# The Power of Inaction
## Bank Bailouts in Comparison

Cornelia Woll

Cornell University Press
Ithaca and London

First published 2014 by Cornell University Press
Printed in the United States of America

Library of Congress Cataloging-in-Publication Data

Woll, Cornelia, author.
The power of inaction: bank bailouts in comparison / Cornelia Woll.
pages cm. — (Cornell studies in political economy)
Includes bibliographical references and index.
ISBN 978-0-8014-5235-2 (cloth: alk. paper)
1. Bank failures—Government policy. 2. Bailouts (Government policy) I. Title.
HG1725.W654 2014
332.1—dc23 2013042835

Cornell University Press strives to use environmentally responsible suppliers and materials to the fullest extent possible in the publishing of its books. Such materials include vegetable-based, low-VOC inks and acid-free papers that are recycled, totally chlorine-free, or partly composed of nonwood fibers. For further information, visit our website at www.cornellpress.cornell.edu.

Cloth printing 10 9 8 7 6 5 4 3 2 1

# 2

# Crisis Management across the World

If we don't do this, we may not have an economy on Monday.

—Federal Reserve chairman Ben Bernanke, testimony to Congress, 18 September 2008

The decision to bail out banks is difficult for all governments. At no time was this more evident than the weeks in September and October 2008, when politicians and central bankers in most industrialized countries tried to avoid the collapse of their banking systems after the fall of Lehman Brothers on September 15. The simultaneity of the responses makes bailouts a fascinating study for crisis management in different political and economic contexts. This chapter begins with a brief history of the crisis until its zenith in September 2008, when international financial markets were effectively frozen. It then present an overview of the bailout packages in Europe and the United States, by providing information about the heights and the nature of intervention between the fall of 2008 and the summer of 2009.[1] This overview helps clarify the puzzle and specify the questions that will frame the case comparisons in the following chapters.

## An International History of National Economic Crises

Although accounts of the recent financial crisis share common themes, there is presently little agreement on the underlying causes and the main culprits.[2] Initially referred to as the "subprime crisis," it changed names and focus depending on the analyst and is now most often referred to as the global financial crisis.[3] This book concentrates on the banking crisis that

1. This section in particular is based on research undertaken jointly with Emiliano Grossman. See Grossman and Woll, "Saving the Banks."
2. Lo, "Reading About the Financial Crisis."
3. Other names include "the Great Recession," the "Lesser Depression," or various combinations of financial crisis and dates.



started in 2007 rather than the ensuing sovereign debt crisis that hit in particular Europe in late 2009 and 2010.[4]

For many, the early financial crisis was an American phenomenon, and it was common to speak about contagion: the bursting of the US housing market bubble and US-led innovation in financial products led to an explosive mix that triggered the collapse of many financial institutions, which then rippled through other countries. In a momentous conversation on the viability of Lehman Brothers, British chancellor of the exchequer Alistair Darling told US secretary of the treasury Henry Paulson that he did not want "to import [the United States'] cancer."[5] Numerous politicians in European countries went on television assuring their citizens that this was an American crisis, which would not reach the much safer and regulated financial systems in Europe.

By late 2008, it had become evident that exposure to the US subprime market was not the only issue that mattered. Crisis management in one country influenced the others and events abroad affected market sentiment at home, in areas entirely unrelated to the original difficulties. As a consequence, it is helpful to begin by studying the crisis from an international bird's-eye perspective, by tracing the relationship between bubbles, bank failures, policies responses, and market developments. This short transnational history of the financial crisis will help to anchor the country comparisons that follow, which in turn highlight how decidedly national the political responses and the problem structure of the banking crises were in each of the countries. As will be argued later on, banking crises in several countries had very little do to with the original US subprime crisis and need to be studied in their own right, even if international capital markets were central in creating generalized and simultaneous stress and distrust.

### Subprime Exposure

Much has been written about the fall in prices on the US housing market, the effect of delinquencies in residential mortgages on mortgage-backed securities and insurers of mortgages and the subsequent unraveling of the market for structured financial products containing such asset-backed securities.[6] After the drop in US house prices in 2006, the subprime mortgage industry crumbled. The first affected were mortgage lenders and insurers of debt payments, the so-called monoline insurers.

4. This is a purely analytical choice to focus the inquiry. Clearly, the banking crisis and the sovereign debt crisis are related in a circular manner: banking crises increase sovereign debt and decrease market confidence and sovereign default affect those financial institutions that hold government bonds.
5. Wessel, *In FED We Trust*, 19; Sorkin, *Too Big to Fail*, 348.
6. E.g., Shiller, *The Subprime Solution*; Schwartz, *Subprime Nation*; Acharya et al., *Guaranteed to Fail*.

In early 2007, many subprime lenders announced very significant losses, put themselves up for sale or filed for bankruptcy. Exposure to both the subprime loans and the collateralized securities—asset-backed securities such as mortgage-backed securities and collateralized debt obligations—started being recognized as risky by many financial institutions as early as 2006.

Although the subprime crisis was clearly an American phenomenon, the first bank to collapse as a consequence of such exposure was German. IKB Deutsche Industriebank had invested heavily in the US market and was bailed out by a consortium of German banks and the German government on the weekend of 28–29 July 2007. Less than a month later, it became clear that the Irish subsidiary of the Landesbank Sachsen (Sachsen LB) had also incurred considerable losses in mortgage-backed securities, which led to a merger with the Landesbank Baden-Würtemberg to avert a complete failure of Sachsen LB. In Germany two further regional saving banks, West LB and Bayern LB, encountered similar problems and would receive public support from their regional governments by February 2008.

## Frozen Capital Markets and Bubbles Elsewhere

Nervousness had increased markedly during the summer of 2007. When French bank BNP Paribas decided on 9 August to close three investment vehicles that had important stakes in the US subprime market, confidence and interbank lending immediately came to a halt. The European Central Bank, the Federal Reserve, and the Bank of Japan began to inject liquidity into the banking market simultaneously. The most prominent victim of this funding freeze was the British bank Northern Rock. A mortgage bank, Northern Rock had virtually no subprime lending, but relied heavily on short-term funding. In mid-August, it informed its regulators that it was no longer able to roll over its debt.[7] When the Bank of England announced on 13 September 2007 that it would provide emergency liquidity support, depositors queued up outside the banks' branches to withdraw their money. To many observers these images embodied the beginning of the crisis, even though it had reached Germany several months earlier. What is true, however, is that Northern Rock was the first in a long list of bank failures that were triggered by funding problems rather than a simple exposure to the US housing market directly. Eventually, on 22 February 2009, the British government would take Northern Rock into public ownership.

In addition to exposure and funding problems, several countries encountered housing bubbles of their own making. Ireland, Spain, Denmark, and Sweden had all experienced a housing market boom in the 2000s, which

7. Shin, "Reflections on Northern Rock."



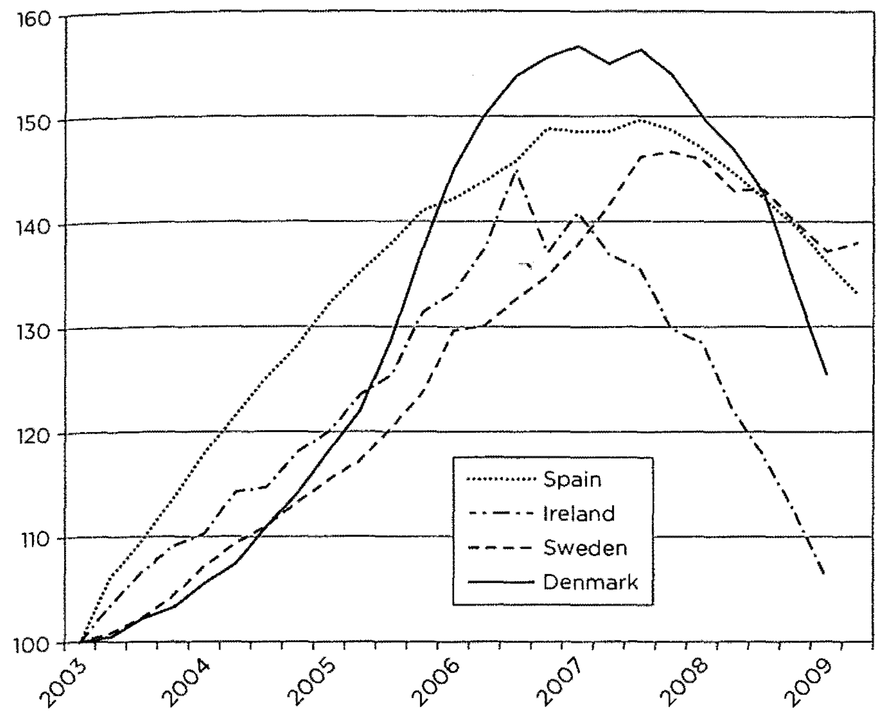


**Figure 2.1** Real house prices, 2003–9
*Source:* OECD, *Economic Surveys: Denmark 2009,* 18.
*Note:* Prices are indexed to the first quarter of 2003

came to a halt in the second half of the decade. The earliest drop happened in Ireland, with clear signs in 2006 that the boom period was over. Denmark's and Spain's bubbles burst in mid-2007, Swedish house prices dropped by the end of the year, and the United Kingdom followed in 2008.

In some countries, such as Spain, the bursting of the housing market bubbles did not affect the banking sector immediately, although it led to a sharp plunge in the construction sector. In others, such as Ireland and Denmark, the distress quickly amplified. The Irish banking system had lent roughly two-thirds of the gross national product to property developers, in particular Anglo Irish Bank, which had a whopping 75 percent of their loans in construction and property.[8] By early 2008, share prices of banks in Ireland and Denmark dropped due to concerns about exposure to their housing markets. In addition, these banks experienced difficulties

8. Kelly, "Whatever Happened to Ireland?"; Regling and Watson, *A Preliminary Report on the Sources of Ireland's Banking Crisis.*

in raising funds on international markets. Liquidity support by the Danish Central Bank was insufficient to save bankTrelleborg, which was taken over by Sydbank in January 2008. In August 2008, the Danish government would organize a public-private bailout of Roskilde Bank, the eight largest lender in Denmark.

## Bailouts Back in the United States

During the early months of 2008, the US government realized that it was dealing with more than just a subprime crisis. Triggered by market distrust, Bear Stearns faced a three-day run by its investors and found itself on the verge of collapse in early March. It had announced the previous year that several of its investment vehicles were experiencing difficulties with mortgage-related securities. Still, its executives were taken by surprise when money market funds withdrew more than $15 billion in cash reserves.[9] One of the major five US investment banks, Bear Stearns was outside the purview of the Federal Deposit Insurance Corporation (FDIC), and the government was very concerned about the repercussions of the imminent collapse. On 14 March 2008, Bear Stearns was taken over by JP Morgan Chase thanks to a government guarantee against future losses between $1 and $30 billion. Bear Stearns was the first bank rescue in the United States outside of the regular FDIC procedure and was severely criticized as having set a precedent for government bailouts of financial institutions that are too big to fail.[10] The criticisms from both sides of the partisan spectrum would haunt the administration and play a decisive role in the unfolding of events in mid-September 2008, when Lehman Brothers was on the brink of collapse. But Bearn Stearns was not going to remain the only rescue.

By the summer of 2008, the principle mortgage finance institutions had entered into great difficulties. On 11 July 2008, Indymac Bank, a subsidiary of Independent National Mortgage Corporation (Indymac), was placed into receivership of the FDIC. The same day, the *New York Times* reported that the government was considering taking over the two government-sponsored enterprises, Fannie Mae and Freddie Mac. Created at government initiative but under private ownership, the housing finance twins owned or guaranteed roughly half of the $12 trillion housing market in 2008. Due to its importance in US housing market finance and its political clout, the market had always considered that the twins benefited from an implicit bailout guarantee.[11] The government made this guarantee explicit with the Housing Market

9. Kelly, "Fear, Rumors Touched Off Fatal Run on Bear Stearns"; Financial Crisis Inquiry Commission, *Financial Crisis Inquiry Report*, 289.
10. E.g., Reinhart, "A Year of Living Dangerously."
11. Acharya et al., *Guaranteed to Fail*.



and Recovery Act of 30 July 2008, hoping to reassure investors. Despite this attempt, confidence faltered and the government eventually asked the regulator, the Federal Housing Finance Agency (FHFA), to put Fannie Mae and Freddie Mac into conservatorship on 7 September 2008. This intervention nationalized the two enterprises through a $100 billion acquisition of preferred stock from the US Treasury, and the wiping out of 80 percent of the value of existing stock.

## The Crash

By then, market strains had become dire, both abroad and in the United States. Early bailouts had not improved the economic climate in countries such as Germany, the United Kingdom, or Denmark, where several other financial institutions continued to look very fragile. Share prices of Irish banks continued falling and a very disconcerting situation became more and more visible in a country that few considered to be at the heart of the financial industry: Iceland.

Based on excessive borrowing in foreign currencies, the Icelandic banking sector had expanded massively in the mid-2000s.[12] In the first quarter of 2008, the financial system's assets were valued roughly eleven times the GDP of Iceland, with a significant mismatch: the share of assets denominated in foreign currency was much smaller than the share of liabilities denominated in foreign currency.[13] Even though one may argue that Icelandic banks were better capitalized and had a lower exposure to high-risk assets than banks elsewhere, they had simply become "too big to save" by the second half of the years 2000.[14] The Icelandic governments' attempt to counteract these challenges had been too slow to take effect, and it became increasingly clear that Iceland could simply not withstand a liquidity crisis on international wholesale markets, where Icelandic banks obtained about two-thirds of their funding.

By that time, in early fall of 2008, the US administration began to receive catastrophic news about the state of their own banks whose situation seemed to worsen by the day. The weekend following the federal takeover of the housing finance twins, the US Treasury and Federal Reserve worked frantically to save the US investment bank Lehman Brothers from collapsing. Trying to broker another private bailout, Henry Paulson, Tim Geithner, and Ben Bernanke and their teams concentrated their hopes on Bank of America and later the British bank Barclays. Bank of America offered only

12. Carey, *Iceland: The Financial and Economic Crisis*; Danielson, "The First Casualty of the Crisis: Iceland."
13. Buiter and Sibert, *The Icelandic Banking Crisis and What to Do About It*, 4; Schwartz, "Iceland's Financial Iceberg."
14. Danielson, "The First Casualty of the Crisis," 11.

half of what Lehman said its assets were worth, effectively requiring the US government or someone else to take $25 billion of Lehman's bad real estate assets. Barclays had similar reservations, so the government gathered the CEOs of the twenty largest investment houses and banks in a conference room to see if they would agree to a "liquidation consortium" to sell off Lehman in pieces. But the difficulties in the financial sector touched every one. All of the CEOs knew that even if Lehman were to be saved, Merrill Lynch, American International Group (AIG), and possibly Morgan Stanley would be next. On Sunday morning, it had become clear that a solution from the US private sector would not come forward. Barclays, in turn, pointed out that the commitment to guarantee all of Lehman's liabilities required a vote from the shareholders, unless the British regulator issued a waiver. In a phone conversation British chancellor of the exchequer Alistair Darling told Henry Paulson that the Financial Services Authority (FSA) would not grant the waiver.[15] The only option left was a publically financed bailout of Lehman Brothers and the administration decided against it.[16] Lehman Brothers filed for bankruptcy on 15 September 2008.

The results of this failure were catastrophic: the Dow Jones plummeted more than 500 points, wiping off $700 billion of value from investment portfolios.[17] Within days, the major investment and commercial banks tumbled. Merrill Lynch had benefited from a government-brokered deal during the same weekend and was taken over by Bank of America.[18] Only one day after, on 16 September 2009, the US government and the Federal Reserve bailed out AIG with a $85 billion loan and received a warrant and equity stake of 79.9 percent. The AIG bailout was secured against AIG's insurance subsidiaries, which were more stable than any collateral Lehman could have offered, the US government argued.[19] Rescuing AIG so shortly after letting Lehman go under raised many eyebrows. A week after the Lehman failure, the two remaining investment banks—Goldman Sachs and Morgan Stanley—asked to be converted into conventional bank holding companies to benefit form additional access to Fed liquidity. The situation of all other banks looked equally alarming. US regulators closed down Washington Mutual, and Wachovia was taken over by Wells Fargo in early October, after initial support and a bid from Citigroup.

15. Paulson, *On the Brink*, 210.

16. The reasons for this decision are still heavily disputed. In their personal accounts and congressional hearings, Henry Paulson, Ben Bernanke, Timothy Geithner, and other observers have cited the belief that markets could absorb the shock, the lack of regulatory instruments, and the unwillingness to create further moral hazard problems. Financial Crisis Inquiry Commission, *Financial Crisis Inquiry Report*; Mitchell, "Saving the Market from Itself"; Paulson, *On the Brink*; Wessel, *In FED We Trust*; see also Blinder, *After the Music Stopped*, 127.

17. Financial Crisis Inquiry Commission, *Financial Crisis Inquiry Report*, 339.

18. Farrell, *Crash of the Titans*.

19. Bernanke, *The Federal Reserve and the Financial Crisis*, 85; Paulson, *On the Brink*, 229.



The fall of Lehman Brothers wrecked havoc abroad. Not only did the Lehman collapse lead to more than eighty insolvency proceedings of its subsidiaries in eighteen countries, its failure also, and more importantly, led to a complete freeze of the interbanking market. Confidence in the solvency of all major financial institutions had all but disappeared. In many countries, cracks appeared quickly in banks that were of concern earlier on, but also ones that had appeared to be healthy. In the United Kingdom, Halifax Bank of Scotland's (HBOS) position had weakened, and the government suspended competition rules to allow Lloyds TSB to take over HBOS on 17 September. Trying to find a similar solution for Bradford and Bingley, the government sold part of its activities to Grupo Santander but had to nationalize the remaining parts on 29 September 2008. Fortis Bank experienced a run on deposits and needed massive liquidity assistance from the governments of the Benelux countries on 26 September, with coordination being a real challenge to the existing multilateral banking resolution scheme.[20] Depfa, an Irish subsidiary of the German bank Hypo Real Estate (HRE), faced severe liquidity pressures on 28 September 2008 and threatened to bring HRE down. Commerzbank, one of the largest German private banks, which had previously taken over Dresdner Bank, was in a similarly dire situation. In France, Natixis, the investment branch of Banque Populaire and Caisse d'Epargne, broke down, losing 95 percent of its stock market value on 29 September. On 30 September, the French, Belgian, and Luxembourgian governments had to cooperate to prop up the bank Dexia. Everywhere one looked, financial institutions fell like houses of cards.

## From Failing Banks to Failing Countries: Iceland

For the overinflated Icelandic banking system, the failure of Lehman Brothers was the straw that broke the camel's back. Although Icelandic banks were not directly exposed to Lehman Brothers, financial markets withdrew their assets from banks considered vulnerable. Icelandic banks were no longer able to fund themselves, making Iceland the first country casualty of the financial crisis.

The rapidity of the collapse of Icelandic finance was impressive. When Glitnir requested an emergency loan from the central bank in late September, the government refused and announced that it was planning to take over Glitnir by acquiring a 75 percent stake in its capital on 29 September. Although not carried through, the announcement decreased the Icelandic credit rating and effectively closed the few credit lines that were left for Icelandic

20. Kudrna, "Cross-Border Resolution of Failed Banks in the EU."

banks. Landsbanki, which in addition held a large amount of Glitnir shares, was severely hit and suffered a considerable outflow of funds from its Icesave account in the week following the announcement. The British authorities were concerned and required additional cash liquidity reserves to be paid to the Bank of England to protect British depositors. Landsbanki was unable to meet this demand and requested aid from the government. At the same time Kaupthing had similar difficulties and requested a loan as well.

Over the weekend, the parliament passed emergency legislation that would enable the Financial Supervisory Authority to take over ailing banks on Monday, 6 October. The next day, it took control of Landsbanki and Glitnir. On the following day, Wednesday, 8 October, the UK authorities froze the assets relating to Landsbanki using powers under the Anti-Terrorism, Crime, and Security Act of 2001. In addition, the British Financial Supervisory Authority announced that the UK subsidiary of Kaupthing, the last of the three main Iceland banks, no longer met bank registration requirements and placed its assets under administration. This effectively took Kaupthing out of business as well, which was taken over by the financial regulator the same day. Simultaneously, the foreign exchange market in Iceland collapsed.

The extent of the crisis was unprecedented in a developed country. Within less than a week, the banking system had broken down, Iceland had lost its creditworthiness, foreign payments could no longer be made, and the payment system was brought to a standstill. GDP was about to fall 65 percent in euro terms, many companies went bankrupt, and the British and Dutch government demanded compensation for their depositors, equivalent to 100 percent of Icelandic GDP.

## In Search for Political Solutions

As banks unraveled and entire economies threatened to fall, governments everywhere began to work frantically on nationwide schemes to stabilize their banking sectors. Although the problems revolved heavily around transborder activities, international cooperation in the initial crisis management was difficult.[21] Central banks, in particular the Federal Reserve and the European Central Bank had coordinated their aid since December 2007 and intervened quickly after the fall of Lehman Brothers, issuing currency swaps and other facilities to the frozen interbanking markets on 18 September 2008, together with the Bank of England, the Swiss National Bank, and the Bank of Japan. However, beyond liquidity provision, joint support for the entire banking systems was impossible to put into place. With time pressing in the second half of September, each government therefore embarked on its own strategy. In almost all major financial centers, governments drew up national rescue scheme or bailout packages designed to prevent the collapse of the national banking sector.

21. Pauly, "The Old and the New Politics of International Financial Stability"; Kudrna, "Cross-Border Resolution of Failed Banks in the EU."



We will examine six of these national solutions in a comparative perspective in the following chapters. Even though the subsequent comparison will concentrate on the national perspectives, this brief overview of the unfolding of the crisis highlights how the evolution and buildup of issues was connected across borders. It also clarifies that the main issues governments faced were not always identical and that it would therefore be misleading to speak only of a US subprime crisis. To be sure financial sector difficulties began with the downfall of the US housing market, but the ways in which this shock was transmitted and reverberated in different countries depended on a multitude of factors. Some banks abroad were directly exposed to the US housing market or the financial products linked to it. Others had business models in which a large part of their short-term funding depended on access to international wholesale markets, which dried up when market confidence evaporated. In addition, several countries had housing bubbles of their own making that national financial institutions were heavily exposed to. In many cases, several of these factors came together to create an explosive mix. The fall of Lehman Brothers was critical in the buildup of events. What the US administration had underestimated was the effect of the fall on market confidence and the shock the failure would represent for interbank lending.

Governments everywhere had learned with great alarm that international coordination would be crucial in the long-term response to the crisis and also in the prevention of future crises. After initial coordination had failed, political leaders huddled in marathon meetings in the first half of October to signal political support to the banking systems and calm financial markets. On the 10 October, the finance ministers of the G7 met in Washington, DC.[22] Negotiations continued under the auspices of the International Monetary Fund (IMF) the following days. On 12 October, member countries of the Eurozone met at a eurogroup summit in Paris, which had been preceded by a Franco-German summit a day earlier. Although the US government had already signed the Troubled Asset Relief Plan (TARP) into law ten days earlier, European governments were still working on their rescue schemes during these days and exchanged information and insights on the most appropriate actions. Most bailout packages were announced in the week that followed. The UK plan had already been unveiled on 8 October, contributing to change the content of the US plan, as Henry Paulson made public on 14 October. The German plan was announced on 17 October and the French on 20 October.[23] For all of these

22. The G7, bringing together finance ministers from France, Germany, Italy, the United Kingdom, Japan, the United States, and Canada, met in April 2008, October 2008, and February 2009 to discuss their responses to the global crisis.

23. In chronological order, the sequence of initial announced bailouts—stand-alone or national—was: Ireland (30 September 2008), United States (1 October 2008), Denmark (5 October 2008), the United Kingdom (13 October 2008), Germany (17 October 2008), Sweden and France (20 October 2008), followed by the Netherlands, Finland, Italy, Greece, Austria, Slovenia, Portugal, Latvia, Hungary, Spain, Poland, Cyprus, Slovakia, Lithuania.

responses, the high-level meetings had provided an opportunity to expose and discuss possible schemes, but most of their concrete design had been elaborated nationally, with few if any consultation of international counterparts.

## Bailouts in Practice

Bailout packages refer mostly to government schemes aimed at stabilizing financial institutions. These efforts require making public budgets available and passing legislation, so they are subject to much public scrutiny. Due to their high degree of politicization, they are at the heart of the analysis of this book, since we would expect private stakeholders to have less influence when an issue moves out of technocratic governance and into the public sphere.[24] However, one needs to keep in mind that government schemes exist alongside central bank efforts.

In banking crises, there are two parallel concerns. First, governments need to buy time and stop a panic. To accomplish this, they can provide liquidity and government guarantees. Second, they need to stabilize their banking sector more durably and address the confidence problem that brings interbank lending to a halt. In the recent crisis, this took the form of recapitalization and, in some cases, a transfer of assets.[25]

In the United States, the United Kingdom, the Eurosystem, and most other European countries, central banks are independent from the government and can decide to intervene quickly, most notably by providing liquidity.[26] However, without downplaying the role of central bank efforts, it is notable that the great majority of countries relied not just on liquidity provision but also on government schemes. To grasp what these entail, it is helpful to consider the different instruments and objectives of bank bailout plans.

### Central Bank Efforts

*Liquidity measures* most commonly refer to central bank efforts. Central banks can lower their policy rates and adopt various standard and extraordinary measures to enhance the liquidity of banks, such as changes in the frequency and process of auctions, the volume and maturity of lending facilities, the range of collateral accepted, outright asset purchases, and the expansion of eligible institutions for lending facilities. In addition, central banks can lend to banks directly through discount windows, where they charge a special rate, a "repo" rate, normally for overnight lending. Despite its name, the discount window rate is actually higher than the federal funds rate to encourage banks to find credit on the interbanking market and only use the discount window as a last resort. In the Eurozone, the discount window is called Standing Facility and has replaced the discount windows at the national level with the beginning of the Eurosystem in January 1999. The Bank of England's Discount Window Facility was only created in response to the credit crunch in October 2008.[27]

The efforts undertaken by central banks are reflected in the expansion of their balance sheets and were substantial everywhere. In the United States, the Federal Reserve allowed its balance sheet to more than double from $800 billion in September 2008 to 2.25 trillion in the following months. Likewise, the Bank of England contributed to the government's Asset Purchase Facility by creating central bank reserves and buying £200 billion worth of assets. In addition to repo transactions, the efforts of the Bank of England caused its balance sheet to more than double, with a peak at almost three times the size it had in early fall of 2008. The Eurosystem, in contrast, has expanded to a lesser extent, from just under €1.5 trillion to just over €2 trillion by the end of 2008.[28]

The liquidity provided by these efforts has been crucial for financial institutions during the crisis. According to a close observer in the United States, "TARP was not the most significant thing that happened during the fall, it was the Fed, and the FDIC with them, agreeing to step in and guarantee new issuance by the banks." This intervention, even without TARP, he went on speculating, might "have done the trick."[29] Guarantee schemes and liquidity provision through the central bank was of primary importance to the financial industry and tailored much more to their needs than capital injections. In addition to liquidity provision, the US Federal Reserve has the capacity to support individual institutions through specific loans.

### Government Instruments

Besides these instruments, governments can help financial institutions to obtain liquidity through a series of indirect measures. They can guarantee deposits or debts and thereby increase the confidence other financial institutions and investors will have in the bank, which crucially shapes the risk premiums it will be charged in money markets. They can also transfer assets

24. Culpepper, *Quiet Politics and Business Power*.

25. Other instruments include tax incentives for loan-loss write-offs to help banks restructure their balance sheets or more general debt forgiveness. These were not central during the recent financial crisis but are discussed in Calomiris, Klingebiel, and Laeven "Financial Crisis and Resolution Mechanisms."

26. However, decision making in the European Central Bank is arguably more complicated than in other central banks.

27. This newness is ironic given that discount windows are also referred to as Lombard credit. In this book *Lombard Street*, the UK equivalent of Wall Street at the time, English writer Walter Bagehot analyzes British finance in the nineteenth century and suggests that liquidity support should only be provided to solvent firms, against good collateral and at high rates.

28. Stolz and Wedow, "Extraordinary Measures in Extraordinary Times," 16–17.

29. Interview, 25 May 2012.

or swap them against government bonds, which banks can use as collateral to obtain further liquidity from central banks. Although these measures ultimately affect the access to liquidity, they will be discussed below, according to the type of measure used.

*Guarantees* are public commitments to repay depositors or other creditors if the financial institution would find itself unable to do so. They are issued in an effort to maintain confidence in the financial system and prevent a run on the banks. The most common form of guarantees are deposit insurance schemes, which have a ceiling on the size of covered deposits. In practice, however, small retail deposits are not the most important liabilities of a financial institution. Large wholesale deposits and interbank lines are more important and more quickly withdrawn when confidence falters. In times of crisis, public guarantees can therefore be extended to cover other liabilities as well as equity.

To begin with, governments can extend the existing deposit insurance to all deposits (retail, commercial, institutional, and interbank ones) and raise or—more often—eliminate the ceiling on covered amounts. Second, the insurance can be extended to bondholders, who are creditors that have made loans to the firm by buying debt securities. Debt securities are typically divided into different risk categories, determined by the order in which creditors will be paid back in case of a bankruptcy. Senior bondholders will be paid back first, holders of subordinated debt only afterward. The risk involved for holders of subordinated debt is reflected in a higher yield. Finally, shareholders have invested funds into a company in exchange for equity. Unlike bondholders, who are creditors, stockholders are owners. They benefit from income through dividends and capital gains, but are also the last in line for repayment in case of liquidation.

A final distinction in public guarantees is whether they are past or future oriented. A guarantee on past deposits and debt aims to avoid a withdrawal of existing assets, while a public guarantee on future debt allows banks to continue having access to additional liquidity. While the former is a defensive measure to shield against a run, the second is more risky because it allows a potentially unhealthy institution to continue operating and even increase its debt.

The payback hierarchy in case of a bankruptcy illustrates the profoundly distortive effect guarantees can have on investment behavior. Bond and shareholders benefit from the types of securities they hold according to the risk involved and chose their strategies accordingly. They can make considerable income from their securities, all the more if they invest in a category that is least likely to be paid back if the company needs to be liquidated. While these gains are private when times are good, the costs arising through the failure of the institution are covered through public money, which effectively eradicates all incentives to monitor risky behavior.

Both liquidity measures and government guarantees are typically employed as emergency measures during the containment phase. In addition,



regulators can modify regulatory requirements to allow banks to continue operating despite being undercapitalized or changing the requirements for continuing operations, such as loan classification or loan loss provisioning requirements. As Honohan and Klingebiel point out, forbearance is a matter of degree, which can range from small regulatory exceptions for a short time period to allowing insolvent banks to continue business as usual.[30]

*Capital injections* or recapitalization entails using public funds in an effort to strengthen a company's capital. The extent to which this implies governmental control over the company depends on the type of stock the government acquires. Common stock comes with voting rights for shareholders, while preferred stock does not carry voting rights. However, preferred stock may have priority over common stock in the payment of dividends and in case of a bankruptcy. Once the government has acquired a controlling interest, it is common to speak about nationalization.

Alternatively, a government can coordinate private capital injections in order to avoid committing public funds. This can take the form of a government-assisted takeover of one financial institution by another. If the government simply acts as a broker for the transaction, such private takeovers are clearly the least intrusive option a government has for stabilizing a failing bank. However, private takeovers depend on the interest and capacity of the potential buyer and are often difficult to engineer. Potential buyers can argue that they can only go ahead if the government provides additional guarantees—for example, on future losses of the company. This is what the US government agreed to do in order to assist the takeover of Bear Stearns through JP Morgan Chase in March 2008.

The government can also try to organize collective and privately financed capital injections. When the conditions at a company have deteriorated to a point where no buyer can be found, a collective recapitalization can help to avoid a collapse and buy time in order to sell the company off in pieces. A collective private bailout was famously orchestrated by the Federal Reserve Bank of New York for the hedge fund LTCM in September 1998.[31] The US government attempted to repeat the exercise for Lehman Brothers in 2008 but was unable to get the main financial firms to engage in a "liquidation consortium," as the head of the New York Fed Timothy Geithner called it.[32]

An important issue for recapitalization schemes is whether they are voluntary or mandatory. Mandatory recapitalization is quite intrusive and implies spending money on companies that might not need to have their capital base strengthened. Voluntary recapitalization, in turn, stigmatizes the companies that agree to it and sends a signal to financial markets that they are

30. Honohan and Klingebiel, "The Fiscal Cost Implications of an Accommodating Approach to Banking Crises."
31. Lowenstein, *When Genius Failed*.
32. Wessel, *In FED We Trust*, 17.

in trouble. Under a voluntary scheme, companies will thus hesitate to have recourse to proposed government aid in order not to trigger a chain reaction in which investors withdraw their money.

*Asset transfers* refer to all public assistance in the relief of assets that have become "troubled" or "toxic." It can cover two related actions. Either the government buys impaired assets directly from financial institutions to prop up their creditworthiness and increase confidence, or it organizes the transfer of impaired assets to a public agency that manages them, sometimes colloquially referred to as "bad banks." These public asset management organizations are responsible for revaluating the market value of low-quality assets and selling them on financial markets. Asset management organizations can be centralized or decentralized. Centralized asset management companies are public entities with the responsibility to dispose of the troubled assets of an entire national banking system, such as in Ireland or Spain in the recent crisis. Decentralized systems consist of either public or private entities created to manage the assets of individual banks or sectors, and have been used in Germany, for example.[33]

The most difficult challenge in asset transfers is determining the worth of the assets in question. Toxic assets refer generally to assets who value has fallen so significantly that they can no longer be sold at a price satisfactory to the holder. This means that there is no longer a functioning market for these assets at the time the government seeks to determine their value. Paying the historic value would clearly lead the government to overpay the asset holder and imposing a fire sale at current market price would destroy the net worth of the company the government is trying to save. One option considered by the US government was therefore to organize auctions to sell off toxic assets. The alternative, transferring assets to a public management organization, has the advantage of being able to sell off assets over a long period of time, at a moment where prices may have risen again. If prices fail to reestablish themselves, however, these management companies can risk turning into the waste buckets of the financial industry, with considerable costs to the public budget, in most cases, or investors.

### Constraint Choices

In choosing government intervention, politicians have to manage two contradictory objectives: they have to prevent a market panic, but they also have to be accountable to the general public. Discussing the urgency and extent of the crisis will trigger a panic, but not discussing it will keep citizens from gaining insight about political choices that severely affect public budgets and create considerable societal redistribution. The politics of bailouts

33. See Gandrud and Hallerberg, "Bad Banks as a Response to Crisis"; Klingebiel, "The Use of Asset Management Companies in the Resolution of Banking Crises."



therefore are marked by ambiguity and vagueness, not least when it comes to naming government intervention. Despite its name, the US Troubled Asset Relief Program was dedicated most prominently to the recapitalization of financial institutions. Attempts to collect comparative data on different measures vary considerably in their categories, grouping items under liquidity support that could also appear under guarantees or transfer of assets.

Moreover, the appeal of a measure may not reside in the objectives it seeks but also in its feasibility. Governments all over the world relied on guarantees, not least because they are commitments that do not show up in the public budget if they are not called on. This means that guarantees can be issued without the legislative procedures that would be necessary to commit public money. Similarly, liquidity support provided by the central bank is discretionary, as long as it falls within the mandate given to central banks. When the Federal Reserve argued that AIG's insurance collateral could make it eligible for a loan, this provided the US government with a way of saving AIG just a day after having been unable to provide a solution to Lehman Brothers. The interpretation baffled more than one, and Congressman Barney Frank reportedly asked the administration, "Where did you find 85 billion?" to which Ben Bernanke responded by citing the entire balance sheet of the Federal Reserve, "We have 800 billion."[34]

## Comparing Bailouts

Although governments embarked on the bank rescues almost simultaneously and arguably had to deal with similar problems,[35] no standard scheme emerges when one compares the responses to crises. To be sure, some transfer of ideas and approaches happened, and many observers noted how the British bailout plan inspired both the American government and the European plans that followed.[36] Yet despite such transfers, bailout packages varied in the amount of money committed, the mix of instruments used, and the degree of burden sharing between public and private stakeholders. The following section presents national responses during the initial crisis management, with particular emphasis on the period from the fall of 2008 to the summer of 2009.

34. Paulson, *On the Brink*, 241.
35. In the EU, only five countries did not propose measures to support their banking sector: Bulgaria, Czech Republic, Estonia, Malta, and Romania. Combined, these five countries account for less than 1 percent of the financial industry in Europe. European Commission, "The Effects of Temporary State Aid Rules Adopted in the Context of the Financial and Economic Crisis," 36.
36. Quaglia, "The 'British Plan' as a Pace-Setter."

## Expenditures

The broadest and most comparable data available concern the amounts of aid governments made available to the banking sector. Collected by institutions such as the European Commission, the European Central Bank, the International Monetary Fund, and the Bank for International Settlements, these numbers indicate the extent to which governments agreed to help—"committed" or "approved" expenditures—and which part of this amount was actually extended—"actual" or "effective" expenditures.

Figure 2.2 ranks countries by actual expenditures from the beginning of the crisis to 2010, as a percentage of GDP. One can see that small countries suffered comparably most, with Ireland extending more than two and a half times its national income on saving the banking sector. Denmark, which committed a similarly unsustainable part of their GDP, actually extended only a quarter of its commitment, still two-thirds of its GDP, while most other countries with substantial expenditures spent between 6 percent and 16 percent of GDP.

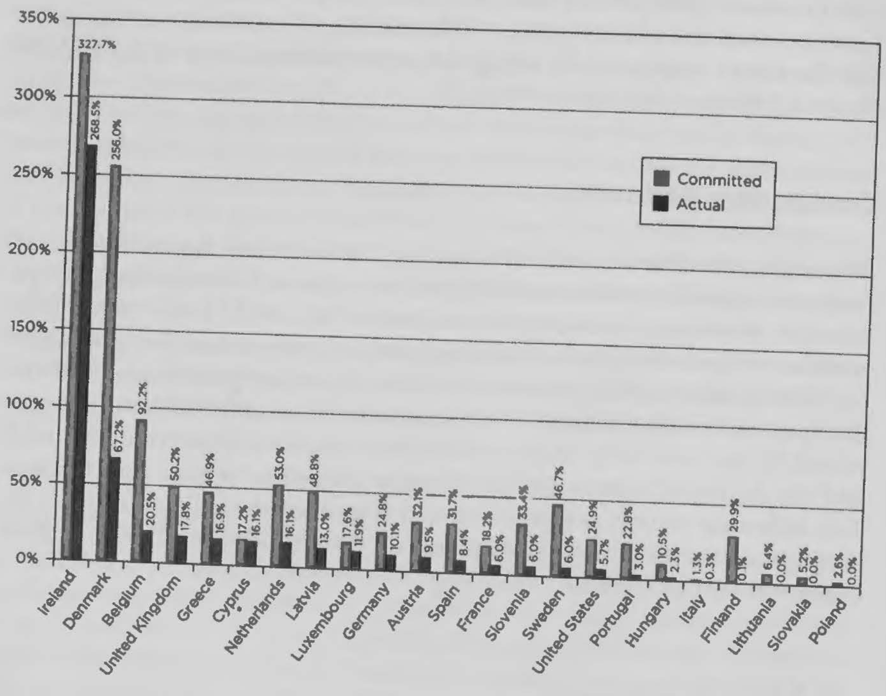


**Figure 2.2** Committed and actual expenditures, 2007–10
*Source:* Bailout expenditures from European Commission competition scoreboard, European Commission, *The Effects of Temporary State Aid Rules Adopted in the Context of the Financial and Economic Crisis,* 2011; Stolz and Wedow, *Extraordinary Measures in Extraordinary Times,* give figures for the United States; percentages are given as percentage of 2010 GDP; all figures include 2010, except for the United States, which runs up to May 2010 only.



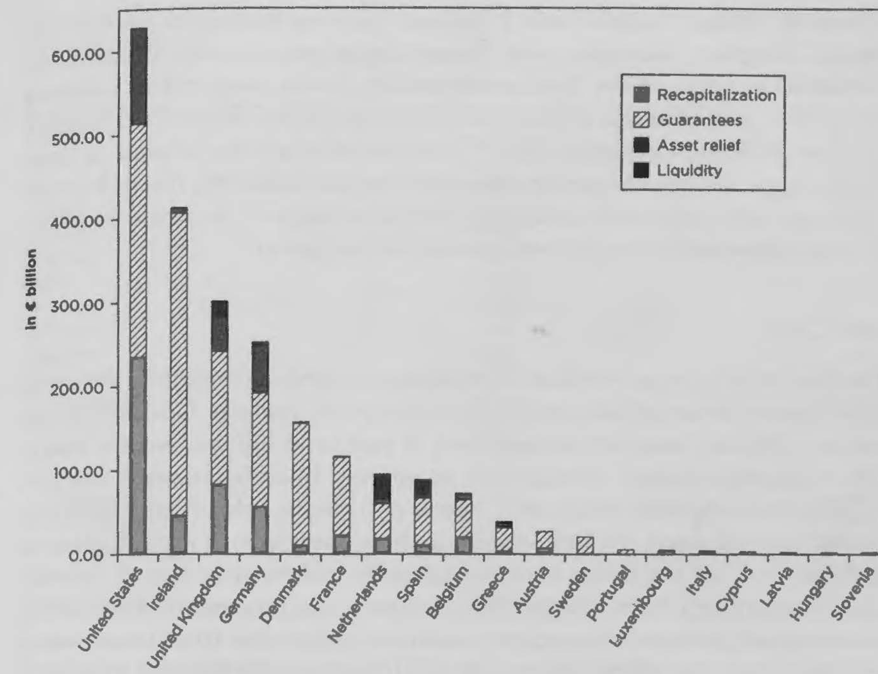


**Figure 2.3** Total expenditures, 2008–10 (in € billion)
*Source:* Author's calculation based on European Commission State Aid Scoreboard: see European Commission, *The Effects of Temporary State Aid Rules;* and Stolz and Wedow, *Extraordinary Measures in Extraordinary Times,* for the United States. Only Germany had expenditures prior to 2008, €0.41 billion in guarantees in 2007, which are included; figures of United States are from 2008–May 2010 only.

Moreover, figure 2.2 shows that the difference between commitments and outlays was considerable in many countries. To be sure, it is difficult to consider these "take-up rates" as a measure of successful or unsuccessful government schemes and/or of effective aid granted. In some cases, take up will be low, because the government plan is inappropriate or highly conditional and thus unattractive for banks; in others it can reflect the fact that the actual health of banks was better than expected or that the program succeeded in coordinating bank rescues without public expenditures via private investment.[37] Still it is important to understand what leads to very striking differences in take-up rates in cases that looked initially similar, such as Ireland and Denmark.

When one considers the total amount of expenditures, the United States leads the ranking with $837 billion (€628 billion) used of its total commitment

37. Panetta et al., "An Assessment of Financial Sector Rescue Programmes, 15–16; European Commission, "DG Competition's Review of Guarantee and Recapitalisation Schemes in the Financial Sector in the Current Crisis," 4.

of over $3 trillion.[38] As the most important banking markets in Europe, the United Kingdom, Germany, and France figure prominently. Constituting almost 60 percent of the European banking sector when taken together, these three countries also account for 60 percent of the aid granted between October 2008 and December 2010.[39] Two smaller countries, Belgium and the Netherlands, also spent considerable amounts, but unlike the rest of Europe, these two never approved a national scheme to support the financial industry, but intervened through a series of ad hoc measures.[40]

## Net Costs

The data so far give an overview of commitments and expenditures. However, these figures do not reflect actual costs to the public budgets. Guarantees may not be called on, loans will be paid back in part or in full, and several instruments generate revenue through fees or interest. In addition, assets the government had acquired (some toxic, others not) can be sold off after a certain period. In some cases, the write-downs on these assets were or are still going to be important, but not always. Even though policymakers never had all the relevant information to know whether their actions would procure the government costs or equity, it is useful to compare which bailout scheme have turned out to be costly, comparatively speaking, and which have actually brought income to the public balance sheet by May 2011 (Table 2.1). Attempts to calculate these net costs are ongoing and often referred to as the "fiscal impact" of bank bailouts.[41]

According to Eurostat's public deficit oversight tables, the most important positive contributions of bank bailouts to public budgets, in absolute figures, were recorded in France, Spain, Denmark, Greece, Sweden, and Belgium.[42] As a percentage of GDP, the most significant deficit reduction was achieved in Denmark, with 0.3 percent of GDP; followed by Greece and Cyprus at 0.2 percent; and Belgium, Spain, Slovenia, France, and Sweden at 0.1 percent. At the other end, the bank bailouts in Portugal, the Netherlands, the United Kingdom, Germany, and Ireland are the most costly in Europe in absolute terms, but still much behind the United States.

However, in terms of GDP (cumulated 2008–10), Ireland holds the uncomfortable last place, with a 22.7 percent deficit increase, followed by Latvia (2.3 percent), Portugal (1.3 percent), the United Kingdom (1.0 percent), Germany (0.7 percent), and the Netherlands (0.6 percent). The projected US bailout costs in terms of GDP are below 0.001 percent. As with all estimates, the applied accounting rules crucially affect the outcome. In particular, the creation of a public entity to deal with the unwinding of an ailing financial institution is considered as costs. The public ownership and capital injections into Northern Rock in the United Kingdom or HRE in Germany, for example, are thus not counted as (potential) equity held by the government, which explains the relatively sizable cost figure in both cases.[43]

38. Converted at the 2010 exchange rate of 1.33 euros to the dollar. The total commitment of the US bailout is €2.226 trillion or $3.301 trillion for commitments under TARP and for the government sponsored entities, according to Stolz and Wedow, which is roughly 25 percent of the 2010 GDP, with 5.7 percent of GDP actually spent. Laeven and Valencia estimate the actual expenditures more conservatively at 4.9 percent during the first year of the crisis. Alternative estimates are also available from Pro Publica, which lists outflows in mid-2012 at $602 billion. Further discussion of the US governments' listed expenditures can be found in the following chapter. Stolz and Wedow, "Extraordinary Measures in Extraordinary Times"; Laeven and Valencia, "Resolution of Banking Crisis," 34.

39. European Commission, "The Effects of Temporary State Aid Rules Adopted in the Context of the Financial and Economic Crisis," 11.

40. Ibid., 36.

41. Laeven and Valencia, "Resolution of Banking Crisis"; Laeven and Valencia, "Systemic Banking Crises Dataset: An Update"; Reinhart and Rogoff, *This Time Is Different*.

42. Both Greece and Spain, but also Portugal, are cases where the banking crisis became visible with considerable delay. Greece spent an additional €30.5 billion (13.2 percent of its GDP) and Portugal €27 billion (15.6 percent of its GDP) in 2011. European Commission, "The Effects of Temporary State Aid Rules Adopted in the Context of the Financial and Economic Crisis." The Spanish banking crisis aggravated in 2012. The actual costs are thus likely to be higher than recorded by May 2011.



TABLE 2.1
Net costs 2008–11

| Country | billion € | % of GDP |
|---|---|---|
| France | 2.40 | 0.10% |
| Spain | 1.45 | 0.10% |
| Denmark | 0.72 | 0.30% |
| Greece | 0.41 | 0.20% |
| Sweden | 0.35 | 0.10% |
| Belgium | 0.20 | 0.10% |
| Italy | 0.13 | 0.00% |
| Cyprus | 0.03 | 0.20% |
| Slovenia | 0.03 | 0.10% |
| Hungary | 0.01 | 0.01% |
| Lithuania | −0.03 | −0.10% |
| Luxembourg | −0.04 | −0.10% |
| Latvia | −0.43 | −2.30% |
| Austria | −1.43 | −0.50% |
| Portugal | −2.21 | −1.30% |
| Netherlands | −3.44 | −0.60% |
| United Kingdom | −15.03 | −1.00% |
| Germany | −16.56 | −0.70% |
| Ireland | −35.72 | −22.30% |
| United States | −66.50 | 0.00% |

*Source*: Eurostat for EU: These figures take into account costs and revenue to public budgets only. Outstanding amounts of assets, actual liabilities, and contingent liabilities are recorded separately. The US net costs are estimated at $50 billion, based on projection of US oversight authorities in late 2011 (SIGTARP, *Quarterly Report to Congress*, 35). The US estimate is conservative and does not include costs incurred through Fannie Mae and Freddie Mac, which could amount to $134 billion according to ProPublica (Kiel, "Behind Administration Spin").

43. European Commission, *Eurostat Supplementary Table for the Financial Crisis: Background Note*. For an alternative estimation of net costs, see Laeven and Valencia, "Resolution of Banking Crisis."

## Instruments

Instruments varied widely. Most countries used guarantees to ward off a panic and potential run on banks. But despite the lead of the United States to propose a focus on the transfer of toxic assets and the UK's example of recapitalization as the main pillar of intervention, national responses had very different mixes of expenditures. In absolute numbers, the United States, the United Kingdom, Germany, and Ireland spent most on injecting capital into ailing financial institutions (figure 2.3).

As a percentage of their entire effort, however, the picture is quite different, as figure 2.4 shows. While the United States and the United Kingdom dedicated 37 percent and 27 percent of their government aid to recapitalization, Germany and France spent around 20 percent (22 percent and 19 percent respectively). Ireland and Denmark, by contrast, use the most substantial part of their support to cover guarantees, 87 percent and 92 percent respectively. Italy stands out as the only country that has used recapitalization measures exclusively. This is indeed quite unusual, since guarantees and liquidity support through central banks are typically a way for governments to

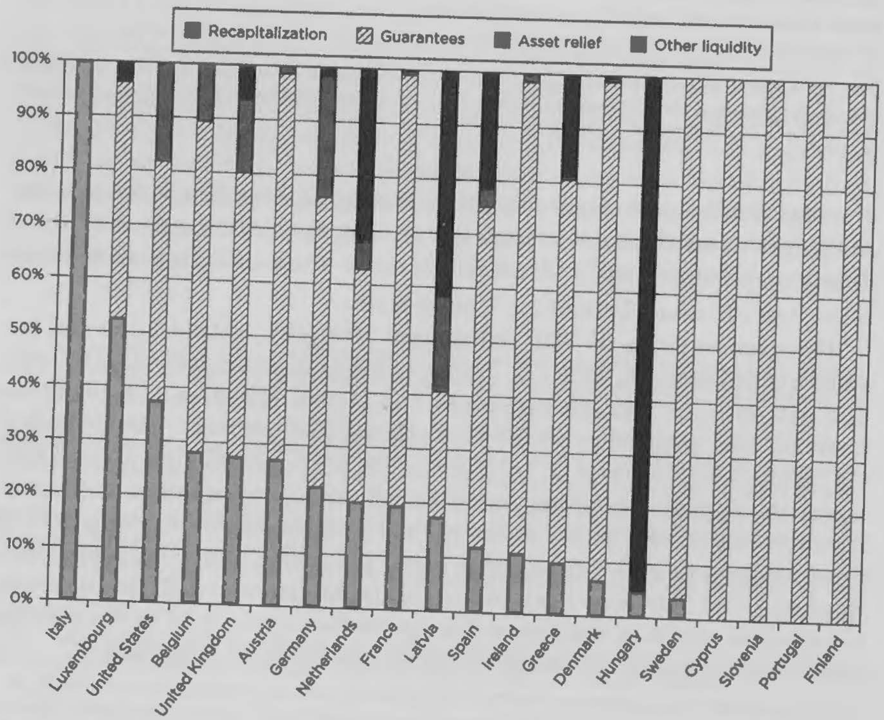


**Figure 2.4** Instruments used as percentage of actual expenditures
*Source:* Author's calculation based on European Commission State Aid Scoreboard, *The Effects of Temporary State Aid Rules*; and Stolz and Wedow, *Extraordinary Measures in Extraordinary Times*, for the United States.



buy time before moving to the more difficult issue of recapitalizing banks.[44] However, Italy, together with Portugal and Luxembourg, offered significantly less support than average, both in absolute terms (figure 2.3) and as a percentage of the size of their banking sectors, by giving well below 1 percent of support.[45] The liberty to choose such an unusual mix of support may thus be a function of an overall small bailout effort.

Finally, it is noteworthy that only a few countries chose to use public funds to transfer troubled assets. After the announcement that the US government would focus its efforts on troubled assets, an announcement that to a great extent failed to materialize, mainly Germany and Austria announced assets transfer mechanisms as part of their early schemes. Ireland and Latvia created similar mechanisms, but much later, in late 2009, early 2010. The British Asset Protection Scheme was announced in January 2009 to ensure assets on the balance sheets of RBS and Lloyds, and this was run by an independent agency that was created in December 2009.

## Conditionality

Beyond pure costs, an important element for comparison is the degree of conditionality attached to government support. The conditions attached to bailout schemes varied across countries, but it is difficult to give a complete picture of the variation. A previous study has provided two indicators to tackle this question: one for the strength of lending requirements, and a second one estimating the overall constraint of the support package.[46] For the second indicator, the authors use a proxy: the delay of approval from the European Commission's Directorate General (DG) Competition. Since the European Commission's task is to ensure that aid is given with the least negative effect on competition possible, their approval can be understood as a signal that a government plan is not unduly favorable to its own banking sector, but upholds prices and conditions similar to what would have been granted on the market, if it was still functioning. Although the argument is appealing, one may assume that other institutional factors may play into the negotiation between national authorities and DG Competition that can affect the delay of approval. Moreover, it is difficult to distinguish between lengthy negotiations that revolved around the adequate contribution of the banking sector and negotiations that were due to unequal treatment of national and foreign banks, as appears to have been the case in Ireland, for example.[47] Finally, the approval time does not indicate what the final version looks like, it merely indicates how the initial proposal was judged by the European authorities.

44. In past financial crises, the median time to implement recapitalization programs was twelve months, and contracted to zero months only in the recent financial crisis. Laeven and Valencia, "Resolution of Banking Crisis."
45. European Commission, "The Effects of Temporary State Aid Rules Adopted in the Context of the Financial and Economic Crisis," 39.
46. Weber and Schmitz, "Varieties of Helping Capitalism."
47. Ibid., 653.

TABLE 2.2
(Un)attractiveness of government support for participating institutions

| | Indicative entry rate | Conditions for recapitalization | Lending requirement | Approval time |
|---|---|---|---|---|
| | Minimum remuneration entry rate for hybrid capital (tier 1) injected by the government | LEND = lending commitments; EMPL = maintaining employment; BOARD = board appointment; COMP = executive compensation; DIV = dividend; CAPSTR = capital structure | Points for explicit mention, early inclusion, specificity, additional features | Quick (<7 days), moderate (7–14), long (15–30), very long (>30) |
| United Kingdom | 12.00% | LEND, BOARD, COMP, DIV, CAPSTR | 4 | quick (2.5) |
| Greece | 10.00% | BOARD, COMP | 2 | quick (5) |
| Hungary | 10.00% | BOARD, COMP | 0 | very long (87) |
| Portugal | 9.50% | LEND, COMP, DIV | 4 | moderate (14) |
| Finland | 9.40% | LEND, CAPSTR | 1 | quick (2) |
| Austria | 9.30% | LEND, EMPL, COMP, DIV, CAPSTR | 2 | very long (50) |
| Germany | 9.00% | LEND, COMP, DIV, CAPSTR | 2 | moderate (14) |
| Denmark | 9.00% | LEND, COMP, DIV | 1 | quick (2) |
| France | 8.00% | LEND, COMP, CAPSTR | 4 | quick (7) |
| Ireland | 8.00% | LEND, BOARD, COMP, DIV | 4 | moderate (10) |
| Italy | 8.00% | LEND, COMP, DIV | 3 | long (27) |
| Spain | 7.80% | LEND, COMP, DIV | 2 | moderate (21.5) |
| United States | 5.00% | LEND, COMP, DIV | 3 | N/A |
| Sweden | market rate | LEND, COMP | 1 | quick (2) |
| Latvia | ad hoc | nationalization of Parex | 1 | quick (6) |
| Belgium | ad hoc | BOARD, COMP, CAPSTR | 0 | N/A |
| Netherlands | ad hoc | BOARD, COMP, CAPSTR | 0 | moderate (9) |

*Source:* Entry price for recapitalization from European Commission, *The Effects of Temporary State Aid Rules Adopted in the Context of the Financial and Economic Crisis*, 52; Panetta et al., *An Assessment of Financial Sector Rescue Programmes* for the United States and Department of Finance for Ireland ("Recapitalisation of Allied Irish Bank and Bank of Ireland"). Conditions from Committee of European Banking Supervisors, *Analysis of the National Plans for the Stabilisation of Markets*, Panetta et al. *An Assessment of Financial Sector Rescue Programmes*; and the state aid rulings of DG Competition, lending requirement, and approval time from Weber and Schmitz, "Varieties of Helping Capitalism".
*Note:* The entry rates given for recapitalization vary according to the specific context of the capital injections, in particular the type of capital covered, the duration, and possible step-up clauses, where remuneration increases over time.

Table 2.2 lists the indicators given by Weber and Schmitz together with a list of conditions formally attached to the recapitalization packages. In addition, it adds new information available now about the pricing of the recapitalization aid, which is a central element in most bailout packages. Pricing is an important factor in making aid attractive or unattractive to banks in difficulty.



In a detailed communication on state aid, the European Commission recommends the adequate pricing of aid to avoid distorting competition and provides a pricing corridor, which suggests that remuneration should take into account the risk profile of the individual institutions and have a rate of return of 7 percent on subordinate debt and 9.3 percent on preferred shares and hybrid debt instruments. Moreover, the price should increase over time to encourage exit from government capital.[48]

The juxtaposition of the different indicators shows that there is not necessarily a relationship between the number of conditions attached to government support and the delay in approval from the European Commission. The similarity of conditions also suggests that we know little about the constraints weighing on participating banks if we do not know how these conditions are reinforced. On the one hand, the approval of state aid in Europe through the European Commission implies a certain degree of harmonization, which means that the formal conditions may appear rather similar. On the other hand, conditions formally attached but with little reinforcement may end up being toothless in practice. In many countries, inquiry reports have highlighted discrepancies between formal conditions and outcomes.[49]

Concerning the remuneration of capital injections, we can see that despite the oversight of the European authorities, variation exists. The United Kingdom, but also Greece and Hungary, are well above the corridor recommended by the European Central Bank (ECB) and the European Commission. In other words, the capital injections are particularly expensive for participating institutions. France, Italy, and Spain are comparatively low, in particular France and Italy, which granted core Tier 1 capital that should be remunerated at the upper level of the corridor.[50] According to the European Commission, the return rate was nonetheless approved as adequate because both schemes entailed important step-up clauses, in other words, increases in the cost of capital granted over time. Nonetheless, comparing different European schemes, the costs for participating banks in the UK scheme are arguably high and in Italy and France quite favorable. This impression is confirmed by interview evidence: one observer characterized the UK plan as harsh, while a representative of the French administration regretted that the government had not tried to extract a higher price from the banks.[51]

48. European Commission, *Eurostat Supplementary Table for the Financial Crisis: Background Note.*
49. SIGTARP, *Extent of Federal Agencies' Oversight of AIG Compensation Varied, and Important Challenges Remain*; Cour des Comptes, *Les concours publics aux établissements de crédit: bilan et enseignement à tirer.*
50. The Spanish rate, in contrast, can be explained by the less risky type of capital granted in the Spanish scheme.
51. Interviews, 8 June 2011 and 15 April 2011.

What is particularly striking, however, is the price of the initial capital injections in the US Capital Purchase Plan (CPP) of 13 October 2008. With 5 percent for preferred shares, the United States is far below the 9.3 percent recommended in the European context at the same time. It is true, the 5 percent was annual divided paid for only the first five years, after which it would rise up to 9 percent. Moreover, the second recapitalization (the Capital Assistance Program—CAP) announced by the Obama administration on 10 February 2009 asked for a 9 percent annual dividend for mandatory convertible preferred shares. Still, the initial rate proposed by the Bush administration was extraordinarily low. Vikram Pandit, CEO of Citigroup, brought this to a point, when he exclaimed in the tense meeting the government had convened to announce its recapitalization plan: "This is really cheap capital!"[52] Clearly, the initial US recapitalization plan was tailored to be as attractive as possible in order encourage financial institutions to collectively accept government support.

## Public-private Arrangements

A final variation in bailout schemes concerns the extent to which the financial industry is involved in the setup and execution of the bank support scheme. In most countries, the guarantee and liquidity schemes, recapitalization and asset transfer plans are run directly by the national governments, treasuries, or the central banks.

In some countries, special entities have been set up to administer parts of the national schemes. Several of these entities are part of or tightly connected with the public administrations and central bank (Spain, United Kingdom, Ireland, Switzerland, and Germany), although the degree of oversight varied from country to country. In France, Austria, and Denmark, by contrast, the special entities build on private sector participation and contributions.

In France, the Société de Financement de l'Economie Française (SFEF), set up to raise capital on financial markets and provide liquidity to ailing financial institutions, was jointly owned by the six big banks and the governments, which held 66 percent and 34 percent respectively. Seven other financial institutions also signed the SFEF agreement to benefit from the liquidity provided through the state-backed mechanism.[53] The objective of SFEF was to issue securities collectively, backed with a government guarantee, and thus obtain liquidity at a much more favorable rate than would have been possible for individual banks and without government backing.

52. Cited in Wessel, *In FED We Trust*, 239.

53. These were mainly housing and consumer credit institutions, often the financial activity branches of large industrial groups: PSA Finance (PSA-Peugeot-Citroën), General Electric, Crédit Immobilier, Laser Cofinoga, RCI Banque (Groupe Renault), S2Pass (Groupe Carrefour) and VFS Finance (Volvo). GMAC had originally signed the SFEF agreement but did not request liquidity support. Cour des Comptes, *Les concours publics aux établissements de crédit: premiers constats, premières recommandations*, 32.



TABLE 2.3
Institutional setup of national schemes

| Country | Institution for funding guarantees | Institution for capital injections | Institution for asset purchases |
|---|---|---|---|
| Austria | Special entity: OeCAG | Special entity: OIAG | N/A |
| Belgium | Government | Government | N/A |
| Germany | Special entity: SoFFin | Special entity: SoFFin | Special entity: SoFFin |
| Spain | Government (Treasury) | Special entity: FROB | Treasury: Financial Asset Acquisition Fund |
| Finland | Special entity under Treasury | N/A | N/A |
| France | Special entity: SFEF | Special entity: SPPE | N/A |
| Greece | Government (Treasury) and Central Bank | Government (Treasury) | Government |
| Ireland | Government | Government | Special government entity: NAMA |
| Italy | Government (Treasury) | Government | Central Bank |
| Luxembourg | Government | Government | N/A |
| Netherlands | Government | Government | ING |
| Portugal | Central Bank | Government | N/A |
| Denmark | Danish Contingency Association | Government | Government |
| Switzerland | N/A | Government | Special entity under Central Bank |
| United Kingdom | Government Debt Management Office | Special entity under Treasury: UKFI | Central Bank |
| United States | FDIC | Government (Treasury) | Treasury and Central Bank |

*Source:* Stolz und Wedow, *Extraordinary Measures in Extraordinary Times*, 63.

In Austria, the Österreichische Clearingbank AG (OeCAG) was set up as a bank with its own license to facilitate interbank lending. It was owned by the major Austrian banks,[54] who contributed €180 million in capital and its operations were backed by a guarantee from the government for up to €4 billion and collateral of up to €5 billion in the form of commercial paper provided by OeCAG. Recapitalization was delegated to Österreichische Industrieholding AG (OIAG), a formerly state-financed holding company for the management of state-owned enterprises, which had turned into a privatization agency and joint-stock company by 2000. OIAG founded a subsidiary in the context of the financial crisis, which acted as a trust company of the government of Austria for the recapitalization of Austrian banks.[55]

54. Raiffeisen Zentralbank Österreich AG, UniCredit Bank Austria AG, Erste Group Bank AG, Hypo-Banken Holding GmbH, Österreichische Volksbanken AG, BAWAG PSK Bank für Arbeit und Wirtschaft, Österreichische Postsparkasse AG, and 3-Banken Beteiligung GmbH.

55. www.fmarktbet.at/cms/start.php.

In the Danish case, liquidity provision was assumed through the Danish Contingency Association, a collective undertaking established by the Danish banking industry for the support of distressed banks in 2007. In exchange for an unlimited government deposit guarantee, participating banks agreed in 2008 to contributed approximately €4.7 billion for a collective guarantee for individual banks and fees paid to the government for the deposit guarantee. Recapitalization was introduced in February 2009 and administered by the Danish Finance Ministry, but the Danish Contingency Association was a central mechanism to share the costs of the extensive guarantees between the government and the private stakeholders.

The overview of these special entities shows that it is possible to find institutional setups that involved the financial industry in the funding and administration of the bailouts. Such institutional mechanism for cooperation between the industry and the government are central features in some countries, but such burden sharing remains somewhat of an exception.[56]

## Conclusion

The global financial crisis may have begun in the United States, but it quickly spread and turned into a challenge that was much larger than the initial subprime crisis. Not just the exposure to the US housing market, but also the reliance of many financial institutions on short-term finance in order to roll over their debt, the overextension of local housing markets, and the the uncertain financial condition of foreign branches of domestic institutions came together as an explosive mix for most governments in the fall of 2008. Despite the international nature of the crisis, government responses were decidedly national. Alongside central bank efforts to provide liquidity to struggling financial institutions, governments made public budgets available for bank support schemes, in most countries at staggering proportions.

The six countries that will be studied in greater detail are the highest spenders on bank support schemes in absolute terms: the United States, Ireland, the United Kingdom, Germany, Denmark, and France. All six have been substantially affected by the financial crisis and made important efforts to prop up their banking sectors through national support schemes.

However, they differ on several dimensions that are relevant for the paired comparison in the following chapters, as table 2.4 summarizes. Compared to the United States, the United Kingdom's plan is striking for its stringent

56. The term *burden sharing* can also refer to a bank levy through which banks would contribute to their own future bailout or to measures with respect to individual failing institutions, whose unwinding revolved imputing costs to the private stakeholders; see European Commission, "The Effects of Temporary State Aid Rules Adopted in the Context of the Financial and Economic Crisis," 60–62.



TABLE 2.4
Comparison summary

| | Initial commitment | Outlays | Net costs | Pricing | Institutional setup |
|---|---|---|---|---|---|
| United States | Moderate (25% of GDP) | Low (6% of GDP) | Low (<0.1% of GDP) | Very low | Government |
| United Kingdom | High (50% of GDP) | Moderate (18% of GDP) | Negative (–1% of GDP) | High | Government |
| Germany | Moderate (25% of GDP) | Low (10%) | Negative (–0.7% of GDP) | Average | Special government entity |
| France | Moderate (18% of GDP) | Low (6% GDP) | Positive (0.1% of GDP) | Low | Public-private entity |
| Ireland | Massive (330% of GDP) | Massive (270% of GDP) | Very negative (22.7% of GDP) | Low | Government |
| Denmark | Massive (256% of GDP) | High (67% of GDP) | Positive (0.3% of GDP) | Average | Public-private entity |

conditions, in particular in the pricing of its recapitalization. However, the British plan risks costing more than the US plan, at least as a percentage of GDP. The French plan appears to have been be more favorable to the financial industry than the German plan but relied in part on a public-private entity for its execution and ended up producing a surplus for the public budget. The Danish plan looked similar to the Irish scheme, at least initially when both countries committed several times their national income to guaranteeing the financial sector. However, the Irish scheme's outlays were equally high and the fiscal impact is likely to be very substantial, while the Danish scheme succeeded in keeping outlays low, in particular through the management of a joint public-private initiative. Explaining these differences requires understanding the interactions between governments and financial institutions during crisis management, more specifically the exercise of power. Providing the tools for such an analysis in the empirical chapters is the objective of the following chapter.