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The Rescue of American International Group Module E: Maiden Lane III[1]

Lily S. Engbith[2] *and Devyn Jeffereis*[3,4]

Yale Program on Financial Stability Case Study
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Abstract

Starting in mid-2007, American International Group (AIG) faced increasing collateral calls from counterparties looking to protect their positions in credit default swap (CDS) contracts that AIG had written on residential and commercial collateralized debt obligations (CDOs) (US COP 2010, 28-30). Per these agreements, the AIG parent company was responsible for insuring the value of the CDOs against the risk of a negative credit event, such as default (GAO 2011, 5; US COP 2010, 29-30). AIG's immediate need for liquidity on September 16, largely driven by a securities lending program and those collateral calls, prompted the Federal Reserve to lend the company $14 billion, a loan that grew into an $85 billion revolving credit facility (Baxter and Dahlgren 2010, 2, 4). But the company continued to face pressing

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[1] This case study is one of seven 2021 Yale Program on Financial Stability (YPFS) case modules considering the various elements of the government's rescue of American International Group:

- "The Rescue of American International Group – Module A: The Revolving Credit Facility" Alec Buchholtz and Aidan Lawson.
- "The Rescue of American International Group – Module B: The Securities Borrowing Facility" by Lily S. 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.

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liquidity needs, market losses, and rating agency downgrades. The Fed and Treasury decided they had to restructure AIG's federal assistance to shore up its balance sheet and reassure market participants and rating agencies about the company's viability (Baxter and Dahlgren 2010, 4).

As part of that restructuring, the Federal Reserve Board authorized the creation of Maiden Lane III (ML III), a special-purpose vehicle that would purchase CDOs from AIG's counterparties in exchange for the cancellation of their CDS contracts. This would end the liquidity-draining collateral calls and cap AIG's exposure to further losses on the CDS contracts (FRBNY 2017; US COP 2010, 73-74). The purchase was funded by a $24.3 billion senior loan from the Federal Reserve Bank of New York and a $5.0 billion equity contribution from the AIG parent company FRBNY n.d.2). The establishment of ML III helped to lessen AIG's exposure to the deteriorating CDO market, end unmanageable collateral calls, and avoid downgrade pressures (Baxter and Dahlgren 2010, 4).

Keywords: AIG, asset purchase, collateralized debt obligations, credit default swaps, Federal Reserve Bank of New York, Maiden Lane III, senior loan

American International Group, Inc.: Maiden Lane III

At a Glance

Summary of Key Terms	
Purpose: To facilitate the purchase of collateralized debt obligations from counterparties of AIG Financial Products and terminate their related credit default swap agreements, halting cash collateral calls and capping any further losses to AIG from this business (US COP 2010, 73)	
Announcement Date	November 10, 2008
Operational Date	November 25, 2008
Termination Date	November 12, 2014
Legal Authority	Section 13(3) of the Federal Reserve Act
Amount Authorized	Up to $30 billion senior loan to ML III from FRBNY
AIG Participation	$5 billion in equity
Peak Utilization	$29.3 billion to purchase CDOs with a par value of $62.1B from counterparties that retained $35B in collateral received earlier from AIG[5]
Participants	AIG, FRBNY

AIG Financial Products (AIGFP) began writing credit default swap (CDS) contracts in 1998 (US COP 2010, 21).[6] In 2004, AIGFP expanded rapidly into CDS on multi-sector collateralized debt obligations (CDOs) that were backed by a collateral pool of different asset-backed securities (US COP 2010, 21). These CDS contracts on CDOs would be the main source of collateral calls and mark-to-market losses for AIGFP during the financial crisis (US COP 2010, 30). Based on these contracts, counterparties would pay regular premiums to AIGFP in exchange for protection against the risk of default (or similar credit events) on the underlying CDOs (GAO 2011, 5). The counterparties could demand additional collateral if rating agencies downgraded AIG or if the market value of the underlying securities declined (AIG 2008a, 17-18). The market for mortgage-linked CDOs began to collapse in the spring of 2007, triggering a wave of collateral calls by AIG counterparties that intensified in 2008 (FCIC 2011, 243; GAO 2011, 6). As collateral calls mounted in the summer of 2008, AIG found itself in a liquidity squeeze, bound to contracts it could not uphold and unable to reassure counterparties that it could make good on its contractual obligations (US COP 2010, 29-30).

[5] The CDOs acquired by Maiden Lane III had a fair market value of $29.6 billion; however, the net cash amount paid to the counterparties was $26.9 billion. This figure is calculated by factoring in the $0.3 billion of CDO interest and principal proceeds accrued to AIG between the announcement and settlement date and the $2.5 billion paid to AIGFP in consideration for the excess collateral that AIGFP had provided, which had caused the surrendered collateral's value to exceed the CDS contracts' fair value (Maiden Lane III Transactions; GAO-11-616 2011, 58).

[6] Credit default swaps are private contracts that obligate one party to pay another in the event that a third party cannot meet its obligations (US COP 2010, 21).

AIGFP's attempts to negotiate tear-ups of its CDS contracts were wholly unsuccessful (GAO 2011, 51). Furthermore, although AIG used $20.2 billion of a government-instituted Revolving Credit Facility[7] (established on September 16, 2008) to help meet collateral calls, the intervention did not address the falling values of the CDOs on which AIG had written CDS (GAO 2011, 63; Baxter and Dahlgren 2010, 4). Thus, as part of the November 2008 restructuring of federal assistance to the company, the Federal Reserve Board authorized the creation of a special-purpose vehicle (SPV) to purchase CDOs from counterparties (FRBNY 2017). In exchange, counterparties agreed to cancel the CDS contracts (FRBNY 2017). The facility, named Maiden Lane III (ML III), was funded by a $24.3 billion senior loan from the Federal Reserve Bank of New York (FRBNY) and a $5 billion equity investment by the AIG parent company (FRBNY n.d.2). ML III purchased a portfolio of CDOs for $29.3 billion, less than half their par value of $62.1 billion (FRBNY n.d.2). But AIG's counterparties effectively received the full notional value of their contracts, as they retained the rights to $35 billion in collateral payments previously collected from AIG (FRBNY n.d.2). The CDOs were eventually sold off at auction to various financial institutions, and ML III was terminated with the repayment of all loan and interest obligations to FRBNY on November 12, 2014 (FRBNY n.d.2). In total, the management of ML III would result in a net gain for the benefit of the public of approximately $6.6 billion (FRBNY 2012b).

Summary Evaluation

The creation of ML III is seen as having successfully halted collateral calls and capped AIG's exposure to losses on its CDS contracts written on CDOs. However, the intervention faced much criticism after the crisis. Specifically, the FRBNY came under intense scrutiny for not seeking financial contributions from counterparties, which might have allowed it to change the facility's design and either reduce the amount it was required to lend or increase the security of the loan. The FRBNY argued that negotiating concessions was difficult because it wasn't willing to threaten to force AIG into bankruptcy, and it might have taken significant time, resulted in further ratings downgrades of AIG, and created a run by other AIG counterparties at a time when the financial system was already vulnerable (FCIC 2011, 378-79; GAO 2011, 56, 68-75).

[7] See Buchholtz and Lawson 2021 for more information on AIG's Revolving Credit Facility (RCF).

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 (five-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
Five-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
Sources: Bloomberg, World Bank Global Financial Development Database, World Bank, Bank Regulation and Supervision Survey, Federal Deposit Insurance Corporation	

I. Overview

Background

AIG Financial Products (AIGFP) began writing credit default swap (CDS) contracts in 1998 (US COP 2010, 21). In 2004, AIGFP rapidly expanded into writing CDS on multi-sector collateralized debt obligations (CDOs) that were backed by collateral pools of prime, Alt-A, and subprime residential mortgage-backed, commercial mortgage-backed, and other asset-backed securities (US COP 2010, 21). These CDS contracts on CDOs would be the main source of collateral calls and mark-to-market losses for AIGFP during the financial crisis (US COP 2010, 30). Under these insurance-like agreements, AIGFP would receive regular premium payments from a counterparty in exchange for the assurance that the AIG parent company would cover losses in the event that a particularly adverse credit event (such as a ratings downgrade or default) was to affect the value of the counterparty's underlying CDOs (GAO 2011, 5). The contracts also called for AIG to post additional collateral if rating agencies downgraded AIG or if the market value of the underlying securities declined (AIG 2008a, 17-18). The CDS contracts were, at the time, written on highly rated securities; however, the ratings would eventually be downgraded (GAO 2011, 13). The purchase of CDS contracts was beneficial to banks and investors who wanted an extra layer of protection on their holdings and had become pervasive in the CDO market (US COP 2010, 21). However, as the CDO market deterioration continued in the summer of 2008, AIG found itself struggling to post the collateral required by its counterparties (GAO 2011, 6).

In early 2006, AIG's management had decided to stop writing new CDSs on multi-sector CDOs. However, it made no effort to hedge legacy exposures by purchasing CDS contracts from other institutions, and AIGFP continued to write new contracts as late as July 2006 (FCIC 2011, 200, 201). By June 2007, AIGFP's multi-sector CDO exposure reached $79 billion (FCIC 2011, 201). In the fall of 2008, the portfolio comprised 140 CDS contracts written on 112 mortgage-related, multi-sector CDOs, with $71.5 billion in notional value for 20 counterparties (GAO 2011, 56). 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 was continuously required to post more collateral to its counterparties (Baxter and Dahlgren 2010, 4).

Part of AIG's problem stemmed from the company's collateral practices. AIGFP's CDS contracts traded over-the-counter—directly with counterparties, as opposed to on an exchange (McDonald and Paulson 2015, 92). The company was therefore able to set its own collateral standards, and most contracts did not call for a full payment of collateral in the case of market changes (McDonald and Paulson 2015, 93). Instead, AIGFP would make collateral payments against CDSs on CDOs only if the decline in value of the CDOs exceeded certain thresholds, which, in turn, depended on AIG's credit rating (McDonald and Paulson 2015, 93). This system inspired ongoing disagreements between AIGFP and many of its counterparties regarding the actual amount of collateral owed (McDonald and Paulson 2015, 93). AIG therefore regularly accrued unpaid valuation liabilities against its CDS positions for

which, absent further price deterioration of downgrades of AIG, it was not required to provide payment (McDonald and Paulson 2015, 93).

Collateral calls increased rapidly in the lead-up to October 2008, and AIGFP had posted $16.5 billion of net collateral by July 31 and was facing collateral calls of $16.1 billion (AIG 2008b, 121; AIG 2009, 3). When S&P downgraded its rating on AIG to A- with a negative outlook on September 15, AIGFP estimated it needed $20 billion in order to satisfy collateral calls and transaction termination payments (AIG 2009, 4). By September 30, collateral demands had soared to approximately $32 billion (AIG 2009, 4).

Program Description

Up until the first restructuring of government assistance on November 10, 2008, AIG had contributed $14.8 billion of its own cash and borrowed $20.2 billion (of an available $85.0 billion) from the Federal Reserve's Revolving Credit Facility to post collateral stemming from AIGFP's CDS business (GAO 2011, 63). While this measure temporarily stabilized AIG's liquidity situation, it failed to address the falling values of the CDOs on which AIG had written CDS contracts (Baxter and Dahlgren 2010, 4). Although AIG had been attempting to negotiate tear-ups of the CDS contracts since 2007, its counterparties had insisted on unwinding the contracts at market value, which would have resulted in billions of dollars in additional losses that AIG had been unwilling to take at the time (GAO 2011, 51). It became increasingly clear that the federal government would need to authorize another facility to stem the liquidity drain at its source by purchasing the CDOs from AIGFP's counterparties (Baxter and Dahlgren 2010, 4).

The Federal Reserve Bank of New York (FRBNY) had three options on the table: let AIG default on the CDS contracts, continue to lend to AIG so that it could meet its obligations under the CDS contracts, or restructure the CDS contracts to mitigate the financial pressures (GAO 2011, 56). The FRBNY decided that the most effective and stable solution was to restructure AIG's CDS contracts. Under time pressure, the FRBNY decided to create a special-purpose vehicle (SPV) through which it could purchase the troublesome CDOs and terminate the CDS agreements (US COP 2010, 73-74). Similar to Maiden Lane II, which the FRBNY created to purchase illiquid and distressed residential mortgage-backed securities (RMBS) from AIG insurance subsidiaries, ML III was financed by a senior loan from the FRBNY and a subordinated contribution from AIG (US COP 2010, 71, 74). The FRBNY retained BlackRock Financial Management Inc. (BlackRock) to supervise operations and ultimately liquidate ML III assets in a series of competitive auctions (FRBNY 2017).

As part of the program, the Federal Reserve Board authorized the FRBNY to lend up to $30 billion, to be fully collateralized by the ML III asset portfolio (FRBNY 2017). The terms of the FRBNY senior loan, effective December 3, 2008, specified a six-year duration that could be extended at the discretion of the FRBNY and an interest rate of one-month LIBOR plus 100 basis points (2.9% as of December 3, 2008) (FRBNY 2017). AIG was also required to invest $5 billion on an equity basis to cover losses related to the CDOs' declining value. The equity

would accrue distributions at a rate of one-month LIBOR plus 300 basis points (4.9% as of December 3, 2008) (FRBNY 2017).

Repayment of the senior loan was to commence immediately upon receipt of proceeds from the CDO portfolio. The initial proceeds from maturity and liquidation would be applied in a waterfall structure, starting with any expenses incurred by the LLC, then the outstanding FRBNY loan and interest, and finally the AIG equity contribution and its interest (FRBNY 2017). Any residual income or remaining funds would be divided among the FRBNY (67%) and AIG (33%) (FRBNY 2017).

On November 25, 2008, ML III drew down $15.1 billion from the FRBNY senior loan; it borrowed an additional $9.2 billion on December 18, 2008 (US COP 2010, 77).

Using funds from the FRBNY senior loan and AIG equity contribution, ML III purchased from AIGFP's counterparties the multi-sector CDOs on which AIGFP had written CDS contracts (FRBNY 2017). The CDO portfolio totaled $62.1 billion at par. The transfer to ML III was settled in two rounds of CDOs, with a principal amount of approximately $46.1 billion on November 25, 2008, and $16.0 billion on December 18 and 22, 2008 (GAO 2011, 77). On the closing dates, the counterparties delivered the CDOs into an escrow account, which ML III funded with $29.3 billion (collectively, $24.3 billion from the FRBNY senior loan and $5 billion from the AIG equity contribution) (GAO 2011, 77). The escrow agent released $26.9 billion to the counterparties and delivered the CDOs to ML III[8] (see Figure 1) (GAO 2011, 77). As part of the intervention, participating counterparties would retain the rights to the $35 billion in collateral previously posted by the AIG parent company, a portion of which had been derived from the FRBNY's Revolving Credit Facility, effectively receiving the full notional amount for the CDOs despite their then-current market value of less than 50% of their par (notional) value (GAO 2011, 63; US COP 2010, 74). The counterparties thus received the full economic benefit of the CDS protection and, in exchange, agreed to terminate their CDS contracts (US COP 2010, 74). Though, some counterparties had previously incurred costs to insure the AIGFP-provided CDS protection itself (Geithner 2010; GAO 2011, 69).

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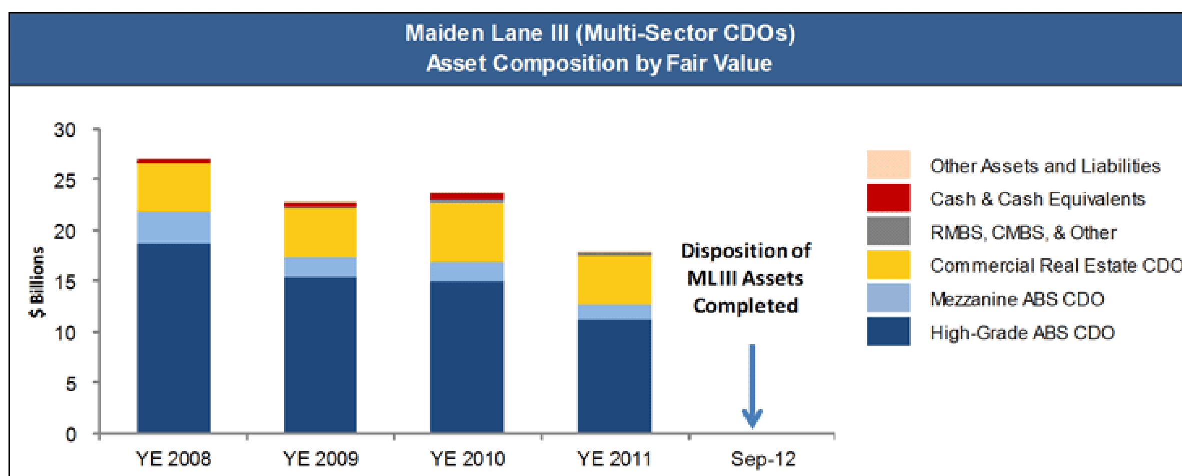
[8] The CDOs acquired by Maiden Lane III had a fair market value of $29.6 billion; however, the net cash amount paid to the counterparties was $26.9 billion. This figure is calculated by factoring in the $0.3 billion of CDO interest and principal proceeds accrued to AIG between the announcement and settlement date and the $2.5 billion paid to AIGFP in consideration for the excess collateral that AIGFP had provided, which had caused the surrendered collateral's value to exceed the CDS contracts' fair value (Maiden Lane III Transactions; GAO-11-616 2011, 58).

Figure 1: Composition of Maiden Lane III Financing

Source of Funds	Funds Provided ($ in Billions)
Collateral Retained by Counterparties	$35.00
FRBNY Senior Loan	$24.30
AIG Contribution	$5.00
CDO Interest/Proceeds Accrued between Announcement and Settlement Date	$0.30
Excess Collateral Posted (paid to AIG)	$(2.50)
Par Value of CDOs	**$62.10**

Data from FRBNY "Maiden Lane III Transactions"

Figure 2: Maiden Lane III (Multi-Sector CDOs) Asset Composition by Fair Value



Source: FRBNY "Maiden Lane III Transactions"

Pursuant to an Amended and Restated Investment Management Agreement entered into by and among the FRBNY, BlackRock, and ML III originally dated November 25, 2008 (and amended and restated August 23, 2010), the FRBNY retained BlackRock to act as investment manager for the ML III assets (Investment Management Agreement 2010, 1). In its role as investment manager, BlackRock was charged with ensuring that ML III could repay the FRBNY senior loan, and then AIG's subordinated loan, while maximizing proceeds from the liquidation and avoiding any market disruption (Investment Management Agreement 2010, 26). In accordance with the Investment Management Agreement, specific individuals in the Investment Support Office (ISO) of the FRBNY were appointed to manage the ongoing relationship with BlackRock and oversee its management of ML III assets (Investment Management Agreement 2010, 2). The ISO officer's responsibilities included acting as point

of contact, assessing BlackRock's performance, modifying investment objectives and risk limits, monitoring the risk composition of assets held, and other functions outlined in the Investment Management Agreement (Investment Management Agreement 2010, 2-3). Acting on behalf of ML III, BlackRock could reinvest the proceeds from asset sales only in liquid, short-term securities such as US Treasury or agency securities with a remaining maturity of one year or less, US 2a-7 government money market funds, and reverse repurchase agreements collateralized by US Treasury securities (FRBNY n.d.2). When it came time to sell the assets, BlackRock ran the bid list process that was standard in the industry (FRBNY 2012c).

FRBNY also hired Bank of New York Mellon, Deloitte and Touche LLP, and Ernst & Young LLP to perform various functions. Bank of New York Mellon acted as administrator and custodian on behalf of ML III. These services included accounting services, report preparation, reconciliation of cash and asset balances, valuation services, and other actions outlined in the Transaction Documents (Administration Agreement 2008, 2-7). Deloitte and Touche LLP was contracted to perform audit services, performing an audit on the annual financial statements for ML III (FRBNT n.d.3; ML III 2011, 4-5). Ernst & Young LLP provided closing work, performing an assessment of the operational and financial close procedures and assisting with the analysis of accounting matters (FRBNY n.d.3).

Outcomes

The CDOs, which previously were highly rated, continued to experience downgrades while being held in ML III; by 2009, 78% were rated BB+ or lower, and by 2010, 98.3% were rated BB+ or lower (ML III 2010, 17; ML III 2011, 17). Once markets stabilized in 2012, the balance of the senior loan had fallen to below $15 billion from CDO interest and principal income, and ML III sold off its portfolio in a series of competitive auctions (FRBNY n.d.2). The proceeds were used to repay the FRBNY senior loan, AIG equity contribution, and all accrued interest and associated fees (see Figure 2) (FRBNY n.d.2).

Using proceeds from the competitive auction of CDOs held by ML III, the FRBNY senior loan was repaid in full, with accrued interest, on June 14, 2012 (FRBNY n.d.2). According to FRBNY president William C. Dudley, the settlement "[marked] the retirement of the last remaining debts owed to the Bank that stemmed from the crisis-era interventions with Bear Stearns and AIG" (FRBNY 2012a).

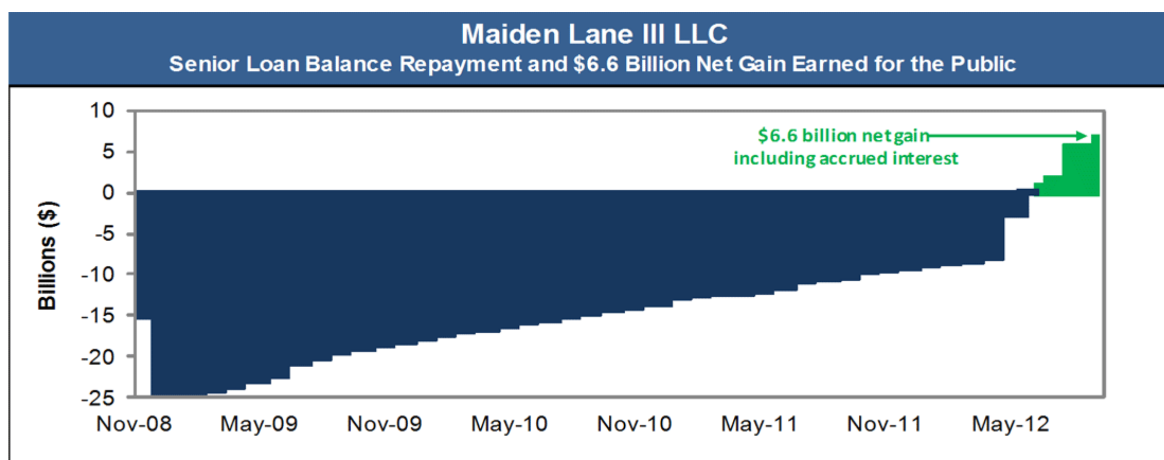
As a consequence of the ML III intervention, AIG was required to forfeit to its counterparties $35 billion in collateral previously posted against the CDS contracts (US COP 2010, 74). The company was also obligated to post the $5 billion equity contribution to supplement the FRBNY senior loan (US COP 2010, 74). Using receipts from CDO sales, ML III repaid this investment in full, including accrued interest, on July 16, 2012 (FRBNY n.d.2). ML III also allowed AIG to cancel all CDS contracts on multi-sector CDOs, effectively stopping the liquidity drain stemming from additional collateral calls and the financial losses related to the falling value of the multi-sector CDOs.

In retaining collateral previously posted by AIG, counterparties to the CDS contracts effectively received par value for the otherwise steeply discounted CDOs (US COP 2010, 74).

Even after downgrades to the securities, ML III made a substantial return on its CDO holdings. ML III bought CDO securities in November and December 2008 for $29.3 billion, 47% of their par value. Including interest and principal payments on those securities of $17.1 billion and their ultimate sales value of $22.6 billion (50% of par), ML III earned a nonannualized return of over 35% (McDonald and Paulson 2015, 98). The median security returned 35%, exceeding the benchmark[9] return by 14% (McDonald and Paulson 2015, 99).

On August 23, 2012, the FRBNY announced the sale of all remaining securities held by ML III (FRBNY 2012b). Residual net proceeds and cash flow generated from the securities provided a net benefit to the US public of approximately $6.6 billion, including $737 million in accrued interest on the FRBNY senior loan (see Figure 3) (FRBNY 2012b).

Figure 3: Senior Loan Balance Repayment and $6.6 Billion Net Gain Earned for the Public



Source: FRBNY "Maiden Lane III Transactions"

The FRBNY began to wind down ML III operations approximately two years following the final sale of CDO assets (FRBNY n.d.2). On September 15, 2014, all remaining ML III funds (apart from a "small amount of cash held in reserve" for trailing expenses) were distributed to the FRBNY and AIG according to the original terms of the agreement (FRBNY n.d.2). The

[9] The benchmarks used by McDonald and Paulson (2015) were constructed using 70% ABX.HE.AAA.06-1 (an index of AAA-securitized subprime mortgage loans originated in the last six months) and 30% CMBX.NA.AAA.1-1 (an index of commercial mortgage-backed obligations). Similar results were obtained when using the ABX alone.

special-purpose vehicle was then terminated on November 12, 2014, and residual funds were allocated to their respective parties on November 20, 2014 (FRBNY n.d.2).

For details pertaining to the individual offerings and sales of the ML III portfolio through competitive auction, refer to the FRBNY website (FRBNY n.d.1).

II. Key Design Decisions

1. Maiden Lane III was created as part of a multi-faceted intervention.

Maiden Lane III was one of a set of government interventions arranged to assist AIG. It was announced alongside Maiden Lane II in November 2008 as a restructuring of government financial support (FRBNY n.d.2). These two SPVs were aimed at removing assets from AIG's balance sheet to address continuing, significant liquidity drains and to improve its capital in the interest of avoiding ratings downgrades (Baxter and Dahlgren 2010, 4). In all, the FRBNY and Treasury would provide $182.3 billion in targeted government support to AIG, including loans, asset purchases, and capital investments (Massad 2012).

2. The Federal Reserve Board authorized the creation of ML III under the legal authority provided by Section 13(3) of the Federal Reserve Act.

According to the legal experts at the Federal Reserve, the FRBNY, and the Treasury at the time, lending to institutions via a special-purpose vehicle "reflected use of the incidental powers conferred on the Reserve Banks" under the Federal Reserve Act (Alvarez, Baxter, Hoyt 2018, 12). Under Section 13(3) of the Federal Reserve Act, the FRBNY loan had to be "secured to the satisfaction of the lending Reserve Bank" (Title 12 U.S.C. 343, 2007). ML III had acquired the CDOs at a substantial discount to their pre-crisis value. The Fed believed the collateral would be "sufficient to repay the loan" once markets improved and the collateral's value increased (Alvarez, Baxter, Hoyt 2018, 12).

3. The FRBNY determined that restructuring AIG's CDS contracts was a more effective and stable solution than the alternative options.

To resolve AIG's CDS issues, the FRBNY had three options: It could allow AIG to default on the contracts, it could continue to lend to AIG in order to fulfill collateral calls and related obligations, or it could restructure the contracts to stem the financial pressures (GAO 2011, 56). Letting AIG default on its contracts was not a feasible strategy, as it would force AIG into bankruptcy (Geithner 2010). This would perpetuate the disastrous economic consequences that were meant to be avoided through intervention and risk previously committed government funds (Geithner 2010). Continuing to lend to AIG was also not a viable option, as it would have increased AIG's debt burden at a precarious moment, raising the potential for ratings downgrades and subjecting taxpayers to a potentially open-ended commitment with no additional security (Geithner 2010). Ultimately, the FRBNY settled on restructuring the contracts by purchasing the assets and canceling the insurance (Geithner 2010). This removed the CDS exposure from AIG's balance sheet, thereby eliminating the possibility of

default on the contracts, while stemming the continued collateral calls that were threatening a ratings downgrade (Baxter and Dahlgren 2010, 3-4).

4. **The Fed created a special-purpose vehicle to purchase the counterparties' CDOs, rather than acquire them directly.**

The Federal Reserve did not possess the authority to purchase the CDOs directly from AIG counterparties in order to restructure the CDS contracts (Title 12 U.S.C. 342, 111). It was, however, able to facilitate the senior loan to ML III, an SPV and independent legal entity that it created for that purpose (FRBNY 2017). Using an SPV to hold troubled assets—in this case, troubled CDOs—allowed the Fed to better manage the collateral and increase the likelihood of repayment (Alvarez, Baxter, Hoyt 2018, 12).

5. **To restructure AIG's CDS contracts, the FRBNY considered three distinct options, selecting the as-adopted structure because of its low execution risk, although it required a greater direct financial contribution from the federal government.**

The three options for restructuring AIG's CDS contracts that were considered included the "as-adopted" structure, the "three-tiered" structure, and the "novation" structure. Each of these structures would use an SPV; however, the interventions taken by the SPV and sources of financing differed.

The as-adopted structure consisted of an SPV jointly funded by the FRBNY and AIG to purchase CDOs. After selling their CDOs to the vehicle, counterparties would cancel their CDS contracts (GAO 2011, 59). This was believed to be the simplest to implement and, among other options, had the greatest chance of attracting widespread participation among counterparties (GAO 2011, 60-61, 65).

The "three-tiered" structure would have provided for the creation of an SPV jointly funded by the FRBNY, AIG, and the counterparties (GAO 2011, 59-60). Counterparties would then sell their CDOs to the vehicle, cancel their CDS contracts, and retain some of the risk underlying the CDOs (GAO 2011, 59-60). Though there was no discussion with counterparties regarding this option, it was rejected because of the lengthy negotiations it would require with counterparties with no guarantee of success (GAO 2011, 61-62).

The "novation" structure would have also provided for the creation of an SPV (GAO 2011, 60). However, rather than canceling the CDS contracts, AIG would novate (transfer) its positions in the contracts to the SPV. CDS protection for counterparties would remain in place but would be paid out by ML III rather than AIG (GAO 2011, 60). The transferal would be cooperatively funded by the FRBNY, AIG, and the collateral previously posted by AIGFP to counterparties (GAO 2011, 60). In addition to retaining their CDO portfolios, counterparties would be required to pay premiums to ML III instead of AIG. They would surrender previously collected collateral to the ML III (GAO 2011, 60). The performance of the SPV and the value of the CDOs would be guaranteed by the FRBNY (GAO 2011, 60). This option was

rejected, among other reasons, because of the difficulty in structuring an FRBNY guarantee that would have to be fully collateralized and capped in value (GAO 2011, 61-62).

In terms of policy considerations, the FRBNY wanted to ensure that it would be loaning against assets of value and that its senior loan would be repaid with interest in a timely manner, regardless of the performance of the CDOs (GAO 2011, 62). Speed of execution, both in establishing ML III and throughout the CDO purchase process, was also a key factor in the intervention's design (GAO 2011, 62). Lengthy initial negotiations with AIG counterparties regarding the terms of ML III funding or the pricing of individual CDOs would have threatened the efficacy of the program (GAO 2011, 61-62). Furthermore, the FRBNY wanted to avoid the establishment of long-term relationships between itself and the counterparties, many of whom were banking organizations over which it exercised supervisory authority (GAO 2011, 61-62).

For further detail, please see "Appendix A: Alternative SPV Structures."

6. **The FRBNY retained BlackRock Financial Management Inc. as the investment manager for ML III along with other outside vendors for various duties.**

As the controlling party of ML III, the FRBNY was tasked with the day-to-day management of ML III's assets and engaged a number of vendors based on their expertise rather than developing internal departments for each need. However, the FRBNY did increase its internal expertise through targeted hiring in order to assist in decision-making and effectively evaluate recommendations from external vendors. The Investment Support Office department, which managed vendor relations, grew from just a few staff to a sizable business unit once all three SPVs were being managed. The FRBNY retained BlackRock Financial Management Inc. (BlackRock) to act as investment manager FRBNY n.d.2). BlackRock's previous work with AIG regarding its swap portfolios and underlying CDOs made it an attractive option (SIGTARP 2009, 12).

FRBNY also hired Bank of New York Mellon as administrator and custodian, Deloitte and Touche LLP as external auditor for annual financial statements, and Ernst & Young LLP to perform closing work (Administration Agreement 2008, 2-7; FRBNY n.d.3; ML III 2011, 4-5). Although the FRBNY devoted significant attention to the implications of engaging outside vendors, there were a number of potential conflicts of interests that arose between the FRBNY, advisers, and counterparties, which were dealt with on an ad hoc basis (GAO 2011, 122).

7. **The SPV was funded via a $24.3 billion senior loan from the FRBNY and a $5.0 billion subordinated investment by AIG.**

The debt and equity structure of ML III was designed to guarantee that the FRBNY senior loan would be repaid even in times of great financial stress, and that the AIG equity contribution would be sufficient to cover losses and protect the senior loan (GAO 2011, 63-64). A stress test conducted by the FRBNY in November 2008 found that the ML III portfolio would still be worth $27 billion under an extreme stress scenario. While that would represent a loss of 57% of its notional value of $62.1 billion, that would still be sufficient to cover the FRBNY's $24.3 billion loan (GAO 2011, 64).[10]

Under the extreme stress scenario, AIG was still expected to recover $2.4 billion of its $5 billion equity contribution (GAO 2011, 64-65). The FRBNY did not require a higher equity contribution from AIG because it aimed to minimize the use of funds from the Revolving Credit Facility and avoid undermining the company's position if the $5 billion were lost entirely (GAO 2011, 65). Alternative options for the one-time equity contribution, including a quarterly payment system or a secured loan through ML III, were rejected as too complex (GAO 2011, 65).

In addition to policy and investment concerns, the FRBNY carefully analyzed the impact of ML III on AIG's long-term stabilization (GAO 2011, 62). It had to consider accounting rules that would have required AIG to consolidate any of the ML III structure onto its books (GAO 2011, 62). Fed officials felt that consolidating ML III on AIG's books could have "injected volatility into AIG's operations" (FRBNY n.d.2; GAO 2011, 62). As structured, ML III was therefore consolidated onto the Federal Reserve System's financial statements (FRBNY n.d.2). Additionally, the FRBNY endeavored to create an intervention that would enable AIG to share in potential gains once federal loans and the company's equity position had been repaid (GAO 2011, 62).

8. **The interest rates on the FRBNY senior loan and AIG's equity contribution were based on the one-month LIBOR.**

The interest rates on the FRBNY senior loan and AIG's equity contribution referenced the one-month LIBOR (GAO 2011, 65). Since LIBOR was also the base rate used for many of the assets in the ML III portfolio, the FRBNY felt this was an appropriate interest rate (GAO 2011, 66). The FRBNY also wanted to leave open the possibility of selling the senior loan in the future and believed that the use of LIBOR and the wide spreads would be attractive to future investors (GAO 2011, 66).

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[10] This analysis was conducted to measure the impact of different hypothetical stress scenarios, ranging from base, stress, and extreme, on the ML III portfolio. For the extreme stress scenario, the analysis assumed 56% housing price declines nationally and 75% declines in California (GAO 2011, 64).

9. The allocation of any residual cash flows, after payment of all debts, would be split 67/33 between the FRBNY and AIG.

The allocation of residual funds specified in the original agreement was based upon the division of funding contributed to ML III and what FRBNY officials deemed to be a fair return for its loan and AIG's equity contribution (GAO 2011, 66). Under alternative structures, AIG's cash flow provision increased in proportion to its equity position, but at a disproportionately higher rate (GAO 2011, 66). To avoid the issue of consolidating ML III onto AIG's books, advisers to the FRBNY determined it would only need to take over at least 55% of the remaining funds, in turn providing a 45% share for AIG. However, FRBNY officials deemed this would have provided an "extraordinarily high rate of return" on its $5 billion equity contribution, and the FRBNY was also aiming to avoid an equity contribution that was markedly higher (GAO 2011, 65, 66-67). Furthermore, the rating agencies were concerned that limiting AIG's participation in any residual earnings would have left AIG in a weaker position (GAO 2011, 67). The FRBNY considered rating agencies' fears along with tax considerations and market perceptions in the creation of the cash flow arrangements (GAO 2011, 67). The FRBNY was not overly concerned with its own stake of the residual earnings, preferring instead to provide stronger protection to its senior loan (GAO 2011, 67). While the split of the residual earnings favored the FRBNY, return on investment was not the FRBNY's primary concern when structuring such a split (GAO 2011, 67).

10. ML III acquired only dollar-denominated cash CDOs.

The FRBNY and BlackRock selected only "CDO tranches referencing U.S. dollar-denominated cash bonds" for purchase by ML III FRBNY n.d.2). AIG was thus left with $12.5 billion in "potentially risky" multi-sector CDOs, most of which didn't meet that eligibility requirement (US COP 2010, 74-75).

A significant number of the CDOs that ML III did not purchase were synthetic. Unlike cash CDOs, which hold portfolios of real assets like bonds or MBS, synthetic CDOs are essentially portfolios of long positions on credit derivatives (GAO 2011, 77). At the end of 2008, the notional value of AIG's synthetic CDOs totaled $9.8 billion (US COP 2010, 75). In an interview with the GAO, the FRBNY expressed concern that synthetic CDOs "might not have met the Federal Reserve System's requirement to lend against assets of value, given that they were not backed by actual assets" (GAO 2011, 77). One FRBNY official also cited the complicated nature of unwinding synthetic CDOs as another reason for their exclusion.

Some CDOs were excluded because they were not dollar-denominated. Euro-denominated trades totaling $1.9 billion in notional value (after conversion to USD) were excluded after reticence toward their inclusion from both the FRBNY and the counterparties (GAO 2011, 77).

Another $500 million in assets were excluded because various counterparties no longer held the underlying bonds and could not retrieve them for delivery to ML III (GAO 2011, 77).

11. Concessions from counterparties were attempted but ultimately abandoned; counterparties received par value for their CDOs.

Concessions from counterparties would have provided an additional layer of support against potential losses on the FRBNY senior loan (GAO 2011, 68). The FRBNY also argued that the discounts proposed were justified because the counterparties would profit from participation in ML III. In particular, they would be able to release into earnings any valuation reserves booked in connection with the CDS transactions, receive instant liquidity for the CDOs they held, and reduce risk-weighted assets on their balance sheets (GAO 2011, 68). They would also be able to avoid the risk of exposure to AIG on potential future declines in CDO value, as well as eliminate collateral disputes and the associated transaction costs and eliminate the costs of hedge protection on CDS contracts (GAO 2011, 69). Therefore, the combination of risk mitigation for the Fed loan and benefits from participation for the counterparties made concessions an attractive goal for the FRBNY in the creation of the intervention (GAO 2011, 68).

Before approaching the counterparties to negotiate concessions, the FRBNY asked an adviser to create different potential concession strategies (GAO 2011, 69). The adviser created three scenarios, each with specific methods and concession amounts (GAO 2011, 70). The first option would involve a 0.50% annual discount on the CDOs' notional value until a credit event, up to a maximum of 3.00% (GAO 2011, 70). Under this method, individual counterparty concessions ranged from $2 million to $322 million, with projected total concessions equaling $1.1 billion (GAO 2011, 70). The second method was a flat discount of 2% on CDO notional value, resulting in individual concessions varying from $2 million to $328 million and total concessions equaling $1.3 billion (GAO 2011, 70). The final option was a 50% discount on collateral received leading up to the close of ML III, a total discount of 9.6% of the CDO portfolio (GAO 2011, 70). Under this method, individual concessions ranged from $0 to $2.1 billion and total concessions would equal $6.4 billion (GAO 2011, 70).

According to officials, between November 5 and November 6, the FRBNY had initially contacted 8 of the 16 counterparties with the largest exposures regarding the possibility of concessions (SIGTARP 2009, 15). All respondents expressed concern about the proposal for a number of reasons (SIGTARP 2009, 16). One issue that arose was that the combination of collateral the counterparties had already collected plus fair market value of the CDOs amounted to the par value of the CDOs; therefore, any concessions would result in voluntarily taking a loss (SIGTARP 2009, 16). In addition, counterparties expected that AIG would not default because of the government's previous actions to avert AIG's bankruptcy, and they were contractually entitled to the par value of the CDSs (SIGTARP 2009, 16).

The FRBNY would have preferred that AIG take the lead in these negotiations and felt that it was not appropriate to interfere with the sanctity of the CDS contracts while playing the role of creditor throughout the ML III process (YPFS Dahlgren Interview 2018; US COP 2010, 75; SIGTARP 2009, 19). If concessions were pursued, severe time constraints would not have allowed for the lengthy negotiations required to calculate individual haircuts, especially given AIG's historical inability to negotiate tear-ups of the CDS contracts and the likely

negligible size of the discounts in a successful scenario (Baxter 2010). Factors that would have had to be considered in calculating specific concessions included the varying amounts of collateralized and uncollateralized exposure to AIG, the methods of risk management employed previous to the crisis (e.g., some counterparties had bought hedge protection on AIG or AIG CDSs), the differences in credit ratings among the CDOs, and market perceptions on whether the government would continue to provide support (GAO 2011, 80-86). Aside from these complicated calculations, the FRBNY had little bargaining power because it could not threaten an AIG bankruptcy, as it had already begun to rescue AIG and had tens of billions of dollars at risk prior to beginning negotiations (Baxter 2010). Even in a scenario where the FRBNY would be able to threaten bankruptcy, the negative reception to this threat by rating agencies could have led to a downgrade exacerbating stress on AIG (Baxter 2010). An additional suggested strategy involved leveraging the regulatory powers of the Fed to coerce counterparties into accepting concessions (Geithner 2010). However, the FRBNY felt this coercion would negatively affect market confidence in AIG, could lead to potential downgrades, would be an abuse of authority, and would unfairly saddle Fed-supervised firms with the burden of concessions (Baxter 2010; Geithner 2010).

The FRBNY concluded that the correct course of action was to compensate the counterparties at market value. This decision proved to be controversial and led to significant testimony and investigation (Baxter 2010; Geithner 2010). In particular, the strategy would evoke substantial criticism from the Special Investigator General for the Troubled Asset Relief Program (SIGTARP) and the Government Accountability Office (GAO), among others (SIGTARP 2009, 29-30; GAO 2011, 56).

12. **Although the stated length of the loan to ML III was six years, the FRBNY allowed for the flexibility of an extension and did not announce a fixed time frame for the auctioning of assets.**

The loan made to ML III by the FRBNY was intended to be repaid from interest and principal payments received from assets if held to maturity, or the proceeds from their sale (GAO 2011, 9). The FRBNY decided not to set a predetermined schedule for selling assets; instead, it indicated a willingness to hold the assets to maturity if warranted (GAO 2011, 9). This afforded it the flexibility to liquidate assets when and if market conditions improved (GAO 2011, 9). If it was determined that liquidation was not the proceeds-maximizing option, ML III would be able to hold these assets to maturity, as the hold-to-maturity proceeds were predicted to be greater than the FRBNY's senior loan (Baxter and Dahlgren 2010, 6). The assets of ML III had varying maturities and primarily consisted of multi-sector CDOs, which were backed by a combination of corporate bonds, loans, asset-backed securities, or mortgage-backed securities (GAO 2011, 9).

Since ML III's inception, BlackRock was tasked with the below objective in addition to constantly monitoring market conditions.

> "The Manager's objective is to manage the Collateral in a manner consistent with repayment of the Senior Loan (including principal and accumulated interest),

> followed by the Equity Contribution Amount (including accumulated preferred distributions representing accrued interest) for as long as the United States Treasury maintains an economic stake in AIG on behalf of the United States taxpayer, while also meeting other obligations in the [payment] waterfall that are senior to the Senior Loan. In meeting the objective, the Manager should strive to maximize sale proceeds" (Investment Management Agreement 2010, 26).

Because of improved market conditions, ML III's investment objective was revised in April 2012 to begin exploring the sale of assets, and on August 23, 2012, the FRBNY concluded its sale of ML III assets (FRBNY n.d.1).

13. ML III CDO assets were auctioned off in multiple competitive rounds throughout 2012.

The FRBNY thought it best to hold the CDO assets on ML III's balance sheet until market conditions stabilized and any losses from sales could be minimized (FRBNY 2020). Selling the assets at auction would ensure equal opportunity for institutions to benefit from the sales, and for the FRBNY to determine that "the winning bids represented good value for the public" (FRBNY 2012c). There was no fixed timeframe for the sales, which began in April 2012 and concluded at the end of August 2012 (FRBNY n.d.1).

14. The government announced the restructuring alongside AIG's third quarter results and provided suggestions to AIG regarding its federal securities filings that disclosed the interventions.

Knowing that AIG was due to report a substantial loss for the third quarter on November 10, 2008, the government made the decision to announce its financial support restructuring on the same day (US COP 2010, 138; GAO 2011, 53). Credit agencies had notified the FRBNY that they would likely downgrade AIG in the wake of the disappointing earnings announcement absent any restructuring of the government's rescue, and the potential for ensuing market turmoil led the FRBNY to communicate its plans earlier than it might have otherwise (GAO 2011, 53). At 6:00 a.m. EST on November 10, 2008, the Federal Reserve Board of Governors and the Treasury Department issued a press release that outlined a restructuring of financial support to AIG (BdofGov 2008). This restructuring included purchasing $40 billion of preferred shares in AIG using TARP funds, changes to the terms of the Revolving Credit Facility, and the introduction of ML II and ML III (BdofGov 2008). The release describes these measures as an attempt to "establish a more durable capital structure, resolve liquidity issues, facilitate AIG's execution of its plan to sell certain of its businesses in an orderly manner, promote market stability, and protect the interests of the U.S. government and taxpayers" (BdofGov 2008).

AIG then filed two 8-K securities filings in December 2008 to formally announce ML III's creation and implementation (GAO 2011, 94). Although AIG retained responsibility for its own filings, the FRBNY was able to review them and provide suggestions (GAO 2011, 101-

102). One comment from the FRBNY regarding the December 24, 2008 8-K securities filings was that the Schedule A attachment, which contained counterparty and CDO deal information, be kept confidential (GAO 2011, 94). The FRBNY's stated reasoning behind this request was that "the counterparty information was commercially sensitive for the parties involved but did not provide material information to investors, and that disclosure could hurt the ability to sell ML III assets at the highest price, potentially to the detriment of taxpayers and AIG" (GAO 2011, 96). The identities of the counterparties would prove to be particularly consequential, owing to their receiving par value for the CDOs (see Key Design Decision 11). According to the Government Accountability Office, the FRBNY did not believe that deal information regarding ML III would be publicly disclosed and assured counterparties in the transaction that their identities would be kept confidential (GAO 2011, 95). Ultimately, the Securities and Exchange Commission granted confidential treatment for only some parts of the attachment, and the treatment ended up being transitory, as AIG disclosed the entirety of the Schedule A attachment in its amended 8-K filing on January 29, 2010 (GAO 2011, 98-100).

Another example of the FRBNY influencing AIG's securities filings occurred when the FRBNY's outside counsel requested that the following language be removed from the December 24, 2008 8-K filing (GAO 2011, 100-101): "As a result of this transaction, the AIGFP counterparties received 100 percent of the par value of the Multi-Sector CDOs sold and the related CDS have been terminated" (GAO 2011, 101). The reasoning behind this change was that it mischaracterized the transaction, since only in combination with previously posted collateral did payments from ML III result in counterparties getting paid par value (GAO 2011, 101). The FRBNY's involvement with AIG filings was indicative of the unique situation presented by ML III, where the FRBNY assumed the role of both a public institution and private market participant (GAO 2011, 102).

In the ensuing years, while managing ML III assets, the FRBNY was transparent in its reporting and announcements. In particular, the FRBNY provided annual audited statements detailing ML III's holdings throughout its existence (ML III 2011, 4-5). Also, since ML III was consolidated on the FRBNY's books, its quarterly fair value (plus normal accounting entries such as interest accruals, senior loan repayments, and expenses) and the outstanding loan balance were disclosed in the weekly H.4.1 release of the Federal Reserve's balance sheet FRBNY n.d.2).

III. Evaluation

As a temporary measure meant to mitigate liquidity pressures stemming from falling multi-sector CDO values and to stop collateral calls on the related CDS contracts, ML III is seen as having succeeded in helping to stabilize AIG (Sender 2012). The counterparties also received accounting benefits from the sale of CDOs and reduced exposure to AIG credit risk (GAO 2011, 68). Furthermore, all associated FRBNY debts and accrued interest were repaid using proceeds from the CDOs and ML III asset sales; interest and principal payments on the CDOs and earnings from their sale resulted in a net gain for the benefit of the public of approximately $6.6 billion (FRBNY 2012b). Despite these perceived gains for all parties

involved, the FRBNY faced widespread criticism for deciding “against plans that would have reduced the size of its lending or increased the loan’s security” (GAO 2011, 56). In particular, the Congressional Oversight Panel (COP)[11] felt that efforts taken by the FRBNY to negotiate concessions amounted to their “going through the motions,” citing the FRBNY’s belief that pursuing concessions could lead to downgrades and its senior officials’ expressions of pessimism regarding the likelihood of their success (US COP 2010, 148). The SIGTARP also held the FRBNY responsible for not having obtained concessions from counterparties, especially considering the discrepancies found between accounts given regarding how much of an effort had been made in the process (FCIC 2011, 378; GAO 2011, 68-75).

SIGTARP officials believed that the government had treated the concessions dilemma in a manner that was inconsistent with the rest of the federal rescue (SIGTARP 2009, 29-30). Given that the Treasury and the Federal Reserve were prepared to compel the “nine largest financial institutions” to accept $125 billion in TARP funding, it was difficult to accept that the FRBNY was unable to negotiate concessions with counterparties in the case of ML III (SIGTARP 2009, 29-30). This perceived disparity led SIGTARP inspector general Neil Barofsky to conclude that

> . . . there is no question that the effect of FRBNY's decisions—indeed the very design of the federal assistance to AIG—was that tens of billions of dollars of government money was funneled inexorably and directly to AIG's counterparties (SIGTARP 2009, 30).

Academic responses to the intervention differed slightly from those reported in government assessments. Writing for the *Journal of Economic Perspectives*, McDonald and Paulson assigned more responsibility to AIG for using “financing (both explicit and implicit) that was subject to termination and cash demands when asset values fell” (McDonald and Paulson 2015, 102). The counterparties were “entitled to collect collateral as the values of the insured assets declined,” especially given their inability to unilaterally terminate the CDS contracts and reduce exposure to AIG’s risk (McDonald and Paulson 2015, 102). Others, such as William K. Sjostrom Jr., pointed to the secretive nature of the Maiden Lane III arrangements, especially with regard to the lack of concessions obtained from counterparties (Sjostrom 2015, 820).

National media responded similarly to the intervention, but with more of an acknowledgement that the government did what was necessary to “keep the system afloat” (Sender 2012). A reporter for *The New York Times* similarly wrote that “federal assistance

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[11] The Congressional Oversight Panel (COP) was a standing committee established by the US Congress following the implementation of the Troubled Assets Relief Program (TARP) on October 3, 2008 and was dissolved in 2011. The COP’s objective was to “review the current state of financial markets and the regulatory system.” It was able to hold hearings, review official data, and write reports on actions taken by Treasury and financial institutions and their effect on the economy. (More information on the panel can be found https://cybercemetery.unt.edu/archive/cop/20110401223216/http:/cop.senate.gov/about/.)

would . . . essentially flow through A.I.G. to counterparties" if the economy continued to weaken (Walsh 2008).

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Appendix A: Alternative SPV Structures

Before implementing the as-adopted structure of Maiden Lane III, the Federal Reserve Bank of New York (FRBNY) considered two additional options to relieve liquidity and downgrade pressures stemming from counterparties' mounting collateral calls (GAO 2011, 56). While FRBNY chose against designing the intervention in a way that would have "reduced the size of lending or increased the loan's security," it was of utmost importance that a viable program be launched as quickly as possible (GAO 2011, 56). Each alternative SPV structure described below was ultimately deemed too complex to execute properly in light of the time constraints (GAO 2011, 63).

Per the alternative "three-tiered" structure, CDOs would have been transferred to the SPV in exchange for the cancellation of CDS contracts (GAO 2011, 59). The program would have been financed by an FRBNY senior loan and an equity contribution from AIG, as well as loans from AIGFP counterparties in the form of a collective mezzanine note (GAO 2011, 59). Counterparties would thus have received less than par initially for the CDOs (and ultimately if the mezzanine notes ended up taking losses), despite being allowed to retain collateral previously posted (GAO 2011, 59). However, this additional contribution would have provided an additional layer of security against potential losses and may have allowed FRBNY to reduce the size of its senior loan to ML III (GAO 2011, 59-60). Such a benefit would have depended on the size of the mezzanine note and counterparties' willingness to participate fully (GAO 2011, 60).

The most important advantage of the three-tiered structure over other options considered was the possibility of the mezzanine note and, therefore, a smaller FRBNY senior loan (GAO 2011, 61). This was particularly significant because although the CDO market was still volatile, an additional layer of losses beyond AIG's $5 billion equity contribution would be covered by counterparties (GAO 2011, 61). However, negotiations with counterparties regarding the pricing of individual securities and subsequent distribution of potential losses would have been extremely complicated and could have taken a year or longer to work out (GAO 2011, 61). Moreover, rating agencies might have had to rate the collective mezzanine notes issued by ML III to counterparties, further delaying the negotiation process (GAO 2011, 61). Aside from the expediency issue, the FRBNY was concerned that entering into ongoing lending relationships with counterparties under its authority could cause future conflicts of interest (GAO 2011, 61).

The second alternative considered, referred to as the "novation" structure, would have provided for the transfer of CDS contracts, rather than CDOs, to ML III (GAO 2011, 60). CDS protection would therefore remain on counterparties' CDOs and be paid out by ML III rather than by AIG (GAO 2011, 60). In accordance with the original agreements, premium payments would be made to ML III, and counterparties would receive future CDS payouts only in the event of a negative credit event (GAO 2011, 60). The SPV would be jointly funded by an FRBNY guarantee, an AIG equity contribution, and collateral previously posted to counterparties by AIG and remitted to ML III (GAO 2011, 60). When compared with the as-

adopted structure, the novation design could have reduced payments made by ML III to counterparties (GAO 2011, 61).

However, this alternative faced complex legal and logistical issues (GAO 2011, 61-62). FRBNY officials concluded that they did not have the authority to implement such a guarantee in a way that didn't bring its own drawbacks, including difficulty in execution and market perception risks given the need to cap the guarantee (GAO 2011, 61-62). Counterparties would also have had to consent to the remission of their collateral to ML III, an action that required coordination and agreement across counterparties (GAO 2011, 62). Additionally, this model could have caused concern among rating agencies and created a further drain of liquidity from the financial system (GAO 2011, 62). Lastly, this intervention would neither have addressed the volatile CDO values nor allowed for any potential investment gains to accrue to the government in the way that the as-adopted structure did (GAO 2011, 62).

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