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Abstract

In September 2008, in the midst of the broader financial crisis, the Federal Reserve Board of Governors used its emergency authority under Section 13(3) of the Federal Reserve Act to authorize the largest loan in its history, a $85 billion collateralized credit line to American International Group (AIG), a $1 trillion insurance and financial company that was experiencing severe liquidity strains. In connection with the loan, the government received an equity interest representing 79.9% of the company's ownership. AIG continued to experience a depressed stock price, asset devaluations, and the risk of ratings downgrades leading to questions about its solvency. To stabilize the company, the government committed additional assistance, including equity investments under the Troubled Assets Relief Program and asset purchases, for a total commitment of $182.3 billion. AIG survived as a smaller entity and repaid all amounts owed to the government, which, along with the government's sale of its AIG equity stake, resulted in a profit of $22.7 billion for the government and taxpayers (Treasury 2013, 14). In this case we discuss the government's actions on an aggregate basis and analyze how the rescue was conceived and executed in order to better understand the unique lessons to be learned and possibly applied to future crisis events.

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[1] This is one on of seven YPFS case modules, all published in 2021, that consider the various elements of the government's rescue of American International Group. See page 5 for a complete list of the cases which are available from the Journal of Financial Crises at https://elischolar.library.yale.edu/journal-of-financial-crises/.

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Keywords: AIG, American International Group, FRA Section 13(3), nonbank, liquidity, capital injections, too-big-to-fail, Maiden Lane II, Maiden Lane III, nationalize, TARP

Introductory note: In analyzing the programs that are the focus of this survey, a color-coded system is used to highlight particularly noteworthy design features. This system is as follows:

Color	**Meaning**
BLUE—INTERESTING	A design feature that is interesting and that policymakers may want to consider. Typically, this determination is based on the observation that the design feature involves a unique way of addressing a challenge common to this type of program. Less commonly, there will be empirical evidence or a widely held consensus that the design feature was effective in this context, in which case we describe that evidence or consensus.
YELLOW—CAUTION INDICATED	A design feature that policymakers should exercise caution in considering. Typically, this determination is based on the observation that the designers of the feature later made significant changes to the feature with the intention of improving the functioning of the program. Less commonly, there will be empirical evidence or a widely held consensus that the design feature was ineffective in this context, in which case we describe that evidence or consensus.
BLUE and YELLOW—INTERESTING BUT CAUTION/SCRUTINY ALSO INDICATED	A design feature that policymakers may want to consider adopting but with care in some circumstances.
FOOTNOTE	Each highlighted design feature is accompanied by a footnote that explains why we chose to highlight it as we did and often includes additional resources such as YPFS Lessons Learned Oral History Project interviews. These footnotes are italicized to identify them for the reader.

American International Group 2008: United States Context	
GDP (SAAR, Nominal GDP in LCU converted to USD)	$14,681.5 billion in 2007 $14,559.5 billion in 2008
GDP per capita (SAAR, Nominal GDP in LCU converted to USD)	$47,976 in 2007 $48,383 in 2008
Sovereign credit rating (5-year senior debt)	As of Q4, 2007: Fitch: AAA Moody's: Aaa S&P: AAA As of Q4, 2008: Fitch: AAA Moody's: Aaa S&P: AAA
Size of banking system	$9,231.7 billion in total assets in 2007 $9,938.3 billion in total assets in 2008
Size of banking system as a percentage of GDP	62.9% in 2007 68.3% in 2008
Size of banking system as a percentage of financial system	Banking system assets equal to 29.0% of financial system in 2007 Banking system assets equal to 30.5% of financial system in 2008
5-bank concentration of banking system	43.9% of total banking assets in 2007 44.9% of total banking assets in 2008
Foreign involvement in banking system	22% of total banking assets in 2007 18% of total banking assets in 2008
Government ownership of banking system	0% of banks owned by the state in 2008
Existence of deposit insurance	100% insurance on deposits up to $100,000 for 2007 100% insurance on deposits up to $250,000 for 2008
Author-compiled. *Sources: Bloomberg; World Bank Global Financial Development Database; World Bank, Bank Regulation and Supervision Survey; Federal Deposit Insurance Corporation.*	

I. Introduction

The Yale Program on Financial Stability (YPFS) has written seven case studies that examine in detail the various elements of the government's assistance to American International Group (AIG).[8] In this overview case, Module Z, we review the government's actions on a combined basis and analyze how the rescue was conceived and executed in order to better understand how nonbank financial institutions in distress may be addressed. Although the rescue of AIG embodied unique characteristics that must be considered, we believe that the lessons learned through this analysis may also apply to other types of nonbanks as well. While this overview case may be read on its own, it is best read in connection with the other YPFS AIG cases, which provide additional detail with respect to each intervention utilized.

In the first part of this case, we review the background of the market factors and particular circumstances that led up to AIG's weakened position. We next consider the interventions taken by the government to support the firm beginning in September 2008. Then, we discuss in detail the key decisions made by the government and highlight unique issues presented by AIG. Lastly, we discuss conclusions that may be of assistance in future efforts.

II. Overview

Background

The fall of 2008 marked a period of severe economic distress for major banks and financial institutions around the world, as a 10-year U.S. housing bubble burst and its effects began to reverberate throughout the financial system. These effects included a widespread decline in

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[8] The seven YPFS case modules, all published in 2021, considering the various elements of the government's rescue of American International Group are:

- "The Rescue of American International Group, Module A: The Revolving Credit Facility" by Alec Buchholtz and Aidan Lawson.
- "The Rescue of American International Group, Module B: The Securities Borrowing Facility" by Lily Engbith, Alec Buchholtz, and Devyn Jeffereis.
- "The Rescue of American International Group, Module C: AIG Investment Program" by Alec Buchholtz and Aidan Lawson.
- "The Rescue of American International Group, Module D: Maiden Lane II" by Lily S. Engbith and Devyn Jeffereis.
- "The Rescue of American International Group, Module E: Maiden Lane III" by Lily S. Engbith and Devyn Jeffereis.
- "The Rescue of American International Group, Module F: The AIG Credit Facility Trust" by Alec Buchholtz and Aidan Lawson.
- "The Rescue of American International Group, Module Z: Overview" by Rosalind Z. Wiggins, Aidan Lawson, Steven Kelly, Lily S. Engbith and Andrew Metrick.

Cases are available from the Journal of Financial Crises at https://elischolar.library.yale.edu/journal-of-financial-crises/.

housing prices, an increase in delinquencies and foreclosures, and a considerable decrease in the value of residential mortgage-backed securities (RMBS), collateralized debt obligations (CDOs), and other real estate–related assets. Beginning in the fall of 2007, credit markets began to be disrupted and, within the year, many such markets practically froze as both governments and banks attempted to protect themselves from an unprecedented downturn.

AIG, one of the largest insurance companies in the world with over $1 trillion in total assets, faced significant exposure to this global market volatility (AIG 2008a, 50). In addition to traditional insurance products, the company had also sold complex derivatives, invested in mortgage-backed securities (MBS) in some of its portfolios, and borrowed from the commercial paper and repurchase, or repo, wholesale funding markets (AIG 2008a, 86). Some of these exposures had begun to worry investors and market participants.

In September 2008, a little more than a week after two mortgage-finance government-sponsored enterprises (GSEs), Fannie Mae and Freddie Mac, were taken over by the government, AIG found itself in the throes of a liquidity crisis (FHFA n.d.1; GAO 2011, 6). On September 15, 2008, each of the three major credit rating agencies downgraded AIG's rating by two to three levels (GAO 2011, 6; FCIC 2011, 349). The negative effects of the downgrades, including costly collateral calls from AIG counterparties and heightened fears of eventual insolvency, were further exacerbated by news of Lehman Brothers' collapse on that same day, and the corporation's stock price fell 61% (GAO 2011, 6-7). On September 16, in hopes of avoiding further destabilization of the financial system, the Board of Governors of the Federal Reserve announced that, with the full support of the Treasury Department, it had authorized the Federal Reserve Bank of New York (FRBNY) to lend up to $85 billion to AIG (BdofGov2008b; AIG 2008b, 1). The loan was also intended to provide AIG time to sell assets and restructure in an orderly manner (BdofGov 2008e, 6). Ultimately, the FRBNY and Treasury would, over the next six months, invest additional funds in AIG in order to stabilize the company, including equity investments under the Troubled Assets Relief Program (TARP) and asset purchases (Webel 2017, 9–17). The total commitment would amount to $182.3 billion, the largest rescue of a single entity during the crisis (Treasury 2012b; Treasury 2013, 14).

There were two main sources of AIG's liquidity drain—the company's need to meet cash collateral demands by securities borrowers and the collateral calls by credit default swap (CDS) counterparties and other counterparties. These liquidity needs compelled the company to seek assistance from the Federal Reserve.

Securities Lending Program

In 1997, AIG started an in-house securities lending program (SecLending Program) through its insurance subsidiaries (Peirce 2014, 18). At the time, the practice was seen as a relatively risk-free way to increase returns on corporate bonds and other stable securities that it held (Peirce 2014, 18). An AIG subsidiary, AIG Securities Lending Corp., lent high-quality securities owned by participating insurance subsidiaries to counterparties in exchange for cash collateral (Peirce 2014, 18). Another subsidiary, AIG Global Investment Corp (AIG GIC), then reinvested the cash collateral to generate income (Peirce 2014, 18). Contracts ranged in term from overnight to three months (COP 2010, 43).

Securities lending is generally a low-risk way for insurance companies to earn modest sums of money on assets that would otherwise be sitting idle (COP 2010, 43). Normally, the proceeds from such a program are invested in liquid assets such as short-term Treasury or corporate bonds or kept in cash; these investments facilitate the ability to return the cash collateral to the lender (Peirce 2014, 18; COP 2010, 43). Prior to 2008, however, AIG began investing in more aggressive investments, particularly RMBS and other illiquid assets, taking on increased risk to maximize its returns (COP 2010, 43–44). The SecLending Program was profitable and grew from approximately $10 billion in 2001 to approximately $80 billion in 2007, about 60 percent of which was invested in RMBS (Peirce 2014, 18; COP 2010, 43).

As early as July 2006, the New York State Insurance Department (NYSID), which regulated AIG's New York–based insurance subsidiaries, had taken an interest in the SecLending Program, considering the investments "aggressive."[9] Eventually the NYSID insisted that the company wind down its Securities Lending asset pool and "that the holding company provide a guarantee to the life companies to make up for any losses that were incurred [up to $5 billion] as that happened" (Moriarty 2010, 4). Michael Moriarty, an executive from the NYSID, testified that the winding down encountered problems beginning in early 2007; some of the RMBS had begun to lose value and selling them would have meant taking losses (Moriarty 2010, 4). Nevertheless, by September 2008, the pool had been reduced by $18 billion to about $58 billion (Moriarty 2010, 4).

As markets became especially volatile during the summer of 2008, borrowers who had engaged in securities lending with AIG increasingly returned the borrowed securities, requesting their cash collateral back rather than rolling over their positions[10] (COP 2010, 43–44). However, the value of the RMBS in which AIG had invested the cash collateral had begun to collapse rapidly, making it difficult for AIG to liquidate the securities to repay the collateral (COP 2010, 44–46).

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[9] The Congressional Oversight Panel said of the program: "This duration mismatch represented an overly aggressive foray into outright speculation, or a misreading of the risks associated with subprime RMBS, or both . . . a blatant risk-management failure" (COP 2010, 44–48). Although the panel did not cast blame per se on the regulators, it did point out the disjointed overlay of various regulatory bodies and how the limitations of their jurisdictions limited their effective supervision of the totality of AIG's business (COP 2010, 19–24).

[10] Michael Moriarty testified that, in the opinion of the NYSID, the rush of SecLending borrowers to return their securities and terminate their contracts was exacerbated by the known troubles in the AIG Financial Products subsidiary. Moriarty noted that while many insurance companies engaged in this practice, AIG was the only one that saw an escalation of termination activity at this time. As he explained, "First, without the crisis caused by Financial Products, there is no reason to believe there would have been a sudden increase in demands by borrowers to return securities and retrieve their cash. Instead, we would have continued to work with AIG to unwind its program and believe that any losses would have been manageable" (Moriarty 2010, 3). (See also Dinallo 2010, 5–6.)

Credit Default Swaps

The second main source of liquidity demand AIG experienced was with respect to CDS that AIG had written, mostly on real estate–related multi-sector CDOs (COP 2010, 25). CDS are a type of insurance, a privately negotiated contract that obligate one party to pay another upon the occurrence of a negative credit event, such as a default of the assured security, bankruptcy, and other incidents of failure to pay (COP 2010, 27). CDS may also provide, as many of the ones written by AIG did, that the issuer post collateral with the buyer to secure the CDS contract (COP 2010, 255). If the risk of the underlying security increases or if the security is impaired, even prior to a default, counterparties may be entitled to request additional collateral (COP 2010, 255). If no event occurs during the contract, the issuer has no obligation to pay and retains the fees paid (COP 2010, 251).

Although they appear to operate as insurance, CDS are not regulated by federal or state authorities. The state insurance regulators examine the parent holding company only so far as it relates to the insurance business (COP 2010).

As of September 2008, AIG had written 140 CDS contracts on 112 mortgage-related CDOs with $71.5 billion (notional value) for 20 counterparties (GAO 2011, 56). During the summer, as the market value of the CDOs underlying the CDS agreements declined and AIG's own credit rating dropped due to losses on these and other mortgage-related exposures, AIG faced increasing collateral calls from counterparties looking to protect their CDS contracts (Baxter and Dahlgren 2010, 4). AIG AIGFP had posted $16.5 billion of net collateral by July 31 and was facing collateral calls of $16.1 billion (AIG 2008a, 121; AIG 2009b, 3).

On September 15, when S&P downgraded its rating on AIG by three notches to A– with a negative outlook, AIG Financial Products (AIGFP) estimated it needed $20 billion to satisfy collateral calls and transaction termination payments, which it could not fund from market sources (AIG 2009b, 4). Moody's and Fitch also downgraded AIG by two notches to A2 and A respectively (FCIC 2011, 349). By September 30, collateral demands had soared to approximately $32 billion (AIG 2009b, 4).

Figure 1: AIG Credit Ratings Downgrades by Agency

	Standard & Poor's	Moody's	Fitch
September 14, 2008	AA–	Aa3	AA–
September 15, 2008	A–	A2	A
Levels changed	–3	–2	–2

Sources: FCIC 2011; Bloomberg.

The Regulators

State Insurance Regulators. In the US, insurance is regulated at the state level. Since AIG operated in all 50 states, it would have been subject to regulation by every state insurance

agency and subject to state-level regulation regarding compliance with policy requirements and reserves. AIG's SecLending operations were subject to the jurisdiction of the insurance commissioners because they involved the investment of assets of regulated insurance subsidiaries. The state regulators had authority to regulate the holding company on matters involving the insurance subsidiaries. Other portions of AIG's business, such as the financial services business, were not directly regulated by federal or state authorities.
Since the parent company was both headquartered in New York and a significant employer in the state, and that the NYSID was a well-respected regulator, the New York insurance division took a leading role in regulating the company and coordinating with other regulators to achieve uniform results (Dinallo 2008b, 2). Eric Dinallo, former superintendent of NYSID, testified before the House Committee on Oversight and Government Reform that the department had increased its scrutiny of the company and its exposure to credit default swaps starting in February 2008 (Dinallo 2008b, 3). He also discussed a plan by the state to permit the parent holding company to use $20 billion in excess surplus assets from its insurance subsidiaries, an unusual move that was ultimately aborted when a private-sector rescue plan fell apart (Dinallo 2008b, 5).

Office of Thrift Supervision. AIG also owned a small thrift savings organization, which was regulated by the Office of Thrift Supervision (OTS), a federal agency (FCIC 2011, 350). AIG also chose to designate the OTS as the regulator of its consolidated operations in order to satisfy European Union requirements that the consolidated entity at the holding company level be subject to a prudential regulator. This was a responsibility that OTS would later admit it was wholly unprepared for, especially with respect to understanding the liquidity risks inherent in AIG's CDS portfolio (FCIC 2011, 350). The agency would be criticized by many parties including the FCIC:

> The OTS failed to effectively exercise its authority over AIG and its affiliates: it lacked the capability to supervise an institution of the size and complexity of AIG, did not recognize the risks inherent in AIG's sales of credit default swaps, and did not understand its responsibility to oversee the entire company, including AIG Financial Products.. (FCIC 2011, 352).

The Fed was not AIG's regulator, but it has responsibility to monitor the stability of the financial system. In August 2008, as the Fed considered expanding access to its emergency lending to other systemically important institutions, it began to look closer at AIG (and GE Capital) (FCIC 2011, 345-346).

In August, Fed officials met with OTS, which reported that it was "generally comfortable with [the] firm's current liquidity . . . [and] confident that the firm could access the capital markets with no problem if it had to." However, the Fed did not agree. Ken Coffey, a Fed analyst, reported to his supervisors that:

> "AIG is under increasing capital and liquidity pressure" and "appears to need to raise substantial longer-term funds to address the impact of deteriorating asset values on its capital and available liquidity as well as to address certain asset/liability funding mismatches" (FCIC 2011, 346).

The OTS would later state that it had not been equipped to carry out supervision of the giant firm in any adequate fashion and that it "failed to recognize the extent of liquidity risk of the Financial Products subsidiary's credit default swap portfolio" (FCIC 2011, 350). In its report on the crisis, the Financial Crisis Inquiry Commission (FCIC) would consider the relationship "like a gnat on an elephant," finding the agency's lack of action totally inadequate to the task assigned it:

> The OTS failed to effectively exercise its authority over AIG and its affiliates: it lacked the capability to supervise an institution of the size and complexity of AIG, did not recognize the risks inherent in AIG's sales of credit default swaps, and did not understand its responsibility to oversee the entire company, including AIG Financial Products (FCIC 2011, 350, 352).

Program Description

Encouraging a Private-Sector Solution

AIG CEO Bob Willumstad first approached Tim Geithner, then–president of the FRBNY (and later Secretary of the Treasury), to request access to the discount window on July 29, 2008, but Geithner thought that to allow AIG access would create a run on the company (COP 2010, 58).

Shortly thereafter, during the weekend of September 12–14, Geithner and Treasury Secretary Hank Paulson were ensconced in the offices of the FRBNY with the heads of the major Wall Street banks trying to hammer out a solution to save the investment bank Lehman Brothers (COP 2010, 62–65). On Saturday, Paulson was told that AIG was in dire straits and in serious need of immediate liquidity; he and Geithner arranged to meet with Willumstad (Paulson 2010, 200). Willumstad reported that the company was trying to raise $40 billion by selling assets and informed Paulson and Geithner that without a major infusion of cash, the company would likely run out of money during the upcoming week (Paulson 2010, 204). AIG had been having trouble rolling over its financial commercial paper and asset-backed commercial paper, which totaled approximately $20 billion, and some banks were refusing it repo funding (FCIC 2008b; FCIC 2008a). AIG was also concerned about a rating agency meeting that was scheduled to occur on September 15 (GAO 2011, 6). A ratings downgrade would trigger off-balance sheet commitments—including collateral calls, contract terminations, and liquidity puts—of as much as $33 billion (FCIC 2011, 346–347).

When it became evident that Lehman would file for bankruptcy, which would likely cause a default under AIG CDS contracts leading to seizure by one or more insurance regulators, Paulson assigned two of his deputies, Dan Jester and Jeremiah Norton, to work with Geithner on a plan to save AIG (Paulson 2010, 220–221). Geithner utilized the Fed's convening authority to initiate efforts towards a private solution for AIG, engaging some of the Wall

Street executives that had been discussing Lehman.[11] The Fed prompted JPMorgan Chase and Goldman Sachs to lead an effort assembling a syndicate of banks willing and able to provide a bridge loan to AIG of $75 billion (FCIC 2011, 349).

However, in the wake of Lehman Brothers' filing for bankruptcy on September 15th, the effort failed[12] (GAO 2011, 34–35). Some of the reasons given for this were (1) the inability to determine with any certainty how much liquidity AIG needed; (2) questions about whether AIG had sufficient collateral to secure a loan of the size needed; and (3) the desire by many financial institutions to preserve cash and pull back from risk given the escalating turmoil in the markets (COP 2010, 67–68; Baxter and Dahlgren 2010; SIGTARP 2009b, 8).

Up until the last minute, Geithner continued to hold to the view that a private solution was the best solution, stating that it "seemed inconceivable that the Federal Reserve could or should play any role in preventing AIG's collapse" (COP 2010, 65; Geithner 2014, 192). FRBNY, Treasury, and NYSID staff were present at the meetings of the private consortium (Dinallo 2010, 19). Additional FRBNY staff also "worked to determine how a failure of AIG would affect the financial system and the broader economy and examined their options for containing the damage from an AIG failure" (COP 2010, 62). They did this with the limited information they could gather about AIG. Because the FRBNY was not the company's regulator, it had no history or knowledge about the firm's operations, structure, or reach (Baxter and Dahlgren 2010). This lack of knowledge greatly complicated the rescue efforts; the government was learning the company as it was executing the rescue.

Direct Government Assistance

In December 2007, the Fed had implemented the Term Auction Facility (TAF)[13] to provide overnight lending to banks through auction, should they need it. In March, due to growing concerns regarding primary dealers, the Fed had implemented the Term Securities Lending

[11] Geithner has said that seeking a private solution was always the first option, especially one modeled after the actions the government took in 1998 to save the giant hedge fund Long-Term Capital Management (LTCM) from collapse (Geithner 2019, 11). Then, the Federal Reserve had used its convening authority to gather LTCM's 15 biggest creditors, who eventually agreed to provide a $3.65 billion lifeline to the fund in exchange for a 90 percent ownership, avoiding a disorderly liquidation (Geithner 2019, 11; Lowenstein 2000) The Fed and Treasury employed this strategy with respect to Lehman and AIG, although it ultimately failed (Geithner 2019, 19–20, 36).

[12] Former FRBNY General Counsel Tom Baxter told the FCIC: "Once Lehman filed [for bankruptcy] on the morning of the 15th, everyone decided that, 'we've got to protect our own balance sheet,' and the banks that were going to provide the $75 billion decided that they were not going to" (FCIC 2011, 349). Sarah Dahlgren, a senior FRBNY official who would lead the AIG team, agreed. "Lehman's bankruptcy 'was the end of the private-sector solution,'" she told the Commission (FCIC 2011, 349). The government became the company's last hope (Geithner 2014, 192).

[13] The TAF made discount window funding available to banks via auction, a structure which was thought necessary because the stigma attached to discount window borrowing was keeping banks from utilizing the facility (English and Mosser 2020, 57-62).

Facility (TSLF)[14] and the Primary Dealer Credit Facility (PDCF)[15] to provide 28-day and overnight lending, respectively, to primary dealers. As noted on page 9, as wholesale credit markets tightened during the summer of 2008, the Fed considered whether other systemically important entities[16] might also be at risk of disturbances in their liquidity provisioning (FCIC 2011, 345).

By September, the FRBNY had begun to consider that a failure of AIG would have far-reaching consequences to a global financial system that was already weakened. A number of AIG risks were identified, including: (1) its limited cash and the potential for runs in its funding sources; (2) "substantial off-balance-sheet liquidity needs"; (3) contract terminations; and (4) "the potential impact on prices of liquidating an $835 billion securities portfolio to cover liabilities" (FCIC 2011, 346).

The decision-makers were also being informed of how broadly and deeply AIG's problems reached. FRBNY Assistant Vice President Alejandro LaTorre wrote to President Geithner and others on September 12:

> The key takeaway is that they are potentially facing a severe run on their liquidity over the course of the next several (approx. 10) days if they are downgraded . . . Their risk exposures are concentrated among the 12 largest international banks (both U.S. and European) across a wide array of product types (bank lines, derivatives, securities lending, etc.) meaning [there] could be significant counterparty losses to those firms in the event of AIG's failure" (FCIC 2011, 347).

By Tuesday, September 16, Fed Chairman Ben Bernanke, Geithner, and Paulson concluded that there was little choice but to lend to AIG, since a bankruptcy of the parent holding company would come with a litany of consequences to the already weakened financial system. These included the prospect that some creditors would not be made whole, immediate write-downs for banks, the impact of liquidating billions of assets, and the risk that a state regulator would seize one of the insurance subsidiaries, triggering a domino effect that would complicate the process. Once the decision to lend was made, Paulson told President George W. Bush that the already weakened financial system could not withstand AIG's collapse (Paulson 2010, 235–237; Wessel 2009 25-26).

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[14] The TSLF offered Treasury securities held by the System Open Market Account (SOMA) for a loan over a one-month term against other program-eligible collateral; presumably the dealers could then secure a market loan against the Treasuries (BdofGov n.d.2).

[15] The PDCF, announced on March 18, 2008, in the wake of Bear Stearns's near collapse, provided overnight collateralized loans to primary dealers (see FRBNY n.d.6).

[16] The other entity reviewed was GE Capital, which was a much larger participant in the commercial paper market with $90 billion outstanding (FCIC 2011, 345).

Revolving Credit Facility

On September 16, 2008, the government announced that it would lend AIG up to $85 billion on a collateralized basis for a two-year period, pursuant to the Revolving Credit Facility (RCF) (BdofGov 2008a). The purpose for the loan as stated in the Fed's announcement was "to assist AIG in meeting its obligations as they come due" and to "facilitate a process under which AIG will sell certain off its businesses in an orderly manner, with the least possible disruption to the overall economy" (BdofGov 2008a). The RCF, which the parties finalized on September 22, was authorized by the Board of Governors pursuant to the Fed's emergency authority under Federal Reserve Act (FRA) Section 13(3) (12 USC § 343) and had the "full support" of the United States Treasury (BdofGov 2008a).

As a starting point for the RCF, given the tight time constraints, the Fed relied on a term sheet that had been prepared by the private-sector consortium, but the facility terms ultimately differed in significant ways[17] (Baxter and Dahlgren 2010, 4; Alvarez, Dudley, and Liang 2020, 137; Starr v. United States and AIG 2015). The several differences between the private consortium proposal and the RCF included the term (18 months vs. 24 months) and the interest rate (LIBOR plus 6.5 percentage points vs. LIBOR plus 8.5 percentage points). The Government Accountability Office (GAO) found that "FRBNY officials could explain only the increase in the base [interest] rate. The officials said an advisor made that increase, on the theory that the loan had become riskier since the failed private-sector attempt" (GAO September 2011, 125). (See Key Design Decision No. 8 below.)

As shown in Figure 2, the RCF was a secured loan and with an interest rate on drawn amounts of the 3-month LIBOR plus 8.5%, for a rate of 12%, at a time when the Fed had lowered the Federal funds rate to just 2 percent.[18] The RCF also carried an annual commitment fee on undrawn funds of 8.5%, which the private-sector term sheet did not have (GAO 2011, 125; Starr v. United States and AIG 2015, 16–17). The FRBNY did not provide an explanation for

[17] *Relying on a private-sector term sheet, or term sheet from a previous intervention, is rare but may be an intelligent timesaving device in the midst of a crisis—the private consortium term sheet had been prepared by one of the most respected lawyers of syndicated lending and FRBNY officials were very comfortable with it as a starting point (Baxter 2021; Dahlgren 2018, 2–3). However, scrutiny should always be applied. Institutions should consider whether the terms included therein are what they need and best suit the particular situation being addressed. Also, private-sector terms may reflect goals that differ from those the government intends to guide it, or which others think should guide it. In the AIG intervention, this distinction was highlighted by the Congressional Oversight Panel (COP) and the US Court of Federal Claims in a related lawsuit (later vacated), both which thought that the Fed had strayed from its guiding principles (COP 2010; Starr v. United States and AIG 2015). However, even a term sheet from a previous government-sponsored intervention may not fully reflect or address the current issues and circumstances and should be carefully reviewed for fit. Utilization of existing term sheets also can serve as a contemporaneous record supporting the decisions made, which will be helpful in a number of ways including later testimony before oversight bodies. (See also footnote 65.)*

[18] There was concern about the interest rate from government officials, but there were no changes by the time the FRB approved the loan to AIG on September 16 (GAO 2011, 126). An FRBNY told the GAO that the discount window staff felt the interest rate was "extremely high and a burden to AIG and thus seemed contrary to the idea of trying to sustain the firm" (GAO 2011, 125, footnote 167). Based on additional knowledge that it had gained about the firm, the FRBNY substantially lowered the RCF interest rate and commitment fees in the first restructuring plan of November 2008 (Baxter 2021; BdofGov 2008f).

this particular fee but GAO wrote of the FRBNY that "in general, they intended the original Revolving Credit Facility terms to be onerous, as a way to motivate AIG to quickly repay the FRBNY and to give AIG an incentive to replace the government lending with private financing" (GAO 2011, 125–126).[19]

Figure 2: Summary of AIG Revolving Credit Facility (Original Terms)

Maximum amount of commitment	$85 billion
Term of commitment	24 months
Interest rate	LIBOR plus 8.5% (12%)
Interest rate floor	3.5% LIBOR floor
Annual commitment fee on undrawn funds	8.5%
Collateral	All assets of AIG and its primary non-regulated subsidiaries, including the stock of regulated subsidiaries
Peak utilization	$72.3 billion on October 28, 2008
Equity kicker	Government received 79.9% equity interest in AIG
Dividends	Government could veto dividends of common and preferred shareholders
Management	CEO resigned/government appointed replacement

Source: BdofGov 2008a.

[19] *Care should be taken to anticipate the possible broader effects and unintended consequences of any proposed intervention, and it may be wise to consider tailoring the intervention so as to mitigate such effects and consequences. While the "onerous" terms of the RCF were consistent with the government's desire to create an incentive for AIG to replace the RCF with private funding expeditiously, and were also intended to address moral hazard, the facility and the company's aggressive usage created challenges for the company, including concern from the rating agencies (Bernanke 2008, 1–2; Dahlgren 2018, 2–3). "AIG's debt-to-equity ratio became inconsistent with its investment-grade rating" putting it at risk of further ratings downgrades (Millstein 2010, 7). "A company's debt to equity ratio is a fundamental metric by which credit rating agencies derive corporate credit ratings" (Millstein 2010, 7).*

It is possible, and in another context should be considered, whether changes of various magnitudes can achieve the goals of quicker repayment while avoiding some of the harsher impacts that occurred in the AIG context. A 2008 legal memorandum from former Board General Counsel Scott G. Alvarez and others in the Legal Division discussing the assistance provided to Bear Stearns confirms that "The Board, . . . has complete statutory discretion to determine the timing and the conditions of lending under section 13(3)" (Alvarez et al. 2008, 12). The various Federal Reserve broad-based lending facilities (and even its original bridge loan to Bear Stearns, which was extended at the primary credit rate) provide examples of a lighter penalty rate and demonstrate that the Fed has discretion to calibrate rates to fit a particular situation (BdofGov 2016d and Alvarez et al. 2008).

Another consideration worth noting is parity with other interventions. If assistance to one entity is seen as being more punitive than the terms offered to others, there is a greater possibility that the government will be asked about this and required to offer an explanation for the difference. In the AIG context, it was pointedly noted by the COP that the RCF's initial interest rate and fees compared unfavorably to assistance provided to Citicorp, Bank of America, and the auto companies on less stringent terms.

Section 13(3) of the Federal Reserve Act requires that lending be secured to the satisfaction of the lending bank, in this case the FRBNY, and the RCF was secured by substantially all the assets of AIG and its non-regulated subsidiaries, which included the equity of substantially all its regulated insurance subsidiaries (COP 2010, 71).

As part of the Credit Agreement that established the RCF, the government was to receive a 79.9% equity interest in AIG through the issuance of Convertible Voting Preferred Stock and a warrant to purchase common stock (collectively referred to as the "Trust Stock"). This mechanism enabled the government to acquire effective control over the company with only a minimum expenditure of $500,000, as compared to the original warrant provision in the private-sector term sheet, which would have required $30 billion in exercise costs.[20]

The stipulation providing for the Trust Stock, sometimes referred to as the "equity kicker,"[21] is similar to provisions that are a common feature in private-equity deals. It was viewed by the Fed as a way to compensate the taxpayers for the extraordinary risk that it was undertaking in lending to AIG and "to penalize the shareholders of the Company for the fact that the Company had no alternative but to ask the government for extraordinary assistance" (Starr v. United States and AIG 2015, 60; BdofGov 2009b, 4; Geithner 2014, 196–97; Millstein 2010, 7). Since, at the time, it was not clear that either the Fed or Treasury had authority to own the shares, the Trust Stock was to be issued to and managed by the independent AIG Credit Facility Trust (the "Trust"), which had been established for that purpose (AIG 2008b, Exhibit D).[22] The Trust was to be managed by three independent Trustees appointed by the

[20] *A creative modification of the equity kicker (see Figure 2) from the original warrants of the private-sector term sheet to the purchase of the Trust Stock at a minimum cost enabled the government to gain effective control of the company at a much lower expenditure than it would have under the original warrant provision. (A similar result could possibly have also been achieved by making the warrant strike price de minimis.) Such a mechanism may be useful in future cases, but the government should proceed cautiously, and all the facts and circumstances of the particular case should be carefully considered. In the context of the assistance to AIG, the mechanism received much scrutiny and criticism. It engendered charges of nationalization and a shareholder lawsuit in which a court found that the FRBNY did not have authority to take control of the company. (See Key Design Decision No. 3 below.)*

[21] For more discussion of the legal authority underpinning the equity kicker, see pages 159–161 of Alvarez, Baxter, and Hoyt 2020.

[22] *The decision to have the Trust Stock held by an independent trust for the benefit of the taxpayers was a creative solution to the limits of authority that the government faced and to potential conflicts of interest. Structurally, the solution allowed control of the company to rest with the government and such decisions as voting for directors and dividends to be managed by experts separately to avoid any conflict that the FRBNY might have as lender, and always with the benefit of the taxpayers in mind. However, as further discussed in Key Design Decision No. 3 and in the accompanying footnotes, diligence should be applied to ensure that the independence of the entity, in form and substance, can withstand scrutiny as the AIG Trust largely did. Because of the previous relationships between the Fed-appointed trustees and how the Trust operated, the US Court of Federal Claims found that the Trust was effectively not independent but under the control of the FRBNY (Starr v. United States and AIG 2015, 30, 60–63). However, that decision was overruled and vacated (Starr v. United States and AIG 2017). Moreover, other jurists have concluded that the Trust was independent of the FRBNY (See Starr v. FRBNY 2012; upheld by Court of Appeals*

FRBNY in consultation with Treasury, who were to exercise the shareholder rights embodied in the preferred stock for the benefit of the Treasury and taxpayer (COP 2010, 99–101). [23]

Although it was extraordinary for the Federal Reserve to insist on government equity as a condition for a loan, the FRBNY believed that "the taxpayer should receive the same terms and conditions that the private sector wanted," according to a 2010 Congressional Oversight Report[24] (COP 2010, 72). A maximum 79.9% stake[25] allowed the Trust the largest share of ownership without requiring the government to consolidate AIG's debts and assets onto its own balance sheet, as would be required by generally accepted accounting principles (GAAP) if the government's interest was 80% or more.[26]

AIG's liquidity needs were immediate, and so on the day the RCF was announced, the FRBNY loaned the company $14 billion on a fully collateralized basis, through a demand promissory note secured on a portion of the AIG assets that were to secure the RCF (AIG 2008c, Preamble). By the time the RCF closed on September 22, there had been three additional

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for the Second Circuit [Starr v. FRBNY 2014]; and concurring opinion for the US Court of Appeals for the Federal Circuit [Starr v. United States and AIG 2017]). (See also Buchholtz and Lawson 2021c for a case study focusing on the AIG Trust.)

[23] The trustees were Jill M. Considine, former Chair of the Depository Trust & Clearing Corporation; Chester B. Feldberg, former chairman of Barclays Americas; and Douglas L. Foshee, Chair of the Board of Directors of the Federal Reserve Bank of Dallas, Houston Branch, and Central Houston, Inc. In testifying before the US House Oversight and Governance Reform (2009), the trustees described how they exercised their responsibilities of the Trust under the trust agreement and stated that they did consider themselves to be operating independently in accordance with the trust agreement and for the benefit of the Treasury and taxpayers.

[24] In addition to looking to the private-sector term sheet, which originally contained the equity kicker, this feature may have evolved in response to certain criticisms of the Bear Stearns rescue which was characterized as "the government took the downside risk but not any of the upside potential" (Baxter 2021).

[25] The approach of requiring the equity kicker was somewhat similar, but also different in significant ways, to the government rescues earlier that month of Fannie Mae and Freddie Mac. In those transactions, in addition to receiving *nonvoting preferred stock*, the government received warrants to purchase common stock representing 79.9 % of the common stock of each government sponsored enterprise (COP 2010, 71–72). The government also took the two companies under conservatorship, which gave it direct control over them. In the case of AIG, the government received convertible *voting preferred stock* and a small number of warrants, which combined to give the government a right to up to 79.9% of the common stock; thus, the government still received effective control over the company.

[26] *A maximum ownership interest of 79.9% will maximize the government's objectives of equity and control while avoiding the need to consolidate a company's debts and assets onto its own balance sheet, as would be required by generally accepted accounting principles (GAAP). If the government's interest was 80% or more, the government would be considered to control the company (Millstein 2010). For instance, even despite an $800 billion legislated increase in the debt ceiling to enable recapitalization of the GSEs, Treasury similarly took a 79.9% stake in those institutions to avoid bringing their trillions of dollars of liabilities onto the government balance sheet (See footnote 26) (Jester et al. 2020, 182). At the time of the intervention, AIG had approximately $1 trillion of liabilities (AIG 2008a). Moreover, changes to the intervention may alter this percentage and later require consolidation, as occurred with the assistance to AIG. Thus, this is an element that must be monitored closely.*

advances totaling $23 billion. The four demand promissory notes, totaling $37 billion, were rolled into the RCF (BdofGov 2008c, 4).

By October 1, the total amount drawn under the RCF had already reached approximately $62 billion, and it was clear that the facility would not be sufficient to meet AIG's liquidity needs (BdofGov 2016a; COP 2010, 84). Mounting losses on subprime RMBS investments and increased collateral calls on CDS contracts during the third quarter of 2008 caused AIG's leverage ratios to rise, leaving the company vulnerable to another credit downgrade (Geithner 2010). Although implementation of the RCF helped to relieve immediate liquidity concerns and temporarily avert further ratings downgrades, it did not directly address the sources of the cash drain or relieve counterparties' concerns (COP 2010, 84–87; Geithner 2010).

Securities Borrowing Facility

As markets became increasingly unstable and securities borrowers became more aware of the issues with AIGFP, those borrowers increasingly returned borrowed securities to AIG and, rather than roll over their positions, requested their cash collateral back (COP 2010, 33–34). However, AIG had invested this cash in RMBS, which were under significant devaluation pressures and becoming increasing illiquid (Peirce 2014, 26–28). As a result, AIG used some of the borrowing under the RCF to meet these cash demands from securities borrowers (BdofGov 2008e).

Figure 3: Summary of AIG Securities Borrowing Facility

Announcement date	October 6, 2008
Termination date	December 12, 2008
Maximum amount of commitment	$37.8 billion
Peak utilization	$20.5 billion
Term of commitment	24 months
Interest rate	100 basis points above the average overnight repo rate offered on the relevant collateral type
Collateral	High-quality securities returned by AIG's SecLending clients

Sources: BdofGov 2008e, 3; BdofGov 2016c.

Concerned about the sustainability of AIG's borrowing under the RCF, officials sought to redesign and expand assistance. On October 6, 2008, the Board of Governors, under Section 13(3), authorized the FRBNY to establish the Securities Borrowing Facility (SBF) to ease the intense liquidity pressures stemming from these cash demands (BdofGov 2008e, 1; COP 2010, 84).

Under the SBF, the FRBNY extended to AIG a maximum credit line of $37.8 billion in exchange for collateral in the form of investment-grade debt obligations (COP 2010, 84). (See Figure 3.) In essence, the FRBNY would step into the transaction being terminated by an AIG counterparty and accept the related lent securities as collateral (BdofGov 2008e, 3). The interest rate applied equaled 100 basis points above the average overnight repo rate offered on the relevant collateral type (BdofGov 2008e, 3).

AIG could use cash borrowed from the SBF to repay the SecLending Program counterparties' cash collateral and terminate their related securities lending agreements without being compelled to liquidate the related portfolio of RMBS (COP 2010, 84-85). The authorized amount under the SBF was sufficient to meet the cash collateral demands of all AIG's SecLending Program counterparties; maximum government exposure at the height of utilization of the SBF in November 2008 was $20.5 billion (AIG Securities Borrowing Facility data 2016b). The SBF was terminated with the establishment of Maiden Lane II as part of the November 2008 restructuring of federal assistance discussed below (BdofGov 2016c).

The November 2008 (First) Restructuring

A major concern that quickly arose with AIG stemmed from the rating agencies' concerns about the burden that the RCF, with its high interest rate and short term, placed on the company, and about the impact of the company's aggressive usage on its leverage ratios[27] (Alvarez, Dudley, and Liang 2020, 137). Also, potential asset devaluations and large losses on AIG's RMBS portfolio and derivatives, and its collapsing stock price, were creating capital concerns (Alvarez, Dudley, and Liang 2020, 137-138; AIG 2009a, 4). A downgrade would trigger higher collateral requirements and increased liquidity demands from counterparties (Alvarez, Dudley, and Liang 2020, 137).

Despite the government's initial effort to assist AIG, on October 3, Moody's downgraded AIG's senior unsecured debt rating to from A2 to A3 and kept the company on credit watch for further downgrades (COP 2010, 86). The credit rating agencies notified the company that its November 10 third-quarter results, where it was expected to report losses of $25 billion, would likely trigger an additional downgrade unless accompanied by "parallel announcement of solutions to its liquidity problems" (COP 2010, 86).

It was clear that further assistance was needed to address these concerns, and the government had a new tool. On October 3, Congress had passed the Emergency Economic Stability Act of 2008 (EESA), which created the Troubled Assets Relief Program (TARP), authorizing the Treasury to purchase assets or securities of troubled financial companies (EESA 2008).

On November 10, 2008, the FRBNY, Treasury, and AIG announced a (first) restructuring plan for AIG (executing it on November 25, 2008). The restructuring plan amended the terms of the RCF to make them less aggressive, contingent on Treasury's making a capital injection (BdofGov 2008g, 4–5). Additionally, two new facilities, Maiden Lane II (ML II) and Maiden Lane III (ML III), were designed to purchase the company's RMBS portfolio and the CDOs underlying its outstanding CDS, respectively (BdofGov 2008g, 7–8; BdofGov 2008d). (These

[27] *Intervention terms that appear effective from one perspective should also be evaluated from several perspectives, which may not at first be obvious. For companies that issue public securities and debt, the rating agencies will always be interested in evaluating any government assistance (Dahlgren 2018).*

latter facilities did not make use of TARP funds.) Further, in light of ML II, the SBF was to be terminated.

Treasury Equity Investment. Utilizing the Systemically Significant Financial Institutions (SSFI)[28] program, authorized under TARP, Treasury agreed to make a $40 billion equity investment in AIG (COP 2010, 86). In exchange, Treasury received 4 million shares of Series D Preferred Stock and a warrant to purchase approximately 2% of AIG's outstanding common stock (Treasury 2008b, 6).[29] These investments augmented AIG's capital, and AIG used some of the proceeds to pay back $35 billion of the $69.7 billion that it had drawn on the FRBNY's RCF, reducing its debt to FRBNY to $35.3 billion (BdofGov 2016a; Millstein 2018) The commitment under the RCF was also reduced to $60 billion (BdofGov 2016a). The November 2008 investment was intended to restructure AIG's balance sheet, "stabilize [its] business, and address rating agency concerns in order to allow [it to pursue] an orderly restructuring" (COP 2010, 86). On an aggregate basis, the government's investment increased, but the debt portion decreased.

Figure 4: Summary of the November 2008 Treasury Equity Investment

Maximum amount of commitment	$40 billion
Equity received	4 million shares of Series D Preferred Stock
Warrant received	To purchase approximately 2% of AIG's outstanding common stock
Use of funds	$35 billion used to pay down RCF debt
Other	Revolving Credit Facility commitment reduced by $25 billion to $60 billion

Source: BdofGov 2008f.

Maiden Lane II. Although the SBF assisted in relieving AIG's immediate liquidity pressures related to its SecLending Program, it did not attend to the collapsing values of the related RMBS in the investment portfolio, which were weighing down AIG's balance sheet and concerning rating agencies (US COP, 137–138). ML II[30] was designed to address more definitively the devaluation issue by creating a pool of funding to remove the SecLending investment portfolio from AIG's balance sheet.

ML II was a special purpose vehicle (SPV), a limited liability company created by the FRBNY. ML II would receive a loan of $19.5 billion from the FRBNY to purchase from AIG insurance

[28] The SSFI Program, later renamed the AIG Investment Program (because AIG was the sole beneficiary), was announced on November 10, 2008, as part of the restructuring of AIG assistance. See Buchholtz and Lawson 2021b.

[29] To maintain the government's overall equity stake in AIG at less than 80% (the percentage of ownership at which GAAP standards would have required the government to consolidate AIG into its balance sheet), Treasury's purchase of the Series D Warrant decreased the equity stake of the Series C Preferred Stock that would be issued to the Trust by 2% from 79.9% to 77.9% (COP 2010, 12). For more information on the changes implemented to the terms of the RCF and the preferred stock, see Buchholtz and Lawson 2021a and 2021b.

[30] The special purpose vehicle (SPV) was called ML II because the first (unnumbered) Maiden Lane had been formed in March 2008 to purchase assets from Bear Stearns to facilitate its merger with JPMorgan Chase.

subsidiaries the SecLending program RMBS portfolio, which became the security for the loans (see Figure 5). The FRBNY loan to ML II had a 6-year term (extendable at the FRBNY's discretion) and accrued interest at 1-month LIBOR plus 100 basis points (FRBNY n.d.4).
As of October 31, 2008, the portfolio had a total fair market value of $20.5 billion and par value of almost $40 billion (FRBNY n.d.4). The AIG insurance subsidiaries selling securities agreed to defer receipt of $1 billion of the purchase price until after the FRBNY loan was repaid in full. This deferred purchase price accrued interest at 1-month LIBOR plus 300 basis points (FRBNY n.d.4).

Figure 5: Summary of AIG Maiden Lane II

Maximum amount of Fed commitment	$22.5 billion
Maximum amount of Fed participation	$19.5 billion (loan)
AIG participation	$1 billion (deferred purchase price)
Securities purchased	RMBS with a total fair market value of $20.5 billion and par value of approximately $40.0 billion (as of October 31, 2008)
Use of funds	To refund cash collateral posted by the FRBNY through the Securities Borrowing Facility
Other	FRBNY Securities Borrowing Facility terminated; AIG Securities Lending Program terminated

Source: BdofGov 2008d.

After repayment in full of the FRBNY loan and payment of the deferred purchase price (and the accrued interest on each), remaining proceeds from ML II would be split: five-sixths to the FRBNY and one-sixth to the AIG insurance subsidiaries from which the securities had been purchased (FRBNY n.d.4).
Proceeds from the establishment of ML II were used to refund cash collateral posted by the FRBNY through the SBF, effectively terminating both its operations and the SecLending Program (FRBNY 2008a).

Maiden Lane III. In addition to collateral calls related to its SecLending Program, AIG faced increasing collateral calls from counterparties looking to protect their CDS contracts written on deteriorating multi-sector CDOs (COP 2010, 30–31). Although the RCF provided cash for AIG to meet its obligations, the CDS posed a serious and continuing liquidity strain on the company (COP 2010, 29–30). Further, unlike the SecLending Program, where the amount of the demands could be calculated, the demands under the CDS were less predictable, creating increasing uncertainty. To address these concerns, a second special purpose vehicle, ML III, was established to purchase the underlying CDOs from AIG's CDS counterparties and to terminate their related CDS agreements with AIG, thus halting future collateral calls (see Figure 6) (COP 2010, 91). ML III was prepared to hold the CDOs to maturity (Baxter 2010).

Figure 6: Summary of AIG Maiden Lane III

Maximum amount of Fed commitment	$30 billion
Maximum amount of Fed participation	$24.3 billion senior loan
AIG participation	$5 billion equity contribution
Securities purchased	CDOs with a total fair market value of $29.3 billion and par value of approximately $62.1 billion (as of October 31, 2008)
Use of funds	To purchase CDOs from AIG's CDS counterparties
Other	Related CDS terminated

Sources: BdofGov 2008d; FRBNY n.d.5.

ML III was funded by a $24.3 billion FRBNY senior loan and a $5 billion equity contribution from AIG, with AIG absorbing the first losses (COP 2010, 91). ML III purchased in two stages, on November 25 and December 18, a portfolio of CDOs worth $27.2 billion at fair market value, and $62.1 billion at par (COP 2010, 91). As part of the transaction agreement, counterparties retained $35 billion of collateral previously collected from AIG and thus effectively received full notional value for the CDOs, despite their then–current market value of less than 50% of par value (COP 2010, 91). This would become a sharp bone of contention with critics of the facility. However, the Fed has maintained that it considered and rejected other options before deciding that the ML III transactions provided the best permanent solutions to AIG's major liquidity drains (Baxter 2010; Baxter and Dahlgren 2010, 10–11; COP 2010, 196).

After repayment in full of the FRBNY loan and AIG's equity interest (each including accrued interest), remaining proceeds from Maiden Lane III would be split 67 percent to the FRBNY and 33 percent to AIG (FRBNY n.d.5).

The March 2009 (Second) Restructuring

On March 2, 2009, the US government announced a second restructuring plan for AIG, exchanging the dividend-cumulating Series D Preferred Stock for Series E Preferred Stock, which would "provide for non-cumulative dividends and limit AIG's ability to redeem the preferred stock except with the proceeds from the issuance of equity capital"[31] (Treasury 2009a, 1; BdofGov 2009a, 5). It was thought that the Series E shares would better resemble AIG common equity and therefore improve the company's financial leverage (Buchholtz and Lawson 2021b). These more limited terms were helpful to the overall composition of AIG's balance sheet as viewed by the rating agencies (GAO 2011, 48–49).[32] The Series E Preferred

[31] The 400,000 shares of Series E Preferred Stock were valued at $104,011.44 per share, up from the $10,000 per share of the Series D Preferred Stock. The higher proportional value per share for Series E shares also included about $1.6 billion in cumulative unpaid dividends that was due to Treasury on the Series D Preferred Stock (GAO 2011).

[32] *This solution creatively managed AIG's limitations to improve its balance sheet by exchanging dividend-paying common stock for non-dividend-paying shares and folding the unpaid dividends into the value of the new shares.*

Stock permitted Treasury to elect new directors to AIG's board of directors if dividends were not paid for four quarters, whether or not consecutive (Treasury 2008c, pdf 111).

In addition, as part of the restructuring, Treasury announced the commitment of an additional $30 billion in TARP funds under an equity capital facility in exchange for 300,000 shares of Series F Preferred Stock and a warrant to purchase 3,000 shares of AIG common stock, approximately 1% of outstanding shares. (See Figure 7.)

Figure 7: Summary of the March 2009 Treasury AIG Equity Investment

Maximum amount of commitment	Up to $30 billion
Maximum amount utilized	$27.8 billion
Equity received	300,000 shares of Series F Preferred Stock
Warrant received	To purchase 3,000 common stock shares, approximately 1% of AIG's outstanding common stock
Use of funds	$35 billion used to pay down RCF debt

Source: Buchholtz and Lawson 2021b.

AIA SPV and ALICO SPV. Last, AIG created two SPVs to hold the common stock of two of its largest foreign life insurance subsidiaries, American International Assurance Co., Ltd (AIA SPV), and American Life Insurance Company (ALICO SPV), in anticipation of their sale or initial public offerings (FRBNY n.d.1). The FRBNY agreed to accept $16 billion in preferred shares of the AIA SPV and $9 billion in preferred shares of the ALICO SPV, each with a liquidation preference of equal value (Form 8-K, 12/01/2009 - pp. 2). In return, the then outstanding RCF balance of approximately $46.5 billion, and the then RCF commitment of $60 billion, were each decreased by the $25 billion aggregate value of the SPV preferred interests[33] (AIG 2009b, 4; FRBNY n.d.1).

As part of this restructuring, the Credit Agreement was also amended to remove the 3.5% LIBOR floor, allowing the interest rate to go lower if the base rate fell below the previous floor (which it already had) (AIG 2009b, 6).

The 2010 Recapitalization Plan

In September 2010, Treasury, FRBNY, and AIG designed a Recapitalization Plan (Recapitalization) for all of the federal assistance provided to AIG (AIG 2010). The plan was "designed to repay all [AIG's] obligations to American taxpayers" and included several steps: (1) accelerated repayment and termination of the RCF; (2) the acquisition of the majority of

[33] *This solution creatively managed AIG's debt-to-equity ratio and cash limitations by utilizing a noncash payment to reduce the amount outstanding and commitment under the RCF; some of AIG's debt was converted into equity interests, which was looked upon favorably by the rating agencies (Millstein 2018, 11). The solution enabled the quicker repayment of a portion of the RCF to the Fed and improved the company's balance sheet prior to the sale or initial public offerings of the subsidiaries, reducing the impact of the government loan, which was proving worrisome to the rating agencies.*

the FRBNY's preferred interests in the AIA SPV and the ALICO SPV by the US Treasury Department; and (3) the Treasury Department's conversion of the preferred stock accumulated from its TARP investments into AIG common stock (FRBNY n.d.1; FRBNY 2011a; AIG 2010).

On January 14, 2011, AIG repaid all amounts due under the RCF, which was then terminated, and the AIG Trust converted the Trust Stock [34] to AIG common and transferred these shares to Treasury, which, pursuant to TARP authority, could now hold such shares (FRBNY n.d.1). When this transfer of shares is added to the common shares acquired by Treasury after converting the preferred shares it had accumulated from its TARP investments, Treasury held more than 1.6 billion shares of AIG common stock equal to approximately 92.1% ownership in AIG (AIG 2010, 2; FRBNY 2011a). Despite earlier concerns about avoiding the need to consolidate AIG's balance sheet with the government's, given this percentage of ownership, consolidation was required. The government's controlling interest in AIG and its attendant dilution of voting and dividend rights of other shareholders would anger one of AIG's largest shareholders, Starr International Company, who sued but eventually failed in its attempt to recover from the government its claimed investment losses.[35]

For details on the preferred stock Treasury purchased through various TARP investments in AIG, see Buchholtz and Lawson 2021b. Treasury sold off the common stock over the following two years to recoup the government's overall investment (Webel 2017, 5).

Outcomes

Maiden Lane II and Maiden Lane III were tasked with selling off the RMBS and CDO assets, respectively, that they had purchased and repaying the FRBNY senior loans and the AIG deferred purchase price (ML II) and equity contribution (ML III).

On March 30, 2011, the FRBNY announced that it would offer for sale ML II assets in competitive process over time using the standard bid list process in the secondary market for RMBS securities (FRBNY 2011b). Purchases by Goldman Sachs and Credit Suisse allowed

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[34] While the Trust Stock was originally designed to be convertible into 79.9% of AIG's common stock, in November 2008 the terms of the Trust Stock were amended to decrease the convertibility to approximately 77.9% of AIG's common (COP 2010, 72).

[35] Starr, whose chairman and majority shareholder, Maurice "Hank" Greenberg, had been the CEO of AIG for more than three decades, brought a number of lawsuits challenging the equity kicker. Starting in November 2011, Starr sued the US government and sought damages of $40 billion, the amount Starr believed the Trust Stock was actually worth at the time of its sale to the Trust in March 2009 (Starr v. United States and AIG 2015). Starr claimed that the government's acquisition of a majority stake in AIG was not permitted under FRA Section 13(3), "constituted a taking without just compensation and an illegal exaction," and was in violation of their Fifth Amendment rights" (Starr v. United States and AIG 2015). In June 2015, the US Court of Federal Claims ruled that while the government did conduct an "illegal exaction," no damages would be awarded to Starr and shareholders (Starr v. United States and AIG 2015). Starr appealed the case in the US Court of Appeals for the Federal Circuit, which concluded that Starr failed to prove "its alleged injury was distinct from the remaining AIG shareholders' injury" and "absent Government intervention, Starr's shares would have been valueless" (Starr v. United States and AIG 2017). In March 2018, the United States Supreme Court declined to grant certiorari, leaving the lower court's ruling intact (SCOTUS 2018).

ML II to repay the FRBNY senior loan as well as AIG's deferred purchase price and all related interest, on February 28, 2012 (FRBNY 2012a; FRBNY 2012b).

Similarly, the CDOs held by ML III were sold off in competitive auctions to various financial institutions (FRBNY n.d.5). Proceeds from these sales enabled ML III to repay the FRBNY senior loan, including all related interest, on June 14, 2012, and also to repay the AIG equity contribution, including all related interest, on August 23, 2012 (FRBNY n.d.5; FRBNY 2012c).

By December 2012, Treasury had sold off all the AIG common stock it had acquired through the Recapitalization Plan (both from the Trust and through its equity investments) (Treasury 2012b; CBO 2019, 5). In March 2013, Treasury sold its warrants back to AIG, officially ending all government investment in the company (Treasury 2013, 14).

The legal existence of ML II and ML III was formally terminated on November 12, 2014. (FRBNY n.d.5). "The small amount of cash held in reserve by each LLC was paid to the New York Fed and AIG, after payment of final trailing expenses, in accordance with their respective interests" (FRBNY n.d.5). These final transactions ended all crisis-era government assistance to AIG.

In aggregate, the government extended $182.3 billion to AIG and recouped all amounts lent, or invested, including accrued interest and fees, while realizing a net gain of $22.7 billion for the benefit of the taxpayers (Treasury 2013, 14). The government also lent to AIG subsidiaries via the Fed's Commercial Paper Funding Facility (CPFF), a broad-based lending facility not exclusive to AIG; this lending peaked at $15.3 billion outstanding, and was also all repaid (Webel 2017, 10; COP 2010, 85).

In totality, the rescue achieved two primary objectives of the government: (1) avoiding the systemic consequences of an AIG bankruptcy on the domestic and international financial systems, and (2) being good stewards of taxpayer resources in structuring and executing the rescue (Bernanke 2008; BdofGov 2008a)

III. Key Design Decisions

1. What factors influenced the government's determination that there was a systemic risk to the financial system?

The US government's strategy was not predicated on saving every institution that might fail, but on addressing those whose failure could jeopardize the stability of the system (Geithner 2019, 13). Thus, when considering whether to rescue AIG, the government first considered whether the company posed a systemic risk to the financial system that should be avoided, concluding that it did.[36] Reasons considered in this deliberation included:

- the size, presence and reach of the company risked sparking significant contagion throughout the financial system if it failed;[37]
- the complexity of AIG's $2.7 trillion derivatives book, which was more intricate than Lehman's;
- that much of AIG's risk exposures was concentrated among the 12 largest international banks (both US and European) across a wide array of product types (bank credit lines, derivatives, securities lending, etc.) (FCIC 2011, 347);
- that an AIG bankruptcy would be a bigger surprise than Lehman's and would occur on the back of Fannie Mae's and Freddie Mac's being placed in conservatorship, the Lehman bankruptcy, and the Reserve Primary Fund "breaking the buck," which had created significant market disruption (COP 2010, 69, 132);
- that the firm's failure would increase European bank capital requirements by $18 billion as their credit default swaps became impaired (FCIC 2011, 348);
- that the retail dimension of AIG's business, reaching to pension plans and municipalities, would likely result in its failure having a greater systemic impact than Lehman's (COP 2010, 129–130); and
- significant further disruption of the commercial paper market was likely to occur if AIG defaulted[38] (COP 2010, 132).

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[36] For example: "This assessment was a function of the firm's size, the importance of its role in the funding and credit markets, its linkages with the rest of the financial system, and the contagion that might accompany its failure. The risk to the financial system was in turn a function of the state of the world at that moment in time" (Geithner 2019). And: "The Federal Reserve's actions were also informed by its judgment that an AIG collapse would have been much more severe than that of Lehman Brothers because of its global operations, substantial and varied retail and institutional customer base, and the various types of financial services it provided" (COP 2010, 130).

[37] An internal FRBNY memo circulated to the Fed's AIG monitoring group stated that "the Lead point" was that "the size, name, franchise, and market presence (wholesale and retail) [of AIG] raise questions about potential worldwide contagion, should this franchise become impaired" (FCIC 2011, 349). Further, "the primary fear of the Federal Reserve and Treasury was that defaults directly related to AIG would have spread throughout the financial system, affecting transactions between other counterparties, negatively affecting investor confidence, and further destabilizing the economy" (COP 2010, 130). In addition, "AIG's role as one of the world's largest and storied insurance companies meant that its failure likely would have had a contagion effect, causing damage as it spread throughout the insurance industry. Policyholders would be hurt" (Baxter and Dahlgren 2010).

[38] "The Fed and Treasury had additional serious concerns about the potential impact of an AIG bankruptcy on MMMFs [money market mutual funds] and the commercial paper market. AIG had issued $20 billion of commercial paper, four times as much as Lehman. By September 16, 2008, an investor run on MMMFs had already begun as a result of Lehman's default and the "break the buck" event at [the Reserve Primary Fund]. Federal [Reserve] officials therefore feared that an AIG bankruptcy would do even greater harm to MMMFs and the commercial paper market" (COP 2010, 132).

Once it became clear that the private-sector solution was no longer a possibility, according to FRBNY General Counsel Thomas Baxter, the government "faced 'a binary choice' to either let AIG file for bankruptcy, or to provide it with liquidity" (COP 2010, 69).

Shortly after the decision to assist AIG, Chairman Bernanke explained it like this:

> In the case of AIG, the Federal Reserve, with the support of the Treasury, provided an emergency credit line to facilitate an orderly resolution. The Federal Reserve took this action because it judged that, in light of the prevailing market conditions and the size and composition of AIG's obligations, a disorderly failure of AIG would have severely threatened global financial stability and, consequently, the performance of the U.S. economy (Bernanke 2008).

Bernanke would also refer to AIG's involvement "in an enormous range of both retail and wholesale markets" and the hundreds of billions of dollars of credit protection to banks that it had written. There was real concern that the company's failure would have led to the immediate write-down of tens of billions of dollars by banks, threatening the already weakened system (Wessel 2009, 25–26).

Scholarly and governmental authorities who have reviewed the government's decision have concluded the same. See for example, Sjostrom 2009: "The bottom line is that nobody knew for certain the scope of damage that would result from an AIG bankruptcy. Because of AIG's size and interconnectedness, and the fact that financial markets were already under serious distress, it was feared that AIG's failure would lead to the collapse of the entire financial system [footnote omitted]. The federal government was unwilling to take this risk and, therefore, bailed out AIG" (Sjostrom 2009, 979).

2. What was the government's purpose for intervening?

The government's purpose for intervening was to avoid a disorderly failure, or bankruptcy, of AIG and the severe disruptions in the financial system that might have followed. It would do so by providing AIG the liquidity it needed to buy time to execute its plan to sell assets to improve its financial position. The purpose for the original loan as stated in the Fed's announcement was "to assist AIG in meeting its obligations as they come due" and to "facilitate a process under which AIG will sell certain of its businesses in an orderly manner, with the least possible disruption to the overall economy" (BdofGov 2008a). It was believed at the time that the AIG subsidiaries had value and could be effectively sold to raise funds. AIG CEO Willumstad had discussed a plan for the firm to sell approximately $40 billion in assets over a 6-to-12-month period, and the RCF loan was to be repaid with proceeds from these sales (COP 2010, 62; BdofGov 2008a). The RCF loan was for an original term of two years, which at the time was thought to be a sufficient period for AIG to avoid fire sales of devalued assets and to successfully complete the plan (GAO 2011, 125). A secondary, often recited goal was to be good stewards of taxpayer resources in structuring and executing the rescue (BdofGov 2008a).

3. What legal authority supported the government's intervention?

Federal Reserve Assistance

The RCF was extended under Section 13(3) of the Federal Reserve Act,[39] which allows the Fed to lend to any entity or person "in unusual and exigent circumstances" if certain conditions are satisfied; it is a "broad and extraordinary authority" (Alvarez 2010). The provision was enacted during the 1930s, used several times during this period; although use was authorized twice during the 1960s, funds had not been lent under the provision in the 70 years prior to the crisis (Alvarez 2010).[40]

In authorizing the FRBNY to lend to AIG, the Board of Governors considered:

> . . . the effect of AIG's disorderly failure on financial markets, the position of the Department of the Treasury on an extension of credit to AIG, and the circumstances presented by this situation as compared with situations recently confronted by the Board. Board members agreed that the disorderly failure of AIG was likely to have a systemic effect on financial markets that were already experiencing a significant level of fragility and that the best alternative available was to lend to AIG to assist it in meeting its obligations in an orderly manner as they came due (BdofGov 2008b, 3–4).

The Board determined that "a disorderly failure of AIG could add to already significant levels of financial market fragility and lead to substantially higher borrowing costs, reduced household wealth, and materially weaker economic performance" (BdofGov 2008a; COP 2010, 129).

Stock Ownership Controversy.

The provision for the government to receive an equity interest in AIG originated in the private consortium term sheet that was developed during the weekend of September 12–14, before Lehman collapsed, which provided that the lenders would receive warrants to purchase 79.9% of the common stock of AIG (Lee 2008; Baxter 2008b). The provision was retained when the private term sheet was used as a model for the Fed term sheet and was included in the term sheet reviewed and approved by the Board of Governors (Starr v. United States and AIG 2015, 25–26). Thereafter, however, the provision was changed to provide that the FRBNY would purchase voting convertible preferred stock and a related warrant

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[39] 12 USC § 343 (prior to 2010 amendments).

[40] In 1991, Congress significantly strengthened the Fed's 13(3) powers to make it easier for the Fed to lend to securities firms, responding to concerns that the Fed's hands had been tied during the 1987 stock market crash (Sastry 2018, 28–29). As revised, between 1991 and 2010, the law required only that loans under Section 13(3) be "secured to the satisfaction of the Federal Reserve Bank"; it no longer stipulated the types of collateral that the Fed could accept. In 2010, Congress significantly limited Section 13(3) powers. The law now allows the Fed only to lend under emergency programs "with broad-based eligibility," effectively preventing the Fed from again undertaking an AIG-style rescue for a specific institution. The law also now requires prior approval from the Treasury Secretary.

representing 79.9% of AIG's outstanding common shares, which is ultimately what ended up in the Credit Agreement that effectuated the RCF[41] (AIG 2008b, Exhibit D).

The equity kicker was seen as a way to compensate taxpayers for the extraordinary risk that the Fed was undertaking in lending to AIG (Starr v. United States and AIG 2015, 60; BdofGov 2009b, 4; Geithner 2014, 196–97). In an (unlikely) worst-case scenario, if AIG was unable to repay the loan and the collateral did not provide full recovery, the Fed's contribution to the Treasury might be negatively impacted.[42] Alternatively, if the RCF successfully provided the lifeline that AIG needed to survive its crisis and restructure its business, emerging as a healthy and sound business, the taxpayers would share in the success via the increase in the value of the AIG stock (Geithner 2014, 196). Although this was not a practice that the Fed had utilized previously, it had been used by private firms and was one that provided a chance of additional upside to the taxpayers in extraordinary circumstances (Starr v. United States and AIG 2015, 2). An internal memo draft from the Federal Reserve Board's Legal Division on the Fed's authority to take equity warrants in connection with a 13(3) loan noted as much, saying, "it is common practice in the banking industry for lenders to take a warrant issued by the borrower in connection with a loan. Thus, it would not be unreasonable to find that accepting warrants is incidental to the power to extend credit as authorized by section 13(3) of the Federal Reserve Act" (Alvarez, Ashton, and Van Der Weide 2008). However, at the time, there was no clear legal consensus between the FRBNY and Board legal staffs as to the extent

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[41] This change was not explicitly approved by the Board of Governors. However, Geithner testified that the Board had granted him some discretion to finalize the terms of the proposal to AIG and that as he did so he kept Chairman Bernanke and other Board members and staff informed of developments. (Geithner 2014b, 1793-97). Geithner also stated that Board General Counsel Alvarez was involved in working through the related legal issues (Starr v. United States and AIG 2015, 26; Geithner 2014b, 1793-97).

[42] *A similar concern with respect to Bear Stearns had prompted the Fed to request and receive from Treasury Secretary Paulson a letter acknowledging this fact. Then-FRBNY President Geithner has said this:*

> *When JPMorgan first proposed that the Federal Reserve assume some of the risk in preventing Bear's failure, our initial response, given the exceptional nature of such a step and the risks involved, was to propose that the Treasury provide a guarantee against any losses the Fed might face. Secretary Paulson, after consulting the Treasury General Counsel, determined the Treasury had no authority to provide such a guarantee.*
>
> *. . . We asked Secretary Paulson to write us a letter conveying his view that acting to help prevent the failure of Bear was important to the stability of the financial system and recognizing that any loss born by the Federal Reserve would ultimately be borne by the US taxpayer (Geithner 2019, 17).*

The FRBNY's commitment to AIG was more than twice the size of its assistance to the Bear Stearns deal, and the risk were difficult to quantify, therefore, Geithner also asked Paulson for a similar letter, which he received. (Geithner 2014b, 1817).

It should be noted that while many commentators have approvingly remarked on the close cooperation between the Fed and Treasury during the crisis, seeking approval from Treasury outside of when it's required also carries risks, as it can also be misconstrued as the Fed questioning whether it has the authority to make the loan without the financial support of Treasury (because of the possibility of losses)—authority which it does have. Also, some commentators have criticized the Fed for not exercising its full authority but at times acquiescing to Secretary Paulson (see Ball 2018, 195–225). After the crisis, the Dodd-Frank Act enacted requirements that the Fed seek prior approval from the Secretary of the Treasury when seeking to exercise its emergency authority under FRA Section 13(3).

of the FRBNY's ability to accept equity interest and exercise the related rights. (Geithner 2014b, 1686-87).

The change of the equity kicker from a warrant to purchase common shares equal to 79.9% of AIG's equity to voting convertible preferred stock with an aggregate vote equal to 79.9% of AIG's common stock was significant. A warrant is a right to purchase shares at a stated "strike price" and requires payment of that price upon exercise and issuance of the shares (Investopedia 2020). Exercise of a warrant for 79.9% of AIG's shares as originally included the private-sector term sheet would have required payment of $30 billion (Starr v. United States and AIG 2015, 25). Only upon exercise of the warrant and issuance of the shares would the owner then have voting rights (Starr v. United States and AIG 2015, 25). By contrast, the Trust Stock had characteristics that granted voting authority, and in this case control over AIG (because of the 79.9% allocation), immediately upon issuance of the preferred, which required merely the payment of $500,000 pursuant to the RCF agreement (Starr v. United States and AIG 2015, 25; AIG 2008b, Exhibit D).[43]

At the time, there was no clear legal consensus regarding the authority of the Federal Reserve or the Treasury to own shares of a private corporation; a topic considered by the legal teams at the Board, FRBNY and Treasury. (Geithner 2014b, 1686-87; Baxter 2008a).[44] Nevertheless, the government chose not to retreat from this term.[45]

From September 16, when the RCF was announced, to the closing on September 22, the government's attorneys worked with outside legal experts to craft a workable solution to the legal problem. A number of options were considered and rejected before settling on the AIG Trust model (Starr v. United States and AIG 2015, 20–31).[46] The shares and warrants would

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[43] *See discussion at pages 12-13 and footnote 20.*

[44] See also footnote 36 and Starr v. United States and AIG 2017, where Wallach, the appellate justice, in a concurring opinion supporting the overturning of the lower court, would have found that government's actions were authorized (and therefore could not be the basis of an illegal exaction claim) because the Federal Reserve Act's Section 13(3) read together with Section 4(4)'s incidental powers provisions does not prohibit the taking of equity as a condition of a loan (Starr v. United States and AIG 2017, 14-22). Justice Wallach would also have found that Starr lacked standing to bring its taking claim because it failed to show that it experienced harm that was particular to it different from other shareholders (Starr v. United States and AIG 2017, 23-32).

[45] *A workable solution was designed to address this limitation, the AIG Trust. The solution was not without criticism, but ultimately appears to have been affirmed by two justices, Engelmayer of the Southern District of New York (Starr v. FRBNY 2012) and Wallach of the US Court of Appeals for the Federal Circuit (Starr v. United States and AIG 2017). Wallach even opined that the FRA does permit the taking of an equity interest (Starr v. United States and AIG 2017). Diligence should be applied to ensure that positions that may be viewed as assertive are properly supported by legally sufficient elements designed to withstand legal challenge.*

[46] See Buchholtz and Lawson 2021c for a detailed discussion of the AIG Trust and the Trust Stock.

be issued to the AIG Trust, administered by three independent trustees who were obligated to manage the shares for the benefit of the Treasury and taxpayer[47] (AIG 2008b, Exhibit D).

Despite the work that went into its design, the equity kicker and the Trust were challenged in court by one of AIG's largest shareholders, Starr International. Although the lower court ruled for plaintiff's finding an illegal extraction but awarding no damages, this decision was overturned by the Court of Appeals, which found that Starr did not have standing to bring the lawsuit because its claims belonged to the company. It also vacated the lower decision so it would not have precedential value, and the US Supreme Court declined to grant certiriori in March 2018 (SCOTUS 2018).

In its vacated 2015 ruling, the Claims Court also expressed the opinion that the creation of the Trust to hold the shares was not sufficient to avoid the finding of an illegal exaction because the trust was not truly independent. Factors cited in support of this finding included that it had been established by the Fed, that the "independent" trustees who were appointed by the Fed had close affiliations to the Fed, and that during the Trust's existence there were close communications between the Fed and the Trust[48] (Starr v. United States and AIG 2015, 62–63). These conclusions were rendered moot when the case was overturned and vacated by the Federal Circuit Court of Appeals. Additionally, Justice Wallach of the Federal Circuit Court (writing in a concurring opinion) would have found that the Section 13(3) of the FRA, in connection with Section 4(4)'s incidental powers provisions, does not prohibit the taking of equity as the term of a loan (Starr v. United States and AIG 2017, 14–22).

It is also worth noting that in a related case brought by Starr against the FRBNY (Starr v. FRBNY 2012), the district court, in considering the FRBNY's motion to dismiss, found the opposite of the Federal Claims Court. Writing for the majority, Justice Engelmayer, determined that the FRBNY had not breached its fiduciary duty to AIG under Delaware corporate law because no such fiduciary duty existed, since the FRBNY (i) did not control AIG as a majority shareholder, and (ii) did not exercise actual control over the company. In reaching its decision, the court pointed to several provisions of the Trust agreement supporting this conclusion, including provisions:

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[47] In a crisis, extraordinary actions may be required. However, care should be taken to ensure that actions taken are within a valid interpretation of the government's authority. In the AIG context, much lawyering was expended to design the AIG Trust as a workable solution to the problem of the Fed's and Treasury's inability to hold the AIG shares. It seems that this diligence paid off, as the ponderance of the courts reviewing the facts and the Trust Agreement in Starr v US have sided with the FRBNY. Additionally, Justice Wallach of the Federal Circuit Court would have found that the Federal Reserve Act—Section 13(3) in connection with Section 4(4)—does directly permit the FRBNY to obtain an equity interest. See footnote 45. This seems to indicate that in the final review, the totality of the facts will be considered in evaluating extraordinary actions taken during a crisis.

[48] "The trustees were the 'protectors of the Federal equity stake in AIG'. . . . The manner in which FRBNY controlled AIG with its handpicked CEO, carefully selected board members, and its hundreds of on-premises advisers belies any conclusion that the operations of the trust were independent" (Starr v. United States and AIG 2015, 63).

- giving the Trustees "absolute discretion and control" over the Trust Stock including how to exercise the voting rights,
- limiting the Trustees ability to elect FRBNY affiliates to the AIG board, and
- stating that the Trustees were not relieved from exercising their independent judgment despite receiving information from the FRNY (Starr v. FRBNY 2012, 9–10).[49]

Additional Federal Reserve Assistance.

The Fed's additional programs to assist AIG—the Securities Borrowing Facility, ML II, and ML III—were also authorized under Section 13(3)[50] (Alvarez 2010). The loans were collateralized by investment-grade securities and carried an interest rate; a straightforward method of lending used frequently by the Fed (BdofGov 2008d, 17). However, there has been some criticism surrounding both the legality and fiscal soundness of ML II and ML III, with ML III being viewed as the more contentious of the two.[51]

The structure of ML II closely mirrored that of Maiden Lane, the SPV that the FRBNY created to purchase assets from Bear Stearns to facilitate Bear's merger with JPMorgan in March 2008.[52] For ML II, FRBNY made a loan of $19.5 billion to the newly created SPV that it used to purchase, from AIG subsidiaries, the RMBS-heavy investment portfolio related to the SecLending Program, which became the collateral for the loans (FRBNY n.d.4). The loan had a 6-year (extendable) term and accrued interest at 1-month LIBOR plus 100 basis points (FRBNY n.d.4). The AIG insurance subsidiaries agreed to defer receipt of $1 billion of the purchase price ($20.5 billion) with the deferred purchase price accruing interest at 1-month LIBOR plus 300 basis points (FRBNY n.d.4). However, because of its "complicated structure," the Congressional Oversight Panel adjudged the creation of ML II to be a "less

[49] The court also held that Delaware fiduciary duty law was preempted by federal law, as upholding it would have interfered with FRBNY performing its duties (Starr v. FRBNY 2012). The decision was upheld by the Court of Appeals for the Second Circuit (see Starr v. FRBNY 2014).

[50] See Board of Governors meeting minutes for October 6, 2008, approving the Securities Borrowing Facility and recording a notation vote on November 7, 2008, authorizing the restructuring, with Treasury, of the government's financial support to AIG, which restructuring included the creation of ML II and ML III (BdofGov 2008d, 17–18).

[51] *Interventions that are innovative or unique may be more open to challenge than those that are considered standard in form. Extra consideration should be given to whether such interventions are necessary or the best option at the time, as reviewers may take exception to a facility that it finds to have a "complicated structure" or "less straightforward fit" within the Fed's authority under Section 13(3) (COP 2010, 268–69). Further, officials should consider exercising the minimum amount of innovation required to make the desired intervention permissible. It should be noted that although they have been the subject of controversy, both ML II and ML III withstood legal scrutiny and the Fed experienced no financial losses with respect to either.*

[52] In that transaction the FRBNY loaned $28.8 billion to the SPV, which it used along with approximately $1.2 billion from JPMorgan, to acquire a portfolio of "mortgage-related securities, residential and commercial mortgage whole loans, and associated hedges (derivatives)" valued at $30 billion from Bear Stearns (FRBNY n.d.3).

straightforward fit with the Federal Reserve's authority under Section 13(3)" (COP 2010, 268).

In rebuttal, the FRBNY argued that the ML II SPV was merely a valid use of its incidental authority and a vehicle for managing the RMBS. The COP described the FRBNY's position:

> Thus, placing the assets into the SPV was "incidental" to purchasing those assets at a discount. Technically, an SPV is a "person," even if wholly owned by the bank that created it (in this case, FRBNY); thus, it could be the recipient of a loan under Section 13(3). In substance, however, FRBNY was lending money to itself under Section 13(3) and then using the funds to purchase RMBS. The Federal Reserve Board staff further explained that you can "look through" the SPV to see that FRBNY was discounting the RMBS assets. Each RMBS was itself a promissory note or debt obligation so FRBNY was essentially purchasing a note or debt obligation at a discount (a practice that fits more neatly under its 13(3)–lending authority) (COP 2010, 268–269).

Ultimately, the Oversight Panel concluded that ML II met the provisions of Section 13(3).[53]

The Panel also found ML III to be "complicated" and not a natural fit under the Fed's Section 13(3) authority:

> The 13(3) analysis of the ML3 facility is more complicated because in ML3, FRBNY purchased the debt obligations from the counterparties to AIG's CDS contracts, rather than from AIG or its subsidiaries. Even though the termination of the CDS contracts and the purchase of the CDOs from the CDS counterparties benefited AIG (an institution that could not obtain credit from alternative banking institutions), ML3 did not involve a loan to AIG or a purchase of notes or debt obligations owned by AIG. ML3 involved a loan to an SPV wholly owned by the FRBNY or a purchase of notes or debt obligations from CDS counterparties of AIG (institutions that likely could obtain adequate credit from other banking institutions)[54] (COP 2010, 268–269).

In addition to the "disconnect"—that the assets were not purchased from AIG, or a related entity—the other major, and seemingly greater, controversy involving ML III was that the

[53] "Even so, however, one can see the structure in one of three ways: as a third-party agreement to benefit AIG (a purchase of a discounted note 'for' AIG, which is all the statute requires), a restructuring of the original loan made by the Federal Reserve using its incidental powers to buttress section 13(3), or a purchase by an SPV that could not otherwise obtain credit (an admittedly weak characterization)" (COP 2010, 270).

[54] It should be noted, however, that these institutions were, in general, already accessing other 13(3) lending facilities writ large—see, for example, usage of the PDCF (BdofGov 2020). That the Fed established these broad-based facilities contrasts with the COP's determination that AIG's major counterparties otherwise had "adequate credit" from the private sector. Furthermore, the Fed's Legal Division noted in a March 2009 internal Fed memorandum that Section 13(3) lending "does not require an incontrovertible finding that each borrower cannot obtain adequate credit accommodations," but rather only that the lending reserve bank "obtain evidence that [the borrower] is unable to secure adequate credit accommodations from other banking institutions" (Alvarez et al. 2009, 11–13).

CDS counterparties were allowed to retain the collateral that they had previously been paid, which, added to the amounts paid by ML III, resulted in their receiving par value, despite the underlying CDOs being worth less than par at the time [55] (See Engbith and Jeffereis 2021b for more discussion of this program.) (See also COP 2010, 89–94, and SIGTARP 2009b, 29, for critical commentary regarding this issue.)

The controversy was intensified by the initial decision of AIG and the FRBNY to not disclose information about the ML III payments or the names of the recipients due to the risk of negative consequences in the tumultuous market environment of November 2008[56] (SIGTARP 2009b, 21). The counterparties included some of the largest US financial institutions, resulting in claims of a "backdoor bailout," despite the FRBNY's contention that the financial condition of the counterparties was not a consideration in deciding to form ML III and pay counterparties effectively at par (SIGTARP 2009b, 29–30).

On March 15, 2009, 10 days after declining to provide such information at a Senate Banking, Housing and Urban Affairs Committee hearing,[57] the FRBNY and AIG disclosed the names of the counterparties and much information regarding the ML III payments (SIGTARP 2009b, 15). This disclosure seems to have had no negative consequences on financial markets. However, it should be noted that it came four months after the first ML III payments were made during the height of the financial crisis (SIGTARP2009, 21). Therefore, it cannot be said with certainty that there would have been no negative fallout had such disclosures been made contemporaneously with the payments.

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[55] *Although the interventions were by their nature designed to assist the firm in paying their debts as they became due, and often avoid bankruptcy, some critics promote the view that creditors as well as counterparties should not be compensated at full value using taxpayers' funds. However, this sentiment arguably runs counter to views of government officials at the time such as Timothy Geithner and Treasury Restructuring Officer Jim Millstein, who emphasize that the government has no authority to compel such concessions and may also have conflicts that would make such efforts untenable. (See Millstein 2018 at pp. 6–8 for a discussion of the nuances of the government's position vis-à-vis this argument; Geithner 2010.)*

[56] *Disclosure and transparency are cousins to accountability, and thus, decisions regarding what information to disclose and when should take into consideration the possible harm to the parties to that information as well as possible damage to the Fed's credibility. In the AIG context, the FRBNY did not disclose the names of the ML III counterparties in November 2008 when the transaction occurred, but it did disclose them in March 2009, shortly after the COP requested them. A controversy regarding "backdoor bailouts" ensued, because the counterparties were some of the largest financial institutions in the US, many of which had received other government assistance. It should be noted that the Dodd-Frank Wall Street Reform and Consumer Protection Act, which as enacted in 2010, specifically requires that the Fed notify the Congress within seven days of the names and specified details of any entities receiving assistance under its FRA Section 13(3) authority. However, the Act also permits the chairman to request that certain identifying information, including names of those receiving assistance, be kept confidential and made available only to the chairperson or ranking member of specified committees (12 USC § 343(3)(C)).*

[57] Fed Vice Chairman Donald Kohn appeared at the hearing and "expressed his judgment that giving the names would undermine the stability of the company and could have serious knock-on effects to the rest of the financial markets and the government's efforts to stabilize them" (SIGTARP 2009, 21).

Treasury TARP Assistance

Prior to the passage of EESA on October 3, 2008, which authorized the establishment of TARP, the Treasury had no authority to invest in the securities of AIG or to own its shares (Starr v. United States and AIG 2015, 29). This is why, as discussed above, the Trust Stock received in connection with the RCF was issued to the newly formed AIG Trust, which held it for the benefit of the US Treasury and the taxpayers (AIG 2008b, Exhibit D). TARP authorized the Secretary of the Treasury to purchase or insure up to $700 billion of "troubled assets," or other securities that promote financial market stability.[58]

The Treasury invested approximately $70 billion of TARP funds into AIG to stabilize it ($40 billion in November 2008 and $30 billion in March 2009) through the purchases of various series of preferred stock. AIG used these funds to pay down the RCF and restructure AIG's balance sheet to reduce its leverage ratios (GAO 2011, 10–11).

Treasury also eventually held and managed the AIG common stock resulting from conversion of the Trust Stock (that had been issued in connection with the RCF) after the payoff and termination of the RCF. Collectively, the shares owned and managed by Treasury equaled approximately 92% of AIG's equity (AIG 2010, 2). Although the ownership was contentious, Treasury was permitted to own such shares under TARP (EESA 2008, 3778).

4. What tools did the government have available?

Because AIG was a nonbank, the Fed had limited tools with which to assist it. It could lend to AIG only under the emergency lending authority of Section 13(3) of the FRA. In September of 2008, the Federal Reserve did not have any authority to make asset purchases from, capital injections to, or to guarantee the obligations of AIG or any nonbank[59] (Geithner 2019, 6). The Treasury's powers were also limited. Even though it would make novel use of its Exchange Stabilization Fund to guarantee money market mutual funds, it would not acquire such authorities until the passage of EESA in October[60] (COP 2010, 79). There was no

[58] TARP defines "troubled assets" as "(a) residential or commercial mortgages and any securities, obligations, or other instruments that are based on or related to such mortgages, that in each case was originated or issued on or before March 14, 2008, the purchase of which the Secretary determines promotes financial market stability; and (b) any other financial instrument that the Secretary, after consultation with the Chairman of the Board of Governors of the Federal Reserve System, determines the purchase of which is necessary to promote financial market stability, but only upon transmittal of such determination, in writing, to the appropriate committees of Congress" (EESA 2008, 3767).

[59] "The Federal Reserve could only purchase Treasuries and agency securities. Unlike many other major central banks, the central bank of the United States had only limited authority to buy municipal government securities, and could not buy corporate bonds, commercial paper, non-agency ABS, or equities, which limited its ability in a crisis to address a breakdown in those important funding markets" (Geithner 2019, 6).

[60] With the approval of President George W. Bush, the Treasury did use its Exchange Stabilization Fund to guarantee money market mutual funds in September 2008, a usage that generally could not have been anticipated. "The Exchange Stabilization Fund was established by the Gold Reserve Act of 1934, as amended,

governmental authority to address the impact of an AIG bankruptcy "on its insurance subsidiaries, the cross-border implications for the foreign subsidiaries, and the potential systemic consequences for the financial system as a whole" (COP 2010, 79). There also was no framework for managing the resolution of the failing company other than bankruptcy, an option that was considered[61] and rejected (although there is some debate as to how sufficiently it was considered) (COP 2010, 79).

Bankruptcy was considered and rejected. The bankruptcy process provides a framework for protecting assets, valuing them, and equitably distributing them among all creditors. Because of its "automatic stay," it avoids a grab for assets by creditors (similar to a run) that can lead to inequities (COP 2010, 259). Under the process, AIG could have bought time to sell assets and restructure itself without being cannibalized by creditors (COP 2010, 259). Even so, concern over the risks of fallout from a bankruptcy of the holding company caused policymakers to reject it as a first response. However, even after the RCF loan was made, the government considered many different bankruptcy scenarios for AIG and AIGFP, but ultimately rejected them all. Some of the reasons why are discussed here.

The bankruptcy process is not totally comprehensive. It exempts domestic and foreign insurance companies. Nevertheless, had the parent company filed for bankruptcy, state insurance commissioners might have been concerned about the effects on the insurance subsidiaries and policyholders. To protect policyholders, they might have seized their local subsidiaries, causing a wave of disturbance (COP 2010).

Other noninsurance subsidiaries without a sufficient US nexus would also have been exempted from the bankruptcy proceeding (COP 2010, 260). While this might not have posed an issue for a smaller company with more contained operations, it was a problem for AIG, with hundreds of subsidiaries around the globe. A bankruptcy could have resulted in a messy process that did not fully resolve AIG's issues or stabilize the company in a manner that avoided the substantial risks to the financial system (COP 2010, 76–79). Also, upon initiating a bankruptcy proceeding, the company would have required debtor-in-possession funding, and with the funding markets in the state of disruption, the Fed might have been the only lender willing and able to provide a loan of the needed size (COP 2010, 78).

Bankruptcy would have been an event of default under AIG's many derivatives contracts and would have terminated the collateral calls by, and termination payments to, the

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and has approximately $50 billion in assets. This Act authorizes the Secretary of the Treasury, with the approval of the President, 'to deal in gold, foreign exchange, and other instruments of credit and securities' consistent with the obligations of the US government in the International Monetary Fund to promote international financial stability" (Treasury 2008a).

[61] See the Congressional Oversight Panel's 2010 report citing an internal FRBNY email of September 15, 2008, stating: "through [the Legal Division], we want to understand how the bankruptcy process will play out" (COP 2010, 129, footnote 495) Also note the COP's conclusion: "Through internal discussions and a dialogue with AIG and its state insurance regulators, the Board and FRBNY ultimately chose to provide AIG with assistance after identifying the systemic risks associated with the company and contemplating the consequences of an AIG bankruptcy or partial rescue" (COP 2010, 129).

counterparties under those contracts (COP 2010, 76–77). However, because of a special exception, bankruptcy's automatic stay would not have applied to derivatives contracts; therefore, AIG's derivative counterparties would have been able to "close out their agreements, seize collateral that had been posted prior to the bankruptcy filing, mitigate their losses, and offset or net out other obligations" (COP 2010, 77). This could have led to a destruction in value as counterparties are not required to maximize value of collateral when selling it to cover their position (See McNamara and Metrick 2019 for a discussion of International Swaps and Derivatives Association requirements.) These circumstances carried the likelihood of resulting in a smaller pool of assets to be distributed among AIG's unsecured creditors through the bankruptcy process, which meant that they would have been subject to substantial discounts and would incur significant losses (COP 2010, 117–119).

Another reason bankruptcy was rejected was because of the parent holding company guarantees of the SecLending Program and of AIGFP's commitments. Once the government was able to gain reliable knowledge about the company, it used that knowledge to review many different bankruptcy scenarios. All were obstructed, however, because of the parent guarantee, particularly as it affected AIGFP. One option considered was to put AIGFP into bankruptcy and have it "walk away" from its CDS contracts. However, the "ironclad" parent guarantee could not be vacated and made this a nonviable option (Baxter 2021).

Last, the government was also concerned about the indirect impact that an AIG bankruptcy might have on the fragile financial system; its bankruptcy would impact the commercial paper market and, more directly, the CDS market, leaving many financial firms without the protection they purchased (COP 2010, 78–79). When Lehman filed for bankruptcy on September 15, the markets had reacted severely. The LIBOR-OIS spread (a measure of illiquidity in financial markets) "spiked significantly, providing one measure of the extent of the impact of Lehman's filing on the markets" (COP 2010, 78). Further, this was in the context where investors had been aware of the firm's difficulties for months and had had time to anticipate its possible demise (Bernanke 2008).

AIG's bankruptcy would have been a bigger surprise than Lehman's, and such surprises are not well-received by markets (COP 2010, 69). FRBNY staffers also considered that AIG's bankruptcy might be even more systemic than Lehman's in part because of its retail businesses, creating concern for millions of policyholders (COP 2010, 69). It was also a much larger company with a more complicated structure, more subsidiaries, more counterparties across the globe and insurance companies that reached many individuals and small businesses as well as other larger companies[62] (COP 2010, 78–79). Given these circumstances, which led it to officials' "binary choice"—allowing bankruptcy or providing

[62] FRBNY internal memoranda show that the staff were concerned with AIG's brand name and broad reach and possible contagion beyond its counterparties. For example, AIG's bankruptcy would likely be considered a default under Guaranteed Investment Contracts held by pension funds. AIG's guarantees on those contracts would need to be replaced, with no assurance that such replacements would be available, or would be available on the same terms without losses (Baxter and Dahlgren 2010).

the necessary liquidity—the Fed invoked Section 13(3) to arrange a revolving credit facility for AIG (COP 2010, 81).[63]

Nevertheless, the Congressional Oversight Panel, while recognizing the extremely urgent and volatile circumstances in which the government was making these decisions, criticized it for deciding that the RCF (which provided full recovery to AIG's creditors) was the most appropriate solution. In its report, the Panel argues that there were other options available that perhaps the government did not adequately consider, such as:

- providing a short-term bridge loan to allow AIG time to prepare a prepackaged bankruptcy or other restructuring,
- imposing terms on its lending to require concessions from AIG's creditors who were insolvent,
- providing a guarantee for a private loan to AIG (COP 2010, 82–84, 139–152).[64]

The FRBNY officials largely responded that given the tight timeframes involved, and the state of the markets, they did not have adequate time to consider or fully develop these options (COP 2010, 128–129). AIG was not one of the "top 10 exposures" for the institutions that the FRBNY supervised, and FRBNY only became fully aware of the extent of AIG's problems on September 12, 2008[65] (COP 2010, 128, footnote 493). It also did not lend to the company or have a previous relationship with it; in contrast, Bear and Lehman were primary dealers.

In their written testimony before the panel, FRBNY General Counsel Baxter and Executive Vice President Sarah Dahlgren stated this:

> We also did not have the luxury of time. AIG needed liquidity and it needed it that day. In the early days of the intervention, when we knew precious little about AIG, but knew that it needed billions of dollars, we were truly facing a binary choice to either let AIG file for bankruptcy or to provide it with liquidity (Baxter and Dahlgren 2010, 3).

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[63] One FRBNY memo proposed the Fed purchase a $38 billion portfolio of pension carve-out assets and allow the parent to fail. However, this option required an act of Congress and we have found no evidence that it was pursued (COP 2010, 69).

[64] *In a crisis, given the presumptive disrupted state of the markets, and with time being of the essence, which makes every decision critical, it is unlikely that the government will have adequate time to consider or fully develop all possible options for intervening in the problems presented. Decisions will have to be made speedily and often with limited information, which may later prove to be unreliable. Operating under such constraints requires reasonable judgment and the willingness to act, even when the solution may be imperfect. Although it may seem superfluous at the time, making an effort to document facts known, options considered and rejected, time constraints, and the basis for decisions, will make responding to later reviews easier and more credible.*

[65] CEO Willumstad did speak with President Geithner on September 9 about becoming a primary dealer so that AIG might gain access to the Fed's various emergency liquidity facilities for primary dealers, but he did not state that "AIG was facing serious issues," and he made no progress (COP 2010, 128, footnote 494).

5. What additional tools did the government seek to acquire?

Early on, government officials expressed reticence toward the idea of rescuing AIG and understood that the situation, was by its nature, on the periphery of the central bank's responsibility.[66] Even as the Fed was entering into the RCF, there was uncertainty about whether AIG had solvency issues in addition to its liquidity issues (GAO 2011, 45). The Fed had no ability to address such issues; however, when companies begin to experience financial strains, the two types of issues often coexist (Geithner 2019, 15).

In entering into the RCF, Bernanke consulted with Secretary Paulson and specifically asked for a letter in support of the Fed's decision to lend. The effort was announced as "with full support of the Treasury Department" (BdofGov 2008a). Concurrent with the Fed's announcement of the RCF, Secretary Paulson had been considering pursuing with Congress additional authority that would provide a broader range of tools to address the continuing crisis. These efforts resulted in the passage of the TARP on October 3, 2008 (EESA 2008, 3767, 3780). By this day, AIG had drawn down $63 billion under the RCF and it was clear that additional assistance would be needed (BdofGov 2010). Among other things, the significant amount of the RCF borrowings and the high interest rate were having a negative impact on AIG's balance sheet, and more than one credit agency had indicated concern (SIGTARP 2009b, 12–13). These developments led the government to determine that, at a minimum, it needed a way to invest capital in AIG and to reduce its RCF borrowing (Millstein 2018). The opportunity to do this was provided by TARP.[67] The Treasury would eventually invest $70 billion of TARP funds into AIG through a series of capital injections.

6. What was the government's initial strategy?

Despite the limited tools available to the government, when it became clear that the private-sector lending option would not be viable, the FRBNY decided to provide liquidity to AIG rather than have it file for bankruptcy (COP 2010, 69). Despite its limited knowledge of AIG's business at the outset, the FRBNY was able achieve a degree of comfort that AIG, despite its liquidity problem, had value in its regulated insurance subsidiaries that could adequately secure a loan (Geithner 2014, 193).

The Board of Governors authorized FRBNY to extend a revolving credit facility of $85 billion to AIG, collateralized by most of the assets of the parent company and its subsidiaries, which included the equity of most of its insurance subsidiaries (BdofGov 2008a). The purpose of

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[66] See Geithner's comments on AIG: "Lending to an insurer still felt like a serious Rubicon to cross, but we had crossed plenty of Rubicons . . . the troublesome parts of AIG behaved more like an investment bank than an insurer, and we were already lending to investment banks" (Geithner 2014, 192). CEO Willumstad first approached Geithner to request access to the discount window on July 29, but Geithner thought that allowing it would create a run on AIG (COP 2010, 58).

[67] *During a crisis, circumstances may change, or the government may acquire additional information that requires recalibrating its initial intervention. It may also acquire new tools as was the case when the TARP passed. Continuous monitoring of the situation and available tools may allow for the most appropriate adjustments to be made, if any (see Dahlgren 2018).*

the loan as stated in the Board of Governors' press release was "to assist AIG in meeting its obligations as they come due. This loan will facilitate a process under which AIG will sell certain of its businesses in an orderly manner, with the least possible disruption to the overall economy" (BdofGov 2008a). On this point, Willumstad had discussed a plan for the firm to sell approximately $40 billion in assets over a 6-to-12-month period, and the RCF was to be repaid with proceeds from these sales (COP 2010, 62; BdofGov 2008a). The RCF loan was for a two-year period, which at the time was thought to be a sufficient period for completion of the plan (BdofGov 2008a). However, based on better information once it began monitoring the company, the FRBNY realized that the interest rate was too high and the term to short; both were adjusted later in the year.

7. How did the government implement its initial strategy?

The decision to provide liquidity to AIG led to the announcement of the RCF on September 16, 2008 (BdofGov 2008a). However, as is usual, it would take several days to draft and sign the related agreements. But AIG needed funds that day to meet collateral calls and for general corporate purposes (BdofGov 2008c, 3–4). Therefore, following the Board vote, the FRBNY advanced AIG $14 billion that same day on a demand promissory note. Prior to the signing of the RCF on September 22, the FRBNY would make four such advances to AIG for a total of $37 billion.[68] These loans carried an interest rate of 14 percent and were secured by "Equity Interests in certain Subsidiaries and certain additional assets" (AIG 2008c, 1; BdofGov 2008c, 4). Upon closing of the RCF, the four demand promissory notes were cancelled and replaced with $37 billion in new obligations out of the available $85 billion under the RCF (BdofGov 2008c, 4; AIG 2008b).

8. How did the government decide on the specific terms of its initial interventions?

The RCF had a maximum commitment of $85 billion and a term of two years, an amount and period that the FRBNY thought would be sufficient for AIG to complete its plan of restructuring by selling assets; it would use the proceeds from such sales to repay the FRBNY (BdofGov 2008b; GAO 2011, 44). Given the severe time constraints, the FRBNY used as its beginning framework for the RCF the term sheet that had been prepared for the private consortium (COP 2010, 71; Dahlgren 2018; Lee 2008; Baxter 2021). This gave the FRBNY a starting point that was responsive to AIG's needs and which was reflective of a commercial deal.[69]

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[68] *This is an example of just how rapidly the Fed can make a substantial amount of cash available to an organization with which it had no relationship days before once it decides to lend—it is a very effective lender of last resort.*

[69] *Former FRBNY General Counsel Tom Baxter commented favorably on having this term sheet available: "For me, it was extremely useful to have [the] term sheet when it became apparent that the Fed was moving into the lender's*

On September 16, 2008, a modification of this private term sheet (the FRBNY term sheet) was presented to the Board of Governors for approval (US Court of Federal Claims 2015, 26). As shown in Figure 8, major changes from the private term sheet to the FRBNY term sheet included:

- Commitment increased by $10 billion
- Interest rate increased by 2%
- Term increased by 6 months
- Duration fees eliminated
- Addition of an 8.5% undrawn fee, and
- Commitment fee lowered by 2% (Lee 2008, 3–4; Baxter 2008b)

With respect to the altered terms, FRBNY officials have stated that the $75 billion commitment amount of the private-sector term sheet was increased by $10 billion, to $85 billion, in light of AIG's still uncertain liquidity needs to provide some cushion and avoid AIG's having to come back for additional funding[70] (COP 2010, 71; Dahlgren 2018; Millstein 2018, 4). The increase in the interest rate was intended to compensate the FRBNY for perceived additional risk in the wake of Lehman's failure and in its role as the sole lender[71] (COP 2010, 125–26). No specific explanations were given for the changes in the other terms, but the FRBNY indicated a general intent for the terms of the RCF to be onerous so as to motivate AIG to seek private funding as soon as possible (COP 2010, 126; Millstein 2018; Bernanke 2008).

position. There is another point, which I felt strongly about both then and now. If the government was going to be in the position of lender, it should follow best practice for lending unless there was a compelling reason not to. If we were to deviate, it should be to make the terms for lending more stringent (again to protect the taxpayer) rather than less stringent" (Baxter 2021). (Also see Footnote 20.)

[70] *Crises are time sensitive and often involve making decisions with limited information, as was the case with AIG (Millstein 2018). Financial and human resources are at a premium and may be extremely stretched. A "best guess" adjustment/estimate such as this $10 billion top-up in an effort to avoid a redo could prove to be an efficient use of government resources. If needed, the extended amount is available to the company through a simple draw from the lending facility with no need for further authorization and/or redocumentation. If not needed, there is likely no harm done. It should be noted that this is only a tool and does not guarantee that more extensive additional funding will not be needed, as was the case with AIG.*

[71] "The [FRBNY] officials said an advisor made that increase, on the theory that the loan had become more risky since the failed private-sector attempt. The rationale was that market turmoil had increased in the day before Federal Reserve Board approval of the loan, following the Lehman bankruptcy, and that it would be FRBNY alone, rather than a syndicate of lenders, that would extend the credit. Otherwise, the officials were unable to provide us with an explanation of how other original terms for the Revolving Credit Facility became more expensive, such as the undrawn amount fee" (COP 2010, 125-26). Also see the GAO Report: "The FRBNY had wanted a high rate to mimic commercial terms and create an incentive for AIG to seek private funding as soon as possible" (GAO 2011, 126).

Figure 8: Comparison of the Terms of the Private-Sector Term Sheet and the FRBNY's Revolving Credit Facility over time

Loan term	Private plan	Original Revolving Credit Facility	November 2008 restructuring	March 2009 restructuring
Amount	$75 billion	$85 billion	$60 billion	Announcement of future reduction: later set at $35 billion in December 2009
Maturity	18 months	24 months	5 years	5 years
Rate on drawn amounts[a]	LIBOR +6.5%, with 3.5% LIBOR floor	LIBOR +8.5%, with 3.5% LIBOR floor	LIBOR +3.0%, with 3.5% LIBOR floor	LIBOR +3.0% (elimination of floor amount)
Rate on undrawn amounts	–	8.5%	0.75%	0.75%
Commitment fee	5.0%	2.0%[b]	–	–
Other fee	1% at 6 months, 1% at 12 months	–	–	–
Default rate	–	Normal rate +2%	Normal rate +2%	Normal rate +2%

Notes: [a] Rate on private plan stated generally as LIBOR; FRBNY loan specified 3-month LIBOR.
[b]AIG received $500,000 credit on FRBNY commitment fee, related to payment for preferred shares.

Sources: Author reconstructed from GAO 2011, 125.

Within a short time, the high interest rate and term of the RCF would become problematic and of concern to the rating agencies; the FRBNY realized this as well as they gained more knowledge about AIG (SIGTARP 2009b, 12–13). Another important detail was that the RCF placed the government in the senior secured position, ahead of AIG's other senior unsecured creditors. This was a positive for the FRBNY but was viewed as problematic by the rating agencies since it was inconsistent with their expectations for an investment-grade company.[72]

Both the private term sheet and the initial FRBNY term sheet presented to the Board provided that the loan would include an equity interest, which was originally described as warrants to purchase common stock (US Court of Federal Claims 2015, 23). The Fed press release was not so specific; it said, "the U.S. government will receive a 79.9 percent equity interest in AIG and has the right to veto the payment of dividends to common and preferred shareholders" (BdofGov 2008a). After the Board's approval and prior to signing, the equity interest was changed from warrants to senior preferred stock with voting rights equal to 79.9% of AIG's common stock and an additional small warrant.

The change would have the effect of neutralizing the AIG shareholders and investing "effective" control over AIG in the AIG Credit Facility Trust upon issuance of the Trust Stock. Together with the acquired voting rights and other rights arising from the RCF, such as rights related to corporate governance, the company was effectively nationalized (see discussion on page 58). The preferred stock required only a minimal payment compared to the originally proposed $30 billion strike price of the warrants (12 billion shares at the par of $2.50) (Starr v. United States and AIG 2015, 25).

Because neither the Fed nor the Treasury believed they had the authority to hold the shares at the time, the equity interest was issued to a trust formed by the FRBNY—the AIG Trust—and managed by three independent trustees (Starr v. United States and AIG 2015, 29–30). The Trust held the stock for the benefit of the Treasury and the taxpayers, and the trustees were to exercise all rights under the Trust shares, including the ability to nominate Board members.

One of AIG's largest shareholders brought a lawsuit challenging the government's right to gain control of AIG, claiming an illegal exaction or taking of its shareholder rights in violation of FRA Section 13(3). The US Court of Federal Claims found the government's actions to be an illegal exaction under FRA Section 13(3) but no financial damages were rewarded to the plaintiff as no economic harm was found to have occurred (Starr v. United States and AIG 2015, 65–67). This decision was later overturned by the Circuit Court, in an opinion by Justice Prost, which held that Starr lacked standing to pursue its claims as those claims belonged to AIG. The Circuit Court ordered the lower court decision vacated and the action dismissed, therefore it has no precedential value (Starr v. United States and AIG 2017).

It is also worth noting, however, that in a concurring opinion supporting the overturning of the lower court, Justice Wallach would have found that government's actions were authorized (and therefore could not be the basis of an illegal exaction claim) because Section 13(3), read together with Section 4(4)'s incidental powers provision, does not prohibit the taking of equity as a condition of a loan (Starr v. United States and AIG 2017, 14–22).

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[72] *Intervention terms that appear effective from one perspective should also be evaluated from several additional perspectives, which may not at first be obvious. For companies that issue public securities and debt, the rating agencies will always be interested in evaluating any government assistance (Dahlgren 2018).*

9. Did the government's strategy change over time?

The government revised its strategy over the ensuing months as it learned more about AIG's business and operations and in response to rating-agency scrutiny. It eased the terms of its loans and replaced some of the Fed loans with Treasury equity, reducing AIG's leverage, once the enactment of TARP provided the funds and permitted the Treasury to do so.

By October 1, 2008, total debt outstanding under the RCF had reached $61.2 billion (BdofGov 2010). The unexpectedly fast rate of usage signaled that the $85 billion might not be sufficient to see AIG to stability (COP 2010, 85–86). It also caused the FRBNY to consider that AIG's problems might be more significant than it at first realized and might be more than just a liquidity problem: possibly an insolvency problem. The line between the two is often vague (Baxter 2021).

Further, the size and terms of the RCF had engendered scrutiny rather than relief from the rating agencies (SIGTARP 2009b, 12–13). The size of the loan had raised AIG's leverage ratio beyond what the rating agencies expected of an investment-grade company, and there was concern over the company's ability to pay the significant carrying fees and interest rate (SIGTARP 2009b, 12–13; GAO 2011, 123–128; Millstein 2018).

The company was expected to report losses on November 10; the major causes of which were the Securities Lending Program and AIGFP's CDS. Rating agencies signaled that a downgrade would be forthcoming unless there was some compensating action announced at the same time (COP 2010, 87). Given these developments, the first change in the government's strategy was to address the major sources of AIG's liquidity drains and the troubled assets that were weighing on its balance sheet (COP 2010, 86–87). This led to the Securities Borrowing Facility (SBF) in October and the first restructuring in November 2008.

10. How did the government implement its amended strategy?

Securities Borrowing Facility.

In October, the SBF was implemented, under which the FRBNY could lend up to $37.8 billion to AIG in exchange for high-quality securities from AIG. AIG could use that cash to repay securities borrowers in its SecLending Program who did not intend to renew their contracts (BdofGov 2008e, 1). Although it did not address the devaluation of the RMBS-laden investment portfolio, this move eliminated AIG's need to borrow under the RCF for this purpose, freeing those funds for other uses[73] (BdofGov 2008e, 2–3).

[73] *The SBF was an innovative measure that quickly addressed AIG's liquidity problems and the fact that usage under the RCF was far beyond what had been expected. The Fed provided another source of funds, freeing up the RCF for other uses. This situation illustrates that in any given situation, the unexpected may occur, requiring additional assistance—and that creative facilities may prove a good solution.*

First Restructuring

In November 2008 the government announced the First Restructuring. The RCF was amended to extend its term from two to five years to provide AIG with more flexibility in implementing its restructuring plan (BdofGov 2008e, 6–7). The interest rate, which had been specifically called out as problematic by one rating agency (S&P), was reduced by 5.5% to 3-month LIBOR plus 300 basis points, or a minimum of 6.5%[74,75] (BdofGov 2008e, 6–7). Also, to address its liquidity needs, two SPVs, funded by the FRBNY, were established to purchase the SecLending Facility RMBS portfolio (Maiden Lane II) and the CDOs underlying the CDS portfolio (Maiden Lane III). (See discussion at pages 19–21.)

To reduce AIG's leverage, Treasury purchased $40 billion of preferred stock. Some of this funding was used to pay down debt outstanding under the RCF so as to lower AIG's leverage even further (BdofGov 2008e, 6; Morgan Stanley 2008).

Second Restructuring

On March 2, 2009, the FRBNY amended the Credit Agreement to remove the 3.5% LIBOR floor, allowing the interest rate to float down if the base rate was lower than the previous floor, which was already the case at the time of the adjustment (BdofGov2009a, 3). The Fed also accepted as partial repayment of the RCF approximately $25 billion non-voting preferred interests in AIA SPV and ALICO SPV, two AIG special purpose vehicles (BdofGov 2009a, 3). The Treasury committed to investing up to $30 billion in additional AIG preferred shares (BdofGov 2009a, 4).

The Recapitalization

The Recapitalization was intended to have AIG pay off all debt owed to the government. The plan included several steps: additional equity investments by Treasury, accelerated paydowns of the RCF, the exchange of equity shares, and the sale of selected subsidiaries.

The government's total investment to rescue AIG equaled $182.3 billion (excluding CPFF lending), with the last step taking place in January 2011, when, through conversions and receipt of the Trust Stock, the Treasury held approximately 1.65 billion shares of AIG common stock from the exchange of its equity holdings, as well as those of the Trust.

11. How did the government determine the specifics of its amended interventions?

In considering the additional assistance to AIG, the government sought to end the company's liquidity drains and to address the rating agencies' concerns about AIG's balance sheet so as

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[74] By comparison, the bridge loan to Bear Stearns and PDCF lent at the Fed's primary credit rate; the bridge loan carried a rate of 3.5% while PDCF loan rates ranged from 0.5% to 3.25% (BdofGov 2016d; BdofGov 2016b; BdofGov 2020).

[75] *This fairly simple amendment eased the negative implications of the loan for the rating agencies, while retaining a "penalty rate." (See also discussion at footnote 19.)*

to avoid further downgrades, which would jeopardize the sales strategy and risk the government's assistance (GAO 2011, 53).

In October 2008, the SBF provided AIG with funding to meet its SecLending Program obligations without borrowing from the RCF, which it was aggressively utilizing (BdofGov 2008e, 1–2). In November 2008, key terms of the RCF were amended to reduce the costs to AIG and provide it enhanced flexibility to pursue its announced sales strategy (GAO 2011, 125, 129).

As part of the First Restructuring, ML II was formed to purchase the RMBS portfolio connected with the SecLending Program, thereby relieving the devaluation pressure on AIG's balance sheet (BdofGov 2008e, 3). ML III purchased from counterparties the CDOs underlying CDSs that AIG had written, which the counterparties agreed to cancel, eliminating future collateral calls and liquidity strains (COP 2010, 171–172).

In interviews, Fed and Treasury officials indicated that there was no specific formula to explain the particular mix of adjustments in the refinancing plans or the size of Treasury's equity investments. FRBNY General Counsel Tom Baxter, however, commented that the actions were informed and shaped by the growing knowledge of AIG's business and the scope and degree of its financial problems that FRBNY and Treasury officials gained as they worked with the company. The adjustments were "deliberative and thoughtful" and "we needed to adapt the tools to fit the problem" (Baxter 2021). Government officials worked diligently with AIG executives and Morgan Stanley (which had been hired by the FRBNY) to review a number of options and choose the most fitting to address the identified problems (Morgan Stanley 2008). Also considered were the losses expected to be reported and the concerns of the rating agencies regarding the terms of the RCF and their wanting to see some "counterbalancing measures" (GAO 2011, 8, 52).

Why did the Fed rather than the Treasury undertake ML II and ML III?

The TARP had been passed on October 3, providing authority for the Secretary of the Treasury to purchase assets and securities from financial companies (EESA 2008, 3767). Even so, ML II and ML III were undertaken by the FRBNY instead of the Treasury. Review of the various records, testimony and government reports shed light on this decision.

First, by November, the Fed was more connected to AIG than the Treasury since it had a team of personnel monitoring the company (Dahlgren 2018). A second reason that the FRBNY took the lead was that ML II and ML III were modeled after the Maiden Lane transaction that the Fed had undertaken just a few months earlier in connection with JPMorgan's purchase of Bear Stearns (Alvarez, Baxter, and Hoyt 2020, 156-158).

Third, ML II ($19.5 billion) and ML III ($24.3 billion) would have required an aggregate of $43.8 billion, more than 10% of the released TARP funding ($350 billion), for one company[76] (EESA 2008, 3780). While the amount of TARP was extraordinary and unprecedented, there is also information in the record that Treasury was not sure that it would be enough to stabilize the financial system and prevent its collapse (Paulson 2010, 333–334). Having the FRBNY fund the AIG Maiden Lane SPVs with loans reserved TARP funds for interventions (such as capital injections) that the Fed could not do. This division of labor not only illustrates the proposition that cooperation between the monetary and fiscal authorities is key to fighting a crisis, but also that the tools required vary.[77, 78]

12. How did the government protect the taxpayers?

Collateralized loans.

The RCF was secured by substantially all of AIG's assets, including equity interests in its nonregulated and (indirectly) regulated insurance subsidiaries, and placed the government in a senior secured position (BdofGov 2008c, 5–6, COP 2010, 71). The interest rate and fees under the RCF were aggressive and of a commercial dimension, returning to the FRBNY more generous payments than under its broad-based liquidity facilities such as the TAF, TSLF, and PDCF, and also under other extraordinary loans made to single entities (GAO 2011, 125–126).[79] This was intended to mitigate moral hazard and to incentivize AIG to repay the loan quickly, whether it used all the available funds or not (GAO 2011, 89–90).

ML II was secured by the portfolio of RMBS that it purchased and a $1 billion deferral of payment to AIG. Using a loan from the FRBNY, ML II purchased the RMBS at fair value, approximately a 50% discount to par, paying $19.5 billion (plus the deferred $1 billion) for assets with a par value of $40 billion.

[76] This is the amount of loans provided by the FRBNY. AIG also provided equity to ML II ($1 billion) and ML III ($5 billion).

[77] As described by Secretary Geithner, "[The Fed's liquidity efforts] could mitigate a loss of funding, but they could not make up for a lack of adequate capital, and they did not have the force of a guarantee. They could help keep a viable firm liquid and functioning, but they had limited power in sustaining the weakest parts of the financial system. Ultimately it took a much broader mix of guarantees and capital injections—together with a powerful set of monetary policy action and fiscal stimulus—to prevent the collapse of the financial system" (Geithner 2019, 13).

[78] *In a crisis, an inventory of available tools and coordination among various agencies are two powerful elements. Being aware of the available tools will enable analysis of what is the best tool to use to intervene and allow a better and perhaps more efficient response. This is particularly true if there are existing facilities that can be deployed immediately, modified, or repurposed. Additionally, communication and coordination among the various agencies that may be able to assist in the intervention is essential to maximize the appropriateness and efficiency of the response and to respond to evolving circumstances.*

[79] See discussion at footnotes 19 and 20 and related text regarding the RCF interest rate and the risks of "onerous" terms and the advisability of carefully calibrating the terms of lending.

In the case of ML III, the FRBNY loaned ML III $24.3 billion secured by the CDOs that it would be purchasing. Coupled with a $5 billion AIG equity contribution, ML III had a total funding of $29.3 billion.

By implementing ML II and ML III, the Fed's exposure to AIG was not reduced but it was more secure. Instead of having $85 billion in short-term loans collateralized by equity in AIG insurance subsidiaries, it had $70 billion of long-term loans outstanding secured by pools of dedicated assets, each of which had AIG standing in place to absorb the first losses ($1 billion in the case of ML II and $5 billion in the case of ML III) (GAO 2011, 8–9; Millstein 2018, 6).

Transactions at Market Value

ML II and ML III acquired assets from AIG at market value, further protecting the Fed's loans to the MLs. Those prices in aggregate represented a discount of 50% or more to par for both portfolios. Valuations of the CDOs in several worst-case scenarios showed that in each case, the CDOs would be worth more than the amounts due to the FRBNY under the ML III loan (GAO 2011, 64).

Limitations in the Revolving Credit Facility

The RCF also included a provision prohibiting AIG from paying dividends on any of its preferred or common stock until the RCF was repaid (AIG 2008b, 23). The preferred stock provided that the Trustees could vote for directors. Later, stock purchased by the Treasury also provided rights to appoint directors in certain circumstances.

The RCF also included a provision prohibiting AIG from paying dividends on any of its preferred or common stock until the RCF was repaid (AIG 2008b, 23). The Fed also had rights with respect to governance, and they were set out in paragraph 4.01 of the Credit Agreement. The RCF also provided that the FRBNY could block mergers or asset sales, but it could not block bonus payments to the employees of the Financial Products division responsible for the CDS (AIG 2008b, 45–46; Geithner 2009, 1).

Equity Interests/Governance Rights

The most significant way that the government protected the taxpayers was through the equity interests. The equity kicker made the Trust AIG's controlling shareholder (effectively nationalizing it)[80] and the Treasury shares strengthened the government's position. The

[80] There is no clear consensus of whether the AIG rescue amounted to a "nationalization" or not, which is indicative of how this term can easily encompass various meanings based on the prescribed point of view. Despite the government's significant ownership interest, the pre-rescue shareholders were not wiped out, although their interests were significantly diluted. Secretary Paulson has referred to the rescue as a nationalization (". . . my definition is, when the government owns more than 50 percent, it's a nationalization") (Starr v. United States and AIG 2014, 1231). However, Chairman Bernanke's comments—lamenting that the government lacked the ability to "put AIG into conservatorship or receivership, unwind it slowly, protect

Trust, with its independent trustees, could vote the shares and were required to manage the Trust Stock for the benefit of the Treasury and taxpayers. Through the Trust Stock and the Treasury shares,[81] the government also was able to effectuate a change in the AIG board over time (Starr v. United States and AIG 2015, 27–28).

The shares also provided that the taxpayers would participate in any upside that might result from the government's assistance (Starr v. United States and AIG 2015, 6–7, 26). Capturing the upside potential is customary in private deals of a similar nature, especially in bankruptcy debtor-in-possession (DIP) financing,[82] and something similar had also recently been done in the conservatorships of the GSEs in connection with which the Treasury provided funding to guarantee solvency.[83]

13. How did the government administer the rescue?

The Federal Reserve took the lead in lending to AIG and in coordinating the balance of the rescue. As soon as the RCF was agreed upon, FRBNY staff were assigned to AIG offices to gather information and monitor company operations and use of RCF funds (GAO 2011, 31–32).[84] There was an immediate need to try to get a handle on the complicated structure of

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policyholders, and impose haircuts on creditors and counterparties as appropriate"—have been viewed as describing the rescue as something other than a nationalization (Garofalo 2009). See also a September 2008 *New York Times* article speculating under what circumstances the government would have "nationalized" Lehman "just as it nationalized AIG, Fannie Mae, and Freddie Mac," and a Reuters update entitled: "Why the government should have nationalized AIG" (NYT 2008; Salmon 2010). We sometimes use the term "effectively nationalized" herein to describe the rescue in acknowledgment that the term has been discussed with regard to the rescue largely because of the government's majority ownership interest. We point out, however, that the value of this term may be more in understanding how the assistance was perceived than in characterizing its actual legal mechanics; as per FRBNY General Counsel Baxter, "this was not a nationalization, it was a rescue" (Baxter 2021).

[81] The preferred shares that Treasury received provided the right to nominate Board members if dividends were not paid after four quarters (consecutive or not), and the number of directors that Treasury could nominate was the greater of two new directors or a number equal to 20% of the size of their current board in some circumstances. Over the course of the rescue (through 2011), the government nominated two new AIG directors, not including the directors that the trustees had nominated. The Treasury preferred stock required that its dividend would be paid before dividends would be paid on any other stock, except the Trust Stock.

[82] "One FRBNY official described the Revolving Credit Facility as being akin to debtor-in-possession financing—that is, it has a high interest rate, aggressive restrictions on AIG's actions, a short term, and a substantial commitment fee" (GAO 2011, 90).

[83] The conservatorships of Fannie Mae and Freddie Mac, implemented on September 7, provided the government control over the GSEs through the conservator, the Federal Housing Finance Agency (FHFA), and certain terms of the Treasury funding, which guaranteed the companies' solvency. Pursuant to the Treasury funding, the government also received from each GSE dividend-paying preferred stock and a warrant to purchase 79.9% of its common stock. To date, the government has received from each company dividends in excess of the amounts invested (Wiggins et al. 2021).

[84] Such was a customary action with the FRBNY when it was a potential lender. It had acted similarly with respect to the four independent investment banks after it implemented the Primary Dealer Credit Facility (FCIC 2011). However, in the case of AIG, the FRBNY was more than a potential lender. Even before the RCF closed on September 22, the Fed had lent AIG tens of billions of dollars.

the decentralized company in order to identify its weaknesses and the substantial liquidity drains (GAO 2011, 31–32).

Geithner charged senior FRBNY officer Sarah Dahlgren with overseeing AIG (Starr v. United States and AIG 2015, 74). She formed a group of 25 employees supported by hundreds of outside experts in law, finance, accounting, and tax (COP 2010, 180). Although Treasury, and to some extent the New York State Insurance Department, had a role in the rescue, the FRBNY was on the scene day in and day out and was the main governmental actor, at least in the beginning (Starr v. United States and AIG 2015, 27–28).

After the passage of TARP and the Treasury's agreement to provide additional assistance, a more coordinated effort emerged. Treasury representatives joined the FRBNY AIG team in rating agency meetings and worked with it to design the restructuring plans, with Treasury being primarily in charge of managing the equity investments. After the payoff of the RCF, the Trust Stock was converted to common shares that were transferred to the Treasury, which sold the AIG shares for the government's benefit (COP 2010, 180; Dahlgren 2018).

Another challenge came almost immediately, as the government team was inundated with calls from state insurance commissioners, rating agencies, and counterparties requesting information and expressing concerns (Dahlgren 2018). The FRBNY hired a communications professional to address these issues (see Key Design Decision No. 15).

14. How did the government coordinate its actions?

The Fed and Treasury coordinated the rescue with the Fed taking the lead and providing liquidity and the Treasury providing equity investments. Treasury personnel worked with the FRBNY group monitoring AIG and together they designed the additional rescue interventions (Dahlgren 2018, 1-7;Millstein 2018, 3-6).

Representatives from the NYSID seem to have been the most prominent and present of the insurance commissioners. This may have been because of the state's prominence among the National Insurance Commissioners, which led to then–NYSID superintendent Eric Dinallo's heading a task force to provide information and coordination on the AIG matter. In addition, at one point, NYSID recommended to the governor of New York that the insurance subsidiaries be permitted to lend to the holding company parent as part of a private solution that did not come to fruition (Dinallo 2010, 18–19). AIG's consolidated supervisor, the OTS, was also engaged but played a limited role (COP 2010, 72–75).

The Fed consulted with the Treasury before deciding to extend the RCF, and Geithner specifically asked Paulson to provide him a letter of support, which he did.[85] He had done similarly in the rescue of Bear Stearns (Geithner 2019, 19; Paulson 2010, 217–221, 235–

[85] In a letter dated October 8, Secretary Paulson stressed that "the situation at AIG presented a substantial and systemic threat" to financial markets and that the government's decision to assist AIG "was necessary to prevent the substantial disruption to financial markets and the economy that could well have occurred from a disorderly wind-down of AIG" (Paulson 2009).

237). The Treasury played an active role in designing and implementing the later restructuring of AIG to address its longer-term issues (COP 2010, 73). As a result of the recapitalization plan, Treasury acquired the Trust shares held by the AIG Trust and eventually coordinated the sale of all AIG shares (COP 2010; AIG 2010, 12).

15. How did the government communicate the terms of the intervention?

The Board of Governors of the Federal Reserve announced the RCF on September 16, 2008 (BdofGov 2008a). Thereafter, the FRBNY followed a pattern of disclosing the details of major elements in the government's funding to AIG as they occurred. The announcements followed a policy of transparency and included a stated purpose and some insight into the factors influencing the government's decision.

The Board of Governors also filed reports pursuant to Section 129 of the Emergency Economic Stabilization Act of 2008 (EESA) with the Senate Committee on Banking, Housing, and Urban Affairs, as well as with the House Committee on Financial Services. As assistance to AIG evolved to include Treasury investments under TARP, the Treasury also made contemporaneous announcements, and many of the announcements were made on a joint basis by the Fed and Treasury.

Given the size and range of AIG's activities, the government's actions spurred many requests for information, challenging the FRBNY's communications resources (Dahlgren 2018). FRBNY officials took unique steps, such as attending the conference of the state insurance commissioners, to inform the public about AIG (Dahlgren 2018). They also hired an experienced communications professional to build an internal FRBNY team to handle all AIG-related communications and created a webpage dedicated to AIG (Dahlgren 2018; Gutt 2019; FRBNY n.d.1).

AIG was the subject of hearings by Congress, the subject of a Government Accountability Office report, and featured prominently in the Financial Crisis Inquiry Commission (FCIC) report (HCOGR 2009a; COP 2010; GAO 2011; FCIC 2011).

16. What was the government's exit strategy?

Once AIG fully repaid the RCF, the Trust converted the Trust Stock into shares of AIG common stock and transferred those shares to the US Treasury General Fund, subsequently dissolving the Trust (FRBNY 2011a; Starr v. United States and AIG 2012, 16). As a result, Treasury held more than 1.6 billion shares of AIG common stock—equal to approximately 92.1% ownership in AIG, and the company was consolidated on the government's balance sheet (Treasury 2011). Although the Trust was charged with creating a plan for disposing of the Trust Stock, this seems to have been abandoned at some point, but the Trustees continued to work with the government throughout the rescue (Feldberg 2019; Baxter 2021).

Over the next two years, Treasury disposed of the AIG common stock through six public offerings (Treasury 2012a). Treasury reported net proceeds from the stock offerings of more than $51.6 billion, a $4.1 billion positive return for taxpayers; a return of $0.9 billion was also recognized from preferred stock (Treasury 2012a).

17. Were there unique factors that influenced the government's actions?

A. Because of a limited tool kit, the Fed was the only government entity that could assist AIG, even though it was not its regulator and knew little about the company.

In September 2008, the government did not have a way to conduct an orderly resolution of nonbank institutions such as AIG (Geithner 2019). Nonetheless, when the company began to experience liquidity concerns, it sought assistance from the Federal Reserve, even though the Fed was not its regulator. The Fed was able to lend to AIG under its emergency lender-of-last-resort authority pursuant to FRA Section 13(3). Given the size of the loan, the Fed coordinated with the AIG's regulator, the OTS, to gain as much information as quickly as possible and sought the support of the Secretary of the Treasury for its actions.

B. The threat of ratings downgrades was a major influence on the rescue.

The threat of further downgrades by the three major credit ratings agencies (S&P, Moody's, and Fitch) and the major insurance rating agency (A.M. Best) loomed over AIG throughout the period of government assistance. Although the RCF provided needed liquidity, its size and terms were inconsistent with those expected of an investment-grade company, causing major concern from the agencies. Throughout much of the rescue, the focus was on restructuring AIG's balance sheet to avoid downgrades, which could have triggered collateral calls or caused a run by counterparties, resulting in AIG's failure despite the government's assistance. Concern over potential downgrades affected not only the terms and structure of the government assistance, but also applied tighter time constraints on officials implementing such efforts (see, for example, COP 2010, 86; Paulson 2010, 393; Geithner 2014, 303; Sorkin 2010, 391). As stated by James Millstein, chief restructuring officer at Treasury and intimately involved with AIG, in a 2018 interview: "What all of the people who were harping about what we were doing at the time missed is the centrality of the rating agencies as a constraint on how bailouts were structured, because a financial institution cannot operate without at least an investment-grade rating" (Millstein 2018, 6).

C. Even in the face of limited information, an initial commitment of assistance may bind the government to doing "whatever it takes" to save a systemically important company despite the unknown cost.

Once the government decided to assist AIG, doing anything less than "whatever it takes" might not have been a realistic option. The purpose of the RCF was "to assist AIG in meeting its obligations as they come due" and allow it to restructure its business "in an orderly manner, with the least possible disruption to the overall economy" (BdofGov 2008a). An AIG failure after the government extended it $85 billion would have been contrary to the overall purpose and would have risked a loss of confidence in the government's ability to address systemic risk and rescue nonbank entities that posed that risk. Had this occurred while the financial system continued to be weakened and fragile, it would have added significant stress to the situation.

At least one member of the COP, J. Mark McWatter, expressed a similar view:

> In my view, the liquidity and solvency of AIG were most likely assured once the FRBNY advanced $85 billion to AIG and it seems unlikely—although not without possibility—that the government would have walked away from such a substantial investment of taxpayer funds and allowed AIG to fail (COP 2010, 288).

Sjostrom (2009) also acknowledges that such a situational bias may exist:

> One could conclude from the fact that the government has twice restructured the bailout after having weeks and months instead of 48 hours to make a decision indicates that AIG's bankruptcy truly does pose significant systemic risk. The decision makers (Treasury Secretary Geithner and Fed Chairman Bernanke), however, may have believed it politically unfeasible to reverse course given the billions of taxpayer dollars already sunk into AIG, or they may have been subject to cognitive biases such as the confirmation trap[86] [original footnotes omitted] (Sjostrom, 2009, 983).

The government didn't walk away; it worked with AIG to consider restructuring options that stabilized the company, although this required additional investments by the government. Bankruptcy continued to be studied as an option at least through mid-2009 but was ruled out largely because of the parent guarantee (Baxter 2021). And the rescue had to contend with the political reality that the participants changed as the presidency changed in January 2009 (Baxter 2021).

IV. Evaluation

Did the government's intervention enable AIG to meet its obligations as they became due, provide it time to sell certain of its businesses in an orderly manner, and minimize disruption to the overall economy, while protecting the taxpayers?[87] By those standards, the AIG rescue was a success. Assistance from the government to AIG spanned the period of September

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[86] The confirmation trap is a cognitive bias "whereby the decision maker seeks confirmation for what is already thought to be and neglects opportunities to acknowledge or find disconfirming information." John R. Schermerhorn et al., Organizational Behavior 364 (2002), cited in Sjostrom 2009, 983, footnote 252.

[87] The Federal Reserve press release announcing the RCF read in part:

> The Board determined that, in current circumstances, a disorderly failure of AIG could add to already significant levels of financial market fragility and lead to substantially higher borrowing costs, reduced household wealth, and materially weaker economic performance.
>
> . . . The purpose of this liquidity facility is to assist AIG in meeting its obligations as they come due. This loan will facilitate a process under which AIG will sell certain of its businesses in an orderly manner, with the least possible disruption to the overall economy." These themes were echoed in later releases as the assistance was amended and augmented (BdofGov 2008a).

2008 through August 2012—when ML III sold the last of the securities that it held—and included two restructurings and a major recapitalization. The company continued to operate throughout the crisis; it paid its creditors, avoiding knock-on effects to the weakened financial system and markets. It was able to forestall credit ratings downgrades and sell assets at a pace slower than originally anticipated to survive to stability. It reduced its size significantly (from total assets of $1.02 trillion in September 2008 to $551 billion four years later) (Treasury website n.d.). It also repaid to the government all amounts borrowed plus interest and fees, the net profits of which (including the sale of AIG stock held by the government) totaled $22.7 billion (Treasury 2012b).

The AIG case demonstrates that in seeking to rescue an operationally complex, systemically important nonbank, the government must be prepared to invest significant resources for deploying a variety of tools, including crafting unique facilities, to address the entity's particular circumstances and risks, some which may not be fully known at the beginning of the government's involvement.[88]

However, despite the outcome, the case has been the subject of various criticisms from shareholders, academics, market commentators, and government officials. The rescue revealed some of the weaknesses in the US regulatory system and in the arsenal of crisis-fighting tools. In addition, significantly varying viewpoints of the government's role in stabilizing the financial system and appropriate trade-offs were expressed by the oversight bodies.

Regulatory Failures

State Insurance Regulators

There does not seem to have been much scrutiny of the state insurance regulators' ability to oversee AIG's increase in credit risk with respect to the investment portfolio of the Securities Lending program, which began in 2005. Michael Moriarty of the NYSID testified to the FCIC that as early as July 2006, the department was engaged in discussions about the SecLending Program with AIG (Moriarty 2010, 4). It appears that Texas first identified the practice of investing in RMBS in 2007 and shared the information with other state regulators. Eric Dinallo, former superintendent of the New York State Insurance Department, told the FCIC that since September 2007, state regulators had worked with AIG to reduce exposures of the SecLending Program to mortgage-related assets but that the problems developing with the CDS business had hindered their efforts (FCIC 2011, 345). However, it is not clear why the practice was not identified sooner than 2006, or why efforts to address its risks only started

[88] In October 2008, four AIG subsidiaries began utilizing a broad-based program established by the Fed to spur the issuance of commercial paper, the Commercial Paper Funding Facility (CPFF), which purchased three-month unsecured and asset-backed commercial paper directly from qualified borrowers (COP 2010, 85). Usage by AIG subsidiaries was limited but consistent with the government's efforts with respect to other nonbank entities, where all available resources and facilities may be employed; AIG subsidiary usage was limited to an originally authorized aggregate of $20.9 billion, before falling to $15.2 billion (Webel 2017, 10). Aggregate subsidiary borrowing reached as much as $15.3 billion under this facility (Webel 2017, 10).

in 2007; earlier actions might have permitted more successful downsizing of the portfolio prior to September 2008 (COP 2010, 56–57).

It is worth noting that during an FCIC hearing, the Commission asked why the regulators did not require the AIG insurance subsidiaries to pull back their securities lending programs from the stand-alone subsidiary and resume management of this activity themselves, something Dinallo admitted could have been done and which would have returned direct management of the credit risks of the portfolios to each subsidiary. Some of the reasons given for why this was not been done were (1) a delay in receiving the information regarding the asset mix of the investment pool; (2) the need for concerted action among the various insurance commissioners to be effective; and (3) the wind-down plan that had been implemented and was having some success prior to September 2008 (FCIC 2010, at 1:00–1:05).

Dinallo also testified before the House Committee on Oversight and Government Reform that NYSID had increased its scrutiny of the company and AIG's exposure to credit default swaps starting in February 2008 (Dinallo 2008, 3). He also discussed a plan by the state to permit the parent holding company to use $20 billion in excess surplus assets from its insurance subsidiaries, an unusual move that was aborted when the private-sector rescue plan fell apart (Dinallo 2008, 5).

Office of Thrift Supervision

Many commentators found the OTS to be a woefully inadequate regulator of the trillion-dollar insurance company as its consolidated regulator, and agency officials admitted as much. The FCIC found that the agency "lacked the capability to supervise an institution of the size and complexity of AIG, did not recognize the risks inherent in AIG's sales of credit default swaps, and did not understand its responsibility to oversee the entire company, including AIG Financial Products." The former OTS director, John Reich, told the FCIC that his job trying to oversee the massive insurance company felt "like a gnat on an elephant" (FCIC 2011, 344, 345–351).

Deregulation

Another significant regulatory failure cited by the FCIC was that the "sweeping deregulation of over-the-counter (OTC) derivatives, including credit default swaps" had permitted AIG's entry into the CDS market to go unregulated. The OTS had no authority to require that the company maintain additional capital or hedge against the risks that it was undertaking (FCIC 2011, 352).

In the absence of a standing lender-of-last-resort facility for nonbank companies, authority to inject capital into, resolve, or guarantee AIG's debts once it began to experience liquidity problems, the Fed stepped in using its emergency authority under FRA Section 13(3) to write the RCF, the largest loan ever made to a single-private borrower (Baxter 2021; FCIC 2011, 344–352; Wessel 2009, 193). Given the time constraints, the loan was based on incomplete information about the company and had to be modified as the FRBNY learned more about

AIG's operations and financial condition (Baxter 2021; FCIC 2011, 344–352; Geithner 2019, 6).

Other Criticisms

An examination of the reports of the Congressional Oversight Panel and the Special Inspector General for the Troubled Asset Relief Program (SIGTARP)[89] that reviewed the AIG rescue reveal the general themes of the government's criticism. In a June 2010 report, the COP summarized the rescue thusly:

> Through a series of actions, including the rescue of AIG, the government succeeded in averting a financial collapse, and nothing in this report takes away from that accomplishment. But this victory came at an enormous cost. Billions of taxpayer dollars were put at risk, a marketplace was forever changed, and the confidence of the American people was badly shaken (COP 2010, 9).

The major governmental criticisms of the rescue fall into three categories: (1) the risk undertaken by the government in rescuing AIG, (2) elements of the rescue that were viewed as preferential, and (3) dissatisfaction with the mechanics of the rescue and the level of transparency adhered to.

The risk undertaken by the government

Although acknowledging both that the Fed was not AIG's regulator and the tight timeframes involved, the COP criticized the Fed's decision to provide the RCF rather than other possible options that might have meant fewer funds expended or less risk undertaken by taxpayers, for example: a short-term bridge loan, a public-private facility, or a plan for a prepackaged bankruptcy (COP 2010, 114–120, 128–129).

The COP and SIGTARP also criticized the government for the risk assumed in connection with ML III's purchase of CDOs from AIG's counterparties for total consideration of par, suggesting it could have achieved its aims with smaller outlays (SIGTARP 2009b; COP 2010 169–177). The panel concluded that AIG had employed poor risk management and noted that it had reported a material weakness in its internal oversight and monitoring of the financial reporting related to the valuation of the CDO portfolio (COP 2010, 45–6).

Elements of the rescue were viewed as preferential.

Several elements of the AIG rescue have resulted in a broad characterization of it as preferential and unfair: (i) the payment of bonuses to AIG employees (and in particular, to

[89] SIGTARP conducted three studies focusing on issues arising from the assistance to AIG. The first was regarding compensation and the payment of bonuses (SIGTARP 2009a), the second regarded Maiden Lane III (SIGTARP 2009b), and the third examined issues facing the government in regulating AIG on an ongoing basis (SIGTARP 2012).

Financial Products Division employees responsible for the CDS business), (ii) the receipt by ML III CDS counterparties of par value when market value was less, (iii) the fact that the all AIG creditors were paid in full, and (iv) the fact that ultimately, AIG shareholders recovered value as the company stabilized (COP 2010, 104–05; Brady 2009; Wilson 2009). These factors amount to a very different outcome than might have resulted from a bankruptcy action (Brady 2009; Wilson 2009).

Executive Bonuses Controversy

Through its funding and equity ownership, the government was able to exercise a great deal of influence over AIG's operations; however, it was not in total control of the company's actions. When in March 2009, AIG paid $165 million in bonuses to AIG Financial Products Division employees, it caused a significant public outcry that was taken up by Congress, the media, and others (Geithner 2009, 1; AIG 2008b, 46; Yellin 2009).

One newspaper commented: "No aspect of the current financial crisis has infuriated average Americans and lawmakers more than the AIG bonus issues" (Brady 2009). President Barack Obama said that the prospect of AIG awarding bonuses runs counter to "our values," and Congress called for the administration to somehow recover the money, which was not an easy thing to do given that they were paid pursuant to contracts (Wilson 2009).

SIGTARP, however, found the bonuses to be "consistent with the law in place at the time the payments were made and AIG's contractual obligations to the government. These payments were not prohibited under EESA and the American Recovery and Reinvestment Act." It also found that the FRBNY had made efforts to understand AIG's compensation programs and found a "staggeringly complex, decentralized system consisting of hundreds of separate compensation and bonus plans" (SIGTARP 2009a, Summary). SIGTARP recommended that the Treasury and the FRBNY work collaboratively on future compensation decisions and offered additional suggestions on how Treasury might increase oversight of institutions in which the government has a substantial investment (SIGTARP 2009a, Summary).

The House Committee on Oversight and Government Reform held hearings in connection with the SIGTARP report to consider the question "What is the justification for giving bonuses to people who drove their own firm off a cliff and very nearly crashed the US economy?" (HCOGR 2009b, 5). However, a bill that would have taxed the bonuses at 90% failed to get sufficient support (VOAX News 2009; Lerer 2009).

The CDS counterparties were paid in full.

The COP and SIGTARP targeted particular criticism at ML III's purchase of CDOs (so that related CDS could be cancelled) with the counterparties receiving par through a combination of purchase payments and retention of collateral when, at the time, the market values of the CDOs were less than half of par value (COP 2010, 89–94, SIGTARP 2009b, 29). This resulted in claims of "crony capitalism" and assertions that the government was orchestrating a "backdoor bailout"[90] despite the FRBNY's contention to the contrary (Salter 2013, 20; SIGTARP 2009b, 29). As noted above, the FRBNY's contention is at least somewhat at odds with one of officials' justifications for the AIG rescue, which was to avoid asset write-downs at AIG's counterparties (Wessel 2009 26; Geithner 2014, 191).

AIG's creditors were paid in full; but were they deserving? Because of the government's assistance, AIG was able to continue to operate and pay its bills as they became due, which is not what would have occurred in a bankruptcy proceeding. In discussing the government's approach to the AIG support, the COP report raises the question of whether, in total, it was a valid use of taxpayer funds:

> One consequence of this approach was that every counterparty received exactly the same deal: a complete rescue at taxpayer expense. Among the beneficiaries of this rescue were parties whom taxpayers might have been willing to support, such as pension funds for retired workers and individual insurance policyholders. *But the across-the-board rescue also benefitted far less sympathetic players*, such as sophisticated investors who had profited handsomely from playing a risky game and who had no reason to expect that they would be paid in full in the event of AIG's failure [emphasis added] (COP 2010, 3).

Not only do these criticisms raise a question of bias, but they also raise questions regarding what it means for the government to provide assistance to a company to "enable it to pay its debts," the first line of security that the market is looking for from a weakened company. James Millstein, who worked on the AIG rescue while at Treasury, noted the irony of this position: "The whole purpose of the bailout was to enable AIG to meet its obligations in the ordinary course of business and not default on anyone" (Millstein 2018).[91]

Inherent in the COP's assessment also is a conundrum; it seems to favor the government's delivering bankruptcy-like results (for example, ranking creditors and providing partial payment of claims to some) while also avoiding the bankruptcy of a systemically important institution precisely because of the potential damage to the system that would result from such bankruptcy. While a policy of "shared sacrifice" might have helped to mitigate the sense of preferential treatment that attended the AIG rescue, as a practicable matter, it may not always be possible or desirable to employ this policy in the midst of a system-wide crisis.[92]

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[90] This term appears to have been used originally by Starr International in its litigation against the FRBNY but was later adopted by certain government bodies and other critics.

[91] Millstein also discusses this concept as it relates to the controversy surrounding payments to the CDS counterparties and expounds on why paying anything less than all creditors in full in such a situation poses unmanageable challenges for government in the midst of a crisis (Millstein 2018, 6).

[92] See, for contrast, a different approach that was taken in restructuring the auto manufacturers General Motors and Chrysler. There, the government promoted as part of its strategy and mentioned in its announcements the need for "shared sacrifice" from creditors and unions, and it lambasted creditors who did not agree to haircut their claims (Treasury 2009b).

It should also be noted that even if discounted claims were achievable, it is not a settled viewpoint that government assistance should require haircutting the recipient's creditors, or that such would be desirable; there are risks. Geithner has expressed the opposite opinion, that imposing haircuts might cause panic among creditors (Geithner 2014, 214). The FRBNY also argued that requiring haircuts might well have resulted in the very harm to the system that the assistance was intended to avoid, for example, by triggering a run, rating downgrade, or lawsuits (SIGTARP 2009b, 29–30; COP 2010, 147). The COP did acknowledge the possibility of such (COP 2010, 145-152).

Further, in the absence of a bankruptcy-like process, the prospect of negotiated claims raises a plethora of difficult questions: To what extent should the government micro-manage the downstream utilization of funds that it provides in a crisis? If haircutting is to be required, on what basis are value judgments of creditors to be made? Will the government play a role in negotiating between the third parties, inserting itself into their contractual agreement? How should the government address potential conflicts between the Fed's regulatory role and its role as crisis lender? Arguably, during a crisis is not the best time to resolve such tenacious policy issues.

AIG shareholders recaptured value.

Although the government's assistance has been called a nationalization, the actions did not wipe out the AIG shareholders' interests, although their voting rights and dividend rights were greatly diluted. Those that held onto the stock eventually saw it rebound in value, a fact that the courts in the Starr litigation also noted. (Starr v. United States and AIG 2015). This also was a different result from a bankruptcy proceeding, which would have likely extinguished the value of the stock. It should be noted, however, that three years after AIG repaid all amounts under the RCF, the stock had not returned to anything near its pre-crisis level, as shown in Figure 9.

Figure 9 -AIG Share Price: September 2, 2008 to September 2, 2013

Note: Prices in $US. Indexed to 100 at September 2, 2008
Source: Bloomberg

Little contemporaneous assistance to homeowners

It cannot be overlooked that the crisis was sparked by the meltdown in the housing market. At the same time that the government was providing assistance to companies like AIG, which were paying their executives million-dollar bonuses, millions of Americans were watching their mortgages reset to higher payments, fighting a foreclosure action, being battered by the downturn unable to sell, or watching their positive net worth in their home turn negative (FHFA n.d.2; Cordell et al. 2009). The government's loan modifications programs to assist troubled homeowners, the Home Affordable Refinance Program (HARP) and the Home Affordable Modification Program (HAMP), were announced in February and March 2009, respectively, but were slow to sign up lenders and did not begin operating until months later (FHFA n.d.2; Cordell et al. 2009). The appearance that Wall Street was rescued from their risky bets while "taxpayers got stuck with the bill," was a powerful one that attached not only to AIG (Greider 2010). This perception fueled "public anger" and a "popular sense of injustice" at the government (Greider 2010).

Dissatisfaction with the mechanics of the rescue and the level of transparency.

Nationalization

There were many indications that some government officials and legislators were not comfortable with the Fed, a semi-autonomous entity, being at the helm of such a massive intervention that was essentially (out of necessity) improvised, even though many of its decisions were, from the beginning, made in consultation with the Treasury. The RCF effectively nationalized AIG, with control in the commercial company effectively being granted to the Trust as majority shareholder (for the benefit of the Treasury). This was a highly unusual action for the US government. Questions swirled about the ownership and the independence of the Trust created to hold the shares on behalf of the Treasury for the benefit of the taxpayers, but these were ultimately settled by court rulings in the government's favor[93] (Starr v. United States and AIG 2015, 2; BdofGov 2009b, 4; Geithner 2014, 196–197). The mechanism paid off handsomely for the government in the long run, which realized both F of the loans and a significant gain for the taxpayers when the shares

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[93] See Footnote 36 . Also, in a related case brought by Starr against the FRBNY (Starr v. FRBNY 2012), Starr claimed that the FRBNY had breached its fiduciary duty to AIG under Delaware corporate law. In considering the FRBNY's motion to dismiss, the District Court found that no such fiduciary duty existed because the FRBNY (1) did not control AIG as a majority shareholder, nor (2) did it exercise actual control over the company, thus no such duty arose. In reaching its decision, the court found that the Trust was not controlled by FRBNY and pointed to several provisions of the Trust Agreement supporting this conclusion. The court also held that Delaware fiduciary duty law was preempted by federal law, as upholding it would have interfered with FRBNY's performance of its duties. The decision was upheld by the US Court of Appeals for the Second Circuit (Starr v. FRBNY 2014).

were sold. However, some government bodies reviewing the rescue questioned whether it was appropriate for the Fed to achieve this result by acting like a private investor.[94]

Transparency

The COP made the argument that the Fed is subject to less oversight and accountability from Congress or the current presidential administration than Treasury or another agency: "Since the Federal Reserve is not as politically accountable as Treasury, it is likely that the Federal Reserve's goals are at least somewhat different from those of Treasury" (COP 2010, 168). The panel also noted that "while the Federal Reserve has provided a large amount of reporting and information concerning its actions during the crisis," it was not subject to the statutory disclosure and oversight requirements that governed the Treasury. Nevertheless, other than the ML III controversy, this did not seem to be a major concern of the panel (COP 2010, 186), and we note that overall, the Fed appeared to make a great effort to communicate the particulars of its assistance to AIG, disclosing, for example, full copies of the RCF agreement and related documents.

Post-crisis resolution framework

In sum, the AIG rescue demonstrates how complex and challenging the rescue of a nonbank was under the regulatory system and limited tools that existed in 2008. The Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank) that was passed in 2010 enacted a new resolution scheme, the Orderly Liquidation Authority (OLA), to address future failing entities such as AIG. Under the OLA, the FDIC would take failing entities through a receivership process similar to what it does for failing banks (FDIC n.d.). However, availability of the OLA is dependent on the company's being designated a Systemically Important Financial Institution (SIFI) by the Financial Stability Oversight Council (FSOC) (FDIC n.d.). AIG was so designated in July 2013, but the FSOC removed its designation in October 2017 after finding that changes that AIG made to reduce its balance sheet size and risk profile reduced the "the extent to which AIG's material financial distress could pose a threat to US financial stability" (FSOC 2017).

As of this writing, the government would stand in a position similar to, but more constrained than, 2008 with respect to an AIG-type company that began to fail. Now, as then, there is no resolution authority to address its orderly dissolution other than bankruptcy. However, due to changes in the law enacted by Dodd-Frank, the Fed's Section 13(3) authority would not be as available to address early liquidity issues on an individualized basis. Section 13(3) was amended by Dodd-Frank so that the Fed's emergency lending must be made through a

[94] See, for example, COP 2010, which quotes Peter Stein of the *Wall Street Journal*: "In this scenario, AIG is treating US taxpayers like private-equity investors funding its growth in hopes of a nice payoff down the line. That's wrong. The only way to mitigate the moral hazard of saving AIG is to repay US taxpayers sooner, not later" (COP 2010, 241, footnote 943).

"program or facility with broad-based eligibility"[95] that is established with the approval of the Secretary of the Treasury (BdofGov n.d.1). Either way, it is likely that now, as then, that whatever actions the government might take will be subject to intense scrutiny and judgment at every step, even if in the final accounting the combined efforts prove successful.

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[95] "Broad-based eligibility" has been defined through rule-making to mean (i) the program was designed to provide liquidity to an identifiable market or sector of the financial system, (ii) the program was not designed to aid one or more specific companies to avoid bankruptcy or other resolution including by removing assets from the balance sheet of the company or companies, and (iii) that at least five entities would be eligible to participate (12 § CFR 201.14). The rule makes it clear that the RCF as implemented in 2008, as a stand-alone facility, and the Maiden Lane facilities would not be permitted (12 § CFR 201.14).

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Appendix A: Overview of Government Assistance to AIG 2008–2012

Intervention date	9/16/08	10/8/08	11/10/08	3/2/09	9/30/10	12/10/12
Revolving Credit Facility (Available $)	85.00	85.00	60.00	35.00	35.00	0.00
Securities Borrowing Facility (Available $)	–	37.80	0.00	0.00	0.00	0.00
Equity Capital Facility (Available $)	–	–	40.00	40.00	0.00	0.00
Maiden Lane II asset purchase	–	–	22.50	22.50	22.50	0.00
Maiden Lane III asset purchase	–	–	30.00	30.00	30.00	0.00
Purchase of preferred interests in 2 subsidiaries	–	–	–	25.00	25.00	0.00
Equity Capital Commitment Facility (Available $)	–	–	–	29.80	0.00	0.00
Purchase of common stock	–	–	–	–	47.50	0.00
Purchase of preferred stock	–	–	–	–	22.30	0.00
Revolving Credit Facility Equity Trust	0.00	0.00	0.00	0.00	0.00	0.00
Total commitment	85.00	122.80	152.50	182.30	182.30	0.00

Source: Author-compiled. Figures in billions ($).

Appendix B: Timeline of Combined Assistance to AIG

September 16, 2008:	The Board of Governors of the Federal Reserve authorizes the Federal Reserve Bank of New York (FRBNY) to extend an $85 billion emergency credit line to American International Group, Inc., (AIG) to prevent AIG's failure by providing sufficient liquidity for AIG to "make appropriate dispositions of certain assets over time." Treasury supports the decision.
September 22, 2008:	AIG and the FRBNY sign the official Credit Agreement and Guarantee and Pledge Agreement that implements the Revolving Credit Facility (RCF), with a maturity date of September 22, 2010. The Agreement also provides that AIG will sell, for $500,000, 100,000 shares of Series C Preferred Stock, convertible into 79.9% of AIG's common stock, to an independent trust to be created for the sole benefit of the US Treasury.
October 6, 2008:	FRBNY announces the creation of a Securities Borrowing Facility (SBF), a facility designed to fund (separate from the RCF) increased requests for cash collateral from counterparties that had borrowed from AIG's Securities Lending Program. A total of $37.8 billion was made available to the firm.
November 10, 2008:	AIG and Treasury agree in principle, under the Troubled Assets Relief Program (TARP), for Treasury to purchase $40 billion in newly issued Series D Preferred Stock and a warrant to purchase 2% of AIG's common stock outstanding. As a result, the convertibility of the Series C Preferred Stock is reduced to 77.9%. Two special purpose vehicles (SPVs), Maiden Lane II and Maiden Lane III, are established to hold residential mortgage-backed securities (RMBS) and collateralized debt obligations (CDOs) issued by AIG, respectively. With the proceeds from the Maiden Lane II SPV, AIG terminated the SBF.
January 16, 2009:	The FRBNY announces the establishment of the independent AIG Credit Facility Trust (the Trust), headed by three independent trustees appointed by the FRBNY, which will hold the 100,000 shares of Series C Preferred Stock.

March 2, 2009:	AIG and the Federal Reserve announced the Second Restructuring Plan with a joint press release. Two SPVs would be created for two of AIG's largest life insurance subsidiaries, AIA and ALICO, where the FRBNY would receive preferred interests and dividends in, an amount "equal to a percentage of the fair market value" of the two subsidiaries. AIG also files a Certificate of Designations agreeing to issue 100,000 shares of Series C Preferred Stock to the Trust in exchange for a $500,000 consideration.
June 30, 2009:	The AIG Annual Meeting of Shareholders takes place, where common stockholders vote down an increase in the number of shares of authorized AIG common stock. However, a vote approving a 1-to-20 reverse stock split passes, providing the shares needed to allow the Trust, and Treasury, to convert their preferred stock into AIG common stock.
December 1, 2009:	In accordance with the March 2, 2009, Second Restructuring Plan, AIG releases agreements to create two special purpose vehicles in the form of limited liability companies to hold the common stock of two of AIG's largest foreign life insurance subsidiaries, AIA and ALICO, in anticipation of their sale or IPOs, establishing AIA Aurora LLC and ALICO Holdings LLC. With the formation of the SPVs, the FRBNY agrees to accept $16 billion in preferred shares of the AIA SPV and $9 billion in preferred shares of the ALICO SPV in exchange for reducing the outstanding debt under the RCF by $25 billion and the commitment thereunder from $60 billion to $35 billion.
September 30, 2010:	Treasury, the FRBNY, and the Trust announce an agreement on a comprehensive Recapitalization Plan for AIG designed to recoup all loans from the US government, including all loans under the RCF, and to end the ownership relationship between the government and AIG.
December 8, 2010:	AIG, the two SPVs of ALICO Holdings and AIA Aurora LLC, the FRBNY, Treasury, and the Trust enter into a Master Transaction Agreement based on the terms set forth in the September 2010 Recapitalization Plan. The Plan involves AIG's repayment of any remaining debt under the RCF, the conversion of the Trust's and Treasury's preferred stock into AIG common stock, and the transfer of the Trust's common stock to Treasury, resulting in the dissolution of the Trust.

January 14, 2011:	The FRBNY announces that AIG has completed the repayment of all loans provided by the RCF and that the Credit Agreement is subsequently terminated. Treasury exchanges its $49.1 billion of Series E and Series F TARP-related preferred stock for AIG common stock. The Trust also converts its Series C Preferred Stock into AIG common stock and transfers the stock to Treasury's General Fund, which increases Treasury's overall ownership stake in AIG to roughly 92.1%. AIG is consolidated onto the government's balance sheet.
February 28, 2012:	The remaining securities in the Maiden Lane II LLC portfolio are sold off by the FRBNY, for a net gain of $2.8 billion on its management of the ML II portfolio.
July 23, 2012:	The remaining securities in the Maiden Lane III LLC portfolio are sold off by the FRBNY, for a reported net gain of $6.6 billion on its management of the ML III portfolio. This marks the end of the Federal Reserve's involvement with AIG assistance.
December 10, 2012:	Treasury sells the last of its ownership stake in AIG in its sixth and final offering of AIG common stock, netting more than $51 billion in gross cash proceeds. Of the proceeds, $17.6 billion came from the AIG common stock held by Treasury's General Fund, converted from Series C Preferred Stock the Trust had held prior to its dissolution. The government calculates an aggregate $22.7 billion profit across all AIG assistance.
March 2013:	Treasury sells its warrants back to AIG, officially ending all government investment in the company