

The Federal Reserve's Financial Crisis Response E: THE TERM ASSET-BACKED SEUCRITIES LOAN FACILITY¹

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ABSTRACT

Securitization is a process that allows banks and other lenders to package loans and sell them as bonds called asset-backed securities (ABS), removing them from their balance sheets and immediately generating cash for new loans. ABS are an important component of the financing cycle for many types of loans to households and small businesses, including mortgages. In the fall of 2008, financial markets began experiencing disturbances as the effects of the U.S. subprime market meltdown spread. The ABS market froze decreasing the volume of new loans to households and small businesses. The Federal Reserve became very concerned about the potential for these circumstances to further weaken the U.S. economy and, as a result, implemented the Term Asset-backed Loan Facility (TALF) to jumpstart the market and mitigate the negative effects on the economy. In this case we discuss the design, usage of the TALF and its impact on the securitization markets during the crisis.

¹ This case study is one of five Yale Program on Financial Stability case modules considering the Federal Reserve's credit and lending responses to the global financial crisis:

- The Federal Reserve's Financial Crisis Response A: Lending & Credit Programs for Depository Institutions
- The Federal Reserve's Financial Crisis Response B: Lending & Credit Programs for Primary Dealers
- The Federal Reserve's Financial Crisis Response C: Providing US Dollars to Foreign Central Banks
- The Federal Reserve's Financial Crisis Response D: Commercial Paper Market Facilities

Cases are available at the YPFS website, <http://som.yale.edu/ypfs>, or may be downloaded from the Social Science Research Network.

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1. INTRODUCTION

By 2008 asset-backed securities (ABS) had become an important element in the funding cycle for banks and other financial institutions providing a wide variety of loans to businesses and households. The consequences of the ABS markets freezing included: limited availability of credit to households and businesses of all sizes, an unprecedented widening of interest rate spreads, sharply contracting liquidity in the capital markets and the potential to further weakening of the U.S. economy. As a result, the Federal Reserve (the Fed) stepped in to provide support to this critical market and implemented the Term Asset-backed Loan Facility (TALF) in hopes of jumpstarting the market and mitigating the negative effects on the economy.

This case discusses the design, usage and impact of the TALF. The balance of this case is organized as follows: Section 2 discusses the critical role of the ABS market in 2008; Section 3 describes the TALF in general, while Sections 4-6 discuss in more detail key provisions of the TALF; lastly Section 7 analyzes the usage and impact of the TALF.

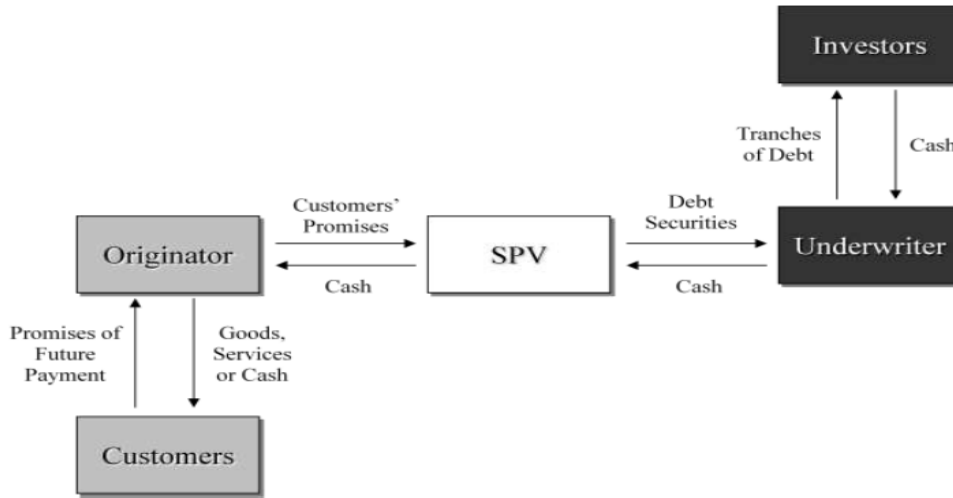
QUESTIONS

1. Why was the TALF designed to provide funding to investors who purchased ABS rather than have the Fed purchase the ABS directly?
2. It took four months after the TALF was announced for the first subscription to occur. What were some reasons for this delay?
3. Why were the categories of TALF-eligible collateral repeatedly expanded? Were the different categories of collateral utilized as expected?
4. Early in the program the Fed announced that it was willing to undertake a significant expansion of the TALF from its original allocation of \$200 billion to up to \$1 trillion. However, only \$71 billion was ever lent under the TALF. What were some reasons for the lower than expected levels of lending?
5. Given the extra capacity under the TALF, were there other asset classes that the Fed should have considered approving?
6. Do you agree or disagree with the issues raised by the Congressional Oversight Panel and with the points made by the Fed in response?
7. What does the TALF say about the Fed's role as central banker in an economy that is becoming less reliant on banks?

2. DISTRESS IN THE ASSET SECURITIZATION MARKETS

By 2008 securitization had become an important and integral part of the financial market. Traditionally, banks made loans to consumers and small businesses and maintained these loans on their balance sheets until maturity. Beginning in the 1990s, however, there was a steady increase in the incidence of selling these loans to third parties for cash that the banks then used to fund new loans. This process of securitization also had the benefit that assets could be removed from the balance sheet. Figure 1 diagrams a classic securitization process.

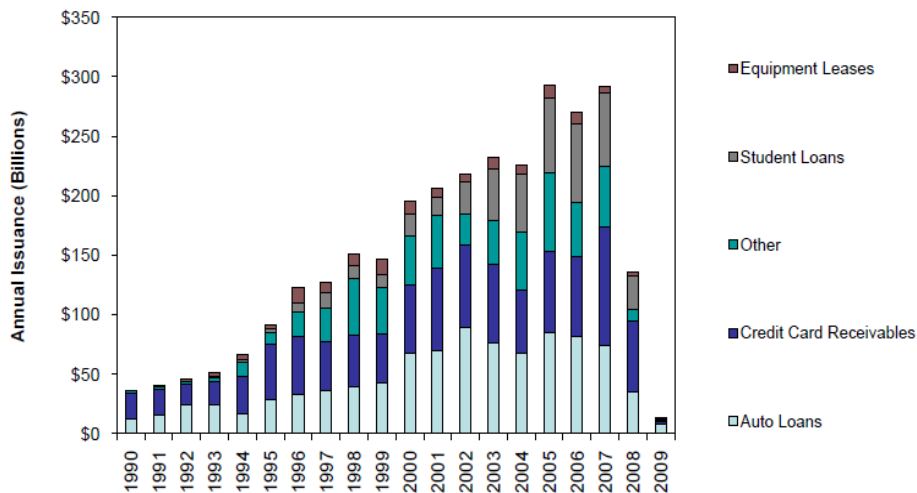
Figure 1: The Securitization Process



Source: COP Report, 38.

Many types of consumer debt (e.g., credit cards, auto loans, student loans, and mortgages) and business loans (e.g., equipment and auto fleet leases) were treated in this manner. (See Figure 2.) Over time, securitization via ABS became a significant and key element in the business funding cycle for both banks and nonbanks and many nonbanks, such as manufacturers of autos and heavy equipment, became important players in the credit markets assuming the lending function that had previously been performed by banks, but with the intent of packaging and sell these obligations as ABS. (See Figure 3.)

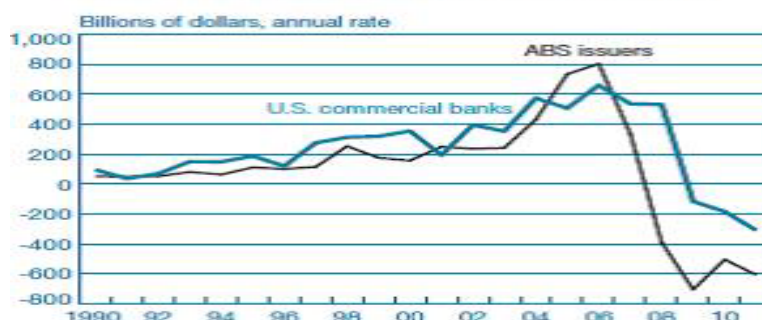
Figure 2: U.S. Issuance of Securities Resulting from Securitization of assets other Than Real Estate-related Loans, 1990-Q1 2009



Source: COP Report, 34. In addition, annual issuance of asset-backed securities resulting from the securitization of mortgage and real estate related loans exceeded \$2 trillion from 2002-2007, before the credit crunch took effect.

3 TERM ASSET-BACKED SEUCRITIES LOAN FACILITY

Figure 3: Net Credit Intermediation by Commercial Banks and Issuers of asset-Backed Securities (ABS)



Source: Federal Reserve Statistical Release Z.1, "Flow of Funds Accounts of the United States."

Through securitization many nonbanks, such as manufacturers of autos and heavy equipment, became important players in the credit markets. Such companies assumed the lending function that had previously been performed by banks, but with the intent of packaging and sell these obligations as ABS.

As the world savings glut expanded in the early 2000s investors sought out more safe assets, leading financial institutions to become more innovative and sophisticated in providing such assets. Because of the real estate and mortgage boom and the historical perception that U.S. real estate was a solid, low-risk investment, mortgages on U.S. properties became an increasing percentage of the securities underlying ABS. Growth of the subprime mortgage industry in mid-2000s, much of it conducted by nonbank finance companies, also flowed through to the ABS market.

When the subprime mortgage market began to sour in mid-2007, ABS prices fell as investors became concerned about all ABS, not just those composed of subprime mortgages. As the financial crisis deepened, financial institutions fled any security perceived as risky and this severely limited the sale of ABS. Institutions of all types, banks, to finance companies, and nonfinancial corporations, that were in the business of originating loans with the intend to securitize them suddenly found themselves unable to sell such assets and were forced to maintain them on their balance sheets. This lead to a contraction in their funding cycle as there was no new cash from selling ABS to support new loans. As a result, many institutions tightened credit requirements. One survey considered by the Fed shortly before announcing the TALF revealed that 60% of respondents had tightened lending standards on credit cards and consumer loans and that the percentage that had tightened lending standards on mortgages was even higher.⁴

In the years leading up to the crisis, approximately 25% of consumer debt was securitized. Securitization was also an important element in funding loans to small businesses. By the fall of 2008, the securitization markets for consumer and business ABS were severely constricted causing disruption in these markets and exacerbating the downturn in the economy. Following the bankruptcy of Lehman Brothers on September

⁴ "Moving to loans to households, almost 70 percent of respondents tightened standards on residential mortgages to prime borrowers . . . nearly 90 percent of the institutions that originated nontraditional mortgages tightened standards on such loans. . . . about 75 percent of the respondents tightened lending standards on home equity lines of credit, and about 60 percent tightened standards on both credit cards . . . and other consumer loans As noted to the right, almost 25 percent of banks, on net, reported reducing the credit limits on existing credit card accounts of some prime customers over the past three months, and about 60 percent of banks reported cutting existing lines of some of their nonprime borrowers" (FOMC Trans. Oct. 28-29, 2008, 14).

15, 2008, which was in part driven by concern over its commercial real estate holdings, sales of commercial mortgage-backed securities (CMBS), which were responsible for approximately 20% of outstanding commercial real estate mortgages, came to a near complete halt. (See Ashcraft et al. 2012, 7.)

These developments were occurring as the interbank lending markets, notably commercial paper and overnight repo, were also experiencing increasing rates and haircuts and tightening collateral demands, resulting in an overall contraction in liquidity. With the increasing pressures on financial institutions, the Fed feared a rash of fire sales of “illiquid” securities at depressed prices, which carried the additional risk of putting downward pressure on balance sheets of institutions compelled to mark-to-market other assets held. It was these concerns—that the crisis in the financial industry might spread to the real economy—which prompted the Fed to address particular impaired markets, including the ABS market.

3. THE FEDERAL RESERVE’S RESPONSE: THE TERM ASSET-BACKED LOAN FACILITY

The purpose of the Term Asset-Backed Loan Facility (TALF) was to *jumpstart* the market for new ABS given its critical role in the credit cycle and thus to stimulate the overall economy. The Fed relied on its emergency powers under Section 13(3) of the Federal Reserve Act (FRA) to loan to any person, partnership, or business in “exigent and unusual circumstances.” (See Wiggins et al 2015, for a discussion of the Fed’s authority under FRA Section 13(3).) The Fed described the situation and purpose when announcing the facility:

New issuance of ABS declined precipitously in September and came to a halt in October. At the same time, interest rate spreads on AAA-rated tranches of ABS soared to levels well outside the range of historical experience, reflecting unusually high risk premiums. The ABS markets historically have funded a substantial share of consumer credit and SBA-guaranteed small business loans. Continued disruption of these markets could significantly limit the availability of credit to households and small businesses and thereby contribute to further weakening of U.S. economic activity. The TALF is designed to increase credit availability and support economic activity by facilitating renewed issuance of consumer and small business ABS at more normal interest rate spreads. (Fed. Res. PR Nov. 25, 2008).

Under the TALF, the Fed committed to provide up to \$200 billion of one-year loans to investors to purchase AAA-rated asset-backed securities (ABS) secured by newly and recently originated auto loans, credit card loans, student loans, and loans guaranteed by the Small Business Administration (SBA). The loans were to be fully collateralized by the ABS with haircuts applied, and were to be non-recourse to the borrower. Originally funds were to be allocated through monthly auctions of preannounced amounts via sealed auction bid but ultimately the TALF operated as a standing facility lending at a rate set by the Fed. The loans were announced to be for a 1-year term, but upon launch in March 2009, however, the term had been lengthened to 3-years. Later, a 5-years loan would be added for certain collateral.

The TALF was the best of a small number of possible remedies considered by the Fed staff for addressing the collapse of the ABS market. (Ashcraft et al. 2012, 8). Another option would have been for the Fed to provide direct funding from the discount window to nonbank finance companies but this posed problems, including that the Fed had little experience in evaluating nonbank companies. The Fed also could have purchased loans directly from the issuers/originators but again this carried risks and evaluation challenges that the Fed had little experience with.⁵ By requiring the issuers to proceed with the

⁵ It is instructive to compare the TALF’s design with that of two other Fed facilities used to combat the crisis: the Commercial Paper Funding Facility (CPFF) and the Asset-backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF). Under the CPFF the Fed purchased eligible commercial paper directly from issuers, albeit through a SPV. With the AMLF, the Fed lent money to depository institutions to purchase eligible ABCP from eligible money market mutual funds, which ABCP secured the loans. See Wiggins and Metrick 2016D for analysis of and the CPFF and AMLF

securitization process, the Fed relied on knowledgeable third parties whom the originators had to satisfy (investors and rating agencies, for example) to review the ABS.

For several reasons the TALF was one of the more innovative facilities that the Fed implemented during the crisis. Its focus was on a particular market, ABS, the originators of which included banks, nonbanks and nonfinancial companies, a wide variety of companies that a Fed did not regularly deal with and which it had no authority to lend to in normal circumstances.

ABS are long-term assets and thus to be effective the loans were lengthened beyond the normal short-term maturities usually dealt with by the Fed. TALF assets would also enlarge the Fed's balance sheet for years if the Fed held the assets to loan maturity.

“Relative to the Fed's short-term lending to financial institutions, the CPFF and the TALF are rather unconventional programs for a central bank to undertake. I see them as justified by the extraordinary circumstances in which we find ourselves and by the need for central bank lending practices to reflect the evolution of financial markets; after all, a few decades ago securitization markets barely existed. Notably, other central banks around the world have shown increasing interest in similar programs as they address the credit strains in their own countries. (Bernanke 2009).

Given some of the particular challenges posed by the TALF it took the Fed four months after announcement to work out the details and hold the first subscription. As noted above, in that time several of the key terms were altered. (See Appendix A for a timeline of TALF dates.)

Also, on February 10, 2009, the Fed and the United States Department of the Treasury (Treasury Department) jointly announced the expansion of the TALF up to a potential \$1 trillion. (Fed. Res. PR Feb. 10, 2009). However, as discussed below, utilization of the TALF would be limited, not even reaching the original \$200 billion. Yet, it would be heralded as an important tool in the Fed's arsenal against the financial crisis.

4. STRUCTURE/MECHANICS OF THE TALF

To implement the TALF, the Fed provided funds to the FRBNY to make loans to eligible investors who would buy eligible ABS and, as the list of eligible collateral expanded, CMBS. The loans were secured by the ABS and CMBS and were non-recourse to the borrower. Given the widespread nature of securitization practice and the various types of assets that were combined into ABS, the TALF permitted any U.S. company to borrow, as long as it met certain eligibility criteria, and could deliver the eligible collateral to support the loan. Each borrower was also required to establish an account with a TALF agent, usually a primary dealer, which would evaluate the borrower for eligibility and also provide certain administrative functions in the processing of the TALF loans. In this manner, because the Fed had limited experience with evaluating non depository institutions, it relied on some of its existing administrative infrastructure in organizing the TALF.

The Fed would hold the TALF collateral until the loan maturity, three or five years, or until otherwise paid off, at which time the collateral was redelivered to the borrower. Loans could be prepaid and the collateral returned to the borrower. The borrower could also surrender the collateral as pre-payment.

Although originally announced to be an auction facility, TALF was quickly changed to be a standing facility with borrowers submitting subscriptions to buy at preannounced rates set by the Fed. As shown in Figure 4, TALF made fixed-rate or floating-rate loans. For each monthly subscription the Fed established a fixed rate for each eligible collateral type, basis, and loan maturity, setting it as a spread over an index. The level of the index, but not the spread, varied by subscription month. (Ashcraft et al. 2012, 38).

Figure 4: TALF Loan Rates

COLLATERAL TYPE	TALF LOAN RATE
Fixed-rate asset-backed securities (ABS)	
<One Year average life	One-year Libor Swap rate + 100 basis points (bps)
>=One year average life	Two-year Libor swap rate + 100 bps
>=Two years average life	Three-year Libor swap rate + 100 bps
SBA Development Company participation certificates	
Three-year TALF loan	Three-year Libor swap rate + 50 bps
Five-Year TALF loan	Five-year Libor swap rate + 50 bps
Commercial mortgage-backed securities	
Three-year TALF loan	Three-year Libor swap rate + 100 bps
Five-Year TALF loan	Five-year Libor swap rate + 100 bps
Floating-rate	
Floating rate ABS	One-month Libor + 100 bps
FFELP loans	One-month Libor + 50 bps
SNA pool Certificates	Federal funds target + 75 bps
Private student loan	Max (100bps, prime rate - 175 bps)

Source: Federal Reserve Bank of New York: <http://www.newyorkfed.org/markets/talf.html>, (Ashcraft et al. 2012).

In addition to the haircuts that were applied, an administrative fee of 10 basis points of the loan amount was applied to loans secured by nonmortgage ABS and a fee of 20 basis points was applied to TALF loans backed by CMBS collateral. (Ibid., 45).

Structurally, the TALF was one of the more complicated programs implemented by the Fed and it required several parties to assess values of collateral, eligibility of borrowers, and to manage the loans during their tenure. The FRBNY, the Fed entity responsible for managing the TALF, employed other parties in the process:

- TALF Agents- Primary dealers or other designated agents who handled certain administrative activities between the FRBNY and the borrowers. Agents paid TALF loan principal and interest from the proceeds of collateral sales and paid the excess to the borrower.

- Bank of New York Mellon- program custodian that held collateral and verified pricing and rating for submitted collateral.
- Collateral monitors provided data and modeling services used in risk assessments and also validated collateral pricing and ratings.
- A special purpose vehicle (SPV), TALF LLC, was established in connection with the TALF to hold any collateral surrendered by a borrower with respect to a TALF loan. The FRBNY was the beneficiary of TALF LLC and assets of the SPV were consolidated onto its books. The SPV would in turn enter into loans with eligible companies wishing to purchase eligible collateral that it held. The Fed also loaned funds to TALF LLC for administrative costs. All such loans were secured by the assets of TALF LLC.

COP INQUIRY AND REVIEW

On March 29, 2009, Elizabeth Warren, who had recently been appointed to head the Congressional Oversight Panel (COP)⁶, sent a letter to Fed Chairman Ben Bernanke questioning the impact on the Fed of acquiring these “illiquid” assets, the risks that it was undertaking, the use of indirect investment vehicles, and other matters relating to the TALF including reliance on the credit rating agencies to evaluate collateral. On April 1, 2009, the Fed responded with a 13-page single spaced letter: Fed COP Response. (Also see the related Wall Street Journal article, Rappaport 2009B.)

In its May 2009 report evaluating the TALF, the COP identified several potential problems with the TALF’s design and with market conditions that might damper the facility’s appeal to its intended participants. These included:

- Some investors were prohibited by regulation from borrowing to purchase ABS
- Some traditional ABS investors were weak
- A mix-match of loan terms to the terms of collateral (at least originally)
- Interest rates under TALF were unproven in the market. The cost of TALF borrowings were greater than other Fed loan programs
- Uncertainty about the applicability of executive compensation and foreign worker restrictions (Originally proposed to apply then removed.)
- Confusion as to TALF Terms and Conditions
- Risk of political action

(COP Report, 48-50).

The COP concluded that “the TALF cannot be the primary means to stimulate credit for small business and family borrowing. Moreover, its shift of liability to the taxpayer remains an important policy issue and requires that the TALF operate in a carefully monitored and fully transparent way.” (Ibid., 63).

⁶ The Congressional Oversight Panel was created as part of the Emergency Economic Stabilization Act of 2008 and is charged with reviewing the state of the financial markets and regulatory system and submitting regular reports to Congress. The panel was to issue regular reports to congress regarding “oversight of the Treasury Secretary’s use of contracting authority program administration; the impact of TARP purchases on financial markets and financial institutions; transparency; and the effectiveness of foreclosure mitigation efforts and whether the program has minimized long-term costs and maximized benefits to taxpayers.” (Warren 2009, 1).

Media reports also indicated that some potential TALF investors and issuers “balked” at certain TALF loan terms, such as one that was thought to give the Fed “too much power to look at their books and to reject them from the program.” Discussions with market participants may have also contributed to changes in some key terms of the TALF. (Rappaport 2009A).

5. TALF COLLATERAL

Over the course of its tenure there would be three categories of acceptable collateral under the , each with its own eligibility requirements: (1) Nonmortgage backed ABS, (2) newly-issued CMBS, and (3) Legacy CMBS. See Figure 5 for summary details of the eligibility requirements for each category.

NONMORTGAGE BACKED ABS

At inception, in November 2008, the original collateral that was accepted under the TALF was U.S. dollar-denominated ABS that were secured by a variety of consumer and business loans originated on or after January 1, 2009:

- retail auto loans;
- federally guaranteed and private student loans;
- credit card receivables;
- small-business loans, fully guaranteed as to principal and interest by the U.S. government, originated under the Small Business Administration’s (SBA’s)] 7(a) (“Pool Certificates”) and 504 (“Development Company Participation Certificates”) programs.

(Fed. Res. PR Nov. 25, 2008; Ashcraft et al., 43).

On March 19, 2008 the Fed held the first TALF auction and loaned \$5.7 billion. On that day it also announced that the TALF eligible collateral would expand to include ABS backed by loans related to:

- commercial, rental car company, and government fleet leases;
- business equipment loans and leases;
- floorplan loans, by which, for example, auto dealers finance inventories;
- servicing advance receivables, which arise from residential mortgage servicing advances.

(Fed. Res. PR March 19, 2009).

On May 1, 2009 the Fed again expanded the categories of TALF eligible collateral to include securities backed by:

- insurance premium finance loans, by which businesses finance lump-sum insurance premium payments;

(Fed. Res. PR May 1, 2009).

Figure 5: Overview of TALF-Eligible Collateral

Asset Class	Description	Origination Date	Issue
Auto, credit card receivables, student loans, small business	Auto loans include retail loans and leases relating to cars, light trucks, motorcycles, and other recreational vehicles; commercial and government fleet leases; and commercial loans secured by vehicles and the related fleet leases and subleases of such vehicles to rental car companies.	After October 1, 2007	^a
	Credit card receivables include both consumer and corporate credit card receivables.	NA	^{a, b}
	Student loans include federally guaranteed student loans (including consolidation loans) and private student loans.	After May 1, 2007	NA
	Small business loans include loans, debentures, or pools originated under the SBA's 7a and 504 programs, provided they are fully guaranteed as to principal and interest by the full faith and credit of the U.S. government.	After January 1, 2008	After January 1, 2008
Mortgage servicing advances, business equipment, vehicle fleet, floorplan	Mortgage servicing advances are receivables created by principal and interest, tax and insurance, and corporate advances made by Fannie Mae- or Freddie Mac-approved residential mortgage servicers.	After January 1, 2007	NA
	Equipment loans include retail loans and leases relating to business equipment. Vehicle fleet includes commercial and government fleets and commercial loans secured by vehicles and the related fleet leases and subleases of such vehicles to rental car companies.	After October 1, 2007	^a
	Floorplan loans include revolving lines of credit to finance dealer inventories.	NA	^{a, b}
Insurance premium finance, new-issue CMBS, legacy CMBS	Insurance premium finance includes loans originated for the purpose of paying premiums on property and casualty insurance originated on or after January 1, 2009.	January 1, 2009	^{a, b}
	New-issue CMBS are commercial mortgage-backed securities issued on or after January 1, 2009.	After January 1, 2009	After January 1, 2009
	Legacy CMBS include structurally senior fixed-rate conduit commercial mortgage-backed securities.	NA	Before January 1, 2009

^aAsset-backed securities (ABS) must have an average life of five years or less.

^bMust refinance maturing ABS through 2010:Q1 or be new master trust with originations after January 1, 2009. Eligible premium finance ABS may also be issued out of an existing or newly established master trust in which all or substantially all of the underlying exposures were originated on or after January 1, 2009.

Source: Federal Reserve Bank of New York: <http://www.newyorkfed.org/markets/talf.html>.

REQUIREMENTS

Eligible ABS had to have a credit rating in the highest investment-grade rating category (AAA) from two or more approved major rating agencies⁷, and could not have received a credit rating below the highest investment grade rating category from a major rating agency. (Ibid., Nov. 25, 2008.) The rating had to be attained on the strength of the securitized assets and structure and not because of a financial guarantee or “wrap” provided by an insurance company. (Ashcraft et al. 2012, 44). At least ninety-five percent of the credit exposures underlying the eligible collateral had to be incurred by U.S. obligors.

The original list of collateral was narrowly drawn and significantly, excluded previously issued ABS as the intent was to stimulate new lending. Synthetic ABS were also excluded because some of these more highly-structured bonds had been shown to have obscured the risks associated with the underlying assets. Also excluded was ABS which contained underlying assets that the issuer had originated.

TALF borrowers were not required to post additional collateral if the value of their posted collateral declined during the term of the loan. And substitutions of collateral were not permitted.

⁷ Only ratings from Fitch Ratings, Moody's Investors Service, or Standard & Poor's were acceptable. After criticism from the COP, the Fed expanded the number of acceptable rating agencies for CMBS adding Realpoint and DBRS and also adopted a rule as to how it would qualify agencies. Also see discussion at page 14.

As shown in Figure 6, TALF loans secured by nonmortgage ABS would amount to \$59 billion (out of a total of \$71 billion), the overwhelming majority of loans issued under the facility. The last TALF auction was held in March 2010.

Figure 6: TALF Loans by Subscription and Asset Class (Millions of Dollars, Except as Noted)

Panel A: March-October 2009		2009							
	March	April	May	June	July	August	September	October	
Auto	1,908.9	796.9	2,310.9	2,945.9	2,830.7	555.3	1,159.8	190.8	
Credit card	2,804.5	890.8	5,514.7	6,022.7	1,459.1	2,553.6	4,399.1	224.4	
Equipment	NA	0.0	445.6	590.2	0.0	0.0	110.6	38.8	
Floorplan	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Premium finance	NA	NA	NA	0.0	0.0	0.0	0.0	0.0	
Servicing advances	NA	0.0	0.0	438.6	34.4	107.5	0.0	475.2	
Small business	0.0	0.0	86.5	29.4	62.2	147.4	161.9	262.5	
Student loan	0.0	0.0	2,281.5	226.7	986.8	2,444.7	177.1	287.7	
ABS total	4,713.4	1,687.7	10,639.2	10,717.3	5,373.2	6,814.0	6,538.5	2,366.0	
New-issue CMBS	NA	NA	NA	0.0	0.0	0.0	0.0	0.0	
Legacy CMBS	NA	NA	NA	NA	635.8	2,148.3	1,351.1	1,930.6	
CMBS total	NA	NA	NA	0.0	635.8	2,148.3	1,351.1	1,930.6	
Amount of loans	4,713.4	1,687.7	10,639.2	10,717.3	6,009.0	8,962.3	7,889.6	4,296.6	
Number of loans	136	83	205	275	165	294	200	170	

Panel B: November 2009-June 2010		2009		2010						Total
	November	December	January	February	March	April	May	June		
Auto	0.0	0.0	0.0	91.0	0.0	NA	NA	NA	12,790.2	
Credit card	63.1	1,528.7	242.2	205.0	409.2	NA	NA	NA	26,317.1	
Equipment	57.1	199.2	0.0	31.1	139.3	NA	NA	NA	1,611.7	
Floorplan	0.0	0.0	0.0	0.0	0.0	NA	NA	NA	0.0	
Premium finance	0.0	0.0	0.0	0.0	0.0	NA	NA	NA	0.0	
Servicing advances	0.0	137.7	0.0	114.8	0.0	NA	NA	NA	1,308.1	
Small business	408.7	274.6	332.4	37.7	349.5	NA	NA	NA	2,152.9	
Student loan	85.0	665.1	0.0	54.4	1,760.1	NA	NA	NA	8,969.1	
ABS total	1,059.3	2,977.4	1,067.5	973.6	4,097.8	NA	NA	NA	59,024.9	
New-issue CMBS	72.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.2	
Legacy CMBS	1,329.5	1,282.4	1,326.0	1,133.0	857.0	NA	NA	NA	11,993.8	
CMBS total	1,401.8	1,282.4	1,326.0	1,133.0	857.0	0.0	0.0	0.0	12,066.1	
Amount of loans	2,461.1	4,259.8	2,393.5	2,106.6	4,954.8	0.0	0.0	0.0	71,091.0	
Number of loans	117	144	109	105	149	0	0	0	2,152	

Source: Federal Reserve Bank of New York: <http://www.newyorkfed.org/markets/talf.html>. (Ashcraft et al. 2012,59).

EXPANSION OF THE TALF COMMITMENT

On February 10, even before the first auction was held, the Fed and Treasury Department jointly announced a willingness to commit as much as \$1 trillion to the TALF program and to expand the acceptable categories of collateral. The expansion was supported by additional funds from the Treasury Department pursuant to the Troubled Asset Relief Program (approved in October 2008). The expanded TALF was incorporated as a key element of The Consumer and Business Lending Initiative, a “multipronged effort to unlock credit markets in the U.S. economy” adopted by the Treasury Department. (See Treasury 2009.) Specifically, the TALF was to “provide additional assistance to financial markets and institutions in meeting the credit needs of households and businesses and thus to

support overall economic growth in the current period of severe financial strains.” (Fed. Res. PR Feb. 10, 2009).

At the original announcement of the TALF, the Fed also indicated that it might later expand eligible asset classes to include commercial mortgage-backed securities (CMBS), non-Agency residential mortgages-backed securities or other asset classes. (Ibid., PR Nov. 25, 2008.) A TALF white paper issued by the Treasury Department (March 3, 2009) revealed that several other classes of assets were indeed being analyzed and evaluated whether and how they might be added to the TALF. The focus was on “including securities that will have the greatest macroeconomic impact and that could most efficiently be added to the TALF at a low and manageable risk to the government.” (Treasury 2009, 4).

The asset classes that ultimately were added to the TALF are discussed below. Also considered but not added to TALF eligible collateral were: private label-residential mortgage backed securities, collateralized loan and debt obligations, and other ABS not included in the initial rollout. (Ibid.).

NEWLY-ISSUED CMBS

On May 1, 2009, the Fed further expanded the TALF eligible collateral to include newly-issued CMBS; the first subscription was to occur in June. At the same time the Fed also authorized 5-year loans (up to \$100 billion) to purchase newly-issued CMBS, and ABS backed by student loans and by SBA loans. Extension to the 5-year term brought TALF loan maturities closer to the longer average maturities of these types of securities.

Eligible CMBS had to be privately issued, structurally senior AAA-rated tranches secured by first-lien, fixed-rate amortizing commercial real estate loans originated on or after January 1, 2009, that bore a fixed interest rate. . (Ashcraft et al. 2012, 43). Like nonmortgage ABS, the rating had to be attained on the strength of the securitization collateral and the structure itself and could not rely on a financial guarantee or “wrap” provided by an insurance company or third party. (Ibid., 44).

The first subscription of the new-issue CMBS program was offered in June 2009 and the last in June 2010. The demand for this type of borrowing never materialized and only one TALF-eligible newly-issued CMBS subscription was closed, in November 2009 for \$72.2 million.

Since the purchase price factored into the determination of the loan amount, borrowers had to have purchased the legacy CMBS in recent secondary-market transactions between unaffiliated parties, executed on an arm’s-length basis, at prevailing market prices. The FRBNY would independently review and reject any CMBS that did not meet the stated criteria or which otherwise posed “unacceptable risk”. (Fed. Res. PR May 19, 2009).

The objective of the expansion to include legacy CMBS was to restart the market for legacy securities and, by doing so, stimulate the extension of new credit by helping to ease balance sheet pressures on banks and other financial institutions. It was postulated that by “promot[ing] price discovery and liquidity of legacy CBMS” the improvement in the market would “facilitate the issuance of new-issue CBMS, thereby helping borrowers finance new purchases of commercial properties or refinance existing commercial mortgages on better terms.” (Ibid.)

Expanding the TALF to include legacy CMBS was controversial at the Fed. Transcripts show that several members balked at taking on what many in the market considered “a euphemism for asset-backed instruments created during the boom that had become toxic”. — “Funding the bad bank is a close cousin to being the bad bank.” (Morgenson 2015). However, the Fed staff considered that stimulating a market for such securities would propel their prices, and help bolster bank balance sheets. (Ibid.).

On August 17, 2009, the Fed announced that it was holding in abeyance any further expansion of collateral types and no further expansion of the TALF eligible collateral types occurred.

Legacy CMBS proved fairly attractive as collateral and as shown in Figure 6 loans secured by legacy CMBS became a sizeable amount of TALF landings, totaling \$12 billion of the \$71 billion total lent under the program. The last legacy CMBS subscription was held March 2010.

6. FEATURES OF THE TALF DESIGNED TO MINIMIZE RISK

From its origination there was controversy that the TALF required the Fed to acquire and hold securities of broader types than the high quality collateral that it usually accepted at its discount window and Open market operations. The TALF assets also had maturities of longer duration than usually held by the Fed. TALF loans were collateralized, but were issued on a non-recourse basis. If a borrower failed to repay the loan, the Fed would retain the collateral but if it was insufficient to cover the amounts owed, the Fed had no recourse to the borrower. In designing the TALF, the Fed incorporated a number of features designed to mitigate these risks.

HAIRCUTS

All TALF collateral was subject to a haircut, which is a type of risk-sharing because the lender does not receive the full-benefit of the market value of the collateral. By applying a haircut, the Fed had a cushion to protect itself if the borrower defaults or if the collateral decreases in value. Haircuts were applied to all collateral securing the TALF loans and ranged from 5% to 16% based on the quality of the assets. Examples include:

- A 5% haircut was applied to student loans and SBA loans guaranteed by the government with maturities of 1-5 years.
- A haircut of 9% was applied to subprime auto loans with 1-year maturity. For similar loans with a 4-5 year maturity, a 13% haircut applied.
- For all CMBS with maturities of 5 years or less, a 15% haircut applied.

See Appendix C for a detailed listing of TALF haircuts.

In responding to the COP's inquiry, the Fed stated that the haircuts were risk-based, that it had "chosen the haircuts to exceed the losses in value likely in nearly all future outcomes," and that "[in] recognition of the fact that the current economic situation is extraordinary and the outlook is especially uncertain, our economists made very conservative assumptions in calibrating the program's haircuts." (Fed COP Response 2, 7, 8).

TREASURY UNDERWRITING

From origination until January 15, 2013, the Treasury Department committed \$20 billion in backup funding from the TARP, to the TALF LLC providing credit protection to the FRBNY. If a TALF loan was not repaid and the proceeds could not be recouped through sale of the collateral, the Treasury Department would bear the next losses, after the borrower's haircut, up to \$20 billion, beyond which the Federal Reserve would bear any further losses. (Ashcraft et al. 2012, 38).

In July 2010, when the program was closed to new lending, the Treasury Department's commitment was reduced to \$4.3 billion to reflect the fact that only \$43 billion of TALF loans were outstanding. After

January 15, 2013, the TALF LLC became self-funding through the income and appreciation for the securities held and the Treasury back up funding was no longer needed.

REQUIRED CREDIT RATINGS

All TALF collateral had to have the highest rating, AAA (or the equivalent), from two designated nationally recognized statistical rating organization (NRSRO) and could not be rated less by any such agency. Originally Moody's Investors Service, Standard & Poor's, or Fitch Ratings were the acceptable NRSROs for nonmortgage ABS. For newly-issued CMBS, eligible NRSROs also included Realpoint and DBRS. (Fed. Res. PR May 19, 2009.) The rating could not be achieved through the reliance on a financial guarantee from a third party or a "wrap" from an insurance company, but had to be attained on the strength of the security's underlying assets and structure.

The credibility of rating agencies had come under attack as the subprime mortgages and related securities were downgraded. The issue of the reliability of the ratings was also raised in the COP's Letter.⁸ As a result, on October 5, 2009, the Fed proposed a new rule creating a new process for determining NRSROs that were acceptable to rate TALF collateral. (Ibid., PR Oct. 5, 2009). The rule was adopted on December 4, 2009 and required NRSROs to register with the Securities and Exchange Commission and demonstrate experience in issuing credit ratings specific to the types of assets accepted as collateral under the TALF. (Ibid., PR Dec. 4, 2009). With the February 2010 subscription, DBRS became an eligible rating agency for nonmortgage ABS. (Ashcraft et al. 2010, 44, Fn10).

INDEPENDENT AUDITOR VERIFICATION

Each ABS issuer of TALF collateral also had to have an external auditor provide an opinion that management's assertions concerning key collateral eligibility requirements were fairly stated in material respects. The Fed asserted that this "attestation provide[ed] a high level of assurance concerning TALF collateral eligibility requirements." (Fed COP Response, 8).

INTERNAL RISK ASSESSMENT

When the Fed announced that it would begin accepting CMBS as eligible TALF collateral it also stated that it would begin conducting internal risk assessments of all such assets delivered. This assessment was likely driven by the unreliable history of certain mortgage-related securities and presumably would provide the basis for the Fed exercising its right to reject any CMBS, or individual underlying loans, as not meeting eligibility requirements or as presenting an "unacceptable risk". (Fed. Res. PR May 19, 2009).

The risk assessments for CMBS were more intensive than those of nonmortgage ABS but both relied on the issuers providing all data regarding the ABS, or CMBS and the underlying exposures that had been provided to any NRSRO well in advance of the TALF subscription date for which the collateral was proposed to be used. For CMBS the Fed analyzed not just the underlying asset pool and trust structure, but also key documents. (Ashcraft et al. 2012, 52).

Beginning with the November 2009 subscription, the FRBNY also conducted a formal risk assessment with respect to nonmortgage ABS collateral delivered for TALF loans. This assessment was designed to ensure that bonds pledged to TALF met three general standards:

⁸ "Consistent failures of the credit rating agencies were a significant factor in the sales of risky mortgage-backed securities that helped produce the current financial crisis. In light of these failures, please explain why reliance on credit ratings for the TALF is a reasonable basis on which to protect the taxpayers, regardless of the number of credit-ratings agencies whose opinions are required." (Fed COP Response, Item 8.)

1. *Credit quality*: The bond is of the highest credit quality with de minimis risk of default and a low probability of a material deterioration in credit quality.
2. *Transparency*: Sufficient information is available to allow investors to make informed judgments about the credit risk of the collateral underlying the bond as well as the level of due diligence on the collateral performed by the issuer.
3. *Simplicity of structure*: The relationship between the performance of the underlying collateral and bond payments is clear and uncomplicated.

(Fed. Res. PR Oct. 5, 2009). (Also see Appendix B.)

7. USAGE AND IMPACT OF THE TALF

In aggregate, the Fed issued 2,152 loans, totally \$71.1 billion, under the TALF. The volume of outstanding loans peaked in March 2010 at \$48.2 billion. The one subscription against newly-issued CMBS occurred in March 2009 for \$ 72.2 million. Loans secured by nonmortgage ABS totaled \$59 billion and loans secured by legacy CMBS totaled \$12 billion (Ashcraft et al. 2012, 57, Table 7, Panel B).

TALF usage grew gradually as shown in Figure 6. Despite supposed pent up volume, only \$4.7 billion was subscribed to in the first lending in March 2009. This was followed by totals of \$1.7 billion, \$10.9 billion, and \$11.5 billion in April, May and June respectively. The Fed termed the trend a “sign of sustained interest after a slow start.” (Lanman and Mulholland 2009).

Utilization was sustained and even increased as TALF-eligible asset classes were expanded. However, overall, utilization of the TALF would stall well below the intended levels of the Fed and Treasury; the aggregate of loans did not even reach one half of the originally committed \$200 billion. Ashcraft concludes that the low level of usage of the TALF can be attributed to two things (1) the stringent risk mitigators built into the facility to protect the public and (2) the rapid improvement in market conditions for the ABS and CMBS markets. (Ashcraft et al. 2012, 52.) As discussed above at page 10, however, the COP and various investors and issuers also felt that certain design elements of the TALF, and market factors, were not particularly conducive to robust utilization of the facility.

The original expiration date for the TALF, December 31, 2009, was extended to March 31, 2010 for loans against ABS and legacy CMBS, and until June 30, 2010 for loans against newly-issued CMBS. The last outstanding TALF loan matured on October 29, 2014. TALF LLC was terminated on November 2014 after distributing accumulated fees and income to the Treasury (90%) and FRBNY (10%).

IMPACT OF THE TALF ON THE SECURITIZATION MARKETS

Despite the lower than expected subscription levels and low volume of usage, the TALF has been credited with succeeding in its objective of providing liquidity to the securitization market and helping it to restart. As early as June 2009, the Fed reported that the program was “working as designed” and that there were signs that the issuance of consumer ABS securities “has been gradually reviving.” March saw four deals totally \$8.3 billion come to market, followed by four in April (\$2.9 billion) and eight in May (\$13.6 billion). And in June 13 deals worth \$16.4 billion closed. These numbers were a long way from the \$200 billion per year in new issuances experienced in recent years but were seen as a “good start”, especially because TALF-eligible deals accounted for only about half of the new issuances. “This means that the TALF is helping to restart the market rather than the TALF being the market.” (Dudley 2009).

In November 2009, it was reported that a total of \$134 billion in new ABS had been issued during the year and that two-thirds of them had been assisted with TALF loans. (Shrivastava 2009). Perhaps, more

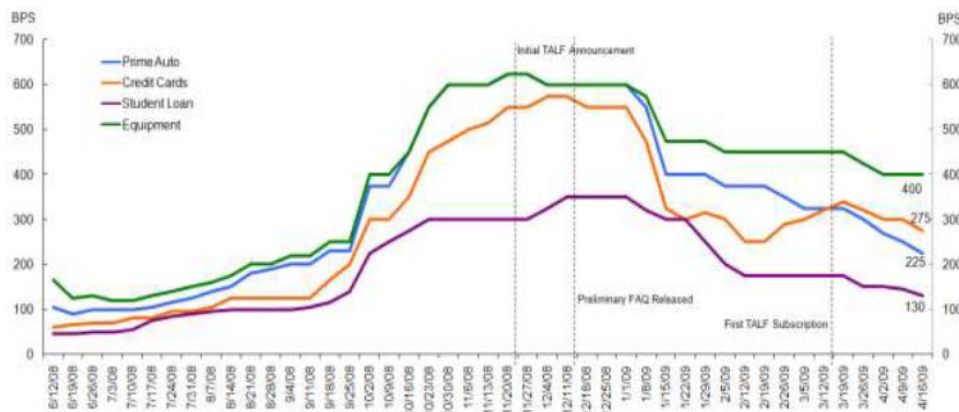
importantly, there were already implications in the market that the ABS market had “sufficiently recovered from last year’s credit crisis that issuer and investors again could interact directly with one another.” (Ibid.). (Also see Figure 7 for changes in the ABS secondary Market Spreads.)

By March 2010, the TALF was being termed “[O]ne of the Federal Reserve’s most successful financial rescue programs” and being praised for having “worked so well” (Ellis 2010). The program was said to “have done what it was supposed to: rekindle demand and get credit flowing again.” (Shrivastava 2010). That month more than \$21 billion in ABS supported by student, auto, and credit card loans were issued, two-thirds without the support of the TALF. Moreover, Tom Deutsch, Executive Director of the American Securitization Forum commented that there seemed to be evidence of a “pretty significant shift from TALF-eligible deals to non-TALF, which is a pretty strong signal that the market has returned to near normal levels.” (Ellis 2010).

This was exactly the type of trend that the Fed had hoped the TALF would spark. In May 2010 the Fed reported favorably on the TALF’s impact on the ABS markets:

Nonetheless, market reactions to the announcement of the emergency facilities, anecdotal evidence, and a number of the studies we do have suggest that the facilities forestalled potentially much worse outcomes and encouraged improvements. For example, some asset-backed securities (ABS) spreads, such as those for consumer ABS and commercial mortgage-backed securities, narrowed significantly following the creation of the TALF, and activity in ABS markets has picked up. While the overall improvement in the economic outlook has no doubt contributed to the improvement in ABS markets, it does appear that the TALF helped to buoy the availability of credit to firms and households and thus supported economic activity. Indeed, following the kick-start from the TALF, a number of these markets are now operating without any governmental backing. (Kohn 2010, 7).

Figure 7: Consumer ABS Secondary Market Spreads Have Narrowed from Their Historically High Levels Reached in the Fourth Quarter of 2008



Source: COP Report, 47.

As might be expected, after announcement, spreads improved for classes of assets eligible for TALF funding. However, researchers also found that shortly thereafter, spreads also improved for noneligible classes of assets.

It is also interesting to note that the Fed has favorably characterized the TALF as an important, new and necessary type of liquidity response for it in its central banker role. It justified its support for market-based credit intermediation, as opposed to traditional banking sector support, by citing the key and sizeable role that securitization had come to play in the economy. While recognizing that legislative changes might limit its ability to implement another TALF, the Fed expressed commitment to the idea that “[it] should be flexible in setting the structure of its liquidity programs to meet the needs of the market.” (Sack 2010).

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APPENDIX A: Events in the TALF Program

Date	Event
November 25, 2008	Initial Program Announcement
March 19, 2009	First new-issue asset-backed security (ABS) subscription
March 19, 2009	Expansion to equipment, servicing advance, fleet lease, nonauto floorplan
March 19, 2009	Joint U.S. Treasury/Federal reserve announcement of expansion of TALF to up to \$1 trillion and plans to study inclusion of legacy commercial mortgage-backed securities (CMBS) and residential mortgage-backed securities
May 1, 2009	Expansion to new-issue CMBS and insurance premium receivables
May 1, 2009	Announcement of the five-year TALF loans, carry cap
May 16, 2009	First new-issue CMBS subscription
May 19, 2009	Expansion to legacy CMBS
July 16, 2009	First legacy CMBS subscription
November 3, 2009	First ABS subscription applying Fed Credit risk assessment
November 17, 2009	First TALF-eligible new-issue CMBS deal
March 4, 2010	Last ABS subscription date
March 19, 2010	Last legacy CMBS subscription date
June 18, 2010	Last new-issue CMBS subscription date
July 20, 2010	Reduction of TARP capital in TALF LLC

SOURCE: Federal Reserve Bank of New York, http://www.newyorkfed.org/markets/talf_announcements.html

APPENDIX B: Federal Reserve Bank of New York Risk Assessment Principles for Non-Mortgage-Backed ABS

The purpose of the Federal Reserve Bank of New York's risk assessment process is to ensure that bonds pledged to TALF meet three general standards.

1. Credit quality: The bond is of the highest credit quality with de minimis risk of default and a low probability of a material deterioration in credit quality.
2. Transparency: Sufficient information is available to allow investors to make informed judgments about the credit risk of the collateral underlying the bond as well as the level of due diligence on the collateral performed by the issuer.
3. Simplicity of structure: The relationship between the performance of the underlying collateral and bond payments is clear and uncomplicated.

In determining whether a proposed transaction satisfies each of the principles above, the Federal Reserve Bank of New York recognizes that appropriate structural and transactional features may differ significantly across asset categories. Within an asset category, however, bonds will be reviewed relative to generally accepted prudent market practices in the areas of: credit support; issuer and servicer strength; underwriting; diversification (geographic, borrower, or other); and simplicity of structure.

The Federal Reserve Bank of New York will identify transactions that may not meet these standards and, in as timely a manner as possible, alert the issuer of specific concerns.

Source: Fed. Res. PR October 5, 2009

Appendix C: Collateral Haircuts for Non-Mortgage-Backed ABS Collateral Under TALF

Sector	Subsector	ABS Average Life (years)						
		0-<1	1-<2	2-<3	3-<4	4-<5	5-<6	6-<7
Auto	Prime retail lease	10%	11%	12%	13%	14%		
Auto	Prime retail loan	6%	7%	8%	9%	10%		
Auto	Subprime retail loan	9%	10%	11%	12%	13%		
Auto	Motorcycle/ other recreational vehicles	7%	8%	9%	10%	11%		
Auto	Commercial and government fleets	9%	10%	11%	12%	13%		
Auto	Rental fleets	12%	13%	14%	15%	16%		
Credit Card	Prime	5%	5%	6%	7%	8%		
Credit Card	Subprime	6%	7%	8%	9%	10%		
Equipment	Loans and Leases	5%	6%	7%	8%	9%		
Floorplan	Auto	12%	13%	14%	15%	16%		
Floorplan	Non-Auto	11%	12%	13%	14%	15%		
Premium Finance	Property and casualty	5%	6%	7%	8%	9%		
Servicing Advances	Residential mortgages	12%	13%	14%	15%	16%		
Small Business	SBA Loans	5%	5%	5%	5%	5%	6%	6%
Student Loan	Private	8%	9%	10%	11%	12%	13%	14%
Student Loan	Gov't guaranteed	5%	5%	5%	5%	5%	6%	6%

Notes: For ABS benefitting from a substantial government guarantee with average lives of five years and beyond, haircuts will increase by one percentage point for every two additional years (or portion thereof) of average life at or beyond five years. For all other ABS with average lives of five years and beyond, haircuts will increase by one percentage point for each additional year (or portion thereof) of average life at or beyond five years.

The collateral haircut for each newly issued CMBS with an average life of five years or less will be 15%. For newly issued CMBS with average lives beyond five years, collateral haircuts will increase by one percentage point for each additional year (or portion thereof) of average life beyond five years. No CMBS may have an average life beyond ten years.

Source: Federal Reserve Bank of New York: http://www.newyorkfed.org/markets/talf_faq.html#10 (Ashcraft et al. 2012.)