

# 2

---

## The Temporary Liquidity Guarantee Program: A Systemwide Systemic Risk Exception

### Introduction

During the unprecedented financial-market disruptions in the United States and abroad in the fall of 2008, government officials took extraordinary measures to calm market fears and encourage lending. One of these measures was the Federal Deposit Insurance Corporation's (FDIC) Temporary Liquidity Guarantee Program (TLGP). The TLGP had two components. It provided a limited-term guarantee for certain newly issued debt not only of banks and thrifts but also of bank, thrift, and financial holding companies and eligible bank affiliates (the Debt Guarantee Program, or DGP). Additionally, the TLGP fully guaranteed certain non-interest-bearing transaction deposit accounts (the Transaction Account Guarantee Program, or TAGP).

During the first half of October 2008, U.S. policymakers made the decision to implement these programs and achieved consensus both about the mechanism for creating them and about the policy trade-offs involved in their design. During this same short period, the FDIC worked to ensure that the two voluntary programs would be in place at the time of their announcement on October 14, and during the last months of 2008, the FDIC refined the programs to increase their effectiveness.

Of the approximately 14,000 entities eligible to participate in the DGP, about half opted into the program (though almost all the debt guaranteed was issued by fewer than 50 such entities), and a significant majority of eligible institutions signed on to the TAGP. At their height, the DGP guaranteed almost \$350 billion in outstanding debt and the TAGP covered over \$800 billion in deposits. The programs were designed in such a way that expected fees would cover potential losses, but as it turned out, the fees charged to participating entities far outstripped the losses attributable to the TLGP as a whole.<sup>1</sup> The DGP ended on October 31, 2009, a year after its introduction (though guaranteed debt

---

<sup>1</sup> If the TLGP's fees had been insufficient to cover losses, a systemic risk assessment would have been levied on all insured institutions; see the section below titled "The TLGP: Effects and Costs."

remained outstanding until 2012). The TAGP, after two extensions, ended on December 31, 2010. The TLGP proved effective in stabilizing financial markets, with the DGP reopening frozen debt markets to participating entities and the TAGP stabilizing deposit funding for insured depository institutions.

## The Policy Debate in October 2008

With financial markets in turmoil, governments around the world sought to formulate and coordinate responses designed to return stability to those markets. In the United States and many other countries, the responses involved guaranteeing debt issued by banks and expanding deposit insurance coverage. In the United States, these two courses of action occasioned a policy debate among financial regulators, leading to the decision to use the systemic risk exception under the Federal Deposit Insurance Corporation Improvement Act of 1991 as the mechanism for providing the debt guarantees and the increased deposit insurance coverage. The box titled “The Systemic Risk Exception: Origins, Definition, and Procedure” provides background on the systemic risk exception.

### *The G7’s Response to the Financial Crisis: Implications for the United States*

Faced with badly deteriorating conditions in financial markets, the Group of Seven finance ministers met in Washington, DC, and developed a plan to address these problems, focusing on liquidity, capital, and market stability. The plan was announced on October 8, 2008, and one of its goals was to “take all necessary steps to unfreeze credit and money markets and ensure that banks and other financial institutions have broad access to liquidity and funding.”<sup>2</sup> To achieve this goal, the governments of many advanced economies decided to guarantee debt issued by banks and other financial institutions, and to expand deposit insurance guarantees.<sup>3</sup>

Given the frozen credit and money markets and the need to coordinate with the international response to the financial crisis, the United States had to determine what mechanism was appropriate for guaranteeing bank debt. The U.S. Treasury Department

---

<sup>2</sup> See G7 Finance Ministers, “G7 Finance Ministers and Central Bank Governors Plan of Action,” October 10, 2008, <http://www.g8.utoronto.ca/finance/fm081010.htm>. The members of the Group of Seven are the United States, Canada, France, Germany, Italy, Japan, and the United Kingdom.

<sup>3</sup> In addition to the program in the United States, some form of debt guarantee was put in place in Australia, Austria, Belgium, Canada, Denmark, France, Germany, Greece, Ireland, Italy, the Netherlands, New Zealand, Portugal, Spain, Sweden, and the United Kingdom. See Sebastian Schich, “Expanded Government Guarantees for Bank Liabilities: Selected Issues,” *OECD Journal: Financial Market Trends*, 2009, no. 1, 5, <http://www.oecd.org/finance/financial-markets/42779438.pdf>. For the expansion of deposit insurance coverage internationally, see International Association of Deposit Insurers, “Discussion Paper on Cross Border Deposit Insurance Issues Raised by the Global Financial Crisis,” March 2011, 13–15, [http://www.iadi.org/en/assets/File/Papers/Approved%20Research%20-%20Discussion%20Papers/IADI\\_CBDI\\_Paper\\_29\\_Mar\\_2011\\_\(Final\\_for\\_publication\).pdf](http://www.iadi.org/en/assets/File/Papers/Approved%20Research%20-%20Discussion%20Papers/IADI_CBDI_Paper_29_Mar_2011_(Final_for_publication).pdf).

(Treasury) later stated that if the United States were not to take actions similar to those being undertaken in Europe, “global market participants might turn to institutions and markets in countries where the perceived protections were the greatest.”<sup>4</sup>

### ***The Policy Response by U.S. Financial Regulators***

For approximately ten days in October, primarily over the weekend of October 11 and 12, senior officials from the FDIC, the Federal Reserve System, and Treasury debated how to respond to the paralysis throughout the credit markets. These officials had to reach agreement on what mechanism would be appropriate for guaranteeing bank debt, if any, and they had to agree on the extent of a transaction account guarantee. Guaranteeing bank debt was seen as the more consequential of the two actions, for two reasons. First, large banks needed access to the debt markets, and needed it right away. Second, guaranteeing bank debt would be an unprecedented foray into a type of guarantee that was totally new for the FDIC, whereas extending the deposit guarantee would be an incremental change.

Underpinning the need to agree on the mechanism for guaranteeing bank debt and on the details for extending deposit coverage was the need to choose the resources that would stand behind these guarantees. The FDIC’s resources would clearly back insured deposits, but the debt guarantee was more problematic. One possible channel of funds was an appropriation by Congress. However, policymakers believed that Congress would not authorize funds over and above those it had—most reluctantly—just provided to the Troubled Asset Relief Program (TARP). Policymakers also considered TARP itself an unlikely source of funding for the debt guarantee. In addition, they believed that the Federal Reserve Board (FRB) had no authority to guarantee bank debt directly.<sup>5</sup> In their view, the only available method of providing broad guarantees of bank debt (and the only way to expand deposit insurance coverage without congressional action) was to use the systemic risk exception (SRE), which allowed open-bank assistance through the FDIC.<sup>6</sup>

---

<sup>4</sup> U.S. GAO, *Federal Deposit Insurance Act: Regulators’ Use of Systemic Risk Exception Raises Moral Hazard Concerns and Opportunities Exist to Clarify the Provision*, GAO-10-100, 2010, 18, <http://www.gao.gov/products/GAO-10-100>. For discussion of the scope and design of foreign debt-guarantee programs, often in comparison with the U.S. program, see Schich, “Expanded Government Guarantees”; Fabio Panetta et al., “An Assessment of Financial Sector Rescue Programmes,” BIS Papers 48, 2009, <http://www.bis.org/publ/bppdf/bispap48.pdf>; Aviram Levy and Sebastian Schich, “The Design of Government Guarantees for Bank Bonds: Lessons from the Recent Financial Crisis,” *OECD Journal: Financial Market Trends*, 2010, no. 1, <https://www.oecd.org/finance/financial-markets/45636972.pdf>; Aviram Levy and Andrea Zaghini, “The Pricing of Government-Guaranteed Bank Bonds,” *Banks and Bank Systems* 6, no. 3 (2011), <https://businessperspectives.org/media/zoo/applications/publishing/templates/article/assets/js/pdfjs/web/4126>; and Giuseppe Grande et al., “Public Guarantees on Bank Bonds: Effectiveness and Distortions,” *OECD Journal: Financial Market Trends*, 2011, no. 2, 47–72, <http://www.oecd.org/finance/financial-markets/49200208.pdf>.

<sup>5</sup> See Sheila Bair, *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself* (2012), 113; Timothy Geithner, *Stress Test: Reflections on Financial Crises* (2014), 226; and Ben S. Bernanke, *The Courage to Act: A Memoir of a Crisis and Its Aftermath* (2015), 340.

<sup>6</sup> The TLGP was not the only use of the systemic risk exception during the financial crisis. For its application in the cases of the individual financial institutions Wachovia, Citigroup, and Bank of America from September

### ***The Systemic Risk Exception: Origins, Definition, and Procedure***

The roots of the SRE can be found in concerns that FDIC resolutions during the banking crisis of the 1980s and early 1990s had frequently protected uninsured depositors and creditors in addition to insured depositors. In February 1991, a congressionally mandated study of the deposit insurance system recommended that the FDIC should, in order to minimize the cost of resolving failed banks, seek to limit its protection to insured depositors whenever possible. To accomplish this goal, any failed-bank resolution was to be undertaken at the least cost to the deposit insurance fund. The study noted, however, that “the presence of systemic risk could require a decision to protect uninsured depositors even if it is not the least costly resolution method.” Although the report acknowledged the FDIC’s practice of consulting both the Board of Governors of the Federal Reserve System (FRB) and Treasury when it chose to protect uninsured depositors, the report stated that a systemic risk decision demanded “a broader government consensus that systemic risk exists and requires extraordinary government action” and recommended that the FRB and Treasury jointly make a systemic risk determination if they agreed on the need to protect uninsured depositors.<sup>a</sup>

Congress incorporated the systemic risk determination into the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA), but amended the regulatory process that Treasury recommended.<sup>b</sup> Unless the SRE was invoked, FDICIA prohibited protection for uninsured depositors and other creditors if protecting those depositors and creditors would increase a resolution’s cost to the deposit insurance fund. It also required that the decision to grant an SRE be made by the Secretary of the Treasury in consultation with the President, but only after a written recommendation by a two-thirds majority of both the FDIC Board of Directors and the FRB. After an SRE determination was made, the FDIC would be authorized to act or assist as necessary to avoid the potential adverse effects of a major-bank failure. The SRE was not used until 2008.

---

<sup>a</sup> See U.S. Department of the Treasury, *Modernizing the Financial System: U.S. Treasury Department Recommendations for Safer, More Competitive Banks* (1991), especially 27–28.

<sup>b</sup> For policymakers’ views on the SRE as it was being considered, see *Economic Implications of the “Too Big to Fail Policy,” Hearing Before the U.S. House of Representatives, Subcommittee on Economic Stabilization, Committee on Banking, Finance, and Urban Affairs, 102nd Cong.* (1991).

By October 13, after days of intense negotiation, the agencies reached agreement on the basic elements of the emergency program to guarantee bank debt and insure a broad subset of transaction deposits. The agreement immediately set in motion the process of requesting a systemic risk determination, in keeping with the procedure set forth in the

Federal Deposit Insurance Corporation Improvement Act of 1991: the FDIC Board and the FRB voted to recommend a systemic risk exception to the Secretary of the Treasury, and the Secretary—after consulting with the President—quickly determined that a systemic risk existed.

The resulting program—the two-part Temporary Liquidity Guarantee Program (TLGP)—was announced on October 14 in a joint press conference by the FDIC, the U.S. Treasury Department, and the Federal Reserve. In announcing the program, FDIC Chairman Sheila Bair emphasized that it was needed to stabilize the financial system and that it would be funded through fees charged to participating financial institutions, not taxpayers and not the Deposit Insurance Fund (DIF), which was intended to protect the deposits of bank customers.<sup>7</sup> The TLGP was a crucial element of a three-part U.S. government response to the financial crisis. The other two parts were the Treasury’s capital injections into banks under the TARP, and the Commercial Paper Funding Facility (CPFF) under the aegis of the FRB. The three programs were designed to work together.<sup>8</sup>

### ***Policy Discussions: The Details of the TLGP***

To reach agreement about the details of the debt guarantee program, policymakers had to resolve several complex issues.<sup>9</sup> One was whether to guarantee bank debt that was already outstanding. There was concern that such a broad guarantee might prove too large a liability to cover and might create a windfall for those institutions that had invested in bank debt, but arguments were also made that the guarantee needed to be as wide as possible. Another issue was whether to guarantee debt issued by bank holding companies (BHCs) and their nonbank affiliates. Some worries were expressed that there might have been legal impediments to guaranteeing such debt, and questions were raised about whether such a guarantee was in fact desirable. However, the view was also held that not guaranteeing debt issued by BHCs would leave U.S. banks at a competitive disadvantage, since European debt guarantee programs would cover the debt issued by the large universal banks in those countries. A third area of debate was whether to assess a fee for guarantees, and a fourth was whether creditors should bear any loss on bonds whose issuers defaulted. On the question of fees charged to entities that would issue guaranteed debt, there was agreement that a fee should be assessed but a spectrum of opinion on how much the fee should be. Arguments were made for (1) a minimal fee

---

<sup>7</sup> See FDIC, “Statement by FDIC Chairman Sheila Bair,” FDIC Joint Press Conference with U.S. Treasury and Federal Reserve, Press Release, October 14, 2008, <https://www.fdic.gov/news/news/press/2008/pr08100a.html>.

<sup>8</sup> For an overview of the CPFF, see Tobias Adrian et al., “The Federal Reserve’s Commercial Paper Funding Facility,” Federal Reserve Bank of New York *Economic Policy Review*, May 2011, 25–39.

<sup>9</sup> This discussion is based on Bair, *Bull by the Horns*, 109–20; Geithner, *Stress Test*, 226–38; and Bernanke, *The Courage to Act*, 339–42.

to encourage participation, (2) a fee calibrated to replicate funding costs during normal market conditions, and (3) a fee that took into account the cost of potential defaults. As for creditors bearing loss if a bond issuer defaulted, an early proposal suggested that creditors bear a 10 percent loss on such bonds, but many policymakers viewed this as undercutting the purpose of the guarantee.

In the end it was agreed that the debt guarantee program would cover only newly issued debt and for a limited range of maturities. BHC debt would be covered, but with a limitation on thrift holding companies' ability to participate in the debt guarantee program and with the proviso that the FDIC would approve applications for guarantees of debt issued by nonbank affiliates of BHCs on a case-by-case basis. These restrictions were necessitated by the large number of thrift holding companies and BHC affiliates and the attendant difficulty in assessing the risk to the FDIC from guaranteeing their debt. The costs to program participants would be low but meaningful, and creditors would not face a loss on bonds whose issuers defaulted.

To reach agreement on the expansion of deposit insurance coverage, policymakers had to decide whether to expand deposit insurance coverage beyond what the FDIC already offered and, if so, to what extent. Bank deposits were an important form of liquidity for many smaller banks, and such banks faced risk from potential runs by entities holding deposits above the insurance limit, such as small businesses and municipalities. To forestall such runs, the FDIC had argued several weeks earlier that the agency should extend an unlimited guarantee to transaction accounts at banks, believing that such a guarantee would promote public confidence in banks, but at that time the proposal for such a guarantee was not adopted. It was later noted that there had been a general opposition to such an expansion of deposit insurance because of moral hazard, but that during the crisis, expansion of the insurance guarantee was thought to be warranted because, without it, there could be rapid deposit outflows from smaller banks into banks that were perceived to be too big to fail.

In the end, the proposal for an unlimited guarantee of transaction accounts at banks was agreed to as part of the TLGP. The policymakers therefore ended up striking a balance among their varying views on providing these two forms of assistance to the financial system.

### ***The Case for a Systemic Risk Exception***

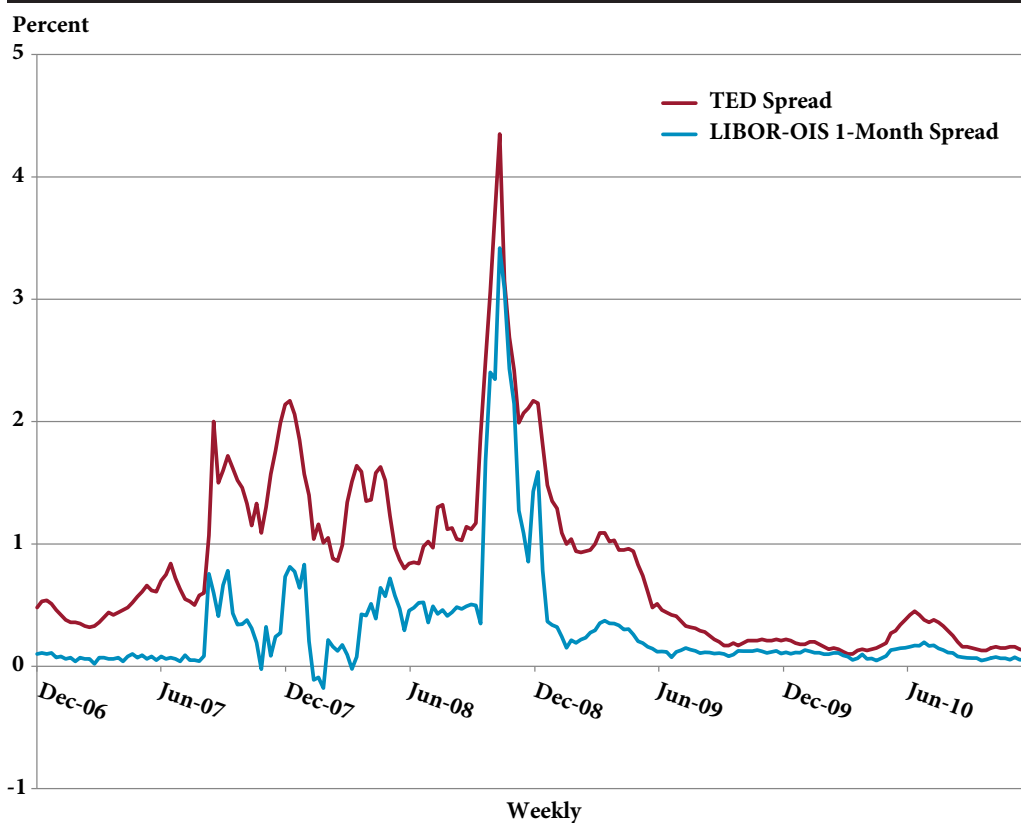
At the same time that these policy discussions were being held, FDIC staff was gathering data and other information to support the case for a systemic risk exception. The information was assembled in a memorandum that the FDIC Board would consider before voting on the issue.<sup>10</sup> The memorandum documented the growing and

---

<sup>10</sup> This section is largely based on that memo: FDIC, "Memorandum to the Board of Directors: FDIC Guarantee of Bank Debt," October 13, 2008. For further discussion of the events and trends during the second half of 2008, see chapter 1.

unprecedented disruption in credit markets and the concomitant effects on banks' ability to obtain funding and to extend credit. Banks had responded to the crisis by retaining cash and tightening lending standards. Borrowing by businesses, households, and state and local governments had slowed significantly, and the trend was likely to continue. The interbank market as defined by the TED (Treasury-Eurodollar) spread was normally stable at just below 25 basis points (bps), but the spread had been rising significantly since 2007; by August 2008 the spread had risen to 238 bps, and by October 9, to 415 bps (see Figure 2.1). At this level almost no interbank lending was taking place, and banks had ceased lending in the federal funds market.<sup>11</sup>

**Figure 2.1. Interbank Lending Spreads, December 2006–December 2010**



Source: Federal Reserve Bank of St. Louis.

In addition, since Lehman Brothers Holdings, Inc., filed for bankruptcy, on September 15, even creditworthy companies had been having difficulty successfully issuing commercial paper, especially at longer maturities, and any debt that was being issued carried extremely high interest rates even for very short-term instruments.

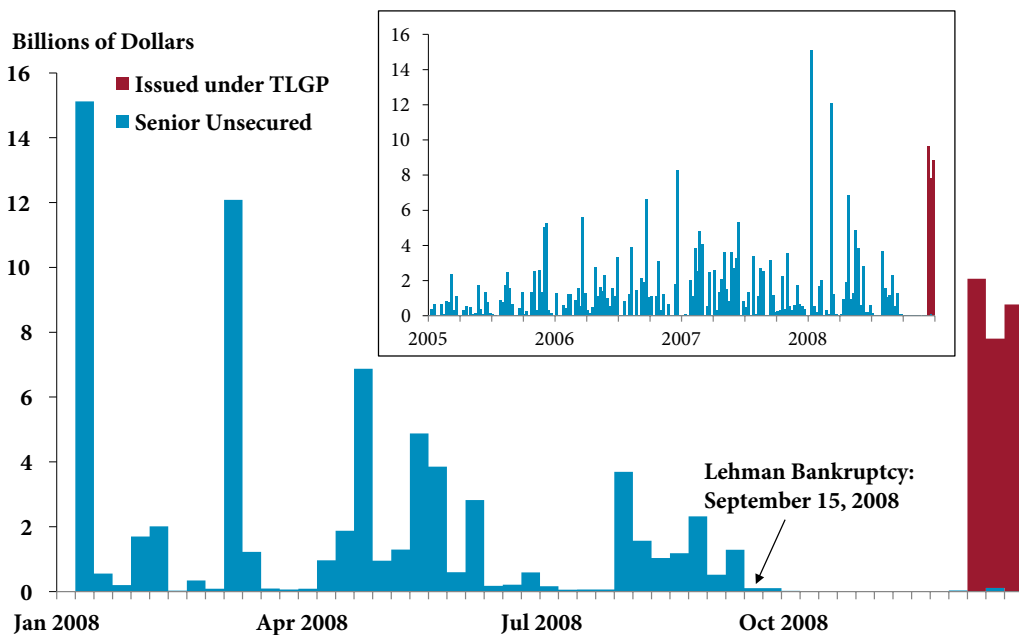
<sup>11</sup> The federal funds market allowed commercial banks that had excess reserves on deposit at regional Federal Reserve banks to lend those funds to financial institutions that had liquidity needs.

Securitization markets for both residential and commercial mortgage-backed securities had essentially shut down, and issuances of other types of asset-backed securities had also fallen drastically. Flight to safety had greatly increased Treasury “fails” (the failure to deliver Treasury securities), demonstrating both increased demand for U.S. government securities and the scarcity of these securities.

Short-term funding markets in particular were essentially frozen, and in this environment many banks and BHCs found it hard to replace funding at a reasonable cost. The short-term funding channels that were normally available to financial institutions had become problematic and expensive, when they were available at all. Figure 2.2 shows the unusual length of time during which almost no bank senior unsecured debt was issued after the Lehman bankruptcy. Had the TLGP not been implemented, that situation could have continued.

In addition, the FDIC had examined the effect that a 5 percent run on uninsured deposits would have on economic activity and found that a stressed environment could reduce GDP growth by nearly 2 percent per year, a reduction that could either create or prolong a recession.<sup>12</sup> Although no evidence suggested that such a large run was happening, uninsured deposits were leaving banks that were perceived to be troubled, and the FDIC had anecdotal evidence that even healthy banks were experiencing deposit outflows.

**Figure 2.2. Trends in Senior Unsecured U.S. Bank Debt Issuance before and after September 2008**



Source: Bloomberg.

<sup>12</sup> See 73 Fed. Reg. 64180 (Oct. 29, 2008).



### ***The Systemic Risk Exception Reinterpreted***

Before the 2008 crisis, policymakers and industry observers generally thought that FDICIA's systemic risk exception was intended to apply to an individual troubled institution. The situation that policymakers were confronting in 2008, however, involved not only the possible failure of a single institution, or even of a single market, but dysfunction throughout much of the financial system. These circumstances led policymakers to reexamine the scope of the systemic risk exception.

Their rationale for viewing the systemic risk exception as appropriate in this set of conditions was, first, that the intent of the proposed two-part TLGP was to mitigate the effects of credit market disruption and lessen the losses to the FDIC that would likely result from inaction. Second, safeguards were built into the two component programs: the guarantees would be limited in duration and scope; the programs would be industry funded, with a fee structure that was expected to protect the DIF; and the participating institutions would be subject to careful oversight. Finally, the total proposed program was integral to the overall three-part U.S. response to systemic risk in the banking system (as noted above, the other two parts were the Treasury's TARP capital infusions and the Federal Reserve's CPEFF).

The FDIC's Board of Directors, while unanimously approving the systemic risk exception and strongly supporting the TLGP, was well aware that the agency was heading into new territory: then Vice Chairman Martin Gruenberg remarked that "this action being proposed today ... is perhaps the most extraordinary ever taken by an FDIC Board." Given the innovative nature of the action, House and Senate leaders had been consulted in advance about the steps the regulatory agencies were going to take and their support was obtained. More than one Board member observed that Congress would need to examine the statutory framework of the systemic risk exception to see if the exception as originally conceived was adequate to cover circumstances not foreseen in 1991, when the law was written.<sup>13</sup> The box titled "Questions about the Statutory Authority for the TLGP" discusses the legal underpinnings for the guarantees provided by the FDIC under the new program.

#### ***Questions about the Statutory Authority for the TLGP***

In 2010, the U.S. Government Accountability Office (GAO) examined the use of the systemic risk exception in 2008–2009. The report noted that the height of the financial crisis was the first time the government had used the exception and that the TLGP was created at a time of "volatile economic circumstances."

continued

---

<sup>13</sup> FDIC, Board of Directors Meeting Minutes (Oct. 13, 2008).

The report went on to explain that the agencies (the FDIC, FRB, and Treasury) believed that FDICIA as drafted was unclear on how the systemic risk determination should be applied. Holding this belief, they thought the law's provisions could be interpreted to allow a systemic risk determination when *either* the banking industry as a whole *or* just a single institution was in danger of causing the entire financial system to collapse. Moreover, the agencies believed that “a systemic risk determination waives all of the normal statutory restrictions on FDIC assistance, as well as creating new authority to provide assistance, both as to types of aid provided and as to the entities that may receive it.” Given these interpretations, the agencies chose to make what they called a “generic systemic risk determination.” They based their choice on two assumptions about bank-by-bank assistance: it would be ineffective, and it would be more costly to the FDIC than would the TLGP.

The GAO acknowledged that it found some support for the agencies' positions that the systemic risk exception could be used both to authorize the TLGP and to provide assistance of the scope that the TLGP provided, but the GAO also found that the agencies' interpretations were open to question and raised significant policy issues. The report recommended that Congress clarify the statutory language about the requirements for, and assistance provided under, a systemic risk exception.<sup>a</sup> Congress revised the language as part of the Dodd-Frank Wall Street Reform and Consumer Protection Act in July 2010 (see the conclusion of this chapter).

---

<sup>a</sup> For a detailed analysis, see U.S. GAO, *Federal Deposit Insurance Act: Regulators' Use of Systemic Risk Exception* (2010), 43–57.

## The Creation of the TLGP and Initial Participation

The TLGP was a complex program that needed to be created quickly. Normally any FDIC program, let alone one entirely new for the agency, would go through a relatively long rulemaking process before being put in place. But because of the emergent nature of the financial crisis, the TLGP took effect as soon as it was announced, on October 14; the announcement was based on the FDIC's best attempts to assemble an intricate program during the first two weeks in October. Immediately after announcing the two component programs of the TLGP, the FDIC briefed potential participants on how the Corporation expected the programs to work.<sup>14</sup>

Just two weeks later, on October 29, the FDIC issued an interim final rule that elaborated on the broad outlines and specific elements previously presented, and at the same time the agency sought comments, though on a much more expedited schedule

---

<sup>14</sup> The transcripts of the conference calls can be found at <https://www.fdic.gov/regulations/resources/tlgp/archive.html>.

than usual.<sup>15</sup> The interim final rule was amended on November 7 (again with a request for comments), and the final rule was adopted on November 21, only five weeks after the TLGP had been announced.<sup>16</sup> Many of the comments helped improve the effectiveness of the program, particularly the debt guarantee component, as a tool for bringing stability to the financial markets.<sup>17</sup>

The TLGP was structured as a voluntary program. When it began, all eligible entities<sup>18</sup> were automatically enrolled for the first 30 days at no cost, after which fees would be assessed to participants, and eligible entities would be allowed to opt out of either the Debt Guarantee Program (DGP) or the Transaction Account Guarantee Program (TAGP) or both.<sup>19</sup> To eliminate an adverse selection problem (only the weakest entities would opt in, while stronger ones would opt out), all entities within a holding company were required to make the same decision about the DGP.

More than half of the over 14,000 eligible entities decided to remain in the DGP during its initial period (the DGP would later be extended beyond its initial period, as discussed below), and more than 7,100 banks and thrifts, or 86 percent of FDIC-insured institutions, decided to remain in the TAGP. Most of the institutions that opted out of the DGP were those that had less than \$1 billion in assets and issued no appreciable amount of senior unsecured debt. In addition, the FDIC placed restrictions on many entities' participation in the DGP (see the next section for more detail).

---

<sup>15</sup> If an agency has enough reason to issue a final rule without first publishing a proposed rule, such a rule is often called an interim final rule; this kind of rule becomes effective on publication, but an agency may amend it later in response to public comments, as was the case with the TLGP interim final rule.

<sup>16</sup> See 73 Fed. Reg. 64179 (Oct. 29, 2008); 73 Fed. Reg. 66160 (Nov. 7, 2008); and 73 Fed. Reg. 72244 (Nov. 26, 2008).

<sup>17</sup> Some of the most significant changes made in response to comments were the following: the definition of senior unsecured debt was revised; an alternative cap was provided for banks that had either no senior unsecured debt outstanding or only fed funds purchased; the debt guarantee limits of a participating insured depository institution and its parent BHC were combined; the timely payment of principal and interest following payment default was guaranteed; and the transaction accounts guarantee was broadened to cover both Interest on Lawyers Trust Accounts (IOLTAs) and negotiable order of withdrawal (NOW) accounts. Many of these changes are discussed below in the sections on the DGP and the TAGP.

<sup>18</sup> Eligible entities were (1) an insured depository institution; (2) a U.S. bank holding company, provided that it controlled (directly or indirectly) at least one subsidiary that was a chartered and operating insured depository institution; (3) a U.S. savings and loan holding company (with certain limitations), provided that it controlled (directly or indirectly) at least one subsidiary that was a chartered and operating insured depository institution; and (4) any other affiliates of an insured depository institution that the FDIC in its discretion designated an eligible entity. See 73 Fed. Reg. 64181 (Oct. 29, 2008) and 73 Fed. Reg. 72266 (Nov. 26, 2008).

<sup>19</sup> When the nine largest banks were informed on the afternoon of October 13 that they had to accept capital infusions under TARP, they were also told that they had to opt in to the DGP. See Henry Paulson, *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System* (2010), 364. Several months later, one observer would note that while some of the largest banks eagerly sought to exit the TARP, they were not similarly eager to abandon the TLGP. See Andrew Bary, "How Do You Spell Sweet Deal? For Banks, It's TLGP," *Barrons*, April 20, 2009.

## The Debt Guarantee Program

The DGP provided liquidity by guaranteeing participating entities' newly issued senior unsecured borrowing, thereby allowing participants to roll over maturing debt or issue additional debt.

### *Ground Rules and Extensions*

The program excluded certain types of debt instruments, as it was specifically designed not to encourage exotic or complex funding structures and not to protect lenders who sought to make risky loans.<sup>20</sup> Generally the FDIC capped guaranteed debt issuance at 125 percent of an entity's senior unsecured debt that was outstanding as of September 30, 2008, and was scheduled to mature on or before June 30, 2009. The cap was set at this level to allow participants to roll over existing debt and have some room for their debt issuance to grow. For entities with no senior unsecured debt outstanding as of September 30, 2008, or with only federal funds outstanding, the limit was set at 2 percent of consolidated total liabilities as of September 30, 2008.

As a condition of participation in the program, entities agreed to comply with any FDIC request that they provide relevant information about their debt issuances under the program. Another condition was that entities agreed to be subject to periodic FDIC on-site reviews (after the FDIC consulted with the appropriate federal banking regulator) to determine the entity's compliance with the terms and requirements of the DGP. The FDIC also had discretion to terminate an entity's continued participation in the DGP after consulting with the entity's primary federal regulator.<sup>21</sup>

Initially the DGP allowed participating entities to issue guaranteed debt until June 30, 2009, with the guarantee set to expire on the earlier of the maturity of the debt or June 30, 2012. In May 2009, however, the FDIC extended the program to reduce potential market disruption and to facilitate an orderly phase-out of the program.<sup>22</sup> The issuance deadline was extended four months, to October 31, 2009, and the guarantee period was extended six months, expiring December 31, 2012. Participating entities that had issued DGP debt on or before April 1, 2009, could use the extension automatically, but others had to receive FDIC approval to use it. No entities that had opted out of the

---

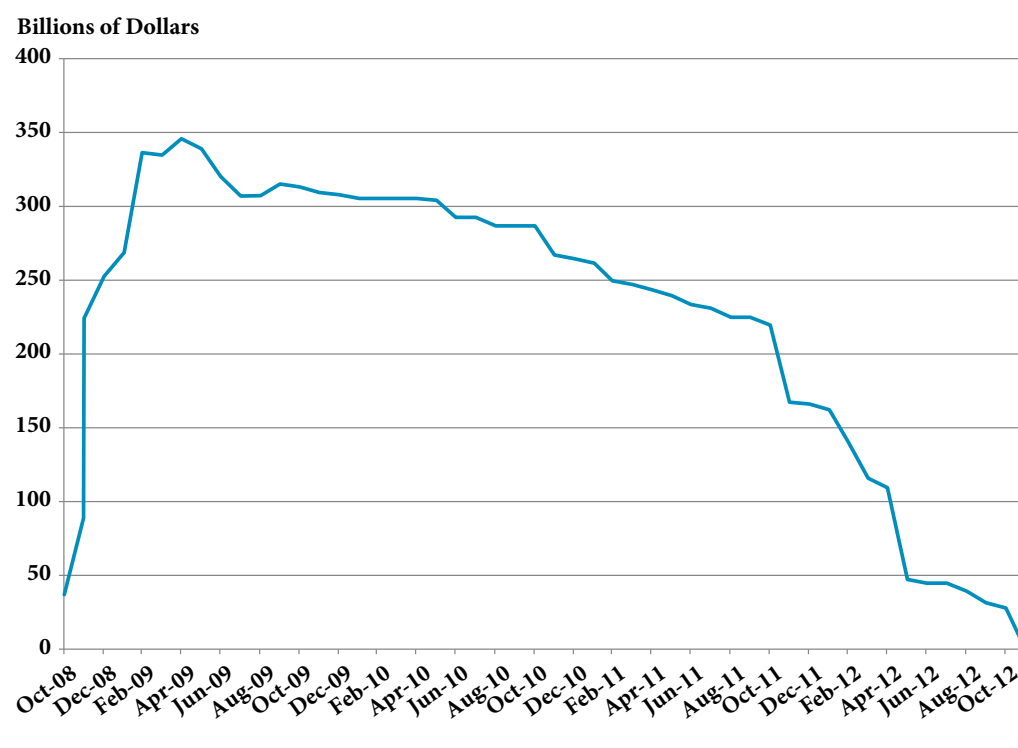
<sup>20</sup> Debt eligible for the guarantee included federal funds purchased, promissory notes, commercial paper, unsubordinated unsecured notes (including zero-coupon bonds), and certain U.S. dollar-denominated certificates of deposit. From the program's inception through December 5, 2008, the DGP covered debt with a maturity of 30 days or less, but in response to comments on the interim rule, the FDIC excluded debt with a maturity of 30 days or less and focused on stable, longer-term sources of funding, where liquidity was most lacking. The DGP was extended in 2009 to cover mandatory convertible debt. See 74 Fed. Reg. 9522 (Mar. 4, 2009). The guarantee for such debt was set to expire on the earlier of the maturity of the debt, the conversion date, or June 30, 2012.

<sup>21</sup> Both the on-site review authority and the termination authority were rarely used.

<sup>22</sup> 74 Fed. Reg. 26521 (Jun. 3, 2009).

initial phase were permitted to make use of the extension. Debt outstanding over the course of the program is presented in Figure 2.3.

**Figure 2.3. DGP Debt Outstanding, October 2008–December 2012**



### *Pricing and Limits on Participation*

To compensate for the FDIC’s risk, entities that issued debt were assessed fees. Initially the Corporation proposed an annualized flat-rate 75 basis point fee, after determining (by using credit default swap [CDS] spreads) that that amount would be substantially above the cost of “normal” credit protection but much lower than the very wide CDS spreads in October 2008. This proposed fee structure was the product of consultation with the Federal Reserve and Treasury. In response to industry comments, however, the FDIC altered the flat-rate fee to a sliding fee schedule, with fees ranging from 50 to 100 basis points, increasing for longer-maturity debt.<sup>23</sup> In addition, for holding companies whose affiliated banks’ assets constituted less than half of the holding company’s consolidated assets, the FDIC increased DGP fees by 10 basis points. Finally, in conjunction with the program’s extension in May 2009, the FDIC added a surcharge to the guarantee fee on debt with a maturity of one

<sup>23</sup> An annualized fee of 50 basis points was applied to debt with a maturity of 180 days or less. The fees increased to 75 basis points for debt with a maturity of 181 to 364 days, and to 100 basis points for debt with a maturity of 365 days or more. 73 Fed. Reg. 72244 (Nov. 26, 2008).

year or greater issued after April 1, 2009. The surcharge varied depending on the type of institution issuing the debt, with banks paying the lowest fees.<sup>24</sup>

Some economists have suggested that the FDIC might have been better served by adopting a more discriminating pricing method, such as the market-based pricing mechanisms used by many similar European programs. For example, pricing for the UK program started with a flat base charge supplemented by an institution's median five-year CDS spread in 2007, the year before the program's implementation. One study, using a sample of banks in both countries (U.S. and UK), calculated a "fair price" for the guarantee by using an average three-year CDS spread in November 2008, and compared the calculated fair price with the average UK guarantee fee and with the flat U.S. fee. The study found that the average UK fee was higher than the average calculated fair price (133.7 bps vs. 109.6 bps) but that the flat U.S. fee was substantially lower than the calculated fair price (75 bps vs. 255.4 bps).<sup>25</sup> These results imply that the U.S. DGP provided a large subsidy to U.S. banks. A later study sought to quantify the subsidy, using a sample of almost \$200 billion in guaranteed debt issued by six large U.S. entities. The study found that the six institutions saved almost \$20 billion over the life of the bonds compared with what they would have spent for nonguaranteed debt; in other words, they saved substantially more than they paid the FDIC for the guarantee.<sup>26</sup> As mentioned above, when the FDIC extended the DGP for four months beyond the original intended expiration of the program, surcharges were added for certain types of guaranteed debt, not only to encourage banks to exit the program but also to "reduce the subsidy provided by the DGP."<sup>27</sup>

It is important to understand that pricing was not the only tool the FDIC had available to address DGP-related risks. Not all institutions were permitted to participate in the DGP, and the FDIC limited others' ability to do so. Specifically, the rule implementing the DGP permitted the FDIC, working with an entity's primary federal regulator, to make exceptions to the entity's debt guarantee limit—to increase, reduce, or restrict in some way the entity's

---

<sup>24</sup> The surcharge was intended to compensate members of the Deposit Insurance Fund (DIF) (including those that did not issue FDIC-guaranteed debt) for bearing the risk that TLGP fees would be insufficient and that, as explained in the section below on the TLGP's effects and costs, a systemic risk assessment would be levied on all insured institutions. Unlike the initial DGP guarantee fees, which were reserved for possible DGP losses and segregated from the DIF, the amount of any surcharge collected in connection with the extended DGP was to be deposited into the DIF and used by the FDIC when calculating the fund's reserve ratio. See 74 Fed. Reg. 26521, 26523 (Jun. 3, 2009). For an explanation of the fund's reserve ratio, see chapter 5.

<sup>25</sup> See V. Acharya and R. Sundaram, "The Financial Sector Bailout: Sowing the Seeds of the Next Crisis?," in *Restoring Financial Stability: How to Repair a Failed System*, ed. V. Acharya and M. Richardson (2009), 327–39. The authors wrote before the FDIC changed its pricing from 75 bps to the 50–100 bps scale depending on maturity; although this change would have altered their results somewhat, it would not have altered their conclusions.

<sup>26</sup> Levy and Zaghini, "The Pricing of Government-Guaranteed Bank Bonds." The authors note that the total issuance was \$184.9 billion, so even if all of the debt had incurred a fee of 100 bps, the total fee would have been less than \$2 billion.

<sup>27</sup> 74 Fed. Reg. 26523 (Jun. 3, 2009). The surcharges were also added to compensate DIF members, see note 24.

ability to issue debt.<sup>28</sup> The Corporation used this discretion extensively to mitigate its risk of loss from the DGP.

In using this discretion, the FDIC and the other federal banking agencies developed a consultative process to review the debt limits of otherwise eligible entities that had adverse regulatory ratings<sup>29</sup> or poor financial metrics, such as very high past-due ratios or poor capitalization, and in the case of several hundred weak institutions, the Corporation reduced to zero the amount of guaranteed debt they could issue. From the very start of the program, no troubled entities (those with supervisory ratings of 4 or 5) had been allowed to issue guaranteed debt, and soon thereafter the restriction was expanded to include many 3-rated entities as well as de novo banks (the latter have a significantly higher likelihood of failure than do established institutions). In all, the FDIC restricted the participation of more than 1,600 banks and thrifts and 1,400 BHCs, or approximately 35 percent of banks and thrifts and 39 percent of bank holding companies and other eligible affiliates that had opted into the program as of year-end 2008.

### ***Challenges: Payment of Claims and Legal Issues***

Of the several challenges the FDIC faced in creating the DGP, the most significant one was how to address the payment of claims under the program. Another was how to handle numerous technical details.

Having never undertaken such a guarantee before, the Corporation was confronted with both a novel problem and a natural tendency to think in terms of its longstanding methods for handling insured deposits. As a result, the initial interim rule the FDIC put forward for the payment of claims relied for triggers on the receivership process for banks and on bankruptcy filings for BHCs—but neither of those adequately took into account the expectations of market participants for prompt payment.<sup>30</sup> In addition, the issue of timely payment could have had serious implications for how the rating agencies treated TLGP-guaranteed debt.

Indeed, *Euroweek* described the program as having been “on the brink of collapse” in early November and noted that senior bankers were “highly dissatisfied with the scheme as it then stood and predicted disaster for it.”<sup>31</sup> After the initial interim rule was published,

---

<sup>28</sup> 73 Fed. Reg. 72267 (Nov. 26, 2008).

<sup>29</sup> The regulatory agencies rate both insured depository institutions and BHCs on a scale of 1 to 5, with 1 being the highest rating and 5 the lowest.

<sup>30</sup> Initially, the FDIC proposed two different methods for the payment of claims, one for insured depository institutions (IDIs), the other for BHCs. For IDIs, the FDIC expected to use its established receivership process, which the agency believed would in most cases lead to payment of claims the next business day after failure so long as the claim was determined to be valid. For BHCs, the FDIC stated it intended to pay principal plus interest to the debtholder when the BHC filed for bankruptcy, but only after the claim was allowed under the bankruptcy code. If the FDIC did not pay within one business day of the filing, the agency would pay interest on the debt at the 90-day Treasury bill rate in effect at the time of the filing. 73 Fed. Reg. 64184-85 (Oct. 29, 2008).

<sup>31</sup> *Euroweek*, “FDIC Fiddling Rescues Bank Liquidity Plan,” November 28, 2008, 10.

parties that commented on it—including representatives of Bank of America, Bank of New York Mellon, Citigroup, Goldman Sachs, JPMorgan Chase, Morgan Stanley, and Wells Fargo—urged that FDIC regulations provide that payment be made as principal and interest became due and payable, and they noted that if the FDIC failed to make payment as soon as an issuer defaulted, the demand for DGP debt would be severely curtailed because likely purchasers would be very concerned about timely receipt of scheduled payments with minimal risk exposure.<sup>32</sup>

Standard & Poor's (S&P) stated that in order for FDIC-guaranteed debt “to qualify for rating substitution treatment [in other words, for FDIC-guaranteed debt to receive the same rating as debt of the U.S. government], the terms of a guarantee had to be unconditional, irrevocable, and timely.” S&P warned, however, that the initial interim rule made it “uncertain whether payment of interest and principal under [the FDIC’s] guarantee would have to be made on a timely basis” and that, indeed, “there appears to be the potential for a significant delay in payment beyond the terms specified in the debt, even though ultimate repayment is expected.” S&P indicated that under the interim rule, guaranteed debt would “result in, at most, limited rating elevation for guaranteed obligations” and that unless the proposal was amended, “we would be unable to rate the debt of financial institutions qualifying for the FDIC guarantees at the ‘AAA’ rating of the U.S. government.”<sup>33</sup> Such an outcome would have greatly reduced the effectiveness of the DGP.

The FDIC recognized the validity of the commenters’ concerns, and the final rule, in November 2008, incorporated changes that assured debtholders they would continue to receive timely payments following payment default without compromising the FDIC’s ability to obtain enough information to pay claims appropriately.<sup>34</sup>

The trigger for the payment obligation was changed from a bank failure or a bankruptcy filing to a payment default.<sup>35</sup> In addition, the FDIC’s satisfaction of the guarantee would be

---

<sup>32</sup> See, for example, the comment letter at <https://www.fdic.gov/regulations/laws/federal/2008/08c39AD37.pdf>. The FDIC sought to acquire knowledge about the debt markets, and during the week of October 27 staff met with representatives of both S&P and Fitch to discuss their methods of rating debt securities.

<sup>33</sup> Tanya Azarchs and Scott Sprinzen, “U.S. Guarantees of Bank Debt under Interim Rules Do Not Promise Timely Payment,” *Standard & Poor’s Ratings Direct* (November 10, 2008), 2. Quotations from this publication are reproduced with permission of Standard & Poor’s Financial Services LLC. Standard & Poor’s Financial Services LLC (S&P) does not guarantee the accuracy, completeness, timeliness or availability of any information, including ratings, and is not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of ratings. S&P gives no express or implied warranties, including, but not limited to, any warranties of merchantability or fitness for a particular purpose or use. S&P shall not be liable for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including lost income or profits and opportunity costs) in connection with any use of ratings. S&P’s ratings are statements of opinions and are not statements of fact or recommendations to purchase, hold or sell securities. They do not address the market value of securities or the suitability of securities for investment purposes, and should not be relied on as investment advice.

<sup>34</sup> 73 Fed. Reg. 72260 (Nov. 26, 2008).

<sup>35</sup> For the changes described here, see 73 Fed. Reg. 72263–4 (Nov. 26, 2008).



such that the agency would continue to make scheduled interest and principal payments under the terms of the debt through its maturity.<sup>36</sup> These changes addressed the concerns of both the industry and the rating agencies.<sup>37</sup> With the program improvements in place, eligible entities quickly responded and, instead of claiming that the DGP was near collapse, *Euroweek* described it as having gotten off to “a scorching start,” with several large U.S. banks issuing \$17 billion in guaranteed debt in late November after having been denied access to the market for months. The publication continued: “Clearly the once-reviled plan [had] ... been given a clean bill of health by the market.”<sup>38</sup> (The box titled “Institutions Using the Debt Guarantee Program” provides information about the use of the DGP by the largest financial institutions in the country—the group that issued the bulk of guaranteed debt. The appendix lists all the issuers of \$250 million or more in debt guaranteed under the program.)

Another important challenge was how to address numerous legal issues having to do with participation in the DGP. The final rule dealt with these difficulties by requiring an issuing entity to execute and file with the FDIC a “Master Agreement” that (1) acknowledged the establishment of a debt to the FDIC for any payment made under the program and agreed to honor the FDIC’s demand for payment on the debt immediately; (2) arranged for the DGP debtholder (a) to assign to the FDIC all rights and interests in that debt upon the FDIC’s payment under the guarantee and (b) to release the FDIC from any further liability with respect to that particular debt issuance; and (3) provided that the issuer could elect to designate an authorized representative to make claims on behalf of debtholders (claimants could choose, instead, to file with the FDIC individually, but the existence of an authorized representative for a class of debtholders was expected to permit a much faster response to a claim).

\* \* \*

By mid-2009, financial markets were stabilizing, and DGP issuance was down significantly. In October, the FDIC approved a final rule ending the DGP on the last day of that month (on October 31, 2009), but with an emergency guarantee facility available on a

---

<sup>36</sup> For debt with final maturities beyond the DGP’s expiration, the FDIC could elect at any time after that date to pay all outstanding principal and interest under the debt issuance.

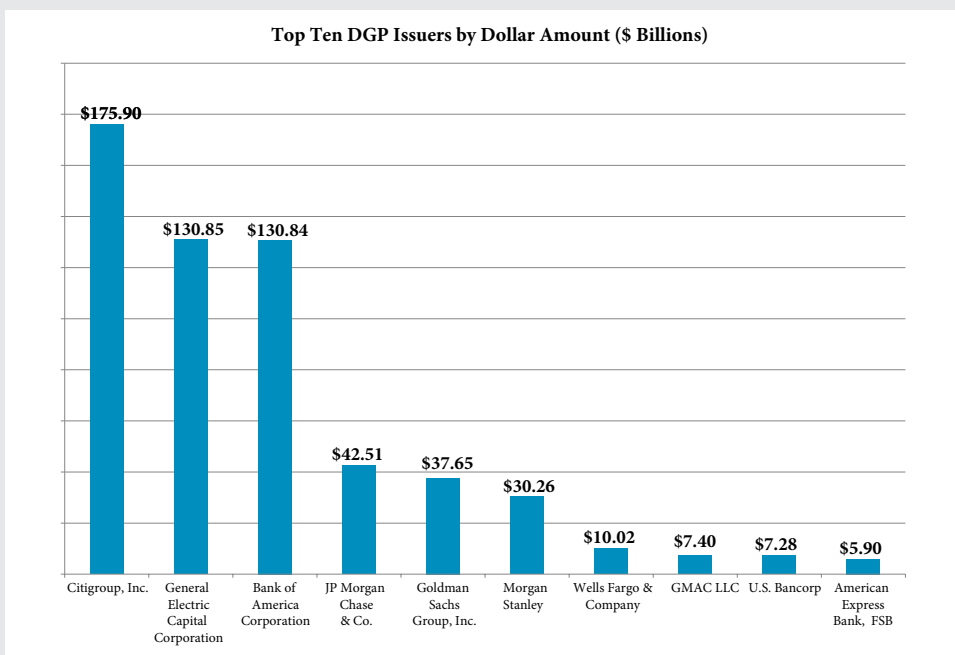
<sup>37</sup> For example, on November 24, Moody’s Investors Service announced that it would assign TLGP-guaranteed debt a rating of “Aaa,” the same rating it assigned the U.S. government, noting that the changes made to the program ensured timely payment (Moody’s Investors Service, “Moody’s Will Assign Backed-Aaa Ratings to Debt Securities Covered by the FDIC’s Guarantee,” *Global Credit Research*, November 24, 2008, [https://www.moodys.com/research/Moodys-will-assign-backed-Aaa-ratings-to-debt-securities-covered--PR\\_167951](https://www.moodys.com/research/Moodys-will-assign-backed-Aaa-ratings-to-debt-securities-covered--PR_167951)). There remained some operational questions about how parties would proceed in the event of a default on DGP-guaranteed commercial paper. These questions were settled in April 2009 by a Memorandum of Understanding agreed to by the FDIC, the Depository Trust Clearing Corporation, the Federal Reserve Bank of New York, and the U.S. Treasury.

<sup>38</sup> *Euroweek*, “Goldman Leads TLGP Off to a Flying Start,” November 28, 2008, 9.

case-by-case basis through April 30, 2010.<sup>39</sup> The emergency facility carried very high fees (300 basis points). In announcing the availability of the emergency guarantee facility, Bair stated, “It should be clear that this is not a continuation of the program, but an ending of the program with just a short-term facility that is only available for clearly unforeseen and unexpected events.”<sup>40</sup> The FDIC had always intended that the program be temporary; the emergency facility was never used and the DGP ended as scheduled on October 31, 2009.

### *Institutions Using the Debt Guarantee Program*

Entities using the DGP ranged from small community banks to the largest financial institutions in the country, with the latter group issuing the bulk of guaranteed debt. The largest issuer was Citigroup, including Citibank and eligible affiliates, which issued almost \$176 billion of guaranteed debt over the course of the program. Among banking organizations, the second-largest issuer was Bank of America Corporation, including its bank and eligible affiliates, which issued almost \$131 billion; and the next-highest issuers among banking organizations were JPMorgan Chase & Company, its bank and affiliates; Goldman Sachs Group Inc.; and Morgan Stanley. Each of the three issued over \$30 billion in guaranteed debt.



continued

<sup>39</sup> 74 Fed. Reg. 54743 (Oct. 23, 2009).

<sup>40</sup> Emily Flitter, “Way Out Gets Clearer as TLGP to End,” *American Banker*, October 21, 2009, 1.

The second largest issuer of DGP debt overall was General Electric Capital Corporation (GECC), which was a savings and loan holding company by virtue of its indirect<sup>a</sup> ownership of GE Money Bank, Salt Lake City, Utah. The FDIC's TLGP rule allowed such holding companies to participate in the DGP, but only if they were engaged solely in activities permissible for a financial holding company under section 4(k) of the Bank Holding Company Act.<sup>b</sup> GECC was, however, not solely engaged in those permitted activities, and so instead it applied (as was also allowed) to participate based on its status as an affiliate of an insured depository institution that had received the requisite endorsement from the appropriate federal banking regulator (in this case, the Office of Thrift Supervision). After some discussion between GECC's parent, General Electric (GE) and the government, the FDIC approved the firm's participation. The FDIC judged GECC's capital and risk management to be solid, and since GE agreed to guarantee the FDIC against loss, GECC's fees would help bolster the FDIC's reserves and offset potential losses in the DGP.<sup>c</sup>

A number of U.S. bank subsidiaries of very large foreign banking organizations also issued guaranteed debt; these included Union Bank (the U.S. subsidiary of Mitsubishi UFJ Financial Group, Inc.); HSBC Bank USA, National Association (the U.S. subsidiary of HSBC Holdings, PLC); and Bank of the West (the U.S. subsidiary of BNP Paribas).

---

<sup>a</sup> GECC's two bank subsidiaries (GE Money Bank and GE Capital Financial, Inc.) were direct, wholly owned subsidiaries of GE Consumer Finance, Inc., which was wholly owned by GECC.

<sup>b</sup> 12 U.S.C. §1843(k).

<sup>c</sup> On GECC, see Paulson, *On the Brink*, 373, 400; and Bair, *Bull by the Horns*, 118.

## The Transaction Account Guarantee Program: Purpose, Fees, and Extensions

Under the TAGP, the FDIC provided a guarantee of all funds held in non-interest-bearing transaction accounts at participating banks until December 31, 2009 (the guarantee was extended twice, first through June 30, 2010, and then through December 31, 2010, as discussed below).<sup>41</sup> The program was intended to encourage customers to keep their

---

<sup>41</sup> The interim rule defined a qualifying account as "a transaction account with respect to which interest is neither accrued nor paid and on which the insured depository institution does not reserve the right to require advance notice of an intended withdrawal"(see 73 Fed. Reg., 64182 [Oct. 29, 2008]). But after receiving comments on the interim rule, the FDIC extended the TAGP to cover certain other types of deposit accounts

deposits in their bank and thereby avoid runs at healthy banks. More particularly, the TAGP addressed the concern of bankers and others that, given the uncertain economic conditions, without the guarantee banks could lose many small-business accounts (including payroll accounts), which frequently exceed the insurance limit of \$250,000.<sup>42</sup>

The TAGP marked the first time the FDIC had offered deposit insurance above the statutory limit. In effect, the program gave institutions the option of purchasing deposit insurance for the otherwise uninsured balances of non-interest-bearing transaction accounts. In this way, assistance could be provided to smaller institutions that did not benefit from the DGP. This is not to say that larger institutions did not also participate in and benefit from the TAGP, for they did, but it is noteworthy that during the program's extension through 2010, the proportional participation of banks with more than \$10 billion in assets dropped far more than did the proportional participation of smaller banks.

Like the DGP, the TAGP imposed fees for using the program. The TAGP initially applied a 10 basis point annual assessment rate surcharge on non-interest-bearing transaction deposits and other qualifying accounts for amounts over \$250,000; with the first extension, the fee was increased (see next paragraph). The total deposits covered by the TAGP are represented in Figure 2.4.

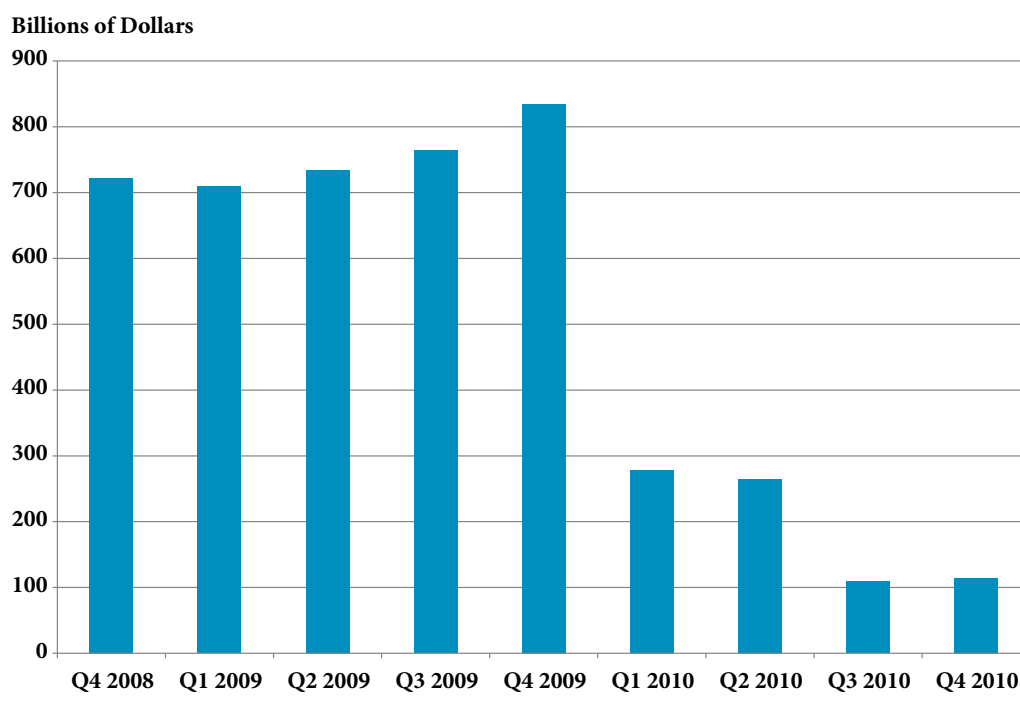
The TAGP proved effective at preventing potentially disruptive shifts in deposit funding. As noted earlier in this section, the TAGP was intended to expire on December 31, 2009, but because bank failures continued to increase during 2009, the FDIC was concerned that terminating the TAGP too quickly could unnerve uninsured depositors and undo the progress made in restoring credit markets. Therefore, the FDIC Board extended the TAGP for an additional six months, through June 30, 2010.<sup>43</sup> As part of this extension, the surcharge was increased from a flat rate of 10 basis points to a risk-based rate. Participating banks paid an assessment rate of 15, 20, or 25 basis points, depending on the institution's deposit insurance assessment category (for deposit insurance assessment categories, see chapter 5). Institutions participating in the TAGP were allowed to opt out of the program effective on January 1, 2010. Over 6,400 institutions (or 93 percent of the institutions that were participating at year-end 2009) elected to continue in the TAGP through June 30, 2010.

---

important to sole proprietorships and charitable organizations. These included Interest on Lawyers Trust Accounts (IOLTAs) and negotiable order of withdrawal (NOW) accounts where the participating institution committed to maintaining a rate no higher than 0.5 percent; this maximum was lowered to 0.25 percent as part of the second extension of the program.

<sup>42</sup> The Emergency Economic Stabilization Act of 2008 temporarily raised the basic FDIC insurance limit from \$100,000 to \$250,000 effective October 3, 2008; Dodd-Frank, in 2010, made the increase permanent.

<sup>43</sup> 74 Fed. Reg. 45093 (Sept. 1, 2009).

**Figure 2.4. Amounts Guaranteed by the TAGP, 2008–2010**

Even after that first extension, the lingering consequences of the financial crisis and recession continued to put pressure on banks' earnings and asset quality. Those effects were expected to persist and could have had the potential to undermine banks, particularly banks exposed to local markets that had experienced the greatest distress. The FDIC was concerned that allowing the TAGP to expire in June as scheduled could lead to the withdrawals of large transaction accounts at many community banks, possibly resulting in needless liquidity failures of those banks or lower deposit franchise values (for a discussion of franchise value, see chapter 6). The FDIC therefore authorized a second six-month extension, until December 31, 2010, leaving in place the surcharges that had been imposed during the first extension. The Corporation left open the possibility of yet a third extension, but not beyond year-end 2011.<sup>44</sup> However, passage of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank) in July 2010 eliminated the need for such an extension, as the law mandated that the FDIC provide an unlimited guarantee, funded by the DIF, of *all* non-interest-bearing transaction accounts from December 31, 2010, through December 31, 2012.<sup>45</sup> Thus, the TAGP ended on December 31, 2010.

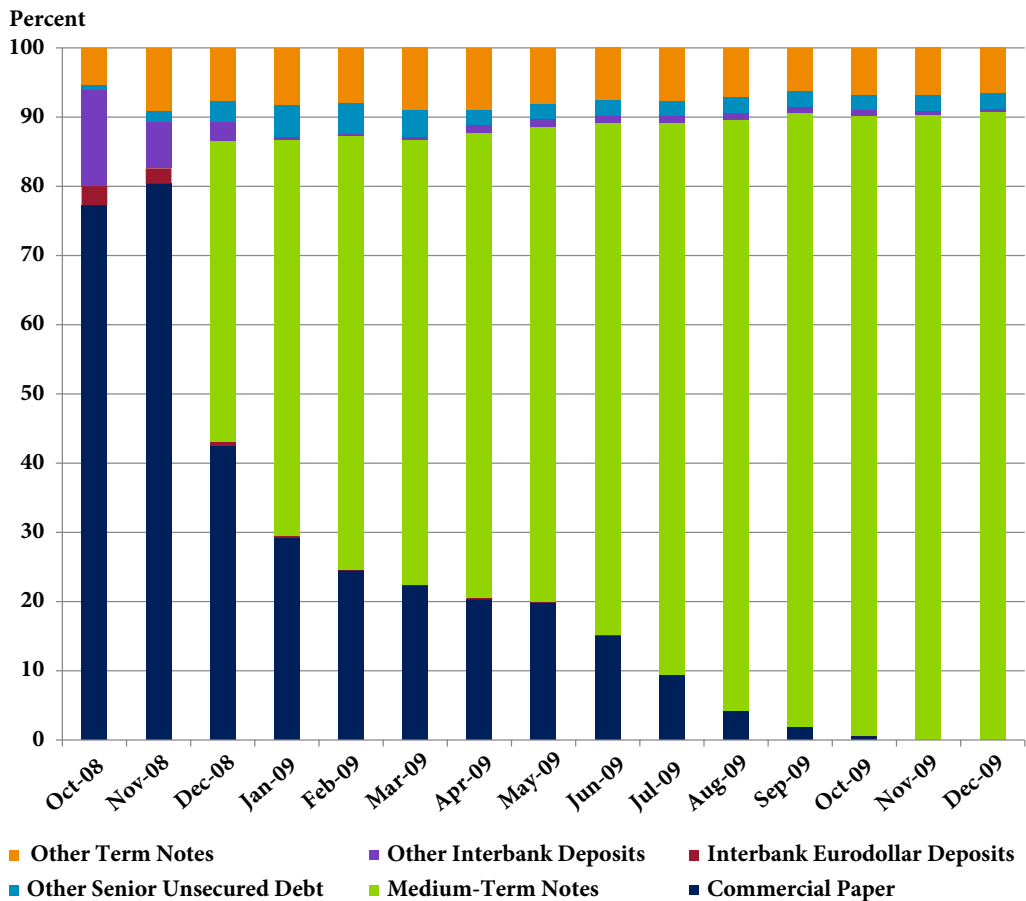
<sup>44</sup> See 75 Fed. Reg. 20247–65 (Apr. 19, 2010).

<sup>45</sup> For the implementation of the Dodd-Frank provisions regarding unlimited coverage of non-interest-bearing transaction accounts, see 75 Fed. Reg. 69577 (Nov. 15, 2010). The guarantee provided under Dodd-Frank did not, however, cover IOLTAs or NOW accounts. On December 29, 2010, a subsequent statute amended

## The TLGP: Effects and Costs

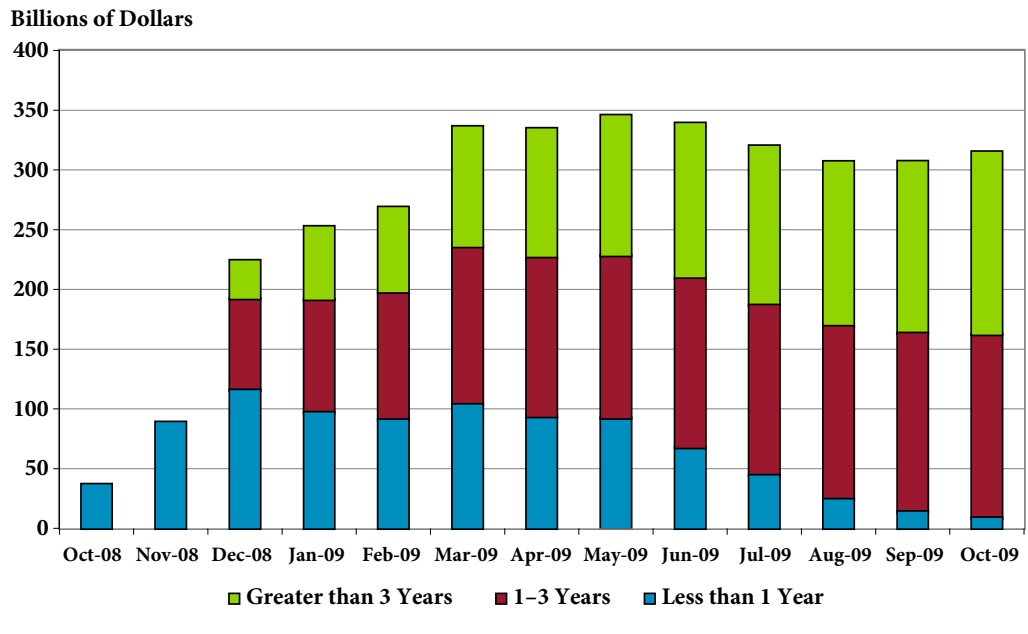
The DGP enabled financial institutions to meet their financing needs during a period of systemwide turmoil. At a time when banks and other eligible institutions were unable to roll over their debt at reasonable rates and terms, the DGP reopened the short- and medium-term debt markets by allowing participating institutions to issue an array of guaranteed debt instruments. Figures 2.5 and 2.6 show that the eligible entities, after issuing mostly short-term debt (commercial paper) at the very beginning of the program, increasingly moved toward issuing debt at longer maturities.

**Figure 2.5. DGP Debt Outstanding by Type, October 2008–December 2009**

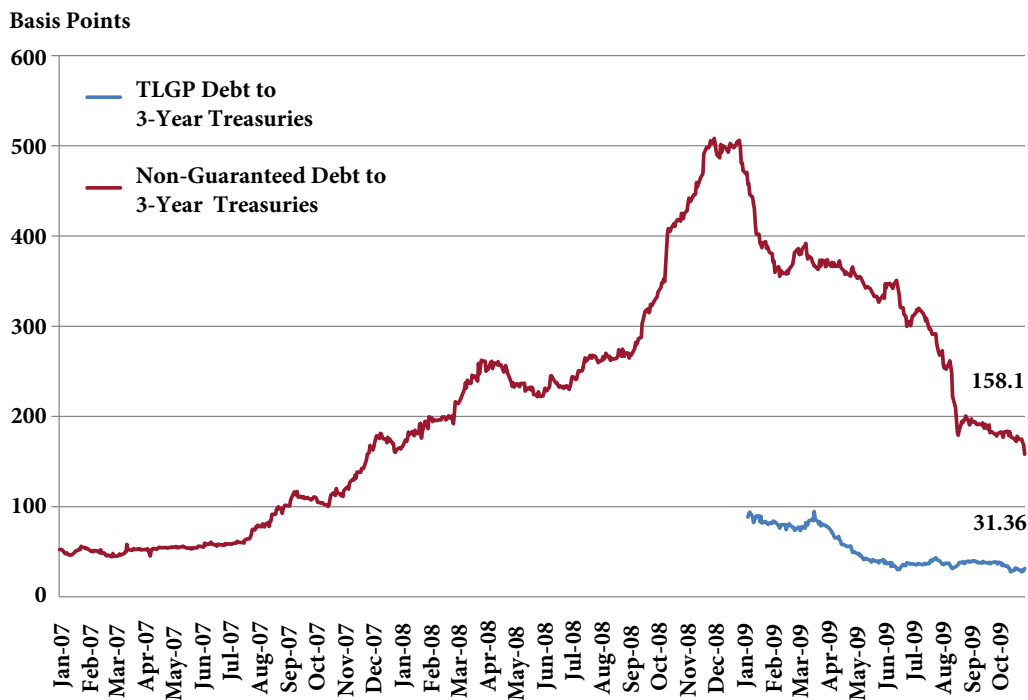


the definition of non-interest-bearing transaction accounts to include IOLTAs. The FDIC implemented the amended definition effective January 27, 2011. See 76 Fed. Reg. 4813 (Jan. 27, 2011).

**Figure 2.6. Maturities of TLGP Debt Outstanding at Month End, October 2008–October 2009**



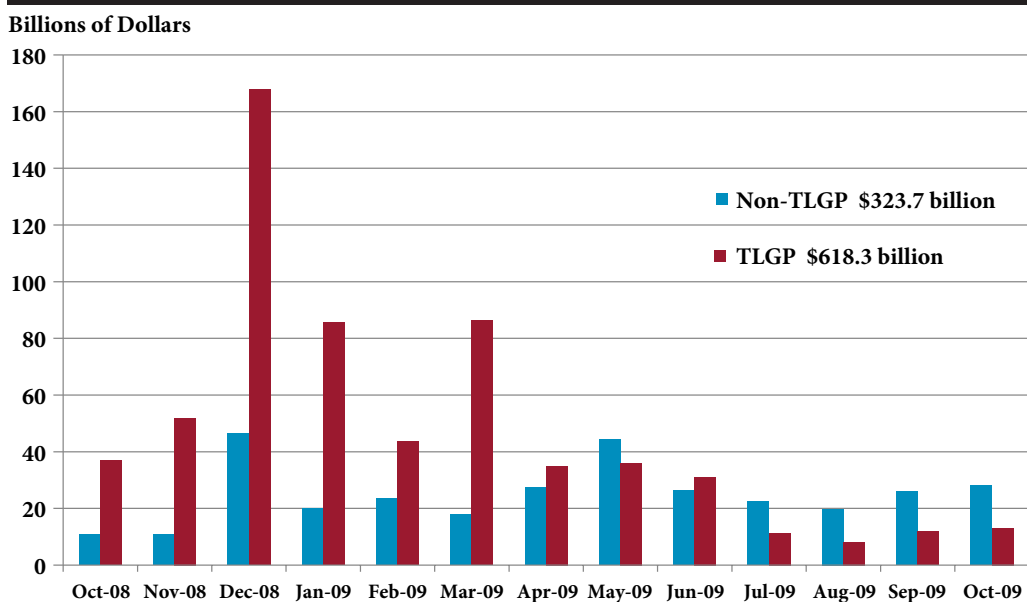
**Figure 2.7. Funding Costs: TLGP Debt vs. Non-Guaranteed Debt, January 2007–October 2009**



Source: Bloomberg.

Specifically, the DGP lowered the cost of funding. For participating entities, the explicit FDIC guarantee—coming at a time when credit market spreads had reached record high levels—meant that DGP debt was assigned an AAA/Aaa rating. That rating allowed participating entities to raise funds and roll over maturing debt at significantly lower funding costs than the entities could have obtained by issuing debt not guaranteed by the government (see Figure 2.7). A 2017 study found that DGP-guaranteed bonds “vastly improved new and pre-existing debt liquidity” and that the program ultimately lowered the default risk of the institution (as well as of the insured bond) and, in addition, improved the liquidity for non-guaranteed bonds issued by DGP participants.<sup>46</sup> A 2013 study found that the DGP led to a drop in yield of AAA/Aaa financial debt near the time of the announcements of FDIC-guaranteed debt issuance and to a general pattern of decreasing yield spreads over time.<sup>47</sup>

**Figure 2.8. TLGP vs. Non-TLGP Debt Issuance, October 2008–October 2009**



Sources: FDIC and Bloomberg.

Note: TLGP debt includes medium-term notes, other senior unsecured debt, other term notes, commercial paper, Eurodollar interbank deposits, and other interbank deposits. Non-TLGP includes all types of bonds and structured notes except TLGP debt, commercial paper, and Eurodollar or other interbank deposits.

<sup>46</sup> See Jeffrey Black et al., “Benefits of Debt Guarantees: Evidence from the FDIC Debt-Guarantee Program” (unpublished manuscript), February 2017, [https://editorialexpress.com/cgi-bin/conference/download.cgi?db\\_name=SWFA2017&paper\\_id=151](https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=SWFA2017&paper_id=151).

<sup>47</sup> See Brent Ambrose et al., “The Financial Crisis and Temporary Liquidity Guarantee Program: Their Impact on Fixed Income Markets,” *Journal of Fixed Income* 23, no. 2 (2013): 5–26.



In the wake of the DGP, debt markets stabilized. By September 2009, most banks were trading in the CDS market below where they were before the Lehman bankruptcy, and a senior syndicate banker remarked, “Good progress has been made so it makes sense for the TLGP to be withdrawn.”<sup>48</sup> Indeed, only a few entities had issued DGP debt during the period of the DGP’s extension, a period when banks and their holding companies successfully issued non-guaranteed debt (see Figure 2.8).

Another source of funding for banks, and in particular for community banks, is deposits held in transaction accounts. By removing the risk of loss to the businesses that commonly use these accounts to meet payroll and to serve other purposes, the TAGP stabilized deposit funding for insured banks.<sup>49</sup> In the first quarter of 2009, banks reported 586,519 non-interest-bearing transaction accounts over \$250,000 in value, representing an increase of 12 percent compared with the fourth quarter of 2008. These first quarter 2009 deposit accounts totaled \$855 billion, of which \$700 billion was guaranteed under the TAGP. At the peak of the program, in December 2009, more than 5,800 FDIC-insured institutions reported having 685,465 non-interest-bearing transaction accounts over \$250,000 in value, with deposits totaling just over \$1 trillion.

\* \* \*

If assessments for the TLGP (counting both components) had proved insufficient to cover the expenses related to the program, statute would have required that the FDIC levy a special assessment on all insured depository institutions (including those that had opted out, but not including BHCs or nonbank institutions that had participated) to cover the loss.<sup>50</sup> However, overall, TLGP fees exceeded the costs of the program.

Under the DGP, 121 entities issued guaranteed debt, with the FDIC collecting \$10.4 billion in fees and surcharges. Six entities defaulted on their debt, with the FDIC paying \$153 million to cover the guarantee on those debt securities.<sup>51</sup> The majority of the FDIC’s

---

<sup>48</sup> *Euroweek*, “FDIC Plans Phase Out of Guarantee Programme,” September 11, 2009, 12.

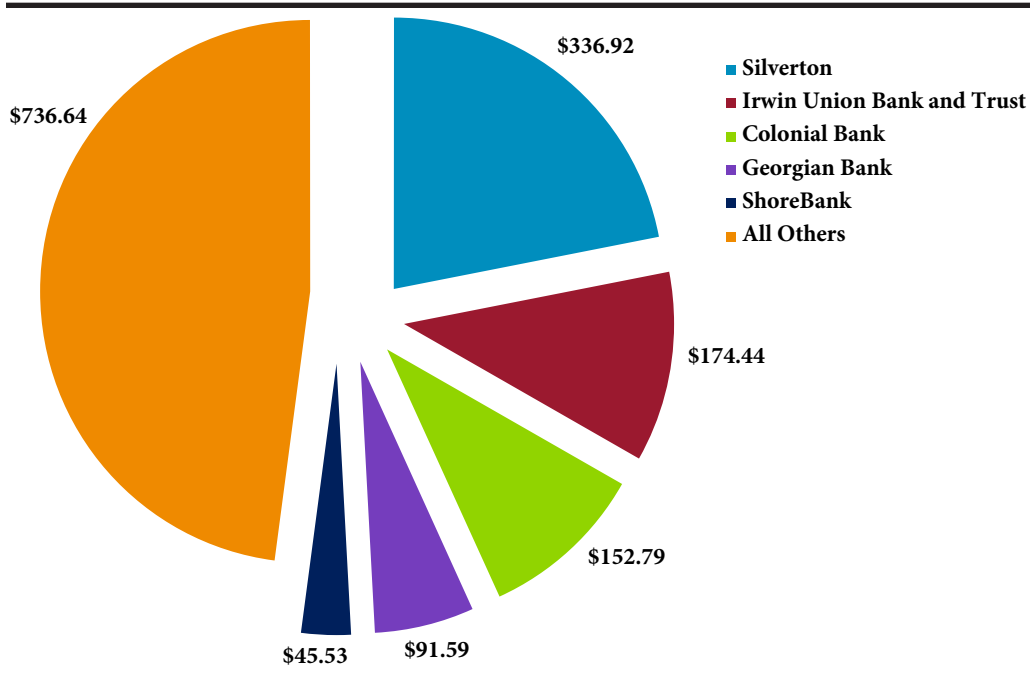
<sup>49</sup> The TAGP also had an effect on FDIC resolutions during the crisis. In combination with the increased insurance coverage limit to \$250,000, the TAGP greatly reduced the number of uninsured depositors at many failing banks. This reduction meant that there were many more whole bank–all deposit resolutions, as opposed to whole bank–insured deposit resolutions; the relative increase in whole bank–all deposit resolutions could have reduced the FDIC’s administrative costs. For a discussion of the different types of resolutions, see chapter 6.

<sup>50</sup> 12 U.S.C. §1823(c)(4)(G)(ii).

<sup>51</sup> One of these losses involved fraud. Three employees of Coastal Community Investments (Coastal), a holding company that owned two Florida banks that would fail in 2010, were sentenced in 2014 to prison terms and were required to pay more than \$4.5 million in restitution to the FDIC. Coastal had had a \$3 million secured loan that was in default, and failure to repay the loan could have allowed its lender to take over the two Florida banks. In order to repay the loan and retain control of the banks, the employees misrepresented the loan as unsecured, allowing Coastal to borrow 125% of the \$3 million amount and have it guaranteed under the DGP. Coastal then obtained a DGP-guaranteed \$3.75 million loan from another bank. When Coastal

payments (\$113 million) stemmed from the outstanding DGP debt held by banks that failed in 2011. Under the TAGP, the FDIC collected \$1.2 billion in fees; as of December 31, 2016, estimated TAGP losses from failures were about \$1.5 billion.<sup>52</sup> The five failures with the highest resolution costs attributable to the TAGP, and the relationship between those costs and all other resolution costs attributable to the TAGP, are presented in Figure 2.9.

**Figure 2.9. The Costs of the TAGP: The 5 Most Expensive Failures vs. All Others (\$ Millions, as of December 31, 2016)**



## Conclusion

For the FDIC, the TLGP was extraordinary in several ways. First, during the Corporation's first 75 years, it had never systematically protected bank debt, let alone bank holding company debt or the debt of nonbank holding company affiliates.<sup>53</sup> Second, the FDIC

---

later defaulted on this second loan, that lender filed a claim with the FDIC for the loan amount plus interest, and the FDIC paid the claim of just over \$3.8 million. See U.S. Department of Justice, U.S. Attorney's Office for the Northern District of Florida, "Bankers and Attorney Sentenced to Prison, for Fraud, False Statement, and Making a False Claim against the United States," Press Release (August 22, 2014), <https://www.justice.gov/usao-ndfl/pr/bankers-and-attorney-sentenced-prison-fraud-false-statements-and-making-false-claim>.

<sup>52</sup> Because these totals were generated using estimated losses on failures as of December 31, 2016, they differ from totals reported by the FDIC at the end of the TAGP (December 31, 2010).

<sup>53</sup> During the 1980s, the FDIC, in the context of resolving troubled institutions, did protect debtholders several

had never extended unlimited deposit insurance protection to a class of bank deposits (in this case, a broad subset of transaction accounts), although in the past the principle of unlimited deposit insurance coverage had been considered. Third, this was only the second time that the FDIC's Board approved a systemic risk exception and the first time that the assistance was actually put in place (assistance to Wachovia had been approved two weeks earlier, but the need for it was subsequently obviated when Wells Fargo acquired that bank [see chapter 3]). Fourth, creation of the TLGP involved the use by bank regulators of a legal interpretation of the systemic risk exception that was at the least novel, as was acknowledged at the time. All these extraordinary features reflected the precarious state of the financial services industry in the fall of 2008.

The TLGP, in concert with other government programs, brought stability to U.S. financial markets in a time of crisis. Conditions in the credit markets had improved significantly by the start of 2009, and by midyear they began returning to normal, despite still-elevated levels of problem loans; interest-rate spreads had retreated from the highs established during the depth of the crisis, during the fall of 2008; and activity in interbank lending and corporate bond markets had increased. Banks were able to issue debt without a government guarantee. This stabilization of the markets was accomplished with an industry-funded program that not only did not damage the DIF but, instead, substantially benefited it. Overall, during a period when the banking industry and the financial markets were in crisis, the TLGP made an important contribution to the stability of both. Looking back on the program, former chairman Sheila Bair noted that "if we ever again get into a situation where the entire financial system is seizing up, where even healthy and well-managed banks are having trouble accessing liquidity, I do think this is a good model to use."<sup>54</sup>

In several important ways, Dodd-Frank refined the range of actions that would be available for responding to future crises of the financial system, and did so essentially by limiting regulatory discretion should another crisis arise.<sup>55</sup> In particular, the act repealed the use of a systemic risk exception to assist a troubled open individual

---

times. In 1984, open-bank assistance to Continental Illinois National Bank and Trust Company included the protection of all general creditors; the open-bank assistance to First Republic Bank Corporation in 1988 also protected all general creditors. Some bondholders were partially protected in the open-bank assistance to First City Bancorporation of Texas in 1988, and a year later, with the failure of MCorp, unsubordinated general creditors of 19 of the holding company's banks were protected. See FDIC, *Managing the Crisis: The FDIC and RTC Experience* (1998), 554, 571, 595, 622.

<sup>54</sup> Joe Adler, "FDIC Debt Program Proves as Good as TARP, without the Baggage," *American Banker*, April 26, 2012.

<sup>55</sup> See Martin Neil Baily and Aaron Klein, "The Impact of the Dodd-Frank Act on Financial Stability and Economic Growth," Presentation at University of Michigan Center on Finance, Law, and Policy, October 24, 2014, <https://www.brookings.edu/on-the-record/the-impact-of-the-dodd-frank-act-on-financial-stability-and-economic-growth/>; and James Broughel, "Title XI: Fed Transparency and Bailouts," in *Dodd-Frank: What It Does and Why It's Flawed*, ed. Hester Peirce and James Broughel (2012), 121–35, <https://www.mercatus.org/system/files/dodd-frank-FINAL.pdf>.

institution; and although Title XI does permit the creation of a program similar to the DGP, it also imposes restrictions on such a program.<sup>56</sup> Dodd-Frank prohibits the creation of a future TAGP.<sup>57</sup>

Title XI explicitly authorizes a “liquidity event determination.”<sup>58</sup> The process of determining the existence of a liquidity event is similar to the process set forth in FDICIA for declaring a systemic risk exception: if the FDIC Board and the FRB determine that a liquidity event exists and that failure to act would significantly affect financial stability, and if the Secretary of the Treasury in consultation with the President concurs, the FDIC has the authority to create “a widely available program” to guarantee obligations of solvent insured banks or their holding companies (including holding company affiliates).

But although the FDIC will be responsible for administering such a program, the maximum amount of outstanding debt that can be guaranteed is to be determined not by the FDIC but by the Secretary of the Treasury in consultation with the President. And, in a significant addition, the law also requires the program to have congressional approval in the form of a joint resolution—a requirement that essentially means Congress must pass the equivalent of a law before the program can go forward.<sup>59</sup> So although Dodd-Frank provides for a program similar to the DGP, the law’s requirement for wider political consent through congressional approval (even though the approval would have to be considered on an expedited basis) could limit regulators’ flexibility during a future financial crisis.

---

<sup>56</sup> For the limits on the use of the systemic risk exception, see Dodd-Frank, §1106 [12 U.S.C 1823(c)(4)(G)(i)]; for the provisions allowing for a future DGP, see Dodd-Frank §1104–5 [12 U.S.C. 5611–12].

<sup>57</sup> The law states that “a guarantee of deposits held by insured depository institutions shall not be treated as a debt guarantee program” under the provisions of the liquidity event determination (defined in note 58). See 12 U.S.C. 5612(f).

<sup>58</sup> The law defines a liquidity event as “an exceptional and broad reduction in the general ability of financial market participants ... to sell financial assets without an unusual and significant discount or to borrow using financial assets as collateral without an unusual and significant increase in margin, or an unusual and significant reduction in the ability of financial market participants to obtain unsecured credit.”

<sup>59</sup> Like a bill, a joint resolution requires the approval of both the House and the Senate in identical form, and requires the President’s signature to become law ([https://www.senate.gov/legislative/common/briefing/leg\\_laws\\_acts.htm](https://www.senate.gov/legislative/common/briefing/leg_laws_acts.htm)).

## Appendix

**Table 2.A. Issuers of \$250 Million or More in FDIC-Guaranteed Debt**

	Entity	Breakdown by Affiliate		
		(if applicable)	Amount	Issuances
1	Citigroup, Inc.	TOTAL	\$175,903,888,595	1,655
		<i>Citigroup, Inc.</i>	\$13,850,000,000	5
		<i>Citigroup Funding Inc.</i>	\$128,997,377,222	1,165
		<i>Citibank, National Association</i>	\$33,056,511,373	485
2	General Electric Capital Corporation	TOTAL	\$130,850,166,935	4,328
3	Bank of America Corporation	TOTAL	\$130,842,662,031	1,454
		<i>Bank of America Corporation</i>	\$64,079,465,128	1,091
		<i>Bank of America, National Association</i>	\$46,976,837,903	281
		<i>Merrill Lynch &amp; Co., Inc.</i>	\$19,786,359,000	82
4	JPMorgan Chase & Co.	TOTAL	\$42,512,382,326	189
		<i>JPMorgan Chase &amp; Co.</i>	\$40,534,011,955	61
		<i>JPMorgan Chase Bank, National Association</i>	\$1,978,370,371	128
5	Goldman Sachs Group, Inc.	TOTAL	\$37,652,426,455	346
6	Morgan Stanley	TOTAL	\$30,256,932,941	57
7	Wells Fargo & Company	TOTAL	\$10,022,320,776	107
		<i>Wells Fargo &amp; Company</i>	\$9,500,000,000	4
		<i>Wells Fargo Bank, National Association</i>	\$250,868,606	14
		<i>Wachovia Bank, National Association</i>	\$271,452,170	89
8	GMAC LLC	TOTAL	\$7,400,000,000	3
9	U.S. Bancorp	TOTAL	\$7,283,744,203	581
		<i>U.S. Bank National Association</i>	\$4,282,285,453	467
		<i>U.S. Bancorp</i>	\$3,001,458,750	114
10	American Express Bank, FSB.	TOTAL	\$5,900,000,000	3
11	State Street Corporation	TOTAL	\$5,289,431,500	53
		<i>State Street Corporation</i>	\$2,839,431,500	51
		<i>State Street Bank and Trust Company</i>	\$2,450,000,000	2
12	John Deere Capital Corporation	TOTAL	\$4,913,503,000	116
13	HSBC USA Inc. (subsidiary of HSBC Holdings, PLC)	TOTAL	\$4,742,598,079	24
		<i>HSBC USA Inc.</i>	\$4,616,910,000	17
		<i>HSBC Bank USA, National Association</i>	\$125,688,079	7
14	Regions Bank	TOTAL	\$4,200,000,000	6

continued

		<b>Breakdown by Affiliate</b>		
<b>Entity</b>	<b>(if applicable)</b>	<b>Amount</b>	<b>Issuances</b>	
15	PNC Funding Corp.	TOTAL	\$3,900,000,000	4
16	SunTrust Banks, Inc.	TOTAL	\$3,576,000,000	3
		<i>SunTrust Bank</i>	\$3,000,000,000	2
		<i>SunTrust Banks, Inc.</i>	\$576,000,000	1
17	Union Bank, National Association	TOTAL	\$2,210,000,000	13
18	KeyCorp	TOTAL	\$1,937,500,000	4
		<i>KeyBank National Association</i>	\$1,000,000,000	1
		<i>KeyCorp</i>	\$937,500,000	3
19	Sovereign Bancorp, Inc.	TOTAL	\$1,600,000,000	2
		<i>Sovereign Bank</i>	\$1,350,000,000	1
		<i>Sovereign Bancorp, Inc.</i>	\$250,000,000	1
20	The Bank of New York Mellon Corporation	TOTAL	\$1,040,412,845	73
		<i>The Bank of New York Mellon Corporation</i>	\$603,448,298	2
		<i>The Bank of New York Mellon</i>	\$436,964,547	71
21	Bank of the West	TOTAL	\$1,002,889,124	2
22	Banco Bilbao Vizcaya Argentaria Puerto Rico	TOTAL	\$686,440,926	31
23	New York Community Bancorp, Inc.	TOTAL	\$602,000,000	2
		<i>New York Community Bank</i>	\$512,000,000	1
		<i>New York Community Bancorp, Inc.</i>	\$90,000,000	1
24	The Huntington National Bank	TOTAL	\$600,000,000	1
25	Wilmington Trust Company	TOTAL	\$460,000,000	11
26	MetLife, Inc.	TOTAL	\$397,436,000	1
27	Associated Bank, National Association	TOTAL	\$395,000,000	6
28	Fifth Third Bancorp	TOTAL	\$285,500,000	4
		<i>Fifth Third Bank</i>	\$285,000,000	3
		<i>Fifth Third Bancorp</i>	\$500,000	1
29	Zions Bancorporation	TOTAL	\$254,892,500	1

*Note:* The data presented in this table account for 99.7 percent of the debt issued under the DGP. Data on the remaining issuers can be found at [https://www.fdic.gov/regulations/resources/TLGP/total\\_debt.html](https://www.fdic.gov/regulations/resources/TLGP/total_debt.html).

## Bibliography

Acharya, V., and R. Sundaram. “The Financial Sector Bailout: Sowing the Seeds of the Next Crisis?” In *Restoring Financial Stability: How to Repair a Failed System*, edited by V. Acharya and M. Richardson, 327–39. 2009.

Adler, Joe. “FDIC Debt Program Proves as Good as TARP, without the Baggage.” *American Banker*. April 26, 2012.

Adrian, Tobias, Karin Kimbrough, and Dina Marchioni. “The Federal Reserve’s Commercial Paper Funding Facility.” Federal Reserve Bank of New York *Economic Policy Review*, May 2011, 25–39. <https://www.newyorkfed.org/medialibrary/media/research/epr/11v17n1/1105adri.pdf>.

Ambrose, Brent W., Yiyang Cheng, and Dolly King. “The Financial Crisis and Temporary Liquidity Guarantee Program: Their Impact on Fixed Income Markets.” *Journal of Fixed Income* 23, no. 2 (2013): 5–26.

Azarchs, Tanya, and Scott Sprinzen. “U.S. Guarantees of Bank Debt under Interim Rules Do Not Promise Timely Payment.” *Standard and Poor’s Ratings Direct*, November 10, 2008.

Baily, Martin Neil, and Aaron Klein. “The Impact of the Dodd-Frank Act on Financial Stability and Economic Growth.” Presentation at University of Michigan Center on Finance, Law, and Policy, October 24, 2014. <https://www.brookings.edu/on-the-record/the-impact-of-the-dodd-frank-act-on-financial-stability-and-economic-growth/>.

Bair, Sheila. *Bull by the Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*. 2012.

Bary, Andrew. “How Do You Spell Sweet Deal? For Banks, It’s TLGP.” *Barrons*. April 20, 2009.

Bernanke, Ben S. *The Courage to Act: A Memoir of a Crisis and Its Aftermath*. 2015.

Black, Jeffrey R., Seth A. Hoelscher, and Duane Stock. “Benefits of Debt Guarantees: Evidence from the FDIC Debt-Guarantee Program.” February 2017. [https://editorialexpress.com/cgi-bin/conference/download.cgi?db\\_name=SWFA2017&paper\\_id=151](https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=SWFA2017&paper_id=151).

Broughel, James. “Title XI: Fed Transparency and Bailouts.” In *Dodd-Frank: What It Does and Why It’s Flawed*, edited by Hester Peirce and James Broughel, 121–35. 2012. <https://www.mercatus.org/system/files/dodd-frank-FINAL.pdf>.

*Economic Implications of the “Too Big to Fail Policy,” Hearing Before the U.S. House of Representatives, Subcommittee on Economic Stabilization, Committee on Banking, Finance, and Urban Affairs.* 102nd Cong. 1991.

*Euroweek.* “FDIC Fiddling Rescues Bank Liquidity Plan.” November 28, 2008, 10.

———. “Goldman Leads TLGP Off to a Flying Start.” November 28, 2008, 9.

———. “FDIC Plans Phase Out of Guarantee Programme.” September 11, 2009, 12.

Federal Deposit Insurance Corporation (FDIC). *Managing the Crisis: The FDIC and RTC Experience.* 1998.

———. “Memorandum to the Board of Directors: FDIC Guarantee of Bank Debt.” October 13, 2008.

———. “Statement by FDIC Chairman Sheila Bair.” FDIC Joint Press Conference with U.S. Treasury and Federal Reserve. Press Release. October 14, 2008. <https://www.fdic.gov/news/news/press/2008/pr08100a.html>.

*Federal Register.* Vols. 73–76. 2008–12.

Flitter, Emily. “Way Out Gets Clearer as TLGP to End.” *American Banker.* October 21, 2009.

G7 Finance Ministers. “G7 Finance Ministers and Central Bank Governors Plan of Action.” October 10, 2008. <http://www.g8.utoronto.ca/finance/fm081010.htm>.

Geithner, Timothy F. *Stress Test: Reflections on Financial Crises.* 2014.

Grande, Giuseppe, Aviram Levy, Fabio Panetta, and Andrea Zaghini. “Public Guarantees on Bank Bonds: Effectiveness and Distortions.” *OECD Journal: Financial Market Trends*, 2011, no. 2, 1–25. <http://www.oecd.org/finance/financial-markets/49200208.pdf>.

International Association of Deposit Insurers (IADI). “Discussion Paper on Cross Border Deposit Insurance Issues Raised by the Global Financial Crisis.” March 2011. [http://www.iadi.org/en/assets/File/Papers/Approved%20Research%20-%20Discussion%20Papers/IADI\\_CBDI\\_Paper\\_29\\_Mar\\_2011\\_\(Final\\_for\\_publication\).pdf](http://www.iadi.org/en/assets/File/Papers/Approved%20Research%20-%20Discussion%20Papers/IADI_CBDI_Paper_29_Mar_2011_(Final_for_publication).pdf).

Levy, Aviram, and Sebastian Schich. “The Design of Government Guarantees for Bank Bonds: Lessons from the Recent Financial Crisis.” *OECD Journal: Financial Market Trends*, 2010, no.1, 1–32. <https://www.oecd.org/finance/financial-markets/45636972.pdf>.



Levy, Aviram, and Andrea Zaghini. “The Pricing of Government-Guaranteed Bank Bonds.” *Banks and Bank Systems* 6, no. 3 (2011): 16–24. <https://businessperspectives.org/media/zoo/applications/publishing/templates/article/assets/js/pdfjs/web/4126>.

Moody’s Investors Service. “Moody’s Will Assign Backed-Aaa Ratings to Debt Securities Covered by the FDIC’s Guarantee.” *Global Credit Research*. November 24, 2008. [https://www.moodys.com/research/Moodys-will-assign-backed-Aaa-ratings-to-debt-securities-covered--PR\\_167951](https://www.moodys.com/research/Moodys-will-assign-backed-Aaa-ratings-to-debt-securities-covered--PR_167951).

Panetta, Fabio, Thomas Faeh, Giuseppe Grande, Corrinne Ho, Michael King, Aviram Levy, Federico M. Signoretti, Marco Taboga, and Andrea Zaghini. “An Assessment of Financial Sector Rescue Programmes.” BIS Papers 48, Bank of Italy Monetary and Economic Department, 2009. <http://www.bis.org/publ/bppdf/bispap48.pdf>.

Paulson, Henry M., Jr. *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System*. 2010.

Schich, Sebastian. “Expanded Government Guarantees for Bank Liabilities: Selected Issues.” *OECD Journal: Financial Market Trends*, 2009, no. 1, 1–36. <http://www.oecd.org/finance/financial-markets/42779438.pdf>.

U.S. Department of Justice, U.S. Attorney’s Office for the Northern District of Florida. “Bankers and Attorney Sentenced to Prison, for Fraud, False Statement, and Making a False Claim against the United States.” Press Release. August 22, 2014. <https://www.justice.gov/usao-ndfl/pr/bankers-and-attorney-sentenced-prison-fraud-false-statements-and-making-false-claim>.

U.S. Department of the Treasury. *Modernizing the Financial System: U.S. Treasury Department Recommendations for Safer, More Competitive Banks*. 1991.

U.S. Government Accountability Office (GAO). *Federal Deposit Insurance Act: Regulators’ Use of Systemic Risk Exception Raises Moral Hazard Concerns and Opportunities Exist to Clarify the Provision*. GAO-10-100. 2010. <http://www.gao.gov/products/GAO-10-100>.