# **Journal of Financial Crises**

Volume 2 | Issue 1

# Guarantees and Capital Infusions in Response to Financial Crises B: U.S. Guarantees During the Global Financial Crisis

June Rhee Yale University

Andrew Metrick Yale University

Follow this and additional works at: https://elischolar.library.yale.edu/journal-of-financial-crises

Part of the Administrative Law Commons, Banking and Finance Law Commons, Bankruptcy Law Commons, Corporate Finance Commons, Economic History Commons, Economic Policy Commons, Finance Commons, Finance and Financial Management Commons, Law and Politics Commons, Macroeconomics Commons, Policy Design, Analysis, and Evaluation Commons, Policy History, Theory, and Methods Commons, Public Affairs Commons, and the Public Policy Commons

### **Recommended Citation**

Rhee, June and Metrick, Andrew () "Guarantees and Capital Infusions in Response to Financial Crises B: U.S. Guarantees During the Global Financial Crisis," *Journal of Financial Crises*: Vol. 2: Iss. 1, 51-68. Available at: https://elischolar.library.yale.edu/journal-of-financial-crises/vol2/iss1/4

This Case Studies is brought to you for free and open access by EliScholar – A Digital Platform for Scholarly Publishing at Yale. It has been accepted for inclusion in Journal of Financial Crises by an authorized editor of EliScholar – A Digital Platform for Scholarly Publishing at Yale. For more information, please contact elischolar@yale.edu.

# Guarantees and Capital Infusions in Response to Financial Crises B: U.S. Guarantees During the Global Financial Crisis<sup>1</sup>

June Rhee<sup>2</sup> Andrew Metrick<sup>3</sup>

Yale Program on Financial Stability Case Study 2015-3b-v1 July 15, 2015

### **Abstract**

During 2008-09, the federal government extended multiple guarantee programs in an effort to restore the financial market and contain the panic and crisis in the market. For example, the Treasury provided a temporary guarantee program for the money market funds, the FDIC decided to stand behind certain debts and non-interest-bearing transaction accounts, and the Treasury, the FDIC, and the Federal Reserve agreed to share losses in certain assets belonging to Citigroup. This case reviews these guarantee programs implemented during the global financial crisis by the government and explores the different rationale that shaped certain design features of each program.

Cases are available from the Journal of Financial Crises.

<sup>&</sup>lt;sup>1</sup> This case study is one of three Yale Program on Financial Stability (YPFS) case modules considering the Guarantees and Capital Infusions in Response to Financial Crises. The others are:

<sup>•</sup> Guarantees and Capital Infusions in Response to Financial Crises A: Haircuts and Resolutions

<sup>•</sup> Guarantees and Capital Infusions in Response to Financial Crises B: U.S. Guarantees During the Financial Crisis

<sup>&</sup>lt;sup>2</sup> Director, MMS in Systemic Risk and Senior Editor, Yale Program on Financial Stability (YPFS), Yale School of Management.

<sup>&</sup>lt;sup>3</sup> Janet L. Yellen Professor of Finance and Management, and YPFS Program Director, Yale School of Management.

## 1. Introduction

During 2008-09, the federal government extended multiple guarantee programs in an effort to restore the financial market and contain the panic and crisis in the market. For example, to stop a disruption and run in the money market funds (MMFs), the Treasury provided a guarantee for the investors of the fund ensuring that the value of their shares would not fall below \$1.00 per share. Additionally, the Congress raised the maximum guaranteed value of the FDIC-insured accounts from \$100,000 to \$250,000 per account. The Federal Deposit Insurance Corporation (FDIC) also established the Debt Guarantee Program (DGP) standing behind certain newly issued senior unsecured debt to restore the interbank lending market, and the Transaction Account Guarantee Program (TAGP) covering non-interest-bearing transaction accounts to prevent runs in small banks by maintaining depositor confidence. Later under the Troubled Asset Relief Program (TARP), the Treasury, the FDIC, and the Federal Reserve jointly decided to guarantee and share losses of certain assets belonging to Citigroup and Bank of America. However, the guarantee program for Bank of America was not finalized. Overall, the guarantees provided by the government exceeded the total value of TARP, making guarantees the single largest element of the government's response to the financial crisis (COP 2009).

Compared to the direct purchases of bank assets, a guarantee does not require any upfront cost from the government and the taxpayers. When government agencies agreed to provide the guarantee programs discussed above, taxpayers paid no immediate price. This low upfront cost allowed the government to guarantee large pools of assets large pool of assets and the programs were to play an important role in calming the panicked financial market. For example, lenders who were unwilling to risk their money in distressed and uncertain markets became much more willing to participate after the U.S. government promised to backstop any losses (Ibid., 2009).

These guarantees, however, have their downside. Despite the low upfront cost, guarantees still carry a considerable risk to taxpayers. There is always a possibility that, if the guaranteed assets radically declined in value, especially in a volatile and unstable market, taxpayers could suffer enormous losses. They could also create moral hazard and price distortions in the market (Ibid., 2009).

By reviewing different designs of the guarantee programs established during the financial crisis, we are able to learn what features of the program most efficiently balanced the upside and downside of a guarantee and which designs can be effective in dealing with a future crisis.

The remainder of the case is organized as follows: Section 2 discusses the temporary guarantee provided for the MMFs by the Treasury to prevent any further "breaking the buck" in the market. Section 3 describes the temporary liquidity guarantee program established by the FDIC to promote interbank lending and prevent runs in smaller banks. Section 4 provides details on the guarantee and loss sharing program jointly set forth by the Treasury, the FDIC, and the Federal Reserve to save Citigroup.

### Questions

1. In limiting the source of funding for the MMF guarantee program only to ESF, what was the government's reason in the decision that a \$50 billion ESF could effectively stop a run in a \$3 trillion MMF market?

- 2. Why did the government decide to include all eligible MMFs rather than considering the differences in run potential between institutional vs. retail holders, and prime vs. non-prime funds?
- 3. What was the reason behind the decision to limit eligible MMFs to funds having a market-based NAV on September 19, 2008, of \$0.995 or greater, and guaranteeing only the shares held as of September 19, 2008?
- 4. Did the MMF guarantee during the crisis set a precedent that raises the prospect or creates moral hazard of the Treasury using Exchange Stabilization Fund (ESF) for other domestic activities that can be plausibly linked to ensuring international financial stability?
- 5. Why were certain guarantee programs designed as opt-in rather than opt-out programs, and vice versa? What features and objectives of a guarantee program are made more effective with an opt-in rather than an opt-out, and vice versa?
- 6. Under the Temporary Liquidity Guarantee Program (TLGP), what is the reason behind the coverage limit (date, amount, etc.) of the DGP, as opposed to unlimited coverage of the guarantee in the TAGP?
- 7. For the Asset Guarantee Program (AGP), did the Federal Reserve, the Treasury, and the FDIC have differing rationale and guiding principles behind each guarantee program and when invoking systemic risk exception, and if so, what were the dynamics among the three organizations?
- 8. Did the government intended to utilize AGP (or guarantee and loss-sharing provided for Citigroup) only for Citigroup and Bank of America, or did it have an intention of possibly expanding it to other institutions? If not, then why limit it to only those two organizations?
- 9. How would the government's response to Citigroup's troubles be different now with the Dodd-Frank Wall Street Reform and Consumer Protection Act and the Financial Stability Oversight Council in charge of developing the specific criteria and analytical framework for assessing systemic significance?

# 2. Temporary Guarantee Program for Money Market Funds

A money market fund (MMF) is a type of mutual fund regulated primarily by Rule 2a-7 of the Investment Company Act of 1940, and is mandated to invest in high-liquid and low-risk securities. These securities include government securities, certificates of deposit, and commercial paper of companies. MMFs strive to maintain their net asset value (NAV) at a constant \$1.00 per share and only the yield goes up and down. NAV in the context of MMF is calculated based on the closing market prices of the securities held in the fund's portfolio, less any liabilities, and dividing this value by the number of shares outstanding in the fund. Before the 2008 financial crisis, MMFs had been widely believed to be as safe as bank deposits, and leading up to the crisis, MMFs were important providers of liquidity to financial intermediaries (SEC 2015).

However, if the fund's portfolio performs poorly, MMF's NAV may fall below \$1.00, and this is referred to as "breaking the buck," which is a rare occurrence. On September 16, 2008, a day after Lehman Brothers filed for bankruptcy, Reserve Primary Fund (RPF), a \$62 billion

prime and oldest MMF in the U.S., broke the buck. It had been 14 years since the last MMF had broken the buck. RPF's NAV fell to \$0.97, and its troubles started when it had to write off \$785 million of commercial paper and medium-term notes issued by Lehman Brothers (Bloomberg 2008).

In the days after RPF broke the buck, investors redeemed more than \$300 billion from prime MMFs, and the commercial paper market shut down for even the high-quality issuers. For example, on September 18, 2008, Putnam Investments, one of the oldest MMFs serving only the institutional investors, announced that it was closing and liquidating Putnam Prime Money Market Fund, which was a \$12.3 billion fund (NY Times September 18, 2008).

On September 19, 2008, to stop the run on MMFs, then-president George W. Bush approved the use of existing authorities by the then-Treasury Secretary Henry Paulson to make available as necessary the assets of the Exchange Stabilization Fund (ESF) for up to \$50 billion to "insure the holdings of any publicly offered eligible money market mutual fund—both retail and institutional—that pays a fee to participate in the program." This approval was done without seeking Congressional authorization (Treasury 9/19/2008).

Funded by the \$50 billion available in the ESF, and not backed by full faith and credit of the U.S., the Treasury was to guarantee more than \$3 trillion of MMF shares. At its peak, this program guaranteed \$3.2 trillion in assets (Treasury 2010). In addition, the Federal Reserve introduced a series of liquidity programs to help stop the run on MMFs (FSOC 2012).

ESF was established by the Gold Reserve Act of 1934, as amended in 1977, and provides as follows:

the Department of the Treasury has a stabilization fund ...Consistent with the obligations of the Government in the International Monetary Fund (IMF) on orderly exchange arrangements and an orderly system of exchange rates, the Secretary ..., with the approval of the President, may deal in gold, foreign exchange, and other instruments of credit and securities.

No loan or credit can be extended by the ESF for more than six months in any twelve-month period, unless the President provides a written determination to the Congress that "unique or emergency circumstances" necessitate a term greater than six months. Currently, the Emergency Economic Stabilization Act of 2008 (EESA), enacted October 3, 2008, requires that the Treasury reimburse the ESF for any funds used related to the Treasury's guarantee of MMFs, and prohibits the Treasury from using the ESF in the future to guarantee MMFs.

Under the MMF guarantee program, the Treasury allowed all eligible MMFs to participate in the program, and each fund decided to participate in the program. To be eligible to participate in the program, a MMF must:

- (i) be registered under the Investment Company Act of 1940;
- (ii) offer securities registered under the Securities Act of 1933;
- (iii) have a policy of maintaining a stable net asset value or share price of \$1.00 per share
- (iv) be operated in compliance with Rule 2a-7 under the Investment Company Act of 1940; and
- (v) have a market-based net asset value per share on September 19, 2008, of \$0.995 or greater.

Eligible funds included both taxable and non-taxable funds. Eligible funds had to apply and pay a fee<sup>4</sup> to participate in the program. The application included submitting an executed version of the Treasury's form of Guarantee Agreement and certain related documentation including an acknowledgement and undertaking by the fund's investment adviser to the Treasury via e-mail.

Under the guarantee program, investors' holdings in participating MMFs as of September 19, 2008, were protected. Payment under the program was triggered by a "guarantee event." A guarantee event occurred when the participating MMF's share NAV fell below \$0.995. When a guarantee event occurred, the Treasury was to use the ESF to ensure that investors in the failing MMF received \$1.00 per covered share up to the extent of their holdings in that MMF as of September 19, 2008.

In order to ensure payment under the guarantee program, after a guarantee event, the MMF were required to, among other things, initiate actions necessary to commence the liquidation process of the fund within five business days and complete the liquidation of the fund on or before the 30th day following the guarantee event unless the Treasury consented in writing to a later date. The guarantee event would be deemed not to have occurred, however, if the MMF's NAV returned to an amount greater than or equal to \$0.995 before the start of liquidation. The guarantee agreements specifically limited aggregate coverage to the amount of funds available in the ESF on the date of a guarantee event, with investor claims in excess of available funds subject to pro-ration.

The original termination date for the program was April 30, 2009 with the Secretary's option to extend the program up to the close of business on September 18, 2009. In order to maintain coverage throughout the extended period of the program, MMFs had to renew their participation in the program after each extension. After two extensions, the MMF guarantee program expired on September 18, 2009.

### **Rationale and Assessment of the Program**

The Treasury stated that this program was designed to address temporary dislocations in credit markets. More specifically, its purpose was to "enhance market confidence by alleviating investors' concerns about the ability of money market mutual funds to absorb losses." According to Treasury, it was intended specifically to "stop a run on money market mutual funds in the wake of the failure of Lehman Brothers" and to alleviate concerns regarding the industry because MMFs "are an important investment vehicle for many Americans and a fundamental source of financing for our capital markets and financial institutions. Maintaining confidence in the money market mutual fund industry is critical to protecting the integrity and stability of the global financial system" (Treasury September 2009).

"While the program had no direct cost to taxpayers, it earned more than \$1 billion in income" (Geithner Testimony 2009). Also, later assessment by the Financial Stability Oversight Council of the guarantee program acknowledges that it ultimately helped MMFs to continue to function as intermediaries in the financial markets (FSOC 2012).

<sup>&</sup>lt;sup>4</sup> If a fund's market-value-based net asset value per share on September 19, 2008, was greater than or equal to \$0.9975, the fund's fee for participation in the Program until December 18, 2008, is 0.01% of the product of the number of the fund's shares outstanding on September 19, 2008, and \$1. If the fund's market-value-based net asset value per share on September 19, 2008, was less than \$0.9975 but greater than or equal to \$0.995, the fee is 0.015% of such product.

# 3. Temporary Liquidity Guarantee Program

On October 14, 2008, as part of a coordinated response by the U.S. government to the disruption in the financial system and the collapse of credit markets, the FDIC adopted the Temporary Liquidity Guarantee Program (TLGP) (Bair 2008). The FDIC issued an interim rule for TLGP on October 29, 2008, with a request for comments, and published the final rule incorporating these comments on November 21, 2008.

In implementing the TLGP, the FDIC relied on Section 13(c)(4)(G) of the Federal Deposit Insurance Act invoking the systemic risk exception to the least-costly resolution requirement. Under the Act, the FDIC may take actions necessary to avoid or mitigate systemic risk when the Secretary of the Treasury, upon the written recommendations of the Board of Directors of the FDIC and the Board of Governors of the Federal Reserve (each recommendation through a vote of not less than two-thirds of the members of such Board), in consultation with the President determines that (i) the FDIC's compliance with the least-cost resolution rule with respect to an insured depository would have serious adverse effects on economic conditions or financial stability; and (ii) the assistance by the FDIC would avoid or mitigate such adverse effects.

The TLGP consisted of the Debt Guarantee Program (DGP) and the Transaction Account Guarantee Program (TAGP). The goal of the two programs differed in that the DGP was mainly to restore normal functioning to the interbank lending market, and the TAGP was to reassure bank customers' confidence in safe banking, particularly in smaller banks. The rationale behind these two programs will be discussed in further detail below. While the guarantee states that it is backed by full faith and credit of the U.S. government, the FDIC stressed that the program does not rely on taxpayer funding or on the Deposit Insurance Fund (DIF), whose primary purpose is to insure deposits and depositors at insured banks and to resolve failed banks. The program was designed such that it would be funded entirely from its own fees and would require no expenditure of the FDIC or other government funds (Final Rule 2008).

The DGP guaranteed newly issued senior unsecured debt<sup>5</sup> of the FDIC-insured depository institutions, U.S. bank holding companies, U.S. financial holding companies, U.S. savings and loan holding companies, and affiliates of FDIC-insured depository institutions through maturity or June 30, 2012, whichever came first. The amount of debt to be guaranteed by the DGP was capped at 125% of senior unsecured debt outstanding as of September 30, 2008, and that was scheduled to mature on or before June 30, 2012. This termination date was later extended to December 31, 2012, in 2009. The DGP, unlike the MMF guarantee program discussed in the previous section, enrolled the eligible institutions and banks automatically and each institution had an option to opt out from the program (Ibid., 2008). The list of banks opting out of the program was published on the FDIC's webpage.

"Senior unsecured debt" does not include short-term senior unsecured debt with a maturity of thirty days or less, due to comments received for the interim rule where it was voiced that the fee for the DGP would be prohibitively expensive for short-term maturity instruments such as federal funds. Fees were calculated on a sliding rate scale based on an instrument's maturity, where the fees for shorter term debt were less than 75 basis points, and for longer term debts were slightly higher. The program imposed limitations on a participating institution in issuing non-guaranteed debt by requiring the entity to max out on the DGP

<sup>&</sup>lt;sup>5</sup> These debts were the ones issued between October 14, 2008, and June 30, 2009, but then this period was extended through October 31, 2009.

guaranteed amount before issuing non-guaranteed debt, to disclose that such debt was not guaranteed, and to pay additional fees (Ibid., 2008).

The TAGP, on the other hand, guaranteed non-interest-bearing transaction accounts at the FDIC-insured depository institutions. The FDIC defined a "non-interest-bearing transaction account" as a transaction account on which the insured depository institution pays no interest and does not reserve the right to require advance notice of intended withdrawals. It included both commercial and consumer accounts and there was no limit to the guaranteed amount. This program, like the DGP, covered all eligible accounts unless the bank where the account was held opted out from the program. Beginning on December 6, 2008, institutions that did not opt out of the TAGP paid annual fees on balances in non-interest-bearing transaction accounts that exceeded \$250,000. This was because \$250,000 was already covered under the FDIC's standard insurance coverage rules. The original termination date of the TAGP was December 31, 2009, but this was extended twice and the program ultimately expired on December 31, 2010.

After December 31, 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) provided temporary unlimited deposit insurance coverage for non-interest-bearing transaction accounts through December 31, 2012, regardless of the balance in the account and the ownership capacity of the funds. This coverage essentially replaced the expired TAGP, and was available to all depositors, including consumers, businesses, and government entities. The coverage was separate from, and in addition to, the standard insurance coverage provided for a depositor's other accounts held at an FDIC-insured bank. Following Figure 1 summarizes the key terms of the DGP and the TAGP.

Figure 1: Comparison of DGP and TAGP

	DGP	TAGP
What is covered?	Newly issued senior unsecured debt, issued between October 14, 2008 to October 31, 2009, of the FDIC-insured depository institutions, U.S. bank holding companies, U.S. financial holding companies, U.S. savings and loan holding companies, and affiliates of FDIC-insured depository institutions.	Non-interest-bearing transaction accounts at the FDIC-insured depository institutions.
Coverage limit	125% of senior unsecured debt outstanding as of September 30, 2008, and that is scheduled to mature on or before June 30, 2012.	No limit.
Opt-in or opt-out	Opt-out.	Opt-out.
Expiration	Original termination date, June 30, 2012, was extended and the program terminated December 31, 2012.	Original termination date, December 31, 2009, was extended twice and the program ultimately expired on December 31, 2010.

### **Rationale and Assessment of the Program**

Over the course of the DGP's existence, 122 entities issued TLGP debt. The DGP, at its peak, guaranteed \$345.8 billion of outstanding debt at participating institutions (FDIC 2013). Over 7,100 banks and thrifts—86% of FDIC insured institutions—initially stayed in the TAGP, and at the peak of the program in December 2009, the TAGP guaranteed deposits amounted to \$834 billion (Cave 2011).

In the press release announcing the TLGP, the FDIC stated that the program was a "part of a coordinated response by the U.S. government to the disruption in the financial system and the collapse of credit markets." As seen in the legal authority backing the program, it was an initiative to counter the system-wide crisis in the nation's financial sector. More specifically, the program was to hold down the cost of any future bank failure and to solve the liquidity problem in the financial market by injecting more capital into the banking system, freeing up credit markets for creditworthy businesses and consumers, and giving banks the self-assurance to resume normal lending. It was an attempt to unlock interbank credit markets and restore rationality into the credit spread (Bair 2008).

The final rule for the TLGP states that the DGP, in particular, was designed to be a time-limited program to restore normal functioning to the market by helping institutions to obtain stable, longer-term sources of funding where liquidity is most lacking. The DGP was further extended to the unsecured senior debt issued up to October 31, 2009, because the FDIC was of an opinion that the credit market had not yet fully stabilized by mid-year 2009 (Amendment 2009).

At the same time, the FDIC makes clear that the TLGP's purpose was not to promote innovative, exotic, or complex funding structures, but to provide liquidity to the interbanklending market. The specific limitations and design features of the program were to reduce the risk of adverse selection (i.e. limitation on the issuance of non-guaranteed debt) (Final Rule 2008). It has been mentioned that the reason why the program only covers newly issued debt was to open up interbank lending without disrupting the market or intervening in the market too much. The FDIC stated that it seeks balance between suppressing uncontrolled growth or funding reckless lending of the banks, and opening up interbank lending, ensuring banks have the liquidity to lend to quality credits and keeping the bank business open (FDIC 10/14/2008).

On the other hand, the TAGP was to reassure bank customers' confidence in safe banking that is vital to public confidence in the banking system. It was to provide stability to the insured banks, particularly smaller ones, enabling their commercial customers to continue to do business without disruption (Bair 2008).

The FDIC collected \$10.4 billion in fees and surcharges under the DGP, and as of December 31, 2012, the FDIC had paid \$153 million in losses resulting from six participating entities defaulting on debt issued under the DGP. The majority of these losses (\$113 million) arose from banks with outstanding DGP notes that failed in 2011 and were placed into receivership. On the other hand, the FDIC collected \$1.2 billion in fees under the TAGP, but cumulative estimated TAGP losses on failures as of December 31, 2012, totaled \$2.1 billion (FDIC 2013).

Overall, considering the profits and losses from both the DGP and the TAGP, the TLGP fees exceeded the losses (Ibid., 2013). From inception of the TLGP, it was the FDIC's policy to recognize revenue to the DIF for any portion of guarantee fees in excess of amounts needed to cover potential losses upon expiration of the TLGP guarantee period or earlier (COP 2009).

As the guarantee program came to an end, the official at the FDIC emphasized "while TLGP clearly led to a positive outcome, it is important that financial institutions replace their reliance on government-guaranteed debt with private borrowing." Banks now have been gradually able to rely again on longer-term debts, and non-guaranteed debts returned to the pre-crisis level (Cave 2011).

# 4. Asset Guarantee Program under TARP

The Asset Guarantee Program (AGP) was a joint effort by the Treasury, the Federal Reserve, and the FDIC. Although the Treasury, the Federal Reserve, and the FDIC jointly announced this guarantee program, the Treasury was the only agency that referred to this tripartite initiative as the AGP. The latter two agencies instead referred to this agreement as "a package of guarantees, liquidity access, and capital." The program was to protect the value of certain assets held by qualifying financial institutions by agreeing to absorb a portion of losses on those assets. It was to support institutions whose failure would have caused serious harm to the financial system and the broader economy. Two institutions were to receive assistance under the AGP—Bank of America and Citigroup— but the AGP arrangement for Bank of America never finalized (SIGTARP 2011).

### Citigroup

On October 28, 2008, the Treasury acquired \$25 billion of preferred stock of Citigroup, as well as related warrants, as part of capital purchases made under the Capital Purchase Program (CPP) established under the Troubled Asset Relief Program (TARP). CPP was available to a broad range of financial institutions. However, on November 17, 2008, Citigroup's stock price dropped. Figure 2 shows a steeper drop of Citigroup's stock price compared to its peers during the week of November 17. The Treasury, the Federal Reserve, and the Office of the Comptroller of the Currency (OCC) all had expressed concern that depositors might start a run on Citigroup and the bank would suffer a severe liquidity crisis. This concern was substantiated on November 21, 2008, with significant corporate withdrawals. The same day the Federal Reserve Bank of New York (FRBNY) witnessed that counterparties began to pull back from Citigroup because of its perceived decline in credit worthiness (Ibid., 2011).

After Citigroup came back for additional assistance, the FRBNY requested that it submit a proposal for additional assistance. Citigroup's proposal requested that the government guarantee 100% of the total value of \$306 billion in a pool of specified troubled assets, and in return it would issue the government \$20 billion in preferred stock that pays 5% annual dividend and can be repaid or converted into common stock at Citigroup's preference in five years. First loss would have resulted in a loss for the government, and the pool of assets included assets that the "public most feared" (Ibid., 2011).

Rejecting Citigroup's initial offer, on November 23, 2008, the Treasury, the Federal Reserve and the FDIC agreed on a guarantee program according to the terms set forth by the government. The Treasury, the Federal Reserve, and the FDIC were to share potential losses on certain parts of Citigroup assets valued initially at approximately \$306 billion. The Treasury later named this program the AGP. The specific terms of the AGP were agreed upon well after the announcement of the government's preliminary framework of the \$306 billion asset pool guarantee (Ibid., 2011).

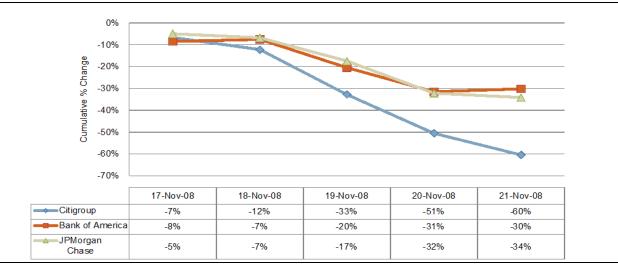
On December 23, 2008, the government's representatives provided Citigroup with a draft of the asset pool agreement including asset criteria on types of assets eligible for the

guaranteed pool. While there was no statutory or regulatory deadline for completing the Master Agreement, Citigroup wanted to complete it before its earnings were released in January 2009. A Master Agreement was signed on January 15, 2009, but according to the FRBNY it was not feasible to finalize the assets in the pool and complete a thorough due-diligence review of the assets by then (Ibid., 2011).

The Treasury, the Federal Reserve, and the FDIC expressed concerns over setting the loss positions and pricing appropriately or executing final documentation without a conclusive listing of assets in the guaranteed pool. Taking these concerns into consideration, the Master Agreement was structured in a way that did not specify the precise value or composition of the guaranteed asset pool, but included a post-signing process for negotiating and finalizing those details (Ibid., 2011).

On November 17, 2009, almost one year after the announcement of the guarantee program, and just about a month before the AGP terminated, the asset pool was finalized at \$300.75 billion. During the screening and replacement of Citigroup's suggested assets in the asset pool, the FRBNY hired PricewaterhouseCoopers LLP (PwC) and BlackRock as consultants for deciding which assets are to be included in the guaranteed asset pool. However, in December 2009, regulators approved Citigroup's exit from the AGP (Ibid., 2011). Figure 3 summarizes the timeline of major events in the guarantee program for Citigroup.

Figure 2: Citigroup and Peers Cumulative Stock Price for the Week of November 17, 2008 (cumulative change is from November 14, 2008)



Source: SIGTARP 2011.

Figure 3: Timeline of Major Events in the AGP



Source: SIGTARP 2011.

Under the AGP, Citigroup would have absorbed initial losses arising from the covered asset pool up to \$39.5 billion. Citigroup would then absorb 10% of any losses in excess of that. The Treasury was first in line among the federal agencies to absorb losses up to \$5 billion. The FDIC then would absorb the next \$10 billion of the losses, and the Federal Reserve would cover any further federal liability by way of a non-recourse loan to Citigroup. These arrangements were to be in effect for 10 years for residential mortgage-related assets and five years for other assets. As compensation for these guarantees, the Treasury and the FDIC received \$4 billion and \$3 billion, respectively, of preferred stock in Citigroup, which bore dividends at 8% per annum. Any residual financing provided by the Federal Reserve would complete the remainder of the term of the guarantee arrangements. Assets eligible for the guaranteed pool had to satisfy the following conditions set forth by the government:

- (i) the asset was owned by a Citigroup affiliate and had been included on its balance sheet as of November 21, 2008;
- (ii) no foreign assets could be included;
- (iii) no equity securities (such as shares of stock in other entities) or derivatives of such equity securities could be included;
- (iv) all assets in the pool were to have been issued or originated before March 14, 2008;
- (v) Citigroup and its affiliates could not be the obligor of any assets; and
- (vi) the assets were not to be guaranteed by any governmental authority pursuant to another agreement.

### **Rationale Behind the Program**

In the joint statement set forth on November 23, 2008, the Treasury, the FDIC, and the Federal Reserve stated that in guaranteeing certain assets of Citigroup, "the U.S. government is taking the actions necessary to strengthen the financial system and protect U.S. taxpayers and the U.S. economy." They also promised to use all their resources to preserve the strength of the banking institutions and promote the process of repair and recovery and to manage risks. They set forth the following guiding principles:

- (i) To support a healthy resumption of credit flows to households and businesses;
- (ii) To exercise prudent stewardship of taxpayer resources;

- (iii) Careful circumscription of the involvement of government in the financial sector; and
- (iv) To bolster the efforts of financial institutions to attract private capital.

Even before the announcement of Citigroup assistance, the Federal Reserve Chairman Bernanke stated that it was "not even a close call to assist" Citigroup, and FRBNY President Timothy Geithner said, "We've told the world we're not going to let any of our major institutions fail. We are going to have to make it really clear we're standing behind Citigroup." FRBNY President Geithner describes a series of calls among representatives of Federal agencies involved in saving Citigroup as "a continuous conversation with the principals on all sorts of ideas on how to do it. We were guided by two objectives: One, we needed a definitive strategy that would work, and, two, we had to do it in a way that would be most economical and fair for the U.S. Government and protect its interests" (SIGTARP 2011).

### Guarantee by the Treasury

The Treasury relied on Section 102 of EESA to implement the AGP. It allows the Treasury to assume a loss position on certain assets held by the qualifying financial institution. The section also allows that "If the Secretary establishes the program authorized under section 101 [authorizing the Treasury to purchase troubled assets from any financial institutions], then the Secretary shall establish a program to guarantee troubled assets originated or issued prior to March 14, 2008," and "the Secretary may develop guarantees of troubled assets and the associated premiums for such guarantees." The expected value of premium was to be no less than the expected value of the losses to TARP from the guarantee, and the guaranteed portfolio had to adhere to a set of portfolio management guidelines set forth by the government.

At the onset of the program, the Treasury stated that the program would not be "widely available" and would be applied with extreme discretion in order to improve market confidence in the systemically significant institution and in financial markets broadly. The Treasury explained that "systemically significant" means that "failure would impose significant losses on creditors and counterparties, call into question the financial strength of other similarly situated financial institutions, disrupt financial markets, raise borrowing costs for households and businesses, and reduce household wealth" (Treasury 12/31/2008). It would determine the eligibility of participants and the allocation of resources on a caseby-case basis, and consider the following factors in deciding what is systemically significant:

- (i) The extent to which destabilization of the institution could threaten the viability of creditors and counterparties exposed to the institution, whether directly or indirectly;
- (ii) The extent to which an institution is at risk of a loss of confidence and the degree to which that stress is caused by a distressed or illiquid portfolio of assets;
- (iii) The number and size of financial institutions that are similarly situated, or that would be likely to be affected by destabilization of the institution being considered for the program;
- (iv) Whether the institution is sufficiently important to the nation's financial and economic system that a loss of confidence in the firm's financial position could potentially cause major disruptions to credit markets or payments and settlement systems, destabilize asset prices, significantly increase uncertainty, or lead to similar

losses of confidence or financial market stability that could materially weaken overall economic performance; and

(v) The extent to which the institution has access to alternative sources of capital and liquidity, whether from the private sector or from other sources of government funds. (Ibid., 12/31/2008).

In a later report by the Treasury on the Citigroup's guarantee program, it noted the concern with Citigroup's failure was that the loss of confidence in a financial institution could result in significant market disruptions that threaten the similarly situated financial institutions and thus impair broader financial markets, pose a threat to the overall economy, and could lead to "threaten the viability of otherwise financially sound businesses, institutions, and municipalities, resulting in spillovers on employment, output and incomes." Additionally, extending the guarantee was part of a broader effort to support Citigroup as the company executes its restructuring plans (Section 129 EESA Report).

### Guarantee by the FDIC

The FDIC once again relied on the systemic risk exception under the Federal Deposit Insurance Act to share and "ring-fence losses" in selected assets of Citigroup. When the FDIC's Board of Directors met to consider whether or not to recommend that the Treasury invoke the systemic risk exception and allow the FDIC to participate in this open bank assistance, the FDIC staff recommended that the Board find that Citigroup's failure would have serious adverse effects on domestic and international economic conditions and financial stability. The FDIC's Board unanimously voted to recommend that the Treasury invoke a systemic risk exception for Citigroup, thereby authorizing the FDIC's participation in open bank assistance to Citigroup (SIGTARP 2011).

While the vote by the FDIC Board to invoke a systemic risk exception for Citigroup was unanimous, Director John M. Reich, an FDIC Board member, expressed the concern that there had been "some selective creativity exercised in the determination of what is systemic and what's not," and that there "has been a high degree of pressure exerted in certain situations, and not in others, and I'm concerned about parity." In terms of Citigroup, an FDIC official said that the FDIC directors and other government entities "made a judgment call" (Ibid., 2011).

Moreover, during the vote, the FDIC noted that this was "based largely on information from Citigroup's primary regulators, the Federal Reserve Board and the Office of the Comptroller of the Currency." Although the FDIC acknowledged that Citigroup's failure would have serious consequences for the functioning of the global payment system, Chairman Bair said, "We were told by the New York Fed that problems would occur in the global markets if Citi were to fail. We didn't have our own information to verify this statement, so I didn't want to dispute that with them" (Ibid., 2011).

A couple of days before the vote by the FDIC, Treasury Secretary Paulson already had stated publicly that "If Citi isn't systemic, I don't know what is" (Geithner 2014). Secretary Paulson also consulted with President Bush about making an emergency systemic risk determination for five Citigroup subsidiary banks, which would then authorize the FDIC to take appropriate action under the systemic risk exception. "Citigroup's failure would threaten the viability of creditors and counterparties exposed to the institution, impair the liquidity of even well-capitalized institutions, dislocate the credit markets, and undermine business and household confidence in the broader economy" (SIGTARP 2011).

After the announcement of the guarantee program and when negotiating the specific terms of loss sharing and the guarantee, the FDIC maintained that Citigroup should take a first loss

position equal to 110% of the initial regulatory estimate of embedded credit losses (initial regulatory estimate was \$37 billion), or \$42 billion, before the FDIC would start to cover losses. This point was taken into consideration as the government parties discussed the structure and order of the government loss positions. FDIC stated that it found Citigroup's ultimate first loss position of \$37 billion acceptable because Treasury was willing to take a \$5 billion second loss position through TARP (Ibid., 2011).

### Guarantee by the Federal Reserve

The Federal Reserve relied on Section 13(3) of the Federal Reserve Act, before its amendment by the Dodd-Frank Act. It allowed the Federal Reserve, by the affirmative vote of not less than five members, to authorize any Federal Reserve bank, during such periods as said board may determine, to discount for any individual, partnership, or corporation, notes, drafts, and bills of exchange when such notes, drafts, and bills of exchange are indorsed or otherwise secured to the satisfaction of the Federal Reserve bank. In return the Federal Reserve bank obtained evidence that such individual, partnership, or corporation is unable to secure adequate credit accommodations from other banking institutions, and all such discounts were to be subject to limitations, restrictions, and regulations as the Board of Governors of the Federal Reserve saw fit to prescribe.

The Board of Governors of the Federal Reserve voted unanimously to recommend to the Secretary of the Treasury that a potential Citigroup failure posed a systemic risk, and the Federal Reserve Board Chairman Bernanke said he believed that Citigroup's underlying financial situation had not changed, but its biggest problems were credit and confidence. The FRBNY officials testified that this was similar to Lehman's situation preceding its failure. The Federal Reserve acknowledged Citigroup's systemic significance based on the following factors (SIGTARP 2011):

- (i) As of September 30, 2008, Citigroup, including its insured depository institution subsidiaries, was the second-largest banking organization in the United States and had total consolidated assets of slightly more than \$2 trillion. Citigroup held more than \$794 billion of deposits at the end of the third quarter of 2008, making it one of the largest deposit holders in the world. Citigroup held a large amount of foreign deposits and performed consumer banking across the globe in more than 100 countries. It was the world's largest provider of foreign currency exchange services and held large deposits for several Fortune 500 companies at the time;
- (ii) Citigroup was a major supplier of credit in the U.S. and abroad. At the time, it was the largest consumer finance lender in the world, the third-largest mortgage servicer, the fourth-largest student lender, and the world's largest credit card lender;
- (iii) Citigroup provided a wide range of investment banking, capital markets, asset management, and retail brokerage services through its subsidiary Citigroup Global Capital Markets, Inc. Citigroup's brokerage arm, Smith Barney, was one of the largest in the United States by the end of the third quarter of 2008;
- (iv) Citigroup was a major securitizer of credit and a major player in a wide range of derivatives markets, both as counterparty to over-the-counter trades and as a broker and clearing firm for trades on exchanges; and
- (v) Citigroup had significant amounts of commercial paper and long-term senior and subordinated debt outstanding, and was a major participant in numerous domestic and international payment, clearing, and central counterparty arrangements.

The Federal Reserve especially noticed that Citigroup was one of the largest financial institutions in the U.S. and had extensive and diversified operations both in the U.S. and abroad (Section 129 EESA Report). It believed that Citigroup's failure would have destabilized the global financial system by seriously impairing already disrupted credit markets, including short-term interbank lending, counterparty relationships in qualified financial contract markets, bank and senior subordinated debt markets, and derivatives. Chairman Bernanke also believed at the time that Citigroup failure "would have been Lehman times two or three in terms of the financial sector and the economy" (SIGTARP 2011).

An FRBNY official also noted that the timing for the announcement of the guarantee program was crucial. In order to indicate to the global market that the U.S. government was guaranteeing Citigroup's tail risk, or unknown losses, it was aiming to announce the program before the markets opened in Asia. According to the official, the term sheet worked by "convincing the skittish market that the Federal Government was taking the risk, even though the risk really remained with Citigroup," because the Citigroup loss position was greater than anticipated losses. While the parties failed to meet that deadline, the announcement was made within hours of the opening of the Asian markets (Ibid,. 2011).

The Federal Reserve Board, on the other hand, did not expect this program to generate any real losses for the Federal Reserve and the U.S. taxpayers since a substantial protection of loss was already provided by Citigroup, the Treasury, and the FDIC. Before any financing would be provided under the Federal Reserve facility, the three entities' loss position would have to be exhausted first and any financing provided under its own facility would have had to be fully collateralized (Section 129 EESA Report).

### **Assessment of the Program**

On November 24, 2008, the first trading day after the government announcement of the guarantee provided for Citigroup, several market indicators reversed their adverse trends from the previous week. For example, Citigroup's stock price increased from \$3.77 to \$5.95 a share, temporarily reversing the stock's downward trend. At the same time, Citigroup's credit default swap spread, or the price of insuring its debt, declined from 4.6% to 3.6% (SIGTARP 2011).

However, not all government participants were convinced that this proposed plan was sufficient to fix the problem with Citigroup. "I don't think this [additional assistance] is going to fix Citi. And unless you figure out a way to stabilize the situation, we are going to be back in here writing more checks," FDIC Chairman Bair noted during the FDIC Board systemic risk discussions about Citigroup on November 23, 2008. "We all need to be realistic about some of the underlying problems at this institution. It's not just because the market is having problems; this institution has some problems very specific to itself...We all need to work together on how we need to fix that." In an email to Citigroup's regulators on February 22, 2009, Chairman Bair emphasized FDIC's view that Citigroup required "greater senior management bank experience" and the need for management changes "at the top of the house" (Ibid., 2011).

The study by the Office of the Special Inspector General for the Troubled Asset Relief Program (SIGTARP) established by EESA, observed that the conclusion of government actors to save Citigroup was strikingly ad hoc. It noted that the consensus that Citigroup was too systemically significant to be allowed to fail appeared to be based as much on gut instinct and fear of the unknown as on objective criteria.

On the other hand, SIGTARP found that the government constructed a plan that not only achieved the primary goal of restoring market confidence in Citigroup, but also carefully controlled the overall risk of government loss on the asset guarantee. It acknowledged that the government drove a particularly hard bargain on behalf of taxpayers and the eventual selection of assets for inclusion in the pool was driven largely by government-imposed criteria. This included a take-it-or-leave-it proposal that required Citigroup to absorb the first \$37 billion in losses in the asset pool as well as 10% of any losses in excess of that amount in return for approximately \$7 billion in Citigroup preferred stock; and \$20 billion capital injection in return for preferred stock, even though Citigroup did not request such an injection (Ibid., 2011). AGP is now closed and has so far resulted in a positive return of over \$3 billion for the taxpayers (Treasury Webpage).

# References

12 UCSC Section 343, before amended by the Dodd-Frank Act

Amendment of the Debt Guarantee Program to Provide for the Establishment of a Limited Six-Month Emergency Guarantee Facility, 74 FR 54743, October 23, 2009

Asset Guarantee Program, Treasury Webpage

Chairman's Statement on the Temporary Liquidity Guarantee Program, October 23, 2008

Emergency Economic Stabilization Act of 2008, 110 P.L. 343,122 Stat. 3765, 2008 Enacted H.R. 1424, 110 Enacted H.R. 1424, §102

Exchange Stabilization Fund, Resource Center, U.S. Department of Treasury

Extraordinary Financial Assistance Provided to Citigroup, Inc., Office of the Special Inspector General for the Troubled Asset Relief Program, January 13, 2011

FDIC Announces Plan to Free Up Bank Liquidity, October 14, 2008

Final Rule Regarding Amendment of the Temporary Liquidity Guarantee Program to Extend the Transaction Account Guarantee Program, 75 FR 36506, June 28, 2010

Frequently Asked Questions About Treasury's Temporary Guarantee Program for Money Market Funds, September 29, 2008, U.S. Department of Treasury

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

Guarantees and Contingent Payments in TARP and Related Programs, Congressional Oversight Panel, November Oversight Report, November 6, 2009

Joint Statement by Treasury, Federal Reserve, and the FDIC on Citigroup, November 23, 2008

Money Market Funds, SEC Webpage

The Next Phase of Government Financial Stabilization and Rehabilitation Policies, U.S. Department of Treasury, September 2009

Professional Money Fund Is Closed by Putnam, The New York Times, September 19, 2008

Proposed Recommendations Regarding Money Market Mutual Fund Reform, Financial Stability Oversight Council (FSOC), November 2012

Report Pursuant to Section 129 of the Emergency Economic Stabilization Act of 2008: Authorization to Provide Residual Financing to Citigroup, Inc. For a Designated Asset Pool Report to Congress Pursuant to Section 102 of the Emergency Economic Stabilization Act, U.S. Department of Treasury, December 31, 2008

Reserve Primary Money Fund Falls Below \$1 a Share (Update4), Bloomberg, September 16, 2008

Secretary of the Treasury Timothy F. Geithner Written Testimony before the Congressional Oversight Panel, U.S. Department of Treasury, September 10, 2009

- Secretary Written Testimony before the House Committee on Oversight and Government Reform, U.S. Department of Treasury, January 27, 2010
- Section 131 of P.L. 110-343
- Statement by Federal Deposit Insurance Corporation Chairman Sheila Bair, U.S. Treasury, Federal Reserve, FDIC Joint Press Conference, October 14, 2008
- Statement of Jason C. Cave, Deputy Director for Complex Financial Institutions Monitoring, Office of Complex Financial Institutions, Federal Deposit Insurance Corporation on the Temporary Liquidity Guarantee Program, Congressional Oversight Panel, Washington, D.C., March 4, 2011
- Temporary Liquidity Guarantee Program, Final Rule, 12 CFR Part 370, Federal Register, Vol 73, No. 229, Nov 26, 2008.
- Treasury Announces Expiration of Guarantee Program for Money Market Funds, September 18, 2009, U.S. Department of Treasury
- Treasury Announces Extension of Temporary Guarantee, March 31, 2009, U.S. Department of Treasury
- Treasury Announces Extension of Temporary Guarantee Program for Money Market Funds, November 24, 2008, U.S. Department of Treasury
- Treasury Announces Guaranty Program for Money Market Funds, September 19, 2008, U.S. Department of Treasury
- Treasury to Guarantee Money Market Funds, The New York Times, September 19, 2008
- Treasury's Guarantee Program for Money Market Mutual Funds: What You Should Know, FINRA Investor Alert

Development of this case has been supported by a generous grant from the Alfred P. Sloan Foundation to the Yale Program on Financial Stability.

Copyright, 2015, 2020 © Yale University. All rights reserved. To order copies of this material or to receive permission to reprint any or all of this document, please contact the Yale Program for Financial Stability at ypfs@yale.edu.