other liabilities, while holding only $11.6 billion in equity capital to service those liabilities.[673] This was well in excess of legal limits on capital ratios, limits which Bear eluded by disguising its balance sheets when it came time to make quarterly earnings reports to regulators and shareholders. Basically, Bear manipulated its capital ratio by selling assets with high liabilities just before earnings reports were due, temporarily

[672] Kate Kelly, *Street Fighters: The Last 72 Hours of Bear Stearns, the Toughest Firm on Wall Street* (New York: Portfolio, 2009), p. 67; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 93.
[673] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 18

increasing its equity and decreasing its liabilities to within legal limits. It then bought those assets back immediately after issuing its quarterly report.[674] Therefore, Bear's extremely high leverage was masked on paper. In order to service its massive liabilities in practice, Bear relied heavily on short-term lending, borrowing up to $70 billion in overnight lending, such that at close of business it was able to service its long-term debts, then paying that back the next morning only to borrow it again the following night.[675] These practices allowed Bear Stearns to grow rapidly, but left it extremely vulnerable, and dependent on its short-term lenders. If one of its short-term lenders were to refuse to continue to lend, Bear Stearns would very quickly be unable to service its debts, and be forced to close.

This is ultimately what happened to trigger Bear's demise. Goldman Sachs refused to serve as counterparty in a routine $5 million trade between Bear Stearns and Hayman Capital.[676] A counterparty essentially guarantees that the parties involved will pay their obligations, so Goldman's refusal to serve as a counterparty for Bear Stearns sent a devastating signal to markets that Bear could no longer be trusted to honor its short-term obligations. 16 minutes later, Goldman relented and agreed to serve as counterparty, but the damage was done, and Bear found itself increasingly unable to get the short-term loans it needed to function.[677]

A combination of lax oversight by the Securities and Exchange Commission (SEC), Bear Stearns' primary regulator, and Bear's own quarterly chicanery meant that Bear's failure caught US policymakers off-guard and unprepared to respond. While in the past,

[674] Ibid., p. 374
[675] Ibid., p. 18
[676] Ibid., p. 383-4
[677] Ibid., p. 384

investment banks had been regarded as small enough that their failure could be absorbed by markets, the growth in their size, and the number of counterparties that would suffer losses if Bear fell meant that US policymakers no longer felt that this was an acceptable course of action.[678] Federal Reserve Chair Ben Bernanke feared that Bear Stearns' key role in the markets could have caused the collapse of the $2.8 trillion tri-party repo market, a key part of the risk-management strategy of financial institutions.[679] Treasury Secretary Paulson feared that the collapse of Bear Stearns would cause panicked investors to start a run on the next-smallest investment bank, meaning that the fall of Bear Stearns would have precipitated the collapse of Lehman Brothers almost immediately thereafter.[680] Such an unexpected collapse, on the heels of Bear's already-unexpected collapse, would have produced even greater disruption than Lehman's actual fall in September ultimately did. This was reinforced by panicked calls from other Wall Street actors, warning of potentially devastating consequences should Bear Stearns fail.[681] Policymakers therefore scrambled to find a solution. This process was marked by two key dynamics that shaped its outcome. The first was that Bear Stearns management and shareholders quickly lost their autonomy and voice in the process. In order to prevent Bear's collapse before a buyer could be found, the Federal Reserve issued the bank an emergency loan of $12.9 billion. Given that the loan was made on $14 billion in collateral, and was paid back with $4 billion (31%) in interest after three days, this followed the Bagehot rule that central banks should lend freely on good collateral at a

[678] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, pp. 99, 109; Lowenstein, *The End of Wall Street*, pp. 127, 175
[679] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 386
[680] Ibid., p. 388; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 120
[681] Ibid., p. 106.

penalty rate of interest.[682] It also signaled the beginning of US policymakers taking over the process from Bear Stearns. The loan was formally a 30-day loan, but when Bear CEO Alan Schwartz took that as a sign that he could take a more leisurely path toward selling his bank, he was sharply rebuked by the Federal Reserve. Schwartz was instructed to act immediately or his bank would be shuttered by regulators as insolvent.[683] At this point, dependent on emergency aid from the Federal Reserve to remain open, Bear Stearns had little choice but to bow to Fed and Treasury demands.

The second key dynamic was the self-interest of the other banks, their unwillingness to act in the interest of broader systemic stability or Bear Stearns, and their willingness to take advantage of the desperation of policymakers to find a solution. Despite Goldman CEO Lloyd Blankfein's stated fears of a financial "apocalypse" should Bear fall, he was unwilling to make an offer to purchase his failing rival, being more concerned with losses to his own bank than systemic stability.[684] Paulson's attempts to convince Fannie Mae and Freddie Mac to play a role similarly met disappointment.[685] Ultimately, only two bidders emerged with an interest in providing a private solution to Bear Stearns. The first, equity investor JC Flowers, was judged too small to address the scale of problems at Bear.[686] This left only JP Morgan as a viable candidate for a private solution.[687]

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[682] Wessel, *In Fed we Trust: Ben Bernanke's War on the Great Panic*, p. 158-9
[683] Kelly, *Street Fighters: The Last 72 Hours of Bear Stearns, the Toughest Firm on Wall Street*, p. 67; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 103
[684] Ibid., p. 106.
[685] Lowenstein, *The End of Wall Street*, p. 123
[686] Ibid., p. 127; Kelly, *Street Fighters: The Last 72 Hours of Bear Stearns, the Toughest Firm on Wall Street*, p. 164
[687] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 107; Kelly, *Street Fighters: The Last 72 Hours of Bear Stearns, the Toughest Firm on Wall Street*, p. 201

JP Morgan was an attractive potential savior for several reasons. It was large enough that, unlike with JC Flowers, a JP Morgan purchase of Bear Stearns could prevent the latter's failure without risking the stability of JP Morgan itself. It was also intimately familiar with Bear's operations already, having served as a major source of the short-term lending on which Bear sustained itself prior to the collapse.[688] Therefore, JP Morgan could research and make a decision on purchasing Bear without the deliberation other potential suitors would have required. However, it was also the only viable candidate, and therefore in a position to extract concessions from the US by playing on policymakers' unwillingness to risk the systemic fallout from letting Bear fail. JP Morgan, and its CEO Jamie Dimon, therefore refused to make a purchase of Bear Stearns without state support.

This left US policymakers in a weak position. Having been unprepared to confront the failure of an uninsured institution of Bear Stearns' scale, they now had only three options: to let Bear fail, which would have unknowable but likely high and possibly catastrophic consequences; to extend loans to Bear Stearns in the unlikely hope that suitor more willing to make an unsubsidized purchase would appear; or to assent to JP Morgan's demands, and subsidize the purchase. Direct purchase of Bear Stearns by the state, which could have saved Bear without subsidizing JP Morgan, was impossible in the time frame at hand, as neither the Federal Reserve nor the Treasury could make such a purchase with their existing legal authority, and Bear would not survive long enough to pass new legislation through the slow-moving US Congress.[689] Given that an alternate

[688] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 386
[689] Wessel, *In Fed we Trust: Ben Bernanke's War on the Great Panic*, p. 167

purchaser seemed unlikely to emerge, the choices became between allowing Bear's failure and subsidizing the purchase. Unwilling to risk potentially catastrophic consequences, Treasury and Federal Reserve officials agreed to extend the subsidy.

The subsidy to JP Morgan, which became known as the "Jamie Deal," after JP Morgan CEO Jamie Dimon, was a 'backstop' on losses from a designated pool of Bear Stearns toxic assets, mostly mortgage-backed securities. As originally constructed, $29.97 billion of Bear Stearns assets were placed in a new legal entity, Maiden Lane LLC, funded by the Federal Reserve. As those assets matured, that money would be repaid to the Fed, though likely with high losses given their poor quality. The deal therefore essentially took $30 billion of risk away from JP Morgan.[690]

Although these terms were generous to JP Morgan, Paulson insisted that the terms to Bear Stearns shareholders be harsh, to limit the political fallout. Although JP Morgan was willing to offer $4 a share for its purchase of Bear Stearns, Paulson insisted on a $2 a share price, for shares valued at $172 a share a year prior.[691] This would therefore, at Paulson's insistence, impose severe losses on Bear shareholders.[692] Ultimately, those losses proved too severe for Bear shareholders, who, although shut out of policy deliberations to this point, still had the ability to refuse the deal and fall into bankruptcy. The difference between the negligible benefit of $2 a share and a total loss from

[690] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 386

[691] Kelly, *Street Fighters: The Last 72 Hours of Bear Stearns, the Toughest Firm on Wall Street*, pp. 9, 210; Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 37; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, pp. 111, 118; United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 386

[692] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 111; Lowenstein, *The End of Wall Street*, p.128; Kelly, *Street Fighters: The Last 72 Hours of Bear Stearns, the Toughest Firm on Wall Street*, p. 204

bankruptcy would be only minor, so Bear shareholders refused to sell for less than $10 a share.[693] This was acceptable to JP Morgan, but the Treasury balked, given Paulson's desire to impose pain on the Bear shareholders to limit the moral hazard of the deal. Paulson therefore threatened to withdraw the backstop, but this was in turn unacceptable to JP Morgan.[694] Instead, the Treasury was able to modify the terms of the backstop, such that JP Morgan now contributed $1.15 billion to funding Maiden Lane, to be repaid only if the Federal Reserve received all of its money first. Therefore, in the final plan, JP Morgan would absorb the first $1.15 billion in losses on the Maiden Lane assets, with the Fed taking losses above that, up to $28.82 billion.[695]

The Bear Stearns rescue illustrates the perils to the state of a voluntary rescue plan. The US above all wanted to limit the systemic consequences of a Bear Stearns collapse, while JP Morgan was willing to risk systemic fallout unless it could get favorable terms. JP Morgan's greater tolerance for the consequences of a Bear collapse put the US in a severe disadvantage. Without a rival bidder, JP Morgan could at any time threaten to walk away, while US threats to simply let Bear Stearns fall were not regarded as credible. This illustrates how US financial firms can continue to wield significant influence, so long as they are healthy. At the same time, the Bear Stearns case also illustrates how the influence of firms drops off considerably once they are in distress. Bear prior to the fall was an extremely powerful financial actor, but once it began to fail, and especially once it became reliant on Federal Reserve loans to survive, Bear

[693] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 119; Kelly, *Street Fighters: The Last 72 Hours of Bear Stearns, the Toughest Firm on Wall Street*, p. 208
[694] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, pp. 119, 120; Kelly, *Street Fighters: The Last 72 Hours of Bear Stearns, the Toughest Firm on Wall Street*, p. 215
[695] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 386

management and shareholders were all but completely shut out of policy deliberations.[696] The Fed and Treasury set the terms of any potential sale in negotiation with would-be buyers, and Bear management were put in the position of simply receiving those terms. The one bit of influence they had, increasing the sale price, was only possible because the initial price proposed, $2 a share, was close enough to bankruptcy that Bear could credibly threaten to simply take bankruptcy instead. Even here, Bear's intransigence managed to secure only a purchase price of 5.8% of its value a year prior, rather than 1.2%, an only slight improvement and still a substantial loss to Bear shareholders.[697] JP Morgan was willing to acquiesce to this higher sale price, but only because it still represented a good deal to JP Morgan. JP Morgan initially proposed $4 a share, but gladly bowed to Treasury pressure for $2 a share, which was an even better deal. This illustrates that JP Morgan had little regard for Bear Stearns, except insofar as making the deal required the assent of the Bear Stearns Board of Directors.

The resolution of Bear Stearns was therefore a severe blow to Bear Stearns shareholders, but a good deal for JP Morgan's, especially with the Maiden Lane loss backstop. In the short term, it could be seen as a good deal for the US as well, as the costs of a Bear Stearns failure would have surely exceeded $29 billion.[698] The losses to Bear shareholders preserved some market discipline for failing firms. However, the precedent of the "Jamie Deal" would haunt US policymakers in the later stages of the crisis, as other healthy banks attempted to leverage their position to extract similar

[696] Kelly, *Street Fighters: The Last 72 Hours of Bear Stearns, the Toughest Firm on Wall Street*, p. 102
[697] Ibid., p. 6
[698] Wessel, *In Fed we Trust: Ben Bernanke's War on the Great Panic*, p. 175; United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, pp. 387, 388; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 120

concessions. The desire to remove the precedent set by the Jamie Deal would be cited as a major reason for letting Lehman Brothers fall six months later.

Lehman Brothers

The failure of Bear Stearns cast doubt on the next two smallest investment banks, Lehman Brothers and Merrill Lynch, both of which would also fail by September 2008. Lehman Brothers would declare bankruptcy, while Merrill Lynch would sell itself to commercial bank Bank of America to avoid a similar collapse. Their resolution, and the relationship of the two banks with policymakers, demonstrates both the way in which political influence declines with fiscal health, and the commitment of US policymakers to avoiding moral hazard problems. Merrill Lynch, which was the stronger of the two banks, retained enough clout to preserve its autonomy and negotiate its own sale, though not enough clout to secure state assistance. Lehman Brothers, the weaker of the two, lost even the ability to negotiate its own resolution, and instead its management was sidelined while US officials attempted to broker a sale and a private consortium rescue. When those attempts failed, the US chose to let Lehman Brothers fall rather than provide a direct subsidy to the failing bank or any would-be purchaser. This precipitated massive financial crashes globally, but decisively erased the precedent of the Bear Stearns bailout, illustrating a strong commitment by the US government to avoiding moral hazard issues. Both Merrill Lynch and Lehman Brothers had difficulties stemming from subprime assets before Bear Stearns' collapse, but the unexpected fall of the smallest of Wall Street's Big Five investment banks put substantial pressure on Lehman and Merrill, the fourth and third largest of the remaining investment banks. Absent a deposit-insurance provision, investors looking to protect themselves from losses must pull out their investments before

the firm loses value. This withdrawal in turn causes the firm to lose value, making projections of decline a self-fulfilling prophecy. Nervous investors, taken off-guard by the fall of Bear, assumed that others would look askance at the next-smallest institutions.[699] They therefore began to withdraw their investments, and in doing so caused Lehman and Merrill to decline from an already vulnerable position.

Investors' fears were compounded when both banks failed stress tests imposed by the Federal Reserve and the Securities and Exchange Commission in late spring 2008.[700] In these tests, the Federal Reserve and SEC closely examined the assets and liabilities of the four remaining large investment banks to estimate how they would fare if they came under pressure from investors comparable to what Bear experienced. While the two largest investment banks, Goldman Sachs and Morgan Stanley, passed the tests, both Lehman and Merrill did not.[701] Lehman's management would reject these results, claiming the bank passed their own internal stress tests with liquidity to spare, but this did little to assuage doubtful investors, and pressures increased.[702]

By August, Treasury and Federal Reserve regulators would begin to worry whether Lehman Brothers was already insolvent, and masking its insolvency by refusing to fully acknowledge the decline in value of its assets.[703] However, regulators were reluctant to press Lehman for more information to clarify the question, for fear that the public request would trigger a panic in already-nervous investors, and push Lehman into crisis.[704] For their own part, Lehman Brothers management maintained that the bank was solvent, and

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[699] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, pp. 397, 433
[700] Ibid., p. 397
[701] Ibid., p. 397
[702] Ibid., p. 398
[703] Ibid., p. 432
[704] Ibid., p. 438

only suffering from liquidity pressures caused by "naked shorts," bets placed by market actors that Lehman would fall in value.[705] They moreover disputed the results of the Fed/SEC stress tests, claiming that the bank passed its own stress tests with billions in "excess cash."[706] Lehman CEO Dick Fuld would maintain even after the bank's collapse that the problem was always liquidity pressure from unfounded rumors, and not mismanagement by the bank itself.[707] This, of course, should be treated skeptically, given the interest Lehman management would have in presenting the bank as failing due to external forces, and therefore more worthy of state support than a failure driven by their own mistakes. This created a private-information dilemma for regulators, who could not trust Lehman's own statements, but could not compel Lehman to reveal its true position without potentially triggering a run that would sink the bank regardless of its solvency. Because of this, planning for a Lehman collapse needed to remain only roughly sketched out, without access to specific figures.[708]

The first preference of policymakers would be to sell Lehman Brothers to another bank, a move that would potentially save the bank without imposing a cost on the state.[709] This was contrary to the wishes of Lehman management, which sought to preserve the bank as an independent institution, and therefore pressed for direct liquidity and capital support

[705] Ibid., p. 435; Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, pp. 96-100
[706] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 398
[707] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 507; United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 435
[708] Ibid., p. 438
[709] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 130

from the Federal Reserve.[710] These petitions, however, found little positive reception at the Federal Reserve or the Treasury. A proposal by Fuld to reclassify Lehman Brothers as a bank holding company, and thus be regulated by the Federal Reserve and able to borrow directly from the Fed's Discount Window, was rejected by all relevant regulators. New York Fed President Timothy Geithner would describe the proposal as "gimmicky."[711] When it became clear that Lehman Brothers would need capital support, and not just liquidity support, Fuld pressed the Federal Reserve to find a way to make a direct capital injection into Lehman Brothers.[712] Federal Reserve Chair Ben Bernanke would refuse, arguing that he lacked the authority to do so.

Policymakers resisted all these entreaties, and spent the first weeks of September attempting to broker a sale or capital injection from a private bank to Lehman. Lehman, however, resisted pressures from policymakers to complete a sale, balking at the fire sale prices those institutions offered and continuing to hope for direct assistance from the US government. Meetings with Korea Development Bank over a potential capital injection fell apart when Fuld insisted on an above-market purchase price and that the Koreans take some of Lehman's toxic assets.[713] Negotiations with JP Morgan never even reached the point of Fuld's involvement. JP Morgan negotiators dubbed the representatives Lehman sent to talks the "Junior Varsity," and took it as a sign that Lehman was not

[710] Lowenstein, *The End of Wall Street*, p. 149.
[711] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 437
[712] Ibid.
[713] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, pp. 116, 215

serious about negotiations.[714] Lehman representatives, for their part, argued that JP Morgan was just using the negotiations as cover to prove Lehman's confidential records and plans, to profit at Lehman's expense.[715]

Lehman's intransigence in negotiating sales increased the pressure on the bank, as each failed negotiation caused market investors to lose more faith in Lehman Brothers. In contrast to Germany, where the healthy banks organized consortium rescues for the ailing ones, US banks increased the pressure on Lehman to protect their own positions. JP Morgan, Citi, and Bank of America all demanded additional collateral from Lehman Brothers, or they would refuse to continue providing essential interbank lending.[716] Even as Lehman posted an additional $3.6 billion in collateral from its dwindling capital reserves to maintain the interbank lending it needed to survive, Fuld continued to press for a direct injection from the Federal Reserve.[717] US policymakers continued to refuse, but grew increasingly frustrated with Fuld. As such, by September 10, when only Bank of America and Barclays remained as potential buyers of Lehman, policymakers would eliminate Fuld's role entirely.[718] When Bank of America CEO Ken Lewis complained of Fuld's resistance to a sale, Treasury Secretary Henry Paulson would reply that it "doesn't matter what Fuld thinks," and that he was "in no condition to make any decisions."[719] By this point in the process, not only was Lehman management excluded from debates, but

[714] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 440
[715] Ibid., p. 440
[716] Ibid., p. 439
[717] Ibid., p. 440
[718] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 270
[719] Ibid., p. 303, 319

were no longer even kept informed as to the status of negotiations, unable to get their telephone calls returned as the sale of Lehman Brothers was negotiated.[720]

Negotiating a final sale with either Bank of America or Barclays would remain complicated even with Fuld removed, however, due to the precedent set by the "Jamie Deal" the Federal Reserve provided in JP Morgan's purchase of Bear Stearns. Both Bank of America and Barclays, in addition to offering only fire sale prices for Lehman Brothers, insisted that no deal could take place without state support. Both demanded that the US provide $40 billion in loss guarantees.[721] In doing so, these banks not only looked out for their own self-interest, but bet that policymakers would rather repeat the moral-hazard creating precedent from Bear Stearns than deal with the consequences of Lehman's collapse. Policymakers, however, refused to consider another Jamie Deal. In addition to the political cost, another loss backstop would cement the precedent set by Bear Stearns, meaning that any further brokered sale would likely contain a similar provision. The pressure for another such backstop would be felt immediately, as both Merrill Lynch and giant insurance company AIG were both distressed and seeking buyers at the same time.

Unwilling to provide state assistance, policymakers instead attempted to organize a consortium of private banks to provide the necessary loss backstop, essentially attempting to create a privately-funded Jamie Deal. This would be good for the US, which would avoid deepening the Bear Stearns precedent, but also potentially good for the banks, given that the alternative, a Lehman collapse, could be expected to impose high and unpredictable costs on all other banks in the ensuing panic. In 1998, a similar consortium

[720] Ibid., p. 306, 328
[721] Ibid., p. 282, 319

had rescued Long Term Capital Management, meaning such an operation was not without precedent. Several key factors, however, distinguished that rescue from the situation with Lehman Brothers. First was the scale. Bank of America and Barclays insisted on a $40-$50 billion loss backstop to purchase Lehman Brothers, compared to a $3.6 billion consortium rescue for LTCM.[722] While the potential costs of a Lehman failure would also be higher than those of an LTCM failure, the direct cost to banks to rescue Lehman was significantly higher.

Second was that policymakers' statements that no government money would be forthcoming in any circumstance were not regarded as credible.[723] Although Paulson told the assembled bankers that not a penny of government assistance would be provided, Lehman Brothers' lawyer, Roger Cohen, maintained that this was a bluff. In his words, the government was playing "a game of chicken," and that policymakers were unwilling to let Lehman fall regardless of the success or failure of the liquidity consortium.[724] In part this was due to the size of Lehman Brothers, such that the costs of its failure would be larger than those of LTCM, but it also reflected the shadow cast by the Jamie Deal for Bear Stearns. In 1990, the last major investment bank to run into distress, Drexel Burnham Lambert, was allowed to collapse into bankruptcy, giving credibility to Fed promises that no public rescue would be provided should the private rescue fail to appear. By contrast, in 2008, the Fed had provided support for a Bear Stearns sale only months earlier. This caused bankers to reasonably suspect the Fed would do so again.

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[722] Ibid., p. 282; Lowenstein, *When Genius Failed: The Rise and Fall of Long-Term Capital Management*, p. 207

[723] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 282

[724] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 445

The third difference between the two situations was that LTCM was a partner of the large banks, while both Lehman Brothers and its would-be buyers were direct competitors. In a cooperative system like Germany's, subsidizing a peer institution is less problematic, as the long-term costs to the aiding banks of maintaining such a peer are lower, even as the costs of letting it fail may be higher. In a liberal system, however, any aid to either Lehman or Bank of America would, while containing the short and medium-term costs larger crisis, eventually result in the supported bank directly competing with the aiding banks. This would be the chief objection of several of the bank representatives in attendance at the Lehman consortium meetings.[725] Moreover, concerns that some partners in the consortium would contribute more, or benefit more, further divided the investment bankers from the commercial bankers.[726] In a corporatist system, strong private bank associations could help to organize the banks, and avoid the danger that a single bank will refuse to participate, free-riding on the others' willingness to spend to prevent systemic crisis. No such institution existed to play a comparable role in the US, however.

In addition to these issues, saving Lehman Brothers would not even guarantee that a broader panic would be contained, given that both AIG and Merrill Lynch were under pressure.[727] A failure by either of these larger institutions would have even greater consequences than a collapse of Lehman. As such, the planned liquidity consortium failed to produce an agreement in the time Paulson had allotted them, and Bank of

[725] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 192
[726] Ibid., p. 202
[727] Ibid., p. 192

America removed itself as a potential buyer.[728] Barclays remained interested, hopeful that a consortium would yet emerge to absorb $40-$50 billion of Lehman's bad assets.[729] However, executing a merger of that size requires a shareholder vote under UK law, and Barclay's UK regulator, the Financial Services Authority (FSA), refused to grant a waiver allowing a more rapid sale.[730] UK regulators, wary of importing the US's "cancer," and leery of the viability of a consortium rescue, were unwilling to approve in large part because Barclays itself was already in distress.[731] Should Lehman drag down Barclays, UK taxpayers would be left with the costs for the failure of both banks. The FSA therefore refused to grant a waiver unless the US government, not a private consortium, provided the loss guarantee.[732] This would have both deepened the Jamie Deal precedent and left the US potentially with tens of billions in losses and ownership of Lehman Brothers if Barclays ultimately backed down from the merger.[733] With neither the US nor the UK willing to take on the direct costs of a Lehman Brothers collapse, the Barclays deal fell through.

With both Bank of America and Barclays out of the running, no bank remained as a potential buyer for Lehman Brothers. This left US policymakers with three unpalatable

[728] Ibid., p. 350; United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 442
[729] Ibid., p. 446
[730] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 343; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 188; United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 446
[731] Alistair Darling, *Back from the Brink: 1000 Days at Number 11* (London: Atlantic Books, Limited, 2012), pp. 123-4; Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 348
[732] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 447
[733] Ibid., p. 447

options.[734] The first was to provide another Jamie Deal, enabling Barclays or Bank of America to make a purchase, the second was direct state assistance to Lehman Brothers, and the third was to let the bank fail and declare bankruptcy. Another Jamie Deal, up to 70% larger than the one for Bear Stearns, could have prevented Lehman's collapse, but only at the cost of reinforcing the moral hazard problems created by the first such deal.[735] Moreover, Paulson's repeated statements to the public and the banks that no state support for Lehman would be forthcoming meant that providing public assistance after all would have severely reduced his credibility in future negotiations.[736] Given that Merrill Lynch and AIG were also under pressure, it likely would have created a need for an additional merger subsidy to resolve issues with these two firms, further deepening the precedent into the future.[737] This was the option favored by the other banks, as it contained the crisis at no cost to themselves, and with a subsidy to the purchasing bank. The banks, however, had no direct role in advising US policymakers on the fate of Lehman, and so had limited ability to push their favored policy.

The second option, direct aid to Lehman Brothers, had both legal and moral hazard issues. A loan to Lehman Brothers would need to be substantial, essentially requiring the Fed to take the entire firm as collateral, as was the case with AIG.[738] Moreover, given Lehman's fundamental solvency issues, that its assets were worth less than its liabilities, even a massive loan could delay but not prevent the bank's failure unless some other source of capital could be found to restore its balance sheets. A state-provided injection

[734] Ibid., p. 441
[735] Ibid., p. 446
[736] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System* 184-6, 187
[737] Lowenstein, *The End of Wall Street*, p. 176
[738] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 452

of capital which kept the bank in private hands, as favored by Lehman CEO Dick Fuld, created severe moral hazard problems. Keeping Lehman private but injecting sufficient state capital would have required the price the state charged for its injection to be well below market value, a substantial subsidy to Lehman shareholders. The final form of direct state aid to Lehman Brothers, given the substantial nature of its solvency problems, would be the nationalization of the bank, either completely or by taking a controlling interest through capital injections priced at or above market value. This was the most palatable direct-aid option for policymakers, with Paulson, Bernanke, and Geithner giving the option serious consideration.[739] It also would have been the worst option for Lehman shareholders other than bankruptcy, as they would take heavy losses, either through expropriation at something close to the virtually-nil market value in a full nationalization or dilution through the state taking an overwhelming majority stake in a part-nationalization. However, since early in September, representatives from Lehman had been almost-entirely shut out of the policy process, with Paulson describing Fuld and Lehman management as irrelevant to the process.[740]

The bigger issues with nationalization were legal and normative. Bernanke was willing to contemplate nationalization, though only with the support of Paulson.[741] Geithner, on the other hand, had strong normative opposition to state-owned banks, arguing that preserving a privately-owned financial system should be a central state goal.[742] Paulson, for his part, argued that nationalization could not be done under existing legal authorities.

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[739] Lowenstein, *The End of Wall Street*, p. 196; Wessel, *In Fed we Trust: Ben Bernanke's War on the Great Panic*, p. 21

[740] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, pp. 303, 319

[741] Wessel, *In Fed we Trust: Ben Bernanke's War on the Great Panic*, p. 21

[742] Laura Conaway, *NPR Planet Money: Geithner's Stress Test February 25, NPR Planet Money: Geithner's Stress Test February 25.* Radio, 2009 .

It would require an act of Congress, and Lehman would not survive the time it would take to pass such an act.[743] The nationalization of AIG, which happened only days later, was possible where a Lehman nationalization was not, because AIG needed only liquidity support, which the Fed could provide, while Lehman Brothers requires capital support, which required new legal authority.[744] AIG's essential problem was one of cash-flow: it had valuable assets, but couldn't sell them in a timely fashion to obtain the cash to service its immediate obligations.[745] Therefore, the Federal Reserve could take possession of those assets, an 80% stake in AIG, as collateral for its loan, and save the institution without injecting additional capital. A comparable move on Lehman would be inadequate because, while Lehman had cash-flow problems, its deeper problem was that its liabilities were greater than its assets, and only additional capital would resolve that problem. Not only did Lehman lack enough quality assets to collateralize a loan large enough to save it, but such a loan would only delay the bank's fall unless it received new capital injections. The Federal Reserve was expressly prohibited from any capital support. The only agency legally able to provide capital injections of any kind was the FDIC, and it could only do so for commercial banks already seized by the FDIC.[746] Nationalizing Lehman, therefore, would need to be done by the Treasury, and with an

[743] Lowenstein, *The End of Wall Street*, p. 169; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 224
[744] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 452
[745] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 229; United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 463
[746] Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 75

emergency authority extending the Treasury's writ granted by the Congress.[747] This would be virtually impossible to obtain, especially on the short notice required. Some key members of Congress, especially Jim Bunning on the Senate Banking Committee, went even further than Geithner, opposing not only state ownership, but any state aid as "creeping socialism."[748] Even among the rest, opposition to state aid for Lehman Brothers was both fervent and bipartisan.[749] Direct aid, therefore, could only be provided on terms which would have introduced severe moral hazard problems and essentially subsidized Lehman losses.

This left letting Lehman fail as the last available option for US policymakers, an extremely risky and costly option that nevertheless offered certain benefits. Perhaps the clearest benefit was a definitive refutation of the precedent set by Bear Stearns' Jamie Deal. In the words of New York Fed Senior Vice President Patricia Mosser, a Lehman bankruptcy would be a "mess on every level, but fixes the moral hazard problem."[750] By letting an institution even larger than Bear Stearns collapse into bankruptcy, the US would effectively restore the old Drexel precedent of no support for investment banks nearing bankruptcy.

There were also some reasons to think that the fall of Lehman Brothers would not be catastrophic. Bear Stearns' failure caught market actors and regulators by surprise, meaning that they had little time to prepare for the fallout of its collapse. This increased

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[747] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 224; United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 453

[748] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 246

[749] Lowenstein, *The End of Wall Street*, p. 169

[750] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 441

the potential for disastrous consequences, and motivated policymakers to implement the Jamie Deal despite the moral hazard problems. Lehman Brothers, by contrast, had been in clear distress since at least July, giving market actors months to brace themselves for a collapse. Because of this, Paulson believed that the contagion effects of Lehman Brothers might be relatively small, larger than those from Drexel, but still manageable.[751] Members of the Fed's Federal Open Market Committee even argued that the benefit from restoring this precedent would offset the costs of Lehman's collapse.[752]

Ultimately, however, the potential costs of letting Lehman fall were unknowable in advance. The largest previous investment bank collapse, Drexel, was smaller than Lehman, and in a less-interconnected market that was not already reeling from the collapse of other institutions in both the US and Europe. Estimates of the consequences ranged from relatively minor, as Paulson anticipated, to catastrophic. The actual effects of letting Lehman fall proved closer to the latter, though there is some reason to think, as UK Liberal Party Shadow Chancellor Vince Cable argued, that the fall of Lehman was the "Franz Ferdinand" moment of the crisis.[753] The assassination of the heir of the Austro-Hungarian Empire started a chain of events that culminated in the First World War, but given the high tensions and irresolvable conflicts of interest in Europe in 1914, some other event would have triggered the war if Ferdinand's assassination had not.

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[751] Andrew Ross Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System--and Themselves* (New York: Penguin Group, 2011), pp. 230, 307; Wessel, *In Fed we Trust: Ben Bernanke's War on the Great Panic*, p. 25; United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 454

[752] Ibid., p. 454

[753] Nathalie Thomas and Rosemary Gallagher, "The Lehman's Legacy: Has Banking's Dragon Finally been Tamed ?" *Scotland on Sunday,* September 13, 2009.

Similarly, per Cable, increasing tensions across Europe and the US left markets ready to panic, and Lehman Brothers' collapse was "the trigger not the cause".[754]

Cable was not alone in giving grudging support for the decision. Jamie Dimon, the CEO of JP Morgan, agreed with Cable's assessment, arguing that "the crisis would have unfolded along a different path, but it probably would have unfolded."[755] US President George W. Bush expressed support, glad that the Lehman bankruptcy signaled that the US would not bail out private investors.[756] Others were far more critical, and far more willing to see the subsequent crisis as preventable, if only the US had rescued Lehman Brothers. Some argued even that Paulson's inconsistencies exacerbated the crisis, as bailing out Bear Stearns signaled to markets that Lehman would also be saved, causing market actors to not anticipate that Paulson would let Lehman fail. One European Central Bank executive board member captured this sentiment memorably, declaring that "we don't let banks fail. We don't even let dry cleaners fail. It never occurred to us that the Americans would let Lehman fail."[757] ECB President Jean-Claude Trichet would privately argue that letting Lehman fail was a mistake.[758]

At the same time, while US policymakers undoubtedly underestimated the fallout from a Lehman bankruptcy, that bankruptcy made both Lehman Brothers and US policymakers convenient scapegoats. If Cable and Dimon are correct that Lehman was simply the proximate cause of a crisis that was bound to erupt inevitably, blaming the US for inaction allowed both other banks and other governments to pass blame for needed

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[754] Ibid.
[755] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 455
[756] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 374
[757] Wessel, *In Fed we Trust: Ben Bernanke's War on the Great Panic*, p. 22
[758] Ibid., p. 22

assistance and unpopular bailouts by arguing it was only necessary because of the mistakes of others and not their own failure to plan for a crisis.

Merrill Lynch

Merrill Lynch, the third-largest American investment bank, ran into difficulties roughly in parallel with Lehman Brothers. Both failed the late-spring 2008 Federal Reserve/SEC stress tests, with inadequate liquidity to survive a Bear Stearns-comparable level of market pressure.[759] Moreover, both seemed likely to experience that pressure. Both came under pressure in part because of the self-fulfilling prophecy of market speculators: if everyone believes that other people see an institution as the next to fall from lack of investor confidence, they will act to protect themselves from that fall, and in doing so create the very lack of confidence that causes the fall. Lehman Brothers, being the next-smallest American investment bank after Bear Stearns, was the obvious target for market fears after Bear's collapse, and Merrill, only slightly larger than Lehman, was the target after that.

That being said, Merrill Lynch was in a somewhat better position than Lehman Brothers. Although both were vulnerable to liquidity pressures, few market observers thought that Merrill had the solvency issues suspected at Lehman Brothers.[760] That greater value meant that Merrill's management could more easily borrow money, and could potentially sell the bank whole or in part to raise additional capital. It also meant that Merrill Lynch management retained a greater measure of political clout than Lehman Brothers. Merrill's somewhat better health meant it could avoid the loss of independence

[759] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 397
[760] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 123

that came with needing direct state aid. The bank retained the autonomy to negotiate its own terms of sale, but lacked the influence to win state aid or other favorable government treatment.

Merrill did come under pressure from Paulson to take a large step to ensure its solvency, but while the Treasury Secretary urged CEO John Thain to complete a deal in the interest of systemic stability, at no point was state aid to Merrill offered, either directly or as a subsidy for a sale.[761] This reflected in part the better condition of Merrill than Lehman, such that a buyer could more easily see value in the bank, and therefore make an offer that both was high enough to appease Merrill shareholders and risk-free enough to appease the buyer's interests. The lack of state aid or significant coercion also reflected that the bank was planning on a sale regardless. Thain, believing that Lehman would fall and Merrill would be next, contacted both Goldman Sachs and Bank of America to negotiate a sale, ultimately opting to sell Merrill entirely to Bank of America.[762] Merrill Lynch, therefore, would be the investment bank resolved in the manner most-closely resembling the pre-LTCM precedents, brokering a private sale with minimal government involvement not unlike the resolution of Salomon Brothers.

Morgan Stanley and Goldman Sachs

The largest two major US investment banks, and the only ones to survive 2008 as independent institutions, were Morgan Stanley and Goldman Sachs. They also were the two in the best position when the crisis struck, having both passed the Federal

[761] Ibid., p. 211
[762] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 445; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 176

Reserve/SEC stress tests and with no speculation that they may be weak in themselves.[763] Nevertheless, both would be subject to market pressures, under the 'domino' theory that drove investors to focus on Lehman Brothers and Merrill Lynch after Bear Stearns' fall, and then to Morgan Stanley and Goldman Sachs after Lehman failed and Merrill sold itself to Bank of America.[764] Within days of Lehman's failure, some European banks stopped accepting Morgan Stanley as a counterparty for derivatives trades, until directly pressured by Morgan's treasurer.[765]

The resolution of Morgan Stanley and Goldman Sachs also illustrates how closely bank health is linked to autonomy and ability to negotiate the terms of rescue in the United States. Bear Stearns and Lehman Brothers, both of which were under severe liquidity pressure and likely insolvent, effectively lost all autonomy, and had the terms of their resolution dictated to them by the state and whatever buyer could be found. Merrill Lynch, which faced liquidity pressure that might have brought the firm down but still had significant value, was pressured into selling itself by the state and received no state aid, but retained the autonomy to negotiate its own terms of sale. Morgan Stanley and Goldman Sachs, however, only came under serious pressure once the crisis reached its apex, and received the most favorable treatment from policymakers of any of the investment banks. Even this, however, did not take the form of direct aid, but only regulatory relief, giving Morgan Stanley and Goldman Sachs the same privileges and restrictions as other bank holding companies. Neither received direct capital support, and

[763] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 397
[764] Ibid., p. 447; Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 464
[765] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 477

liquidity support was provided on terms already offered to bank holding companies. However, while representatives of Bear Stearns and Lehman Brothers were completely shut out of the policy-making process, and Merrill Lynch was in the position of simply receiving instruction from the Treasury that it needed to sell itself, both Morgan Stanley and Goldman Sachs were able to propose potential solutions.

Both banks had expectations that they would get more generous state relief. Leadership at both banks was keenly aware that because of their systemic importance, the US could ill afford to let them fail. As advisor Eugene Ludwig argued to the Morgan Stanley board, "if we go, Goldman goes. And then GE will go."[766] The collapse of GE, which was vulnerable because of its GE Financial division, would cause substantial damage to the real economy, so even massive sums of money to stop the dominos from falling with Morgan Stanley and Goldman Sachs could be justified.

Both banks, however, would be thwarted in their attempts to secure generous rescue terms. Goldman Sachs proposed a merger with Wachovia, with a government subsidy modeled on JP Morgan's "Jamie Deal" for Bear Stearns.[767] This would have given Goldman the support of Wachovia's depositor base and saved Wachovia from closure, while the taxpayer would have absorbed the losses. However, Paulson, Bernanke, and Geithner refused to support this plan, which would have both extended the moral hazard precedent set by Bear Stearns and left Morgan Stanley, as the last remaining independent investment bank without a depositor base, even more vulnerable to market pressures.[768]

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[766] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves,* p. 463-4
[767] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System,* p. 276
[768] Ibid., p. 276

Morgan Stanley similarly tried to save itself through mergers, though this proved unsuccessful as no buyer was willing unless either the government provided a guarantee or the price was lower than Morgan Stanley was willing to accept. Secretary Paulson initiated talks with Chinese Vice Premier Wang Qishan on Morgan Stanley's behalf, hoping to secure a sizeable from the China Investment Corporation, a Chinese state-owned bank. [769] Qishan balked, however, refusing to make a deal without the US government explicitly guaranteeing the Chinese investment. As with Goldman's proposal for the government to subsidize a Wachovia purchase, Paulson refused, and without a government guarantee, China Investment Corporation would not invest.
The US would also attempt to push a JP Morgan-Morgan Stanley merger, though both parties balked at this, with Morgan Stanley wanting a much higher purchase price than JP Morgan was willing to accept. Jamie Dimon, CEO of JP Morgan, initially refused to take on Morgan Stanley at any price, arguing that such a merger would cost JP Morgan $50 billion plus job losses. Under intense pressure from Paulson, he agreed to consider a merger.[770] Morgan Stanley, meanwhile, was itself pressured by Paulson, Bernanke, and Geithner to accept whatever offer JP Morgan put forth, even if was for only a dollar.[771] Ultimately, this merger too would fail. JP Morgan was reluctant to take on Morgan Stanley even for free, and the US lacked the ability to compel the healthy bank to do so. Moreover, Morgan Stanley, which was distressed but not about to collapse imminently, could and did refuse government pressure, as it still had at least some time to find an alternate solution.

[769] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 469
[770] Ibid., pp. 478-479
[771] Ibid., pp. 480-481; Lowenstein, *The End of Wall Street*, p. 234

Ultimately, both Goldman Sachs and Morgan Stanley would propose to policymakers that their firms shift to bank holding company status. Morgan Stanley CEO John Mack was urged to consider such an option by Goldman Sachs CEO Lloyd Blankfein, who was nervous that a Morgan Stanley collapse would make the fall of Goldman inevitable as well.[772] Prior to the crisis, all five of the major investment banks had been regulated as independent broker-dealers, which did not provide access to borrowing from the Federal Reserve Discount Window but meant that the firms were only lightly regulated, by the Securities and Exchange Commission. Bank holding company status, by contrast, allowed borrowing from the Discount Window, for up to 90 days on good collateral, but meant that the firms would be under the more stringent regulatory oversight of the Federal Reserve. Because of this, none of the major investment houses had interest in becoming bank holding companies before the crisis.[773] Even in the crisis, it was regarded as an undesirable option. It was seen as a move which would solidify the stability of the banks in the short term by solving liquidity problems, but would lower the banks' market value in the long term.[774]

However, after attempts to secure more favorable terms of assistance failed, Blankfein would propose bank holding company status as a possible solution for Goldman Sachs. With unsubsidized mergers unlikely to materialize, US policymakers came to see a shift to bank holding company status, coupled with a modest private capital injection for each bank, as the most viable solution going forward.[775] Policymakers

[772] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 448; Lowenstein, *The End of Wall Street*, p. 227
[773] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 442
[774] Ibid., pp. 442, 448, 450
[775] Ibid., pp. 450, 466

would soon pressure John Mack at Morgan Stanley to consider bank holding company status as well. Since neither bank was willing to consider mergers on the terms available, both would reluctantly petition to reclassify themselves as bank holding companies. With the understanding that both would seek additional private capitalization, Paulson and Geithner accepted their applications, and pressed the Federal Reserve to approve them immediately, rather than taking the customary several weeks of review.[776] Goldman Sachs would ultimately receive a capital injection from Warren Buffet, and Paulson, Bernanke, and Geithner helped persuade Japanese bank Mitsubishi UFJ to take a stake in Morgan Stanley.[777]

Goldman Sachs and Morgan Stanley therefore emerged from 2008 as the only two of the Big Five investment houses to survive as independent firms, though not without accepting the additional regulatory oversight of bank holding company status. They also retained considerably more autonomy in their dealings with the US government than Bear Stearns, which was forced into a merger with JP Morgan, Lehman Brothers, which policymakers let fail rather than assist, or Merrill Lynch, which was forced to find a merger partner or fail. This greater autonomy follows from their relatively healthy economic position. Although both Goldman Sachs and Morgan Stanley faced a risk of collapse, neither firm's fall was imminent and both still had substantial value. Therefore, they were able to escape the fate of Merrill Lynch, which was strong enough to negotiate its own terms of sale but too weak to resist demands from the state that it sell itself or

[776] Lowenstein, *The End of Wall Street*, p. 230; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 276

[777] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 481; Lowenstein, *The End of Wall Street*, pp. 265-7

even to delay a sale long enough for an alternative solution to emerge. By contrast, while Goldman Sachs and Morgan Stanley failed in their attempts to secure state subsidies or guarantees to make mergers on favorable terms, they retained enough health to refuse state pressures to merge at any price.

They were also able to obtain bank holding company status, whereas Lehman Brothers' similar proposal to shift regulatory status was dismissed by Geithner as "gimmicky."[778] This again reflects the superior health and access of Goldman and Morgan Stanley. Because they were healthier, the liquidity support of bank holding company status could do more to help them than it could insolvent Lehman Brothers. Moreover, their ability to survive, at least temporarily, without accepting whatever terms policymakers offered them meant that they were still able to negotiate with policymakers, while Lehman management were shut out of debates over the bank's fate, and forced to accept whatever terms were offered. Thus, both Goldman and Morgan Stanley could still propose a solution of their own devising, even if it was not their first choice.

Ultimately, while the expedited approval of the change in status for Goldman Sachs and Morgan Stanley demonstrated the willingness of policymakers to prioritize steps to save the two banks, the change in status itself was not a significant extension of state aid. Both banks had considered and rejected the option of a change in status in good times, preferring the lighter regulation by the SEC that came with independent broker-dealer status to the more invasive Federal Reserve oversight that came with the Discount Window access of bank holding company status. Moreover, bank holding company status was not an emergency provision providing unusually generous terms of access to

[778] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 437

Federal Reserve borrowing, but an existing regulatory option. Since Discount Window borrowing was well-collateralized, the risk of losses to the Federal Reserve was minimal. Because the liquidity access gained was not extraordinary, and because the increased regulatory burden was high, bank holding company status was not in itself a radical improvement. The systemic importance of the two banks, and the political autonomy that followed from that, enabled them to secure rapid approval of a reclassification while Lehman Brothers was rejected, but the reclassification itself was not exceptionally generous. Indeed, it was seen by management at both banks as a move of desperation and a last resort option, after efforts to secure more generous assistance failed.

Discussion

Examining the fates of the five major US investment houses illustrates several themes. The first is how the banks' ability to win favorable terms of assistance tracks very closely with their financial health. Bear Stearns and Lehman Brothers, the weakest of the five, and the ones that were most likely actually insolvent, as opposed to merely short on liquidity, lost virtually all voice in the process. Both Bear and Lehman management were ultimately shut out of negotiations to resolve the fates of their firms, which in both cases were extremely harsh to their shareholders. Lehman's shareholders were wiped out completely, while Bear shareholders managed to win a slight concession on sale price only because the originally offered price was so close to a complete loss of value that they could credibly threaten to force a failure instead. Merrill Lynch, weak enough that it could not survive on its own but strong enough to retain a bit of influence, essentially had neither assistance nor significant pressure from the state, negotiating its own sale but unable to win concessions that would keep it an independent entity. Finally,

the strongest two investment banks, Morgan Stanley and Goldman Sachs, were the only two to win any favorable concession from the state. Even that, however, was the relatively minor assistance of reclassification, which carried both advantages and restrictions from their previous status. The firm involved in the investment banking crisis that received the most favorable treatment was by far the strongest financially, commercial bank JP Morgan-Chase. JP Morgan was the only institution to win a major concession, the loss-sharing agreement it extracted in exchange for purchasing Bear Stearns. Significantly, JP Morgan was also the only firm involved in no danger of collapse. The commercial bank, therefore, retained in large measure the political influence and market leverage the investment banks lost once they ran into distress. In contrast, in the German case, failing major institutions retained significant clout. Commerzbank was able to negotiate favorable terms from the state even as its own fate was uncertain, while the distressed Landesbanken ably played the federal state and the Länder off each other.

The struggling German banks were able to retain the influence their American counterparts lacked in part because the healthy German banks, and the German banking associations, acted on behalf of their distressed peers. While the German banks, under the auspices of their banking associations, initiated the organization of consortium rescues for SachsenLB and Hypo RE, no such American equivalent could be organized.[779] The only significant attempt at a consortium rescue, the proposed Lehman

[779] European Commission, "COMMISSION DECISION of 4 June 2008 on State Aid C 9/08 (Ex NN 8/08, CP 244/07) Implemented by Germany for Sachsen LB (Notified Under Document Number C(2008) 2269)," *Official Journal of the European Union* L 104 (April 24, 2009), p. 34.; Derek Scally, "Top Banker Said Depfa Crisis nearly Collapsed System," *The Irish Times*, sec. FINANCE; Business News, July 8, 2009.; Andrew Bulkeley, "German Government Bails Out Hypo," *Daily Deal/the Deal,* September 30, 2008.

consortium, only organized under the heavy influence of US policymakers, who essentially dictated to the bankers to come up with acceptable terms. Moreover, while German bankers agreed to significant consortium rescues in the interests of systemic stability, their American counterparts broke apart over unwillingness to aid rivals, even in the interest of containing a broader crisis. The JP Morgan purchase of Bear Stearns also illustrates the narrow understanding of self-interest US banks adopted in the crisis. JP Morgan retained its influence, but used it purely to benefit its own interests, and not to gain a better deal for Bear Stearns. Jamie Dimon readily accepted Paulson's insistence on a punitively-low sale price for Bear, below what he was otherwise willing to pay, and had little concern for the fate of Bear's shareholders.

Rather than acting in the interest of distressed banks, or of systemic stability, US banks generally exacerbated the crisis in pursuit of their narrow self-interest. Goldman Sachs initiated the panic on Bear Stearns by refusing to serve as counterparty to the Hayman Capital deal, and would later refuse to consider absorbing Bear Stearns in the interest of systemic stability.[780] JP Morgan, Citigroup, and Bank of America all increased the pressure on Lehman at its weakest point, by increasing their collateral demands just as the Korea Development Bank deal was collapsing.[781] Throughout the crisis, the healthy banks also increased pressure on the failing ones through efforts to poach clients.[782] Even merger discussions were stymied by inter-bank rivalries, as failing banks resisted opening their books to potential buyers, afraid that their rivals would use the opportunity

[780] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 384
[781] Ibid.
[782] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, pp. 208, 410

to access confidential information to better poach clients or otherwise profit from the bank's failure.[783]

With the failing banks unable to exert political influence, and the healthy banks unwilling, US policymakers essentially had a free hand to negotiate terms to the investment banks. Throughout the process, therefore, while concerns about systemic stability clashed with concerns about moral hazard, the interests of shareholders generally were disregarded. JP Morgan extracted a generous deal because policymakers felt that Bear's fall would cause catastrophic consequences exceeding the dangers of moral hazard. When the moral hazard consequences of that deal manifested themselves in the attempts to find a Lehman buyer, policymakers came to the opposite conclusion. Finally, the regulatory relief granted to Goldman Sachs and Morgan Stanley also reflected a balance between moral hazard and systemic risk. Bank holding company status prevented the banks from failing from liquidity issues so long as they had good collateral, but that Federal Reserve lending was given at market rates, and carried with it the tighter regulatory oversight of holding company status. In all of these cases, the deciding factors in shaping policy were not the influence of the bankers, but conflicting policymaker views on the relative importance of systemic risk versus moral hazard. Left to their own devices, policymakers showed a fairly strong interest in limiting moral hazard. Paulson insisted that moral hazard-avoiding costs be paid by Bear Stearns, and refused any state aid for a Lehman or Merrill sale. Morgan Stanley and Goldman Sachs survived as independent institutions because they had sufficient capital and liquidity buffers to save

[783] Kelly, *Street Fighters: The Last 72 Hours of Bear Stearns, the Toughest Firm on Wall Street*, p. 199; Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 246

themselves through Federal Reserve borrowing, and not because they won remarkable emergency access.

Non-Investment Bank Institutions

In addition to the commercial and investment banks, several other institutions of systemic importance to the US financial system also came under pressure in 2008. The dynamics in the resolution of these institutions were broadly similar to those in the investment banks. These large non-bank institutions had significant political clout when they were healthy, but lost it rapidly once their economic position worsened. As with the investment and commercial banks, healthy institutions showed no interest in helping Fannie Mae and Freddie Mac or AIG. As such, policymakers had a free hand to implement whatever policies they though appropriate. As with the investment banks, however, no clear resolution authority existed for the non-bank financial institutions, necessitating ad hoc decisions on the part of policymakers. Unlike the investment banks, however, policymakers chose to respond to the failure of these institutions with nationalization, and Fannie Mae, Freddie Mac, and AIG all ended up wholly- or majority-owned by the United States by the end of 2008.

Fannie Mae and Freddie Mac

Fannie Mae and Freddie Mac, the so-called Government-Sponsored Enterprises (GSEs), are a crucial case demonstrating how rapidly even the most connected American firms can lose their clout in a crisis. Prior to the crisis, Fannie and Freddie were regarded as the most politically-connected US financial firms. Despite their structural importance and political clout, and the widespread belief that they operated with the implicit backing of the US government, both firms would be taken into conservatorship, a temporary and

compulsory nationalization without compensation for shareholders, in early September 2008.

The two GSEs had significant pre-crisis political influence, through a combination of history, structural importance, and deliberately-cultivated political connections. All of these factors relate ultimately to the two firms' role as private companies with a public mission. Fannie and Freddie existed to create a 'secondary mortgage market,' buying mortgages from banks in order to increase the ease with which people could get mortgages.[784] The essential problem with mortgages from a bank's perspective is that they represent an enormous sunk cost: money lent out all at once to fund a real estate purchase is paid back only slowly, conventionally over a 30 year period, and with a not-insignificant risk of default. Because this ties up so much of a bank's money, they would normally be reluctant to issue significant numbers of mortgages, or at least want to charge a substantial amount and only offer them to the most credit-worthy borrowers, to minimize the opportunity costs and risks to the bank. The secondary mortgage market, allowing bankers to sell mortgage-backed securities, made issuing mortgages more attractive for bankers, as issuing mortgages no longer meant tying up substantial liquidity. Mortgages could be issued, and then sold to third parties to bear the risk and the sunk costs. It was for this public function that Fannie Mae was created in 1938 as a state-owned enterprise. It would be privatized thirty years later, though with the same public function, and its sibling organization, Freddie Mac would be

[784] Lowenstein, *The End of Wall Street*, pp. 8-9; United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 412

created by Congress as a private firm in 1970, to provide a competitor to Fannie Mae and prevent it from holding a monopoly position in the secondary mortgage market.

In part because of their origin and public function, and in part due to a deliberate strategy, both GSEs had long cultivated close ties with Congress, especially with Democrats.[785] Between 1999 and 2008, the two firms spent over $164 million on lobbying, including $15 million directly to election campaigns.[786] They were consequently regarded by the Wall Street firms as having a distinct competitive advantage. This was reflected in their regulatory treatment, which was among the lightest of any American financial institutions. The GSEs' regulator, the Office of Federal Housing Enterprise Oversight (OFHEO), had less authority over its subjects than any of the bank regulators.[787] The GSEs' capital requirements were substantially lower, being required to hold in capital only 0.45% of the value of their mortgage-backed securities and 2.5% of the value of their directly-held mortgages.[788] In contrast, banks and thrifts were required to hold a minimum of 4% of the value of any mortgage assets they held, to absorb any potential losses.[789] Moreover, the GSEs' legal definition of what counted as capital reserves was looser than that for the banks, leading the Wall Street banks, and Secretary Paulson, to refer to the GSEs' reserves as "bullshit capital."[790] The GSEs were able to maintain such low capital ratios without investors losing faith in part because the two were widely believed to have an implicit guarantee from the Federal government. Therefore, Fannie and Freddie bonds, despite the thin underlying capital,

[785] Lowenstein, *The End of Wall Street*, p. 11
[786] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 80
[787] Ibid., pp. 78, 80
[788] Ibid., p. 76
[789] Ibid., p. 76
[790] Ibid., p. 412

were regarded as virtually as safe as US Treasury bonds.[791] This, in turn, allowed the two firms in good times to borrow at lower rates than they otherwise could have done.

These structural and political advantages did little to help the GSEs when they ran into trouble, however. They were already under pressure from the Bush administration, which lacked the close links with the GSEs of the Democrats, who at the time controlled the US Senate and House of Representatives.[792] The new OFHEO director, James Lockhart, from the beginning of his term in 2006 showed concern as to the stability of the GSEs, and lobbied for an increase in his regulatory authority.[793] One key area of concern was resolution authority: the OFHEO had the authority to put the GSEs in conservatorship, a form of temporary nationalization, but lacked the funds to do so, making the power essentially unusable.[794] Resistance from the Democratic-controlled Congress, however, blocked his initial moves to increase the viability of this authority.

Once Fannie and Freddie actually started running into difficulties, however, even their support from Congress would fade. As early as the collapse of Bear Stearns, their weaknesses became apparent. Henry Paulson was forced to abandon an early plan to push the GSEs to save Bear once it became clear that they were too fragile to play a constructive role.[795] Once Bear collapsed, both GSEs would come under increased pressure. Of the two, Freddie Mac was in a worse position, but since investors treated them as essentially identical, Freddie Mac's problems would increase Fannie Mae's

[791] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 56
[792] Ibid., p. 5
[793] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 248
[794] Ibid., p. 415
[795] Lowenstein, *The End of Wall Street*, p. 123

problems as well.[796] Their initial appeals for regulatory relief, however, were rebuked from Lockhart, who rejected proposals to lower their capital requirements.[797] Lowering capital requirements would have let the GSEs increase their borrowing without increasing their capital reserves, by loosening their restrictions on the maximum ratio of borrowing to capital reserves. Thus it would have increased their ability to borrow without improving their actual position. Instead, Paulson and Lockhart pressured the GSEs to solve their problems by increasing their capital reserves with capital from new investors, allowing temporarily lower capital reserves on the promise that the reserves would be increased above the legal requirements immediately thereafter.[798] Fannie Mae would keep this promise, raising $7.4 billion in preferred stock.[799] Freddie Mac, however, did not, claiming that existing capital stock was sufficient and any raise would unacceptably dilute existing shareholders.[800] Lockhart, however, argued that this was simply Freddie Mac CEO Richard Syron attempting to put a brave face on his inability to find investors willing to buy into his troubled institution.[801]

In contrast to their close relationship with politicians in good times, the GSEs found their relationships with regulators in bad times to be considerably cooler. Once regulators beyond the toothless OFHEO became involved, the two institutions' problems were revealed to be considerably worse than previously thought. Federal Reserve and

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[796] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, pp. 10-11
[797] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 414
[798] Ibid., pp. 418-419; Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 183
[799] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 419
[800] Ibid., pp. 419-420
[801] Ibid., p. 420

OCC audits found the reserves of Fannie and Freddie to be significantly lower than the OFHEO believed.[802] At this point it was clear that the two institutions required a significant capital injection to survive. Rather than pursue options that would keep Fannie and Freddie going as private institutions, which would have required a Bear Stearns-like subsidy to find a willing partner, Paulson instead began pressing Congress to grant the Treasury wind-down authority for the two GSEs.[803] The increase in regulatory oversight involved supplanting the OFHEO with a more powerful newly-created replacement, the Federal Housing Finance Agency (FHFA).[804]

Chief among the new FHFA's powers was an expanded conservatorship authority. The struggle over establishing this authority itself illustrated the reach of the GSEs' influence. Paulson wanted authority to put the two institutions in receivership, which would allow the FHFA to break up the GSEs and sell their component parts.[805] The Democratic Chairs of the House and Senate Financial Services Committees, Barney Frank and Chris Dodd, respectively, resisted this, and Paulson was forced to accept conservatorship, which allowed the Treasury to seize the failing institutions, but required them to be kept whole.[806] Paulson was, however, able to secure an $800 billion increase in the debt

[802] Ibid., p. 421
[803] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 143; Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, pp. 187, 196
[804] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 421
[805] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 162
[806] Ibid., p. 164

ceiling, giving the Treasury access to the funds necessary to make conservatorship viable.[807]

Once Paulson had conservatorship authority, he immediately moved to seize the two institutions. This process would still take three weeks, due to resistance from the FHFA, which still hoped to preserve the institutions as private firms.[808] As the two firms' problems became more apparent, however, both the FHFA and the GSEs' previous defenders in the Congress came to support a government seizure of the institutions. Both Barney Frank and Chris Dodd would bless Paulson's actions as driven by necessity.[809] Finally, on September 6, the FHFA acted, placing the two firms under state control, with the Treasury taking warrants for 79.9% control of each firm, plus injecting $1 billion in preferred stock paying a high 10% dividend.[810] This move essentially wiped out the value of all existing preferred and common stock holders, though by leaving a portion of the firms in private hands, the Treasury avoided a legal obligation to wipe out bondholders as well. This, however, was done out of international concerns, rather than from pressure from domestic interests. Global investors had long assumed that the US government provided an implicit guarantee of GSE debt, and treated them as equivalent to Treasury bonds. This created two difficulties in taking a harsh line with bondholders. The first was that investors would continue to regard GSE bonds as equivalent to Treasuries, only now regarding a default on GSE bonds as a signal that Treasuries were also not as secure as previously thought. This could substantially increase the cost of

[807] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 422
[808] Ibid., p. 423
[809] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 12
[810] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 428

future US borrowing, including borrowing necessary to roll over the national debt. The second was that among the global GSE bondholders were important foreign states, which shared the general market view on GSE bonds being as safe as Treasuries.[811] China, in particular, held a significant portion of the GSEs' bonds, and Chinese officials voiced their concerns to US policymakers over potential losses.[812] A default on GSE bonds, therefore, risked both raising doubts about US credit-worthiness generally and offending major foreign powers.

The resolution of the GSEs illustrates both the tremendous influence American financial firms can hold in good times, and how quickly they can lose that influence. When they were strong, the GSEs managed to secure more favorable treatment than any other US firm, including an implicit guarantee that ultimately forced policymakers to chose between insulating bondholders from losses or risk threatening the US's own credit rating. Despite this, the GSEs would ultimately be dealt with as harshly as any firms outside of the reach of the FDIC. Their influence managed at best to delay their resolution, but ultimately even their allies in the OFHEO, its successor the FHFA, and Congress all came around in support of a compulsory nationalization. Those terms would be ultimately extremely harsh to the firms' shareholders, and the generosity to bondholders had little to do with the firms' lobbying strength. Rather, it reflected international pressures from other states. The key determinant of this aspect of the GSEs' fate, therefore, was not the strength of the firms' influence, but the importance of foreign sovereign creditors to the United States.

[811] Lowenstein, *The End of Wall Street*, p. 143

[812] Stiglitz, *Freefall: America, Free Markets, and the Sinking of the World Economy*, p. 12; Lowenstein, *The End of Wall Street*, pp. 143-4

AIG

The other major non-bank financial institution to run into trouble in 2008 was AIG, an insurance company that had moved into the business of insuring stock market deals through so-called "credit default swaps," or CDSs.[813] A CDS is basically a counter-bet on a stock market trade, designed to minimize losses if an investment underperforms by providing a compensatory pay-out. As such, they serve a counter-cyclical function for investors, diminishing the losses from a market downturn. They are, however, strongly pro-cyclical for CDS issuers, who profit from investments succeeding in good times, collecting fees but not paying out for the CDS. CDS issuers lose out in bad times, when they are forced to pay out the insurance they issue. Such operations are customarily the province of hedge funds, which are small enough that their failure cannot precipitate systemic crises. Regulated banks have restrictions on taking on such risk. AIG, however, as an insurance company, was free of these restrictions on banks, and took advantage of this loophole to function as an enormous hedge fund.[814] The insurance company's financial division, AIG Financial Products, took on some $300 billion in counterparty risk, from many of the largest banks both in the US and internationally.[815]

The enormous scale of AIG's operations created significant problems for regulators. Much as they had earlier decided that the old philosophy of letting investment banks fail was too risky given the enhanced collateral damage from the fall of large and interconnected institutions, AIG's fall would be far greater than that of a conventional hedge fund, dwarfing even LTCM. Its counterparties included many of the largest and

[813] Lowenstein, *The End of Wall Street*, p. 55
[814] Wessel, *In Fed we Trust: Ben Bernanke's War on the Great Panic*, p. 194
[815] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 395.

most vulnerable investment institutions, meaning that the collapse of AIG would increase the losses to these institutions, increasing in turn the scale of systemic losses.[816] Moreover, several of AIG's major counterparties were European banks, adding an international dimension.[817] At the same time, the same regulatory gap that let AIG take on so much pro-cyclical risk also hindered the ability of the Federal Reserve and Treasury to act on the failing institution. As a non-bank institution, AIG could not access either the conventional or emergency liquidity programs of the Federal Reserve without a specific act authorizing the Fed to lend to other institutions.[818] This delayed the ability of AIG to access liquidity, as the insurance company needed to reach a level of distress that could justify extraordinary measures, while banks could seek smaller Fed loans earlier, and in doing so stave off massive needs later.

These circumstances essentially produced a game of chicken between AIG and policymakers. AIG management, knowing the systemic importance of their institutions, argued that the Federal Reserve should exercise its emergency lending provision to allow them to borrow directly from the Fed. Since AIG's other operations remained profitable, their problem was one of liquidity, and the immense cost of paying out all of the CDSs at once, and not one of solvency. Therefore, AIG management argued that a $40 billion bridge loan would allow AIG to survive, and even pay back the Federal Reserve.[819] This, however, created significant moral hazard problems, as the Federal Reserve's extraordinary lending would essentially allow AIG to escape the consequences of its

[816] Lowenstein, *The End of Wall Street*, p. 215; Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 395
[817] Ibid., pp. 391, 394
[818] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 460
[819] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, pp. 218, 229

severely misplaced gamble that its CDSs would turn out in their favor, or at least not go bad all at once. Policymakers, therefore, again showed their first preference for a private solution, and pressed AIG to perform a private capital raise.[820] Geithner even took steps to broker such an injection, from a banking syndicate led by private equity firm JC Flowers and German insurance company Allianz. The proposed merger would inject $10 billion in equity capital, transfer control of AIG to Allianz, and because of Allianz's regulatory status, allow the newly-merged institution to tap Fed financing as a bank.[821] AIG management, however, refused to even negotiate with JC Flowers or Allianz, dismissing the offer immediately as not a "serious effort." Like Lehman, AIG management instead held out hope that the Federal Reserve would aid them directly.[822]

The collapse of Lehman Brothers altered the dynamics of this struggle considerably. The increasing pressure on their own balance sheets caused the partners in the proposed rescue syndicate to withdraw their offer and focus on their own problems, leaving the Federal Reserve as the only viable savior for AIG. It also increased pressure on policymakers from their French and German counterparts, concerned that the collapse of AIG would increase the capital needs of their own banks, and thus deepen the crisis in Europe.[823] These developments strengthened AIG's campaign for Fed assistance, as no private alternative remained for the Fed to press AIG to accept, and AIG now had allies in the French and Germans, who wanted to avoid contagion from the insurer's collapse.

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[820] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, pp. 375, 380

[821] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 465

[822] Ibid., p. 465

[823] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 394; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 233

On the other hand, the post-Lehman downturn increased AIG's liquidity needs, which more than doubled to $85 billion, and meant that AIG could no longer play a waiting game, as it would run out of money within days.[824] Moreover, having shown their willingness to let Lehman Brothers fall, policymakers could credibly threaten to let AIG go as well.

Policymakers took advantage of this position to offer assistance to AIG on punitive terms. The Federal Reserve extended $85 billion in credit that AIG was in no position to refuse, but offered it in the classic Bagehot formula of abundant liquidity at punitive rates backed by good collateral. The rate, the benchmark Federal funds rate plus 8.5%, was extremely high, and imposed a heavy loss on the company.[825] It was also basically comparable to what risk-conscious and self-interested JP Morgan offered in liquidity support to Goldman Sachs. As collateral, the Federal Reserve took 79.9% of AIG stock, essentially wiping out AIG's private shareholders in a move comparable to that taken with the GSEs.[826] In the words of Treasury advisor Dan Jester, "the important point was that AIG shareholders would be punished."[827] Unlike the FHFA with the GSEs, however, the Federal Reserve lacked the ability to compel AIG to accept its terms. In that light, the terms were arguably as harsh as could credibly be offered. Like Bear Stearns, AIG's board debated bankruptcy, feeling that the difference between bankruptcy

[824] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 400; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 240; United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 466
[825] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 402; Lowenstein, *The End of Wall Street*, p. 210
[826] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 401
[827] Lowenstein, *The End of Wall Street*, p. 210

and the losses from accepting the Fed's offer would be only slight.[828] However, unlike with Bear Stearns, AIG was unable to win any concessions, and policymakers remained resolute that this would be the only offer AIG would receive. The AIG board accepted the terms, and the Federal Reserve became the majority owner of the firm.[829]

The AIG resolution illustrates again the focus of US policymakers on moral hazard concerns. Although their hands were tied by lack of regulatory oversight over AIG, policymakers nevertheless took a hard line, refusing to offer any state aid until all private alternatives had dissipated, and even then offering aid on harsh, market-conforming terms. Although AIG managed to escape regulatory oversight while healthy, once in distress, it was unable to win favorable terms. The case of AIG also illustrates the lack of allies for firms in crisis. The private syndicate of buyers faded away almost immediately after Lehman fell, being far more concerned with their own balance sheets. Even AIG's interconnectedness with other banks won them no allies in crisis to lobby on their behalf, though the atomized US system also meant that no LTCM-style rescue could be organized with the speed and on the scale required. The only significant advocates for preserving AIG with clout in negotiations were the French and German governments, and their concern was entirely with limiting their own banks' exposure, and not over the terms of US rescue. Both states were satisfied with the US taking a hard line with AIG, so long as the risks to their own markets were contained.

Systemic Responses

In contrast with the UK and Germany, which only turned to systemic solutions relatively late in the crisis, US policymakers began considering systemic response plans

[828] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 404
[829] Ibid., p. 206

as early as 2006. Efforts prior to TARP, however, would be stymied by the need to rely entirely on liquidity-based solutions. Prior to October 2008, no Federal agency had the authority to inject capital into banks except the FDIC.[830] Even the FDIC, however, could only inject capital into commercial banks, and only into commercial banks it had already nationalized unless given a "systemic risk exception" by the Federal Reserve. State capital injections beyond those narrow conditions would require Congressional approval. In a pre-crisis environment, such an extension of regulatory authority was unlikely, given the political clout of healthy US investment banks, and their desire to resist an FDIC-style moral hazard-containing resolution authority, especially one funded by a levy on the insured institutions. Therefore, despite considering capital injections earlier than the UK or Germany, the US would adopt such a plan only after the UK had already unveiled its own systemic response.

Prior to the enactment of TARP, therefore, US policymakers were forced to rely only on liquidity solutions from the Federal Reserve and private-market capital solutions. The latter would prove difficult to organize. The subsidization of JP Morgan's purchase of Bear Stearns, and the failures to find buyers for Lehman Brothers and AIG, showed the limits of case-by-case capital-raising solutions, but systemic solutions were also difficult to come by. Early in his tenure as Treasury Secretary, Henry Paulson had sketched out his "Break the Glass" plan, a recapitalization plan based on a bad bank model. Essentially, the plan called for the US to establish a facility to buy toxic assets from struggling banks, to return them to solvency.[831] Such a plan, as with all bad bank

[830] Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 75
[831] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 83; Wessel, *In Fed we Trust: Ben Bernanke's War on the*

plans, carried with it moral hazard issues. Those issues would lead to the US scrapping a bad bank plan for TARP. Paulson, however, never got that far with "Break the Glass," as Congressional opposition blocked any major regulatory reforms.[832] Blocked from enacting a state plan, Paulson attempted to press forward with a private-sector equivalent, the Master Liquidity Enhancement Conduit (MLEC).[833] Essentially the MLEC would have been a privately-funded bad bank, creating a so-called "Super SIV", which would have purchased potentially-toxic assets from banks with money contributed by the major US financial institutions.[834] The German Landesbanken had developed a similar facility, setting up a private bad bank for toxic assets from SachsenLB, allowing the distressed Landesbank to sell itself without those assets weighing down its value. It was therefore not unprecedented, and besides considerable support from the Treasury, MLEC had initial support from JP Morgan, Bank of America, and others.[835] However, it ultimately fell apart from the self-interest of the US banks. JP Morgan and Bank of America didn't need its protections, while other interested would-be participations Citi and Wachovia would potentially be substantial users. It therefore would have functionally involved JP Morgan, Bank of America, and any other healthy participants, propping up their distressed competitors.[836] The alternative, excluding the distressed banks, would have eliminated MLEC's utility as anything other than a balance-sheet-clearing operation for the healthy banks. As such, the self-interest of the US banks caused this attempt at systemic private capital support to crumble.

Great Panic, p. 176; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 131

[832] Ibid. , p. 139; Wessel, *In Fed we Trust: Ben Bernanke's War on the Great Panic*, p. 179

[833] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 78-79

[834] A SIV, or Special Investment Vehicle, is a spin-off holding company designed to get assets off a company's main balance sheet.

[835] Ibid., pp. 78-79

[836] Ibid., pp. 78-79

Absent a systemic capital support system, until the crisis reached a point of panic the only systemic responses were liquidity programs, which the Federal Reserve had broad authority to implement at its own discretion. The Federal Reserve became increasingly concerned about liquidity at the investment banks, which lacked the ability to borrow from the Federal Reserve discount window, and that commercial banks were hoarding cash rather than lending it to either the investment banks or the broader economy. Initial attempts to encourage commercial banks to increase their liquidity, and thus their lending to the investment banks and the real economy, by lowering the overnight bank borrowing rate failed to significantly affect markets.[837] Borrowing directly from the Fed discount window carried a stigma, signaling to markets that the borrowing bank could no longer secure private lending. Therefore, prior to the Bear Stearns panic, the Fed launched two programs aimed at expanding lending. The Term Auction Facility (TAF) aimed to reduce the stigma of using the discount window by releasing liquidity at auction. Such auctions ensured that the Fed would get a good price for its money, but also avoid signaling weakness on the part of the borrowing banks. This met with some success, with $40 billion in borrowing by the end of 2007, but did not sufficiently increase lending to the broader economy, as the banks instead continued to hoard the cash in anticipation of liquidity problems.[838] Therefore, the Fed embarked on a more ambitious program to lend directly to investment banks, the Term Securities Lending Facility. The TSLF would provide Treasuries at an above-market rate to be backed by very high quality collateral, thus minimizing the risk to the Fed and charging a

[837] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, pp. 343, 366
[838] Ibid., p. 367

penalty rate in the classic Bagehot formula.[839] Following the collapse of Bear Stearns, the TSLF would be supplemented with the Primary Dealer Credit Facility, which would lend overnight cash, not Treasuries, to the investment banks.[840] This therefore gave the investment banks a way to borrow overnight from the Federal Reserve comparable to the access held by commercial banks. As with the commercial banks, above-market fees encouraged the investment banks to use the PDCF only as a facility of last resort. This, however, discouraged the use of the PDCF for reasons beyond the higher cost, as using the expensive facility would signal weakness, potentially triggering a loss in confidence by investors. As such, it lacked the widespread use of the TSFL until the peak of the crisis.[841]

All of these Federal Reserve programs followed the Bagehot formula, and thus fulfilled the Federal Reserve's lender of last resort function without significantly increasing moral hazard problems. Moreover, the required collateral meant that such lending, though reaching massive scales, never presented a significant risk of losses to the Fed, or the taxpayer. The PDCF, for instance, was specifically only offered after Bear Stearns failed, so that it would be a measure to preserve banks in future panics, and not a moral-hazard-creating life preserver for Bear.[842]

Following the collapse of Lehman Brothers, however, it became clear that liquidity programs and private market capital were insufficient. Borrowing from the PDCF and TSLF reached nearly $300 billion in the ten days after Lehman's bankruptcy,

[839] Ibid., p. 382
[840] Ibid., p. 392
[841] Ibid., p. 393
[842] Ibid., p. 392

increasing the Federal Reserve's balance sheet by 67%.[843] Moreover, liquidity solutions could only buy time for banks with solvency issues. Such issues could only ultimately be addressed by new sources of capital. Although letting Lehman Brothers fall disabused markets of the expectation of another Jamie Deal, it also meant that private buyers under pressure would be more reluctant to provide that capital. Therefore, by mid-September, both Federal Reserve and Treasury officials turned to debates over a capital injection plan.

The debates over what would ultimately become TARP essentially broke down into a debate between whether it should take the form of a bad bank or direct share purchase. Apart from Republican Senators Richard Shelby and Jim Bunning, none of the major participants in the debate favored a laissez-faire approach, though they disagreed, at times bitterly, over the form capital injections should take.[844] The relatively convoluted US legislative process meant that the debate over the US systemic plan was both lengthier and involved more actors than in the UK. However, like in the UK but unlike in Germany, the banks themselves were shut out of the policy debate. Debates over the form of TARP, therefore, were driven by politicians' and policymakers' preferences, and not the self-interest of the banks.

The substance of the TARP debates reflected this lack of voice for the banks. The strongest advocate for preserving private ownership was New York Federal Reserve President Timothy Geithner, a career civil servant without close links or a personal stake

[843] Ibid., p. 492
[844] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, pp. 261, 275, 283

in the financial industry.[845] Those with the closest links to the financial industry showed no inclination to protect it. Federal Reserve Chair Ben Bernanke was the most comfortable with the state taking direct ownership stakes, even up to full nationalization, being vocally more concerned with the economic consequences than the political or ideological implications of state ownership of the financial system.[846] The members of the House and Senate Financial Services Committees, despite substantial campaign donations from financial actors, insisted that bank shareholders and management bear substantial pain.[847] Republicans Richard Shelby and Jim Bunning argued against any capital injections at all.[848] Bunning especially rejected any state aid to the banks as "socialism," and dismissed concerns about broader economic consequences.[849] The Democrats were more receptive to an active state role, but acutely aware of the need to impose costs on the banks, both as a matter of good policy, to limit moral hazard, and as a matter of good politics, to limit voter backlash. House Financial Services Committee Chair Barney Frank proved especially caustic in remarking on the disconnect between banks' previous support for deregulation and current petitions for state aid, asking "how are all of the these free-market people going to feel about letting the markets work?"[850] Frank would be the strongest voice arguing for the need for compensation restrictions and other forms of punishment for the banks. His Senate counterpart, Chris Dodd, and

[845] Conaway, *NPR Planet Money: Geithner's Stress Test February 25*; Simon Johnson and James Kwak, *13 Bankers: The Wall Street Takeover and the Next Financial Meltdown* (New York: Pantheon Books, 2010), p. 178
[846] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 323; Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 510
[847] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, pp. 259, 304
[848] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 418; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, pp. 261, 275, 283
[849] Ibid., pp. 275, 283
[850] Ibid., p. 220

Speaker of the House Nancy Pelosi both focused on the need to limit the political backlash by providing other measures to help struggling mortgage-holders.[851]

The crucial actor in the actual drafting of TARP was Treasury Secretary Henry Paulson. Paulson, a former Goldman Sachs CEO, shared Geithner's philosophical opposition to state ownership of the financial system, but despite his stronger links to the financial community, showed a greater concern with avoiding problems of moral hazard than with ideological concerns over state ownership.[852] Paulson would also prove to be the key debate player whose position evolved the most, eventually supporting state ownership stakes as the moral hazard problems of other solutions became apparent. Paulson's original proposal for TARP, as reflected in its name, the Troubled Asset Relief Plan, was for a bad bank based closely on the never-implemented Break the Glass plan.[853] As a bad bank, this original vision of TARP would have preserved private ownership, but posed significant moral hazard problems: overpaying for assets would help the banks but subsidize their bad decisions, while underpaying would inflict costs on the banks but not do much to prevent their failure. Paulson initially proposed to evade this problem through a "reverse auction," in which the banks would bid to sell their assets to the bad bank, driving down the price the Treasury would pay.[854] This plan fell apart upon closer inspection, however, as the various toxic assets were not comparable enough to make this approach viable.[855]

[851] Ibid., p. 261
[852] Ibid., pp. 332, 337
[853] Ibid., p. 248
[854] Ibid., p. 267
[855] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 500

In addition to the increasingly apparent impracticality of this approach, two events moved Paulson closer to accepting direct capital injections. The first was the failure of the first bill authorizing TARP in the House. In part, this was product of TARP becoming entangled in politics of the contemporary Presidential election. Democratic candidate and ultimate victor Barack Obama cautiously supported the bill, and heeded Paulson's request to avoid further complicating the already-fraught negotiations.[856] His Republican rival, John McCain, however, was trailing in the polls, and sought to harness anti-bailout sentiment by publically inserting himself into TARP debates.[857] This politicization broke the Congressional leadership's ability to hold their coalitions together in support of the bill. Once right-wing Republicans, upset about the intervention of the state in markets, started following McCain's lead and challenging TARP from the right, left-wing Democrats, who had concerns about redistribution to bankers, similarly broke from Congressional leadership. This splintering, coupled with the general unpopularity of any bailout and concerns about the lack of details in the open-ended 16-page original legislation, led to the bill's initial defeat in the House of Representatives.[858] In order to win passage of the bill on a second vote, Paulson needed to address some of the concerns of legislators who had voted it down. This in part involved including provisions for oversight and enhanced depositor protections, but also a shift toward buying direct stakes, which the Democrats generally supported more strongly than Paulson.[859] The second

[856] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 278
[857] Ibid., p. 294; Lowenstein, *The End of Wall Street*, p. 243
[858] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 493
[859] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 500; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 367; United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on*

event moving Paulson toward direct injections was the implementation of the equivalent UK systemic response plan, which involved substantial direct ownership stakes.[860] The initial successes of the UK plan in stabilizing British markets convinced both Paulson and Congressional Democrats of the viability of a systemic response based on direct injections.

Paulson did retain his reservations about politicizing financial markets by taking controlling stakes, however, so opted instead for a plan based on preferred shares.[861] This was broadly moral-hazard equivalent, as it diluted shareholders a comparable amount. Moreover, because preferred shareholders were senior in any payment of dividends or bankruptcy payout, holding preferred shares reduced the risks of losses to the Treasury.[862] Preferred shares also avoided giving the Treasury controlling interest in supported institutions. With these changes, TARP secured passage in the Senate on October 1, and in the House on October 3.[863]

The next challenge became implementation. Unlike the UK plan, TARP was formally a voluntary plan, creating a problem of negative signaling. Institutions which accepted TARP money risked signaling to markets that they were in distress, potentially causing a run by other investors obviating any advantage gained from TARP

Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011, p. 494

[860] Wessel, *In Fed we Trust: Ben Bernanke's War on the Great Panic*, p. 229; Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 510

[861] Lowenstein, *The End of Wall Street*, p. 270; United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 495; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 337-338

[862] Ibid., p. 338

[863] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 494

participation. The similarly voluntary German SoFFin plan would address this problem by offering assistance on such generous terms that any costs of sending a negative signal about firm health were offset.[864] In the US, where the banks had less organizational strength, and no role in the drafting of the state response plan, the problem was addressed by making TARP functionally mandatory for the top nine US financial institutions.

On October 13, Paulson summoned the heads of the top nine US financial institutions to the offices of the Treasury in Washington.[865] Those banks were Citi, JP Morgan, Wells Fargo, Bank of America, Merrill Lynch (not yet merged with Bank of America), Morgan Stanley, Goldman Sachs, and clearing banks BNY Mellon and State Street.[866] Once assembled, the heads of these banks heard from Paulson, Bernanke, OCC Chair John Dugan, and FDIC Chair Sheila Bair.[867] Paulson informed them that each would be required to accept a capital injection from TARP at a specific value.[868] Citi, JP Morgan, and Wells would each take $25 billion, Bank of America $15 billion, plus $10 billion to Merrill Lynch, $10 billion each to Morgan Stanley and Goldman Sachs, $3 billion to BNY Mellon, and $2 billion to State Street.[869] These injections would be non-

[864] Carter Dougherty, "U.S. Investor Lacks Allies in German Bank Battle ; Financier Threatens Suit if Government Buys Up Hypo Real Estate," *The International Herald Tribune*, sec. FINANCE, April 27, 2009.; Judy Dempsey, "Germany Loosens Limit on Executive Pay at Banks that use its Bailout Fund," *The New York Times*, sec. B; Business/Financial Desk, October 21, 2008.
[865] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 495; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 359; Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 519
[866] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 495
[867] Lowenstein, *The End of Wall Street*, p. 270; Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 521
[868] Lowenstein, *The End of Wall Street*, p. 271; Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 524
[869] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of*

voting preferred shares, to avoid the appearance of a government takeover of the financial sector, but would be for non-negotiable terms. Those terms included a 5% annual dividend for the first 5 years, which would subsequently rise to 9% per year thereafter.[870] The banks had the ability to refuse, but were informed if any of them did so, none of them would receive capital on the terms presented, and any subsequent application for aid would be on much harsher terms.[871] Coupled with this was a threat that the banks' regulators, represented by Dugan from the OCC and Bair from the FDIC would closely audit any banks which refused the injections to determine their continued viability.[872] If found to be undercapitalized, the government could force them to accept recapitalization, but Paulson indicated he wanted voluntary consent.[873] Confronted with these alternatives, and unable to negotiate for better terms, the bankers ultimately all agreed to accept the terms offered. Because TARP recipients now included all of the most high-profile financial actors, the stigma was removed for future voluntary participation by smaller and less visible actors.

This strategy was successful for two reasons. The first was the ability of policymakers to play off the disorganization of the US banks. The struggling banks needed the capital, were in too weak a position to refuse the terms offered, and could not count on the healthy banks to advocate for more generous terms on their behalf in the

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Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011, p. 495; Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 524

[870] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 495; Phillip Swagel, "The Financial Crisis: An Inside View," *Brookings Papers on Economic Activity* 2009, no. 1 (2009), 1-63, p. 52.

[871] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 365

[872] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 525

[873] Lowenstein, *The End of Wall Street*, p. 270.

future. The healthy banks did not need or want the injections, which carried with them additional oversight and diluted existing shareholders. However, even if concerns over collective action and relative gains prevented them from acting directly to support systemic stability, they had a clear interest in limiting the growing financial panic. This was acknowledged most clearly by JP Morgan CEO Jamie Dimon, who maintained that he didn't need or want the support, and that it was "asymmetrically bad for JP Morgan," but was willing to act in the interest of systemic stability.[874] In his own words, "we [JP Morgan] shouldn't stand in the way."[875] The CEOs of Morgan Stanley and Goldman Sachs would echo this position.[876] Refusing to participate would have further destabilized markets, causing the panic to grow, potentially threatening even the healthiest institutions. US policymakers, therefore, were essentially able to threaten even the healthiest banks to cajole them into accepting the terms of the deal.

In this they were also helped by the terms offered, which were relatively generous at first, charging a relatively low dividend for the first five years, but then rising to a penalty rate thereafter. In effect, this was market-priced capital for the healthy banks with little risk of failure, but initially below-market for the riskier failing banks. This is why Vikram Pandit, CEO of the highly distressed Citi, described the initial TARP injection as "cheap capital;" it was for his struggling bank because of the risks, but not for the healthier banks.[877] Assistant Treasury Secretary Phillip Swagel described this initial rate as "the opposite of the "Sopranos"…. a deal so attractive that banks would be

[874] Sorkin, *Too Big to Fail: The Inside Story of how Wall Street and Washington Fought to Save the Financial System from Crisis--and Themselves*, p. 527
[875] Ibid., p. 527
[876] Ibid., p. 527
[877] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 365

unwise to refuse it."[878] This was true only for the first five years, however. Distressed banks unable to repay within five years would still be paying dividends when the rate rose to penalty levels in 2013. The healthy banks, however, would be able to repay the Treasury sooner, prior to the penalty rate kicking in. This had the added advantage to the US of having the healthy banks essentially subsidize the failing ones. Injections in the healthy banks presented relatively little risk, and could be counted on to yield a positive return. This compulsory positive return to the US would help offset losses from those banks which accepted TARP capital but either failed anyway or could not repay for a long time.

TARP in practice looked very close to the UK systemic response plan. Both were ultimately mandatory plans that part-nationalized the respective national financial systems. Moreover, both were drafted without the input of the banks, and implemented by using the disorganization of the banks against them, turning the healthy banks into allies against the failing ones. Both plans were also drafted with an eye toward minimizing moral hazard and maximizing the chances of a positive return, though the specific strategies varied. The UK plan relied on punitive rates for the distressed banks, while the US plan involved roping the healthy banks into shouldering some of the burden as well. Crucial to evaluating TARP is the recognition of the lack of role played by the banks in its drafting. This left policymakers free to draft whatever policies they thought best. This still captured a variety of policy positions, from Senator Bunning's free market fundamentalism to Fed Chair Bernanke's ambitious state ownership plans. However, the politically isolated failing banks had no ability, and the healthy banks no incentive, to shape the policymaking process. This left the process to be determined by the ideologies

[878] Swagel, *The Financial Crisis: An Inside View*, p. 52

and electoral calculations of the executive and legislative branch agents, which despite some arguments for avoiding state control, nevertheless consistently favored limiting moral hazard as a chief goal alongside restoring systemic stability.

Post-TARP Rescues

Once TARP was in place, it became the chief vehicle for the distribution of assistance to failing institutions. Three financial institutions in particular are worth analyzing, as all were of systemic importance: AIG, Citi, and Bank of America. Moreover, all would be cited by critics of the US response as prime examples of US generosity to the financial sector.

AIG under TARP

Even after falling into majority-government ownership and receiving an $85 billion line of credit from the Federal Reserve, AIG continued to struggle, requiring an additional $27 billion to pay off its outstanding CDSs.[879] This would prompt additional state support in three components. The first was a $40 billion injection of preferred stock from TARP, while the second and third, known as Maiden Lane II and III, were loans to address AIG's outstanding obligations.[880] Maiden Lane II was a $19.8 billion loan from the New York Fed to allow AIG to purchase mortgage-backed securities from its life insurance company subsidiaries, essentially preventing an escalation of losses on that front. Maiden Lane III was designed to address AIG's outstanding CDS problems.[881]

[879] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 498
[880] Ibid., p. 498
[881] Ibid. , p. 499; Johnson and Kwak, *13 Bankers: The Wall Street Takeover and the Next Financial Meltdown*, p. 169

The TARP injection and Maiden Lane II were relatively unproblematic from a moral hazard standpoint, as the injection got relatively good terms and Maiden Lane II was well-collateralized. Maiden Lane III, on the other hand, would attract considerably more controversy, as it was used to buy back CDOs from AIG-FP's counterparties. While this was necessary to limit AIG's exposure, Maiden Lane III controversially paid 100¢ on the dollar for CDOs, effectively insulating all counterparties from risk.[882] This lack of burden-sharing by AIG counterparties would be roundly criticized not only by outside observers such as Clinton-era Treasury Secretary Larry Summers and former Chief Economist of the IMF Simon Johnson, but also by Neil Barofsky the Special Investigator General for TARP, the program's independent overseer.[883] Treasury officials would counter that they had no leverage to renegotiate, as the counterparties had legal claim to AIG assets if AIG defaulted on its obligations, which would have seen them fully-repaid but the Treasury and Federal Reserve on the hook for their investments in AIG.[884] Therefore there was little space to negotiate a more favorable offer, making the alternative a bankruptcy in which counterparties receive only a fraction of their value, but with much broader systemic consequences. The CDO buy-back was a good deal for the bank counter-parties, and again illustrates the political clout of US banks when healthy, as apart from their AIG exposure, most of the relevant banks were in no danger of collapse. Importantly, since AIG was majority-owned by the US at this point, there

[882] Ibid. , p. 169; United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 499-500
[883] Johnson and Kwak, *13 Bankers: The Wall Street Takeover and the Next Financial Meltdown*, pp. 169, 174; Neil M. Barofsky, *Bailout: An Inside Account of how Washington Abandoned Main Street while Rescuing Wall Street* (New York: Free Press, 2012), p. 180
[884] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 500

were relatively few moral hazard problems from the perspective of the US supporting AIG shareholders. Because AIG was nationalized, aid to AIG essentially was simply a transfer from one government account to another, and not a transfer of wealth to private citizens.

Citigroup

Despite $25 billion in capital injections from TARP, Citi continued to struggle into 2009. Citi was in a unique position in American finance, being the truest universal bank in the US. Although universal banking, combining investment and commercial banking in one institution, had been legalized with the repeal of Glass-Steagall in 1999, most US banks remained primarily focused on one function or the other. The large investment houses may have owned small commercial banks, but their investment operations dwarfed their deposit-taking ones. Similarly, the large commercial banks that branched out into investment banking generally kept their investment arms relatively limited. Until 2008, when JP Morgan obtained Bear Stearns and Bank of America took Merrill Lynch, Citi alone had both substantial commercial and investment banking operations.[885] In addition to Citibank, Citi's large commercial bank, Citi had acquired Salomon Brothers' investment bank operations by absorbing Salomon's buyer, Travelers Insurance, in 1998.[886] This meant that Citi also had a substantial investment bank within its operations. Therefore, the collapse of Citi had greater potential to wreck havoc than other comparably-sized institutions, and that existing resolution procedures were limited

[885] Ibid., p. 138; Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 121

[886] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, pp. 96, 354. This merger, prior to Glass-Steagall's repeal, was possible because existing law allowed such mergers so long as either the commercial or investment banking activities were spun off within five years. The repeal of Glass-Steagall the following year made this spin-off unnecessary.

in their reach. Different regulators had responsibility for different arms of the bank, such that neither of the bank's primary regulators, the Federal Reserve and the OCC, had a clear picture of what was going on in other parts of the bank, though problems in one division could bring down the whole edifice.[887] The FDIC could put Citibank, the commercial banking arm, into receivership, letting the rest of Citigroup fall into bankruptcy. This would not, however, protect the FDIC from taking losses on Citibank as a result of losses from the investment bank or other divisions, making receivership an unattractive option that would both fail to contain the crisis and impose high losses on the FDIC's Deposit Insurance Fund.[888] This complexity also meant that managing the bank was more difficult. CEO Vikram Pandit came out of the investment banking world, and was regarded by regulators, especially Sheila Bair in the FDIC, as being outside of his competence managing a commercial bank.[889]

Citi therefore presented significant and unique risks, and was a high priority for US policymakers. Citi was highly exposed to subprime assets, up to $55 billion, from its investment banking arm, and had been in a precarious position for most of 2008.[890] Citi attempted to address its weaknesses by acquiring Wachovia with Federal loss guarantees, which could have potentially used Wachovia's deposit base to plug Citi's own holes. This move backfired, however, and publically losing a bidding war with Wells Fargo for Wachovia rattled investor confidence in Citi, leaving the bank in a worse position than

[887] Ibid., p. 404; Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 121
[888] Ibid., p. 173
[889] Ibid., p. 2
[890] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, pp. 346, 353

before.[891] Citi became heavily dependent on state aid, taking $25 billion in TARP capital injections, $25 billion in liquidity assistance, and $32 billion in senior debt guarantees from the FDIC.[892] Nevertheless, the bank continued to teeter, weighed down by its increasingly worthless toxic assets. Moreover, the bank's lack of sufficient remaining collateral and fears that any new liquidity would immediately be drained by panicked investors meant that the Federal Reserve balked at expanding Citi's liquidity support.[893]

It became clear to policymakers that either Citi would need to solve its toxic asset problem or fail. Only Citibank could be taken into receivership by the FDIC, leaving a significant portion of its operations to fall into Lehman-style bankruptcy. Moreover, the costs of resolving Citibank threatened to drain the FDIC's Deposit Insurance Fund, handicapping the agency's ability to resolve future commercial bank failures.[894] Therefore, senior policymakers, especially Geithner and Paulson, resisted use of the FDIC receivership process and rejected any plan to let Citi fail. [895]

If failure and receivership were not viable, this meant that Citi needed to contain the losses on its toxic assets. A bad bank remained problematic for both moral hazard and practical reasons, meaning that policymakers turned to a 'ring fence' approach not unlike the loss backstop provided to JP Morgan in the Bear Stearns purchase. Citi and the Treasury together identified $306 billion in problem assets to be put under loss-

[891] Ibid., p. 501
[892] Ibid., p. 504
[893] Ibid., p. 504
[894] Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 123
[895] Lowenstein, *The End of Wall Street*, p. 278; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 411; Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 123

sharing protection.[896] Citi would absorb the first $39.5 billion in losses, the estimated most likely depreciation of the assets, while the government and Citi would split losses on the remaining assets with the US taking 90% and Citi 10% of all further losses.[897] Reflecting Citi's sprawling reach and multiple regulators, the costs were divided among various government agencies. The Treasury would absorb the first $5 billion in losses, the FDIC the next $10 billion, and the Federal Reserve any losses above that.[898] In order to further improve market confidence in Citi, an additional $20 billion in new preferred stock was issued.[899] This new preferred stock was not on the relatively generous 5% dividend terms of the first injection, but carried a higher 8% dividend.[900] This improved Citi's capital position and increased the cost to the Treasury, but also further diluted shareholders and improved the Treasury's terms of capital injection. Once again Bernanke pushed for expanded common stock purchases, but Paulson resisted, not wanting to become a majority shareholder in Citi.[901]

Thus, the arrangement as structured hoped to expose Citi to the most likely actual losses while limiting investor panic at the prospect of broader losses. It therefore was

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[896] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 505; Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 125; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 410

[897] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 505; Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 125

[898] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 505

[899] Ibid., p. 505; Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 125; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 414

[900] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 504

[901] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 413

moral hazard-limiting if estimates of losses were correct, though undeniably created moral hazard if losses exceeded $39.5 billion. On the other hand, Citi private shareholders saw their equity further-diluted, as the Treasury was now 1/3 owner of the bank.[902] Moreover, the terms of preferred stock that Pandit had described as "cheap capital" were now altered, replaced with terms that were market-value, further diminishing the position of Citi's private shareholders. Citi's terms of repayment would worsen further in February 2009, when the original $25 billion of preferred stock, with more generous terms, would be converted into common stock, eliminating the "cheap capital" advantages of the original injection.[903]

Ultimately the ring fence and injections worked to stabilize Citi. Furthermore, though at $45 billion, Citi took more in TARP capital than any other institution, it was ultimately either repaid or sold at a profit by the Treasury by the end of 2010.[904] The Citi ring-fence moreover would serve as a model for the UK's own asset protection plan, as a solution to toxic assets that minimized the moral hazard issues of a bad bank.[905]

Bank of America

Citi's ring fence would also attract the attention of Bank of America, which was struggling with its purchase of Merrill Lynch.[906] Following third-quarter losses of $5.1 billion, estimated fourth-quarter losses for Merrill Lynch climbed from $5 billion to $12

[902] Lowenstein, *The End of Wall Street*, p. 278
[903] Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 167
[904] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 505
[905] Comptroller and Auditor General National Audit Office (UK), *The Asset Protection Scheme* (London: National Audit Office,[2010]), p. 20-21.
[906] Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 127

billion by December 2008.[907] It became increasingly clear that Merrill Lynch was insolvent, and not merely illiquid.[908] Merrill's outgoing CEO, John Thain, claimed that Bank of America was aware of Merrill's position at the time of purchase, but Bank of America CEO Ken Lewis disagreed.[909] More problematically for policymakers, Lewis began suggesting he would invoke a "material adverse change" clause in the Bank of America-Merrill Lynch merger contract to exit from the agreement.[910] In taking this position, Lewis attempted to use Bank of America's remaining political clout, pressing to either break the merger or get government assistance to back the merger.

Bank of America's position had deteriorated both legally and economically, however, and with it the bank's political influence. Legally, invoking the material adverse change clause was by no means guaranteed to succeed, leaving Bank of America already potentially irrevocably tethered to Merrill Lynch's losses. Even without Merrill weighing down Bank of America, the commercial bank was coming under increasing market pressure. Just as the fall of Bear Stearns put pressure on Lehman Brothers, so too did Citi's distress cause investors to look askance at the other commercial banks. Of the remaining major commercial banks, Wells Fargo, with its West Coast focus and lack of ties to Wall Street, was seen as outside the crisis, while JP Morgan was regarded as

[907] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 506
[908] Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 114
[909] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 507
[910] Ibid., p. 507; Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 429

perhaps the sturdiest financial institution in the US.[911] That left Bank of America as the most prominent target after Citi for investors nervous about distress in the commercial banks.

Policymakers took advantage of both of these factors to put pressure on Bank of America. Paulson and Bernanke both informed Lewis that invoking the material adverse change clause "was not a legally reasonable option."[912] Paulson moreover argued that the collapse of the deal would demonstrate a "colossal loss of judgment" by Bank of America, weakening Bank of America as well as Merrill Lynch.[913] Paulson reminded Lewis that pursuing a "destructive" strategy on "no reasonable legal basis" would give the Federal Reserve pretext to exercise its legal authority to replace both the Bank of America board and management.[914] Bernanke, for his part, supported Paulson by promising Lewis that Bank of America would receive no government assistance of any kind unless the Bank of America-Merrill Lynch deal went through.[915] Given that investor confidence in Bank of America would be rattled by the collapse of the Merrill deal, policymaker resistance threatened to put Bank of America in a devastating position. These naked threats worked, and the Bank of America-Merrill Lynch merger was completed without renegotiation or direct subsidy on January 1, 2009.[916]

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[911] Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 331

[912] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 507

[913] Ibid., p. 508

[914] Ibid., p. 508

[915] Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*, p. 427; United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 508

[916] Ibid., p. 509

Once Citi won its ring-fence protection, however, Bank of America petitioned for a similar plan. Having decided that ring-fences were a superior method than bad banks to provide supplemental support, the Federal Reserve and FDIC negotiated an equivalent plan for Bank of America.[917] $118 billion in assets, mostly from Merrill Lynch, would be identified, with Bank of America taking the first $10 billion in losses, then burden sharing losses on the same 90%/10% split with the government that Citi received.[918] Because the majority of assets were not from commercial banking, the FDIC's exposure was less, with the first $10 billion of government losses split 75%/25% between the Treasury and FDIC, and the remaining losses taken by the Federal Reserve.[919] In addition, the Treasury would use TARP to purchase an additional $20 billion in preferred stock, carrying the same high 8% divided as the second Citi injection.[920] As with Citi, the plan was designed for Bank of America to absorb all likely losses, and the government to absorb extraordinary losses above that. However, by May, Bank of America came to believe that losses would be below $10 billion, making maintaining the ring fence arrangement expensive and unnecessary. It therefore negotiated an exit from the program, but not before paying a $425 million termination fee, to cover the benefit it received from four months of coverage.[921]

State policies toward Bank of America again demonstrate the willingness of policymakers to take a hard line with weak banks. Although Bank of America had been a valuable partner in helping policymakers broker a private solution for Merrill Lynch,

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[917] Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, p. 126

[918] United States Congress House Committee on Financial Services, *The Final Report of the Financial Crisis Inquiry Commission: Hearing before the Committee on Financial Services, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, February 16, 2011*, p. 509

[919] Ibid., p. 510

[920] Ibid., p. 509

[921] Ibid., p. 510

once Bank of America itself was in distress, it was dealt with as harshly as any other failing bank. Paulson and Bernanke nakedly threatened Lewis with both legal action shattering confidence in the bank, and with withholding of state aid to prevent its failure unless Bank of America fulfilled its obligations and completed the Merrill Lynch merger. Once again the Lehman Brothers precedent proved valuable, by demonstrating the willingness of policymakers to allow the failure of a major institution. Moreover, since Bank of America was FDIC-insured, the threat gained additional credibility. A Bank of America receivership would have been costly to the FDIC Deposit Insurance Fund, but a legal mechanism already existed to make the fall of Bank of America softer than that of Lehman Brothers. This gave policymakers an even stronger negotiating position to compel Bank of America to commit to its private rescue of Merrill, even as the profitability to Bank of America declined. Subsequent aid, moreover, ultimately would be declined by Bank of America as imposing greater costs on the bank than going forward without aid would do.

Conclusion

Ultimately, the story of the financial crisis and its responses in the US is not one of the political weakness of the financial sector generally, but rather one of disorganization and self-interest, producing a scenario where the healthy firms retain considerable clout, while the failing firms have little choice but to accept whatever offers policymakers or other firms present them with. The clout of healthy firms in the US is readily demonstrated before the crisis, with the Glass-Steagall repeal and the successful campaign against derivatives regulation, and also during the crisis, especially in JP Morgan's ability to secure a generous subsidy for its purchase of Bear Stearns. However,

when banks fail, they fall both far and fast. Their representatives are largely shut out of policy negotiations, and their proposals for relief generally disregarded, as seen in the immediate rejection of proposals by Bear Stearns, Lehman Brothers, and Wachovia for terms of state assistance. Not only are the banks themselves shut out, but they lack the healthy bank allies and strong organizational support found in Germany. The healthy banks in the US not only played no lobbying role on behalf of the failing ones, but also proved unwilling to provide any direct support. The one attempt to organize a consortium rescue, for Lehman Brothers, failed to produce a result, and purchase offers for failing banks were made only at fire-sale prices. In some cases, successfully for Bear Stearns and unsuccessfully for Lehman Brothers, healthy banks will attempt to secure state aid that will benefit the buyer, but not the distressed bank. Even at the height of the crisis, failing banks saw the healthy banks as rivals, potentially looking to poach valuable clients and data models, rather than potential saviors.

In addition, US banking associations played even less of a role than their British peers. The British Banking Association had no organizational role, but at least remained a high profile and vocal critic of state policies. The major US organizations, the American Banking Association and the Financial Services Roundtable, played no such role, and certainly came nowhere close to the active role of the German associations, which not only organized private and public-private rescues directly, but also were active participants in the policy debates on the terms of state rescues.

As a result, US policymakers were unencumbered by pressures from the banking sector, and the key determinants of policy outcomes were the policy preferences of the relevant policymakers. These proved diverse in the US case, from Senator Bunning's

willingness to let the banks fail no matter the consequence rather than involve the state to Fed Chair Bernanke and FDIC Chair Bair's strong support for temporary nationalization. Apart from New York Fed President Tim Geithner, the vast majority of voices preferred taking a hard line with the banks, even if it meant failure or state ownership. Even here, it is hard to see a clear influence of the financial sector. Geithner was a career civil servant, without direct links to Wall Street, and therefore more likely swayed by ideology rather than political influence. By contrast, Treasury Secretary Paulson, a former Goldman Sachs CEO with the clearest links to Wall Street of any of the major players, would be one of the strongest advocates for defending principles of moral hazard, supporting letting Lehman fail and mandatory capital injections on punitive terms for the others.

The results of this political configuration were a range of resolution policies which broadly conform to the principles of minimizing moral hazard and perverse redistribution. The US experience also illustrates the value of a pre-defined resolution authority. By far the most successful rescues, in terms of limiting both a broader panic and moral hazard, were the FDIC resolutions, which proved capable of resolving even large banks such as Countrywide and WaMu on good terms for taxpayers. Even in the case of Wachovia, resolution authority was not used, but was a useful credible threat to force Wachovia's board into accepting an alternate state-devised rescue program. A compulsory legal authority also enabled the resolution of Fannie Mae and Freddie Mac with a minimum of negotiation.

Where no pre-existing authority existed, state responses depended largely on the amount of leverage the state possessed over the affected banks. JP Morgan was able to

secure a favorable subsidy for its purchase of Bear Stearns because it could more credibly walk away from the merger than the US could credibly threaten to allow Bear Stearns to fall. Even here, though, JP Morgan used its clout in its own interest, and not in the interest of Bear Stearns. A desire to reject this precedent drove the US to then let Lehman Brothers fall, in order to restore the credibility of US threats to let a major institution go into bankruptcy. A lack of leverage also forced the US to accept a 100% payout for AIG's CDOs, as the counter-party banks could insist on full repayment, which would produce an AIG bankruptcy but would be unlikely to bring down the counterparties. Since this was an unacceptable outcome to the US, and policymakers lacked either the legal authority or the leverage to compel compromise, they had little choice but to accept these terms.

When the state did possess leverage, however, it was quick to use it. Both Bear Stearns and Lehman Brothers, which were reliant on state support to survive, found that they virtually all influence in the policy process, while Fannie & Freddie and AIG had plans presented to them on a "take it or leave it" basis, forced to chose between majority state control and bankruptcy. Even the strongest of the investment banks, Morgan Stanley and Goldman Sachs, could not win exceptionally favorable treatment, only able to gain regulatory reclassification and not direct state support.

This dynamic is found in the TARP plan as well. In order to eliminate the stigma of accepting state aid, which forced the Germans to offer aid on extremely generous terms, US policymakers chose to make TARP injections mandatory for the top nine financial institutions. This required striking a balance between imposing harsh terms on failing banks, and convincing healthy banks to accept assistance that they could not be

legally compelled to take. This was accomplished by using a combination of playing off of the healthy banks' systemic fears, by making it an all-or-nothing proposal, and by offering assistance on terms which were generous at first, but would become punitive later. Doing so won the support of the healthy banks, while providing cover for the weaker ones. These terms would be more generous than any future TARP support, however, which would carry a moral hazard-limiting 8-10% dividend, at or higher than the rate a market investor would charge.

The cases of chief criticism similarly reflect the US attempting to minimize moral hazard within the limits of its ability. The most naked state aid, the subsidy of JP Morgan's purchase of Bear Stearns, reflected the influence of the healthy JP Morgan, and benefited JP Morgan but not Bear Stearns. The greatest losses to the taxpayer in the crisis would come from Fannie Mae and Freddie Mac, but even here the actual terms of intervention wiped out existing shareholders in a compulsory nationalization. The failure of the GSE rescue to produce a positive return reflect not the terms of the rescue, but the deep fiscal hole the two institutions were able to dig themselves thanks to decades of kid-glove treatment by regulators in the time when their political clout was unrivaled. Finally, Citi, the case where Bair, among others, saw the softest treatment by the state, did ultimately produce a positive return for the state, and in less than two years. Indeed, excluding from the automotive industry bailout component, TARP would produce a positive return for the US, reflecting terms which defended taxpayer interests.

The US experience, therefore, shows policymakers consistently taking as hard a line as possible against the failing firms, in contrast to the soft line of the Germans. In some cases, such as the bankruptcy of Lehman Brothers and the FDIC nationalizations,

the US would take a harder line than the UK. At the same time, however, the healthy US institutions continued to demonstrate considerable influence. This suggests that, while the US can impose a hard line against the failing firms, it may have limited ability to either prevent banks from engaging in risky behavior, as with the GSEs, or to develop an FDIC-style pre-funded resolution authority for the investment banks. This, in turn, increases the importance of imposing harsh costs on failing banks, as the threat of market discipline remains the most effective tool US regulators possess to limit the excesses of its investment banks.

Chapter 8: Conclusion

Examining state responses to financial crises reveals a seeming paradox: states with a tradition of laissez-faire state economic policies adopt crisis response policies that both rely heavily on an expansion of state ownership and involve the state taking a hard line with private interests, while states with a tradition of state management through organized capitalist systems respond with a far lighter state intervention, through generous assistance that minimizes state ownership and relies heavily on the voluntary compliance of private interests. Through an examination of the interests of healthy banks and banking associations, and the political positions they take in times of crisis, this seeming paradox can be resolved. Liberal financial systems produce atomized interbank relationships, such that when banks run into distress, they have little influence and few allies, enabling the state to take a hard line and adopt policies that minimize moral hazard and perverse redistribution, while maximizing the likelihood of the state recovering its money. By contrast, in corporatist financial systems, greater interdependence means failing banks have allies in the other banks and in private governance associations. This means that private banks and their associations are both more willing to contribute their own money toward rescuing their peers and more willing to use their political influence to shape state responses to be more favorable to the banks.

This understanding of the comparative dynamics of banking crises across advanced capitalist states carries important implications for both the multi-level governance and comparative capitalisms literatures, which will be discussed following an examination of the validity of the argument in comparative perspective and a discussion of relevant alternate explanations. Finally, although significant structural differences

exist between the liberal and corporatist financial systems, a series of policy lessons may be gleaned that are applicable in both contexts, and will be discussed at the close.

Comparing State Responses to Banking Crises

The Role of Financial Systems

Looking at state responses to banking crises comparatively reveals clearly divergent patterns of state response. Those states in which stock markets dominate the provision of capital have a markedly and statistically significant greater propensity toward state intervention through ownership stakes or nationalization than those with a private bank-dominated national financial system. Moreover, the former are also significantly more likely to recover the money they invest in rescuing their financial systems in times of crisis. Turning to the case studies, an examination of responses in Germany, the UK, and the US reveals that this divergence can be traced to the tighter and more cooperative interbank relationships in private bank based systems, which produces stronger private governance networks and both greater willingness and greater ability for healthy banks to intervene to secure more favorable treatment. In their absence, policymakers in states with stock market-based systems can more easily implement policies which minimize moral hazard and perverse redistribution while maximizing the chances of the state recovering its money. Case study research reveals as well that private rescues are more common in states with private bank-based systems, and that the terms of public intervention are harsher for banks in states with stock market-based systems.

The three cases compared, Germany, the UK, and the US, reflect this divergence in national financial systems. In Germany, private banks dominate the provision of

capital, providing approximately twice as much capital to firms as the German stock markets. In the UK, this ratio is closer to 1:1, while in the US, stock markets provide over four times the capital of private banks. Because of the longer-term nature of bank-client relationships when private bank capital dominates, banks in such systems are less competitive, and more likely to form interdependent relationships and stronger private governance systems. This holds in the German case, where within the three pillars of German banking, banks are highly interdependent, with extensive cross-shareholding and strong private governance networks. By contrast, in the more highly-competitive British and American systems, interbank relationships are far more arm's-length. Interbank lending is only done at risk-sensitive rates and on good collateral, cross-shareholding is extremely limited, and sectoral associations are extremely weak. In contrast to the strong German associations, which even run private deposit insurance schemes, the British and American equivalents are merely industry lobbies, which cannot stop their members from working at cross-purposes. These differences would be reflected in how both the banks and the states managed the 2007-2009 crisis.

In Germany, private banks played a key role in organizing and funding rescue efforts, especially initially. In the case of SachsenLB, the initial rescue, involving both liquidity and capital support, was organized and funded entirely by the Landesbanken themselves, with minimal state involvement. Initial rescues of IKB and Hypo RE would both contain significant private components, with the three German banking associations negotiating their contributions with the state and organizing their members to contribute to the rescues. The Hypo rescue is especially noteworthy, because after the initial aid proved insufficient, the German commercial banks proved willing to increase their

contribution even without a matching increase in state contributions. By contrast, in the British and American cases, such privately-funded rescues were virtually unheard-of. The British government managed to organize a small consortium to support Bradford & Bingley, but only with significant effort by policymakers to extract a relatively meager contribution. In the US, attempts to organize a private consortium to rescue Lehman Brothers would collapse entirely. Private banks in the UK and US would only play a role in rescues in what were essentially "fire sale" purchases: taking advantage of the distress of a failing peer to obtain its assets at a bargain price from owners desperate to sell before they collapsed and lost all value. In some cases, such as the purchase of Bear Stearns by JP Morgan or the proposed purchase of Northern Rock by Virgin, even the fire sales would only be contemplated with a subsidy by the state. Whereas the British and American banks were only willing to contribute when their direct interests were at stake or if the terms were exceptionally favorable, the German banks showed a far greater willingness to contribute to rescues in the interest of systemic stability. This reflects the diminished interbank competition in Germany, which makes systemic stability more important to banks than gaining a marginal advantage over other banks. It also reflects the stronger private governance associations, which enabled the rapid organization of private consortium rescues.

The shape of the financial system, especially the interests and organizational strength of the banks, would also play a role in determining the shape of public rescues. Because of the absence of private consortia to protect against systemic risk, the state needed to intervene earlier in UK and US cases. The US and UK needed to intervene in relatively small cases such as the FDIC-insured institutions and Northern Rock, whereas

comparably-sized SachsenLB could be managed entirely by the Landesbanken and the DGSV, the Landesbanken private governance association. This is found in the quantitative data as well, where the state in stock market-based systems generally intervened more readily than in private bank-based systems. Moreover, not only the extent but also the form of state intervention would be determined by the role played by the healthy banks and the banking associations. In the UK and US, no significant private governance associations existed, and the healthy banks had no interest in securing favorable terms for their failing rivals. To the contrary, they would resist generous state aid, not wanting to compete against a state-subsidized rival. Therefore, since the failing banks were at the mercy of the state for their very survival, they had little choice but to accept whatever terms the state issued. This enabled policymakers in both the UK and the US to shape rescues which came at a high cost to failing banks. By contrast, in Germany, the banks and banking associations played a key role in shaping state responses. Representatives of the banking associations and the major private banks would be part of the group which devised not only the rescue of Hypo RE, but also the SoFFin systemic rescue plan and its later modifications. These banks would even include Commzerbank, one of the institutions seen as highly likely to need to participate in these rescues. This access reflected not only the interest of the still-powerful healthy banks, but also the importance of the private governance associations as regulatory partners of state authorities. The banks and banking associations would use their position to promote plans which treated more favorably. This is nowhere more clearly illustrated than with the bad bank which was a component of the second round revision of SoFFin, a plan

which was based largely on one developed and promoted by the BdB, the commercial banks' association, and which helped insulate banks from losses on their toxic assets.

As a result of the differing ability and willingness of the healthy banks and their governance associations to shape rescues, the outcomes in the three cases were substantially different. In the US, the rescue efforts were broadly successful from a state perspective, limiting a broader financial system collapse at a relatively small net cost. Through a combination of mandatory full and partial nationalizations, some pre-funded through bank levies by the FDIC's standing Deposit Insurance Fund, the US managed the failure of many smaller and some larger institutions, as well as negotiating the fire-sale purchase of several larger institutions. Moreover, the terms of those nationalizations and capital injections were generally harsh. The FDIC-insured banks and the GSEs Fannie Mae and Freddie Mac were nationalized for *de minimis* compensation, and the AIG shareholders similarly saw the state take an 80% ownership stake on harsh terms, while TARP assistance to the top nine banks rose to a high 9% dividend after five years, and would start at 9% for other banks seeking assistance. As a result, the net cost of rescues to the state in the US was relatively low. The FDIC-insured banks imposed no cost on taxpayers, while state aid to AIG and to the banks through TARP has, as of early 2013, shown a slight profit to the state. While the US aid to the GSEs, and on TARP aid to the auto industry has not been fully-repaid, of the three cases, the US recovered the most money relative to aid provided.

The British story is similar. State aid was on harsh terms, with the full nationalization of Northern Rock and Bradford & Bingley on *de minimis* terms and the compulsory capital injections into the larger banks carrying a high dividend on preferred

shares and a low price on common stock. The UK has yet to show a profit on its rescue investments, but policymakers remain optimistic that they will ultimately recover all of their money. Because the British terms were even harsher than the American ones, this reflects more the larger scale of the crisis in the UK, especially relative to GDP.

The German outcome, however, was significantly worse in terms of recovery of investment. Although the banks contributed to early rescues, the ultimate state-funded plan was considerably more generous than in either the US or the UK. As such, unlike both American and British objectives of recovering the state's investment, the German plan was anticipated to ultimately operate at a loss, a prediction which proved accurate. Moreover, German aid to Greece served in part as an additional 'backdoor' bailout of the German banks, which were highly exposed to Greek debt. Therefore, German state losses to prop up the banking system included not only the direct aid to banks, but also the German aid to Greece as part of the management of the Greek debt crisis.

These patterns in the cases are broadly reflected in the quantitative analysis. Although the quantitative analysis cannot capture the specific terms of state aid, it does show a clear greater willingness of banks with stock market-based system to use state ownership to manage crises, and a greater likelihood of states in such systems recovering their investment. As demonstrated in the cases, this divergence can be traced to the willingness of the healthy banks and their governance associations to use their political access to shape state responses in ways more favorable to the failing banks and the banking sector generally.

Alternate Hypotheses

Several alternate hypotheses have been suggested to explain state policies in banking crises, though the statistical analysis and cases studies suggest that none of them were determinative. Party policies would seem to be an obvious potential factor, with left parties seen as more likely to take a harder line with the banks than right parties, which are less comfortable with state intervention and more likely to count financial interests as part of their base. Both the statistical analysis and the cases studied, however, show very little effect of party. Within the cases, there is a general consensus across parties as to the proper order of state objectives, with only some minor disagreement about the specific policy tools used to maximize those objectives. This is most obvious in the German case, which was governed by a center-right/center-left CDU-CSU/SPD (Christian Democrat/Social Democrat) Grand Coalition into 2009. In that time, there was no public disagreement among the coalition members as the correct course of action. Even after the SPD moved into the opposition, the terms of the bank rescue, including extensions of SoFFin by the new government, were not seriously contested between the parties. The SPD did critique the CDU and new partner the FPD (Free Democrats) on their management of subsequent aid to the German automotive industry, but aid to the banks remained outside of the political debate.

The UK and US lacked the German coalition government, but nevertheless saw general consensus between the center-left and center-right over the proper course of action. In the US, although the Democratic leadership insisted on some supplemental aid to homeowners, they largely supported the general terms of the Republican Administration's bank rescue plans. Opposition came primarily from the further left

elements of the Democrats and the further right elements of the Republicans. This opposition, however, rather than arguing for more favorable terms for the banks, instead argued for even harsher terms, letting the banks fail even at the risk of systemic crisis. Parties in the UK disagreed somewhat more, but chiefly over whether the state should prioritize minimizing the state's outlay of assistance, and thus risk of losses, or prioritize maximizing the likelihood of recovering investment, even if that meant taking large stakes at punitive terms in the banks. As in the US, neither the incumbent Labour Party nor the opposition Liberal Democrats and Tories favored more generous terms to the banks. The lone exception was the Scottish National Party, which favored more generous terms toward HBOS. Even this, however, was driven not by a desire to protect the bankers per se, but rather out of a desire to keep HBOS independent of London banks, and thus make a stronger case for Scottish secession. In all of these cases, therefore, state aid to the banks was therefore largely depoliticized, and framed as a technical question rather than one to be addressed through party conflict.

A second factor to be examined in some detail is the role of international institutions in managing the conflict. The most prominent of these institutions to play a role in the crisis was the European Union, and especially the Competitiveness Directorate of the European Commissions. Obviously, the EC played no significant role in non-EU members, including the United States, but even in the United Kingdom, its role was fairly small, generally approving of UK rescue plans with only slight modifications. It played a much more important role in Germany, where it was routinely critical of German rescue plans, frequently flagging the German state for excessive state aid and insisting on at times substantial modifications to German policies or divestment of large portions of

state-assisted German banks. This therefore fits predictions that international integration would lead to pressures to limit competition-distorting moral hazard-creating policies. The EC formed, in essence, an upper limit of how generous state aid to the banks could be. In the UK, where the failing banks had little influence, policymakers had no incentive to be generous, when such generosity would run the risk of greater state losses and political fallout from angry voters. As such, British aid routinely fell within the bounds set by the EC. In Germany, by contrast, where the healthy banks and banking associations pressed for more generous aid, the state routinely pressed up against EC limits. The German assistance, therefore, would have been even more generous without the EC to rein it in.

A final alternate argument is that dynamics should be different in federal states, where the banks will have more potential channels of influence. Federalism is not found to be a statistically significant predictor of state policy, and the two federal cases diverge in the role the federal system played. In the US, the federal states played no real role in managing the crisis, with all assistance, and thus all key policy debates, conducted by representatives of the federal government. In Germany, however, the Länder would play key roles in the response, at times serving as an alternate and more generous source of aid to the banks, especially the Landesbanken. There are some important differences between German and American federalism, most significantly that the US states operate under a hard budget constraint, barring them from running deficits and diminishing their ability to provide substantial assistance.[922] More important, however, is the extent of state ownership at the sub-national state level in the two cases. The US states have

[922] This barrier to running deficits is found in the state constitutions of 49 of the 50 US states, with Vermont, not a major banking center, the lone exception.

virtually no ownership stakes in the banks, especially the national banks, and therefore little incentive to not simply let the federal government manage the crisis. The Länder, however, are large shareholders in the Landesbanken, meaning that they have a direct stake in the terms the Landesbanken receive. This, in turn, may give them an incentive to provide an alternate source of assistance, rather than accept less desirable terms from the federal government. That ownership stakes, and not the hard budget constraint, is the key difference may also be indicated by the fact that the Länder only provided aid to the Landesbanken, and not to any distressed commercial banks in their territory.

The Cases and the Literature

Implications for the Governance Literature

Examining the German case in comparison to the US and the UK shows a clear difference, which can be traced to the presence of private governance institutions in German finance. The absence of private governance institutions in the US and UK forced those states to take a much more active role in managing their banking sectors, both before and during the crisis. By contrast, private governance institutions in Germany played a key role both before and during the crisis. Before the crisis, the banking associations' private deposit insurance schemes obviated the need for the state to develop its own plan, while at the same time giving the banking associations a formal role in managing the regulation of the financial sector. This would leave the German state without a formal plan for managing bank failure, as the FDIC possessed. It also meant that the banking associations would have a key role in the negotiations over state responses, which they would use to promote more bank-friendly terms.

This difference allows an examination of real consequences of the presence or absence of a private governance level in managing an issue of crucial "high politics." It therefore examines governance not simply as a frame for understanding, but a phenomenon with empirically significant results. The absence of private governance in the United States and United Kingdom significantly altered the politics of response from the German case, where private governance empowered the healthy banks through both coordination and formal access, making them significant players in the politics of financial response. This furthermore suggests that the form of governance, whether competitive or cooperative, may be empirically different between cases: in stock market-dominated systems, banks have a more competitive relationship, creating little space for private governance to form, as each bank will jealously protect its position relative to the other banks. In such an environment, in the absence of private governance, only the state will provide governance of the financial sector. By contrast, the longer time horizon and greater difficulty in poaching clients in private bank-based systems means that relative position is less important, and bank relationships become more cooperative. In such an environment, private governance institutions are more likely to form, and to have significant power to organize their members toward common goals.

Examining private governance in financial crises also moves away from conceptions of governance as a normative 'good.' Rather, the picture is somewhat more complicated. In economic good times, private governance allows the state to transfer some burden of regulation to the private governance institutions. In small disruptions, such as the failure of SachsenLB, it also allows the state to escape the need to organize rescues or contribute state funds. In these circumstances, the presence of private

governance is a net good for the state, as the US and UK, in the absence of private governance institutions, are forced shoulder the burden of all regulation, and to manage the costs of even smaller firms that cannot simply be sold to a single buyer. The state in such circumstances may chose not to regulate, or to deregulate the banks, leaving no body regulating. Healthy banks may have significant influence in both types of systems, and the fact that healthy banks escape direct costs of rescuing failing banks in crises gives them less of an interest in preventing crises than in private governance institutions, where other banks' failure may impose direct costs. For this reason, overall regulation may be lighter in systems without private governance.

When the crisis reaches the level of requiring state intervention even in states with private governance institutions, private governance institutions become a force increasing the costs to states, however. In the US and the UK, healthy banks either expressed indifference to the fate of failing banks or actively lobbied for harsher terms. In Germany, the private governance institutions played a key role in convincing the state to take a gentler line on state aid to the banks. In terms of limiting the need for expensive state intervention, therefore, private governance is positive factor in smaller crises, but when the crisis reaches a larger scale, where private governance institutions are insufficient to manage the crisis, they become a force driving the state toward more expensive rescues, with greater moral hazard and greater perverse redistribution than in cases without strong private governance institutions.

Implications for the Comparative Capitalisms Literature

The most important implication for the comparative capitalisms literature of examining financial crises may be in examining the methods by which national financial

systems either transform or sustain themselves in financial crises. Since the shape of the national financial system is a key determinant of the overall orientation of the economy, this has great importance to the ability of various models of capitalism to survive generally. Contrary to the predictions of the convergence literature, the corporatist model proves more capable of restoring the pre-crisis status quo than the liberal model. While the corporatist model in Germany survived essentially unchanged, in the US and UK there were intense factors pushing toward a more statist model. While the US essentially returned to a pre-crisis liberal model, in the UK the state has dramatically expanded its ownership stakes in the financial sector, with a corresponding call by some factions both in and out of government to use those ownership stakes to advance state policy goals. Explaining this can be traced to the political choices of banks in the various systems, illustrating not only the merits of considering comparative capitalisms as a political theory, rather than one rooted in economic functionalism, but also the merits of combining a comparative capitalisms framework with the insights of the governance literature.

Post-crisis German finance looks very similar to pre-crisis German finance. The crisis prompted some bank consolidation, both within the Landesbanken and the commercial banks, but the three-pillar structure remains intact and the state has not significantly changed its relationship with the banking sector. Only one bank was fully-nationalized, and that bank, Hypo RE, was nationalized only to facilitate an orderly wind-down. State stakes in the other banks were kept as small as possible, and with an eye toward selling them as soon as possible. The state's stake in IKB, which it obtained before the crisis, was even sold at a loss due to pressures from the banking industry to

withdraw state ownership. This return to the status quo was thanks in no small part to the willingness of the healthy German banks and the banking associations to take steps to preserve that system, both through privately-funded rescues, as in SachsenLB, and through a willingness on the part of the healthy banks to push for state aid that was generous and hands-off. The institutions of corporatist finance, bank interdependence and private governance structures, therefore worked as factors pushing toward the perpetuation of the corporatist structures.

The US also retained the essentially liberal orientation of its pre-crisis financial system, although with more extensive structural transformations. Most obvious is that the US government remains the owner of Fannie Mae and Freddie Mac, giving it a key position at the heart of the mortgage finance system, though political debates continue as to whether these state-owned enterprises should be held, sold off whole, sold off partially while retaining a public stake, or wound down and sold off in pieces. More subtly, US finance shifted significantly away from its commercial bank-investment bank bifurcation, with Bank of America, the purchaser of Merrill Lynch, and JP Morgan-Chase, the purchaser of Bear Stearns, joining Citigroup as financial firms with significant operations in both types of banking. Moreover, the remaining large investment houses, Goldman Sachs and Morgan Stanley, converted to bank holding companies, meaning that no large institutions remain chartered as independent investment banks. However, the continued distress of Citigroup means that some political sentiment exists for restoring the Glass-Steagall legal division between commercial and investment banking, and significant political sentiment exists for some expanded state authority to manage "too big to fail"

institutions. Ultimately, however, US finance remains dominated by stock market capital, and largely free of state ownership.

Unlike in Germany, however, this was essentially as a result of policy choices made by state actors, and not because of structural barriers to the transformation of the system. Henry Paulson and his successor as Secretary of the Treasury Timothy Geithner both retained a strong ideological commitment to a privately-owned financial system, and therefore chose a model of state intervention which minimized state control and prioritized returning nationalized financial firms to private hands. This commitment to a privately-owned financial system, however, did not bar them from favoring stringent terms for state assistance to financial actors. Virtually no major US actors favored gentle terms to the banks, and some went further, favoring letting them fail even at the risk of systemic collapse rather than provide even harsh assistance. Therefore, the choice by US policymakers to preserve the liberal American system was, unlike in Germany, not driven by structural barriers to change, but rather by the politics of key decision-makers.

A similar dynamic played out in the United Kingdom, although here politicians were more willing to maintain a public stake in the financial sector indefinitely. While the US broadly maintained its liberal orientation, in the UK the state took far greater strides toward a statist financial system. While both relied on nationalization to resolve failing banks, the US generally either immediately re-sold nationalized banks to private actors or took preferred shares which minimized control from ownership stakes. In the UK, by contrast, the state would take full ownership of Northern Rock and Bradford & Bingley, a controlling 80% share in RBS, and a significant minority voting interest in Lloyds/HBOS. Moreover, although politicians both at the time and since have

announced their intention to reprivatize these firms once the state can make a profit from their sale, that may be years into the future, leaving the British state in control or near-control of two major British banks as well as a significant smaller one formed from the merger of Northern Rock and Bradford & Bingley. In addition, since taking these stakes, there have been significant calls, both from outside groups and from Members of Parliament to manage these banks not just as profit-maximizing firms, but in order to further state goals, such as increasing credit to the economy and diminishing the impact of the post-crisis recession.

In the UK, as in the US, the healthy banks played no role in restricting the state's active intervention in the economy through compulsory nationalization and capital injections. In some cases, they even called for harsher terms of nationalization. This left the state in both the UK and the US in control of significant portions of their financial industries, obtained at a relatively low price from their private owners. While in the US, policymakers then chose to almost immediately divest itself of those positions, in the UK, policymakers instead contemplated using those state-owned firms more in line with the statist model of finance, using state-owned banks to direct the economy. That the US chose one path and the UK another cannot be traced to the policies of the banks, but rather to the policy preferences of state policymakers.

The UK is ultimately unlikely to move toward a fully statist financial system and policymakers will likely ultimately reprivatize the state-owned banks, but the contrast between the two liberal systems and Germany is telling. In the German case, the institutions of corporatist finance served as a barrier to systemic transformation. Not only would the state need to take on the costs of financial governance currently being

shouldered by the private governance associations, but the healthy banks and banking associations were willing to use their political influence to block any move to a statist or liberal system. The preferences of state policymakers were thus only one factor determining whether the pre-crisis status quo would be preserved. In the liberal cases, however, both responded to the crisis with an expansion of state ownership, not having barriers to action from the healthy banks, and similarly had little pressure from the financial sector to return to a liberal system after the crisis. That the US chose to divest itself quickly and the UK slowly came down to a question of the preferences of state policymakers, without the institutional barriers to a transformation of the system found in the corporatist model. This therefore furthers the argument that, while corporatist systems are hard to dislodge thanks to their self-perpetuating institutions, national financial systems can more easily transition between liberal and statist models, as the determining force pushing in one direction or the other is control of the state.

This analysis also has implications for how to conceive of comparative capitalisms and its underlying mechanisms. The logic of Hall and Soskice's formulation in *Varieties of Capitalism* is one of economism and functionalism, with policy driven by the institutional logic of liberal or coordinated systems. This explanation, however, fits poorly with the dynamics observed in the three cases described here. A logic of economic functionalism would suggest that states with a private bank-based system would consider a wholly-different slate of options than those with a stock market-based system, but that does not bear out in practice. The menu of policy options was broadly the same in all three cases, but the choices made were different. The Germans considered mandatory plans and substantial capital injections, but ultimately rejected them, while the

Americans and the British attempted private consortium rescues with little success. This is more adequately explained through a political theory of comparative capitalisms than one of economic functionalism. The German banks had political resources to shape the terms of the response more favorably than their American or British counterparts, and this provides a more compelling explanation of the differences in outcome than a reference to logics of economic functionalism. Moreover, similarities between the American and British financial systems pre-crisis means that economic functionalism is a poor explanation of why the outcomes of the two cases look more liberal in the American case and more statist in the British one. Again political explanations, especially a greater tolerance for state-owned enterprises among British policymakers, provide a more credible explanation.

Here the combination of comparative capitalisms with multi-level governance therefore provides a fruitful way to advance both literatures. Conceiving of corporatism as a system in which private governance structures shape the direction of economic actors allows for a clear explanation of the greater political clout of the financial sector in times of crisis in corporatist systems, as the weaker actors have the support of the private governance institutions and the stronger actors, producing a better ability to shape the political process. This also allows for an expansion of an area of multi-level governance that has been regrettably overlooked in the literature to date, the role of private governance.

Policy Implications

In addition to the implications for the comparative capitalisms and multi-level governance literatures, and the greater understanding of the dynamics of banking crises,

the cases examined here also provide several lessons for policymakers, both in planning for managing banking crises and in devising policies in the midst of crises. The broader implication of this study focuses on the implications of structural features of national financial systems in shaping the politics of financial crises, and as such may be of relatively little direct impact for policymakers. After all, the broad structural orientation of a national financial system will change only with immense effort, and one of the strengths of the comparative capitalisms literature is its emphasizing the resilience of national financial systems. Therefore, changing the orientation of a national financial system will not be a viable option for policymakers, save perhaps in contemplating a broad overhaul of the national economy generally and in the long term. Nevertheless, there are several smaller policy implications that may be gleaned from comparing the responses of Germany, the UK, and the US in the 2007-2009 crisis, especially for policymakers looking to take state action to limit moral hazard and maximize the chance of recovering state investment in banking rescues. Although the greater political clout of the banks in times of crisis in private-bank-based systems may preclude their implementation in times of crisis, in principle all of the below prescriptions could be implemented as part of long-term crisis planning in economic good times, when the strength of the corporatist private banks is less clearly greater than that of the healthy liberal system banks. Therefore, these prescriptions may be as valuable in either context.

Mandatory Plans Lower Costs to the State By Eliminating the Space For Banks to Negotiate Terms

Perhaps the chief reason why the German SoFFin plan consistently produced state intervention on better-than-market terms for the banks was that the German state lacked a

mechanism to compel the banks to accept assistance. This created a space for banks to negotiate for more favorable terms, wagering that the state would sooner make the terms of aid more favorable than risk letting a bank fail, or risk letting a bank survive by contracting lending, cutting off credit to the broader economy. Without the ability to compel banks to accept money on state-determined terms, the state's unwillingness to risk damage to the broader economy gave the banks leverage to extract above-market terms of assistance. Similarly, in the United States, because regulators lacked the legal authority to resolve Bear Stearns without the consent of both Bear Stearns and would-be purchaser JP Morgan, both Bear and JP Morgan representatives could extract favorable terms from the US. JP Morgan, which could refuse to complete the purchase, leaving the US no recourse other than to let Bear fall, used this leverage to extract a $29 billion subsidy of losses from the Federal Reserve. Bear Stearns, meanwhile, successfully leveraged the potential damage of a Bear collapse to raise the sale price from the Treasury-directed $2 a share to $10 a share. If the US had held the authority to compel an injection, Bear could not have refused the terms, and would have lacked the ability to, in essence, hold the rest of the economy hostage to extract an increase in sale price.

By contrast, in those cases in the US and UK where the state had the authority to compel the banks to accept assistance, they consistently were able to impose higher costs on the banks. The nationalizations of the FDIC-insured banks and the GSEs in the US, and of Northern Rock and Bradford & Bingley in the UK came at *de minimis* compensation to shareholders. Similarly, the UK capital injections into RBS and Lloyds came at a higher price than the banks would have accepted if they had the authority to refuse. This was possible because the state possessed the legal authority to compel the

banks to sell, meaning the banks had no opportunity to leverage the threat of refusal and failure to extract greater assistance.

Mandatory assistance, therefore, substantially increases the ability of the state to impose terms which best further its goals of minimizing moral hazard and maximizing the recovery of the state's investment. Although the German banks were able to block the imposition of mandatory terms of aid, the difficulties of the US with Bear Stearns and the UK before it gained statutory authority to nationalize Northern Rock illustrate that voluntary assistance is problematic in liberal systems as well. Therefore, in both cases, pressing for mandatory aid may be a key element in the state's ability to maximize its goals.

Pre-determined Response Plans Increase The Speed of Response, And Thus Lower the Cost of Assistance Required

The FDIC approach, in addition to being a mandatory response plan, also had the virtue of being a pre-determined response plan, drafted years in advance and executed according to a well-documented set of procedures. This produced several advantages. The first is minimizing market disruptions. FDIC procedures for managing a failing bank are well-known by market actors, eliminating the uncertainty of investors: small depositors and senior debtholders can be reasonably assured of recovering their assets, while uninsured depositors, junior debtholders, and shareholders can assume they will lose out, and plan accordingly. Although losses are imposed, they are known in advance, and therefore produce less panic than in an ad hoc rescue. They also avoid sub-optimal investment strategies for private investors. For instance, hedge funds SRM and RAB Capital invested substantially in Northern Rock after its distress became public but prior

to nationalization, assuming that they would be treated generously if the state intervened. Instead, both lost virtually their entire investment, increasing the uncertainty about investing in other institutions showing signs of weakness.

Pre-determined plans are also faster to implement, enabling the state to act while the costs of intervention may be relatively low, before investors have fully-deserted an ailing institution. By example, the UK nationalization of Bradford & Bingley came at a relatively lower cost to the state than that of Northern Rock, because the UK already possessed compulsory-nationalization authority and could act as soon as it was clear that such a course of action would be necessary. In the Northern Rock case, UK officials delayed until it became clear that nationalization would be necessary, and until Parliament granted the Treasury nationalization authority, in the meantime propping up Northern Rock with expensive liquidity support and watching investors desert the bank, increasing the amount of state money needed to prop it up once in state ownership. At a further extreme, US policymakers' options were sharply limited for investment banks pre-TARP, as they lacked a pre-existing authority to inject capital, forcing them to either let banks fail or subsidize private purchases. The slow-moving US legislative process meant that gaining new statutory authority was not possible in the time before major banks would collapse with potentially catastrophic effect. This left policymakers forced to chose between a generous subsidy for purchasing banks, as in the Bear Stearns sale, or letting major institutions fail, as with Lehman Brothers.

Additionally, a pre-determined process allows for longer deliberation over optimal policy choices in a pre-crisis environment. One common feature of crisis policymaking in all three discussed cases is that the time crunch required for policy

action forced policymakers to 'satisfice,' adopting the first viable solution rather than debating at length the merits of various alternatives. This not only makes sub-optimal policymaking more likely, but gives greater clout to organized interests, which can present readily-actionable plans that may be less advantageous than others. Since financial actors are generally more organized than, for instance, academics or public-interest groups, this gives an advantage to bank-friendly policies.

A final advantage of pre-determined plans is that they can potentially be pre-funded. The FDIC-insured institutions imposed no costs on the American taxpayers in part because the rescues were paid for out of the FDIC Deposit Insurance Fund, filled by a pre-crisis levy on insured banks that gave the FDIC the resources to provide rescues without imposing new costs on taxpayers. By contrast, even the most moral-hazard limiting and expensive ad hoc plans in the UK and elsewhere in the US necessarily imposed costs on taxpayers, whether ultimately paid back or not. Moreover, a pre-funded system is fairer, by imposing some of the costs of the rescue on the banks which fail. Even if the costs of a non-pre-funded rescue are ultimately covered by new taxes on the financial sector, as it has partially been in the UK, these are taxes on the banks which didn't fail, and didn't require assistance. The banks which failed are in essence able to escape the tax by ceasing to exist before it is imposed. While the surviving banks still benefit from the containment of contagion, this is less fair than a pre-funded levy, which enables burden-sharing even among the banks which fail to survive the crisis.

State Part-Ownership Gives Leverage to Banks to Extract More Generous Assistance from the State Because the State Will Feel Losses Directly

The broad disadvantages from state ownership of banks have been long-debated in the literature. Critics of state ownership frequently highlight how the state may direct investment in sub-optimal ways, to reward political allies or advance economically-undesirable policy goals. Defenders of state ownership, meanwhile, highlight how state ownership of banks may allow for superior development policies, and challenge the notion that state-owned banks are necessarily less successful than private banks. In times of crisis, however, state ownership presents additional issues, which are worth considering in drafting state response policies.

The first effect can be seen with the German Landesbanken, which are part-owned by the various German Länder. The distressed Landesbanken, especially HSH Nordbank and BayernLB, were able to use this to their advantage in a crisis, to extract assistance from the Länder in addition to or on more favorable terms than that available from the central government. Because their collapse would impose costs directly onto the Länder, these Landesbanken could leverage that to extract additional support. Similarly, once RBS and Lloyds/HBOS were part-owned by the British state, the state had further incentive to keep them operational beyond issues of systemic stability, as the collapse of either would now prevent the state from recovering its investment, and thus impose substantial costs on the state itself.

Preferred Stock Ownership Maximizes the Likelihood of Early Repayment by Minimizing Politicization of Firm Decision-Making

A second effect of state ownership is that it politicizes operational decisions for the firm. The UK would be sharply criticized by the public for its management of its fully- and partially-nationalized firms, which embarked on a series of branch closures and

layoffs. These contractions were part of a strategy to return the overextended firms to profitability by reducing operational expenses, and thus increase the ability of the state to recover its investment. However, the affected customers and employees complained bitterly, creating a political conundrum for British politicians. They were forced to chose between a policy which would maximize profits to the state and repay assistance, and one that would minimize the suffering of people affected by bank retrenchment. UK politicians would further be pressured to use their state-owned banks to provide relief to small businesses suffering from the credit crunch, which again would win political support but decrease the ability of the banks to repay state assistance.

Temporary ownership sidesteps these problems, assuming a willing buyer can be found. If the state can recover its investment immediately through a sale, as in the FDIC procedure, the state can avoid the political repercussions of state ownership. Preferred-stock ownership offers some relief here as well. AIG's post-crisis policies were massively unpopular, but while the US held 80% of AIG stock, it was in the form of preferred stock, meaning the US lacked operational control of AIG. This did not relieve policymakers of all accountability, but it did enable them to pass blame onto AIG's common stockholders and management, which adopted procedures which maximized repayment of the state's stake, but at a cost to laid-off employees and customers forced to pay higher rates.

The state may chose, of course, to use its position as owner or part-owner of financial institutions to provide crisis relief through more generous lending policies and avoiding redundancies, at a cost of a decreased speed with which it can extract itself from state ownership at a profit. However, if it takes ownership stakes with a goal of

maximizing return on investment, this creates great political vulnerability. Therefore, unless a strategy of using the banks for policy objectives is adopted, an ownership structure which minimizes state control may be superior. This allows other shareholders and management to "play the heavy," taking the blame for unpopular decisions. This, in turn, insulates policymakers from political fallout, and increases the ability of state-owned banks to undertake unpopular and painful decisions which increase the likelihood of rapid repayment.

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Appendix

Table A.1 - Other Intervention Variables (Model II)

	Asset Freeze	Bank Holiday	Asset Purchase	Bad Bank	Central Bad Bank
System	-0.180	-0.668	0.512	-0.067	-0.012
	(0.547)	(0.684)	(0.371)	(0.486)	(0.497)
Trade as % of GDP	-0.016	0.013	1.73E-03	1.12E-03	4.28E-03
	(0.010)	(0.011)	(4.06E-03)	(5.28E-03)	(5.75E-03)
Central Bank Independence	-1.907	-2.702	0.748	-0.276	-2.109*
	(1.659)	(2.237)	(0.850)	(1.126)	(1.258)
IMF Program	1.011*	-0.229	0.033	-0.887*	-0.424
	(0.600)	(0.599)	(0.409)	(0.467)	(0.471)
System	0.742	-1.243**	-0.180	0.288	0.253
(0=pres.,1=mixed,2=parl.)	(0.453)	(0.528)	(0.225)	(0.320)	(0.337)
Federal/Central State	0.631	1.405*	-0.128	0.194	-1.63E-03
(0=federal,1=mixed,2=central)	(0.460)	(0.826)	(0.255)	(0.367)	(0.389)
Executive Party	0.323	0.424	-0.147	-0.544	0.023
(0=left,1=center,2=right)	(0.258)	(0.310)	(0.294)	(0.462)	(0.260)
Legislative Majority Party	1.60E-03	-5.17E-04	0.394	0.476	2.22E-03
(0=left,1=center,2=right)	(0.012)	(0.011)	(0.299)	(0.463)	(0.011)
GDP per capita	1.24E-04**	1.12E-05	-1.5E-06**	-1.4E-05**	-2.7E-05*
(Constant USD)	(6.9E-05)	(3.23E-05)	(1.78E-05)	(2.28E-05)	(2.44E-04)
Constant	-0.739	-2.619	-1.231	0.092	0.480
	(1.239)	(1.603)	(0.689)	(0.937)	(0.963)
Observations	66	66	67	42	42
Pseudo-R^2	0.3941	0.3559	0.1105	0.1638	0.1468

*=p<0.1, **=p<0.05, ***=p<0.01

Table A.2 - Results With Four-Part Structure-Activity Dummy Variable (Model II)						
	Guarantees	Liquidity Support	All Captial Support	Nationalization	Recapitalization	Recapitalization Recovery
System	0.611**	0.083	0.501*	0.344	-0.056	0.812*
	(0.269)	(0.246)	(0.278)	(0.227)	(0.219)	(0.493)
Trade as % of GDP	0.012*	1.66E-03	0.012*	0.013**	0.013**	0.014
	(6.45E-03)	(6.67E-03)	(6.39E-03)	(5.48E-03)	(6.13E-03)	(0.011)
Central Bank Independence	0.861	2.726**	1.306	-0.357	0.691	1.693
	(0.984)	(1.207)	(1.069)	(0.927)	(0.993)	(3.210)
IMF Program	0.680	1.084**	-0.135	0.100	0.011	-0.172
	(0.526)	(0.544)	(0.456)	(0.418)	(0.449)	(0.694)
System	0.268	0.035	-0.964**	-1.116	-0.483*	-1.206
(0=pres.,1=mixed,2=parl.)	(0.282)	(0.263)	(0.325)	(0.318)	(0.279)	(0.847)
Federal/Central State	-0.137	-0.452	0.208	0.030	0.111	-0.409
(0=federal,1=mixed,2=central)	(0.333)	(0.392)	(0.305)	(0.282)	(0.301)	(0.539)
Executive Party	0.442**	-1.62E-03	0.40E-03	0.123	-0.430	0.99E-03
(0=left,1=center,2=right)	(0.206)	(8.67E-03)	(7.69E-03)	(0.187)	(0.491)	(0.011)
Legislative Majority Party	1.60E-03	-0.87E-03	-2.47E-03	-3.66E-03	0.817	0.228
(0=left,1=center,2=right)	(0.017)	(6.40E-03)	(6.31E-03)	(0.021)	(0.503)	(0.334)
GDP per capita	6.05E-05**	1.27E-05	6.45E-05**	7.17E-05**	6.18E-05**	1.26E-04*
(Constant USD)	2.53E-05	2.43E-05	3.00E-05	2.54E-05	2.71E-05	7.27E-05
Constant	-4.093281	-0.4865837	-1.228745	-1.042567	-1.749487	-2.453961
	1.211554	0.9497728	0.9896477	0.8442731	0.9556375	2.371584
Observations	68	65	66	66	67	29
Pseudo-R^2	0.462	0.2454	0.2376	0.2842	0.2627	0.3347
*=p<0.1, **=p<0.05, ***=p<0.01						

Table A.3 - Results With Continuous Structure-Activity Measure (Model II)

	Guarantees	Liquidity Support	All Captial Support	Nationalization	Recapitalization	Recapitalization Recovery
System	0.567	9.16E-03	1.258*	1.022*	-0.327	4.692*
	(0.363)	(0.382)	(0.660)	(0.576)	(0.362)	(2.443)
Trade as % of GDP	0.010	1.21E-03	0.013**	0.014**	0.012**	0.037*
	(5.97E-03)	(6.64E-03)	(6.53E-03)	(5.72E-03)	(6.06E-03)	(0.021)
Central Bank Independence	0.699	2.676**	1.265	-0.297	0.687	3.747
	(0.951)	(1.203)	(1.042)	(0.946)	(0.988)	(3.723)
IMF Program	0.603	1.103**	-0.116	0.122	-0.019	-0.459
	(0.500)	(0.547)	(0.458)	(0.420)	(0.456)	(0.799)
System	0.327	0.046	-1.053**	-1.209	-0.518*	-2.909*
(0=pres.,1=mixed,2=parl.)	(0.280)	(0.273)	(0.347)	(0.345)	(0.283)	(1.588)
Federal/Central State	-0.156	-0.466	0.318	0.169	0.038	0.103
(0=federal,1=mixed,2=central)	(0.333)	(0.398)	(0.323)	(0.310)	(0.312)	(0.742)
Executive Party	0.397**	-1.73E-03	0.62E-03	0.128	-0.426	5.77E-03
(0=left,1=center,2=right)	(0.197)	(8.79E-03)	(7.82E-03)	(0.187)	(0.483)	(0.012)
Legislative Majority Party	1.70E-03	-0.81E-03	-2.68E-03	-3.93E-03	0.815	0.431
(0=left,1=center,2=right)	(0.015)	(6.42E-03)	(6.35E-03)	(0.021)	(0.497)	(0.432)
GDP per capita	5.39E-05**	1.50E-05	6.35E-05**	6.97E-5**	7.10E-5**	2.07E-04*
(Constant USD)	(2.66E-05)	(2.87E-05)	(2.97E-05)	(2.56E-05)	(3.00E-05)	(1.07E-04)
Constant	-3.238	-0.352	-1.288	-1.309	-1.540	-5.929
	(1.026)	(0.891)	(0.973)	(0.893)	(0.910)	(3.976)
Observations	68	65	66	66	67	29
Pseudo-R^2	0.4253	0.2438	0.245	0.2967	0.2714	0.4544

*=p<0.1, **=p<0.05, ***=p<0.01