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Fed Lending to Nonbanks in the 2008 Financial Crisis

The 2008 financial crisis is one of the most severe economic downturns in economic history. Analyzing the reasons behind the crisis and the actions taken is vital in order to get insight about how the Fed responded to the problem, what kind of tools and mechanisms it used and how these tools affected the economy, possibly in the future with similar scenarios what the Fed could do better.

After the 2001 crisis, as a policy the Fed lowered interest rates to revive the economy, and the abundance of the loans for homeownership, raised demand for home and home prices. According to one measure *"U.S house prices rose about 10 percent per year on average from 2000 to 2006*" ("*The Economy: Crisis & Response", p.1*). During the 2008 crisis, huge demand for home loans also increased the amount of mortgage backed securities which also included subprime mortgages with relatively high default risk. Soaring house prices made people assume that this will keep going forever. People thought that it is unlikely to default on these loans because the creditor could sell a house as a collateral higher than the value of loan borrowed in case of a default. However, with the realization that home prices cannot increase forever, house prices started plummeting. After that, people owed more than what their houses really were worth, which caused people to have difficulty with paying their loans. As a result of this, mortgage backed security prices started going down and financial institutions holding these securities lost huge amounts of money. According to the International Monetary Fund estimate "*In October 2007, losses of financial institutions related to U.S financial mortgages would total $240 billion. By April 2009, its estimate was nearly six times larger, exceeding $1.4 trillion." (p.2).* This enormous loss of financial institutions spread to other financial institutions, created a whole panic in markets; banks and investors raised standards for loans and asked for higher interest rates, which in return affected businesses in goods and services markets badly. Due to tight credit, companies started laying off workers, consumer confidence decreased, the stock market crashed, and spending on goods, especially durable goods almost halted and the U.S economy got into a recession. In this paper, I will talk about the Fed actions to stabilize the U.S economy and purpose of lending to nonbanks, and the way the Fed lent to non-banks, lastly the role of Dodd-Frank Act affecting the Fed's ability to lend to non-banks.

The Federal Reserve has played a main role by lending non-banks during the 2008 financial crisis. Normally, the Fed only lends to institutions that take deposits such as commercial banks, lending to non-banks is the profession of commercial banks in ordinary times, however, during 2008 the Fed also lent to non-banks such as: investment banks, money market mutual funds exc. According to Walter Bagehot, central banks should lend early and freely to only solvent firms, against good collateral at higher interest rates. We can see this dictum as a constitution of central banking. While examining the Fed's lending practice to non-banks, it is important to consider Bagehot's dictum in the context of the modern financial system. By acting early and freely, the Fed prevented fire sales from happening, and people ran banks or non-banks to withdraw their money. Furthermore, by lending only to solvent firms, the Fed also prevented banks and non-banks from acting recklessly by using too much leverage and holding risky assets. By lending at a penalty rate, the Fed averted the motivation of borrowing from the Fed while the market funding is available. Therefore, these rules limit moral hazard which might occur otherwise. During the times of crisis, the Fed is responsible to make sure that short term interest rates and volume of credit and money are adequate to support macroeconomic objectives, such as stable prices and minimum unemployment.

During the crisis, non-banks institutions such as, primary dealers, investment banks, faced similar problems as banks had run to the banks. Primary dealers or brokers are firms holding illiquid long-term assets using short term financing such as repurchase agreements. The crisis deeply impacted primary dealers because of the turn down in asset prices and higher haircuts required on repo agreements. In order to satisfy withdrawal requests, they engaged in fire sales; however, fire sales made the situation worse, causing issues, such as asset prices to free fall and increased illiquidity and volatility. Since money market funds are repo investors, they could have been affected severely from the malfunction of the primary dealers. As a result, the commercial paper market could have crashed because of a lack in funding from money market funds. To deal with the illiquidity crisis of primary dealers and investment banks, the Fed created two facilities called Term Securities Lending Facility (TSLF) and the Primary Dealer Credit Facility (PDCF). "*The Federal Reserve Board to invoke its authorities under section 13(3) of the Federal Reserve act and in particular to make a determination that 'unusual and exigent circumstances' were present" ("Bagehot's Dictum in Practice: Formulating and Implementing Policies to Combat the Financial Crisis.", p.3).* Although the Fed engaged in lending to non-bank entities through TSLF and PDCF, its lending behavior was compatible with Bagehot's dictum because the Fed lent to only solvent firms against good collateral and applied haircuts, and interest rates higher than market rates in ordinary situations. TSLF supplied funds by auction mechanism which eliminated the stigma problem substantially. "*In this context stigma means if* *people see a financial intermediary taking a loan from a central bank, they will fear the financial intermediary is on the edge illiquidity and run on the financial intermediary will intensify, making things worse." (Hanes notes).* The Fed directly lent to investment banks and primary dealers because banks had their own illiquidity and capital problems and they were not solid enough to provide liquidity to all financial systems. The Fed did a good job evaluating the firm's quality of collateral and situation to determine firm's solvency, although price quotes were volatile.

Another important segment of non-bank institution are money market funds and commercial papers issuers. Money funds are one of the major players in commercial paper and repo markets. Their business is based on intermediation across the maturity model, "*They offer shares that are payable on demand but hold assets that typically mature in several weeks*" *("Bagehot's Dictum in Practice: Formulating and Implementing Policies to Combat the Financial Crisis.", p.6).* Over the course of the crisis, due to decreased value of those assets, money funds had big capital losses and investors started running and asking for their money back. Although money funds are required to pay back $1 per share, during the crisis they "broke the bucket" meaning they couldn't maintain to pay $1 per share when investors asked for their money back. Huge amounts of withdrawals from money funds caused the commercial paper market to plummet; as a result, businesses and investments vehicles were unable to roll over their debts.

Federal reserve created a few facilities to provide funds to money funds and money markets. Asset Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF), through AMLF the Fed lends to commercial banks, and commercial banks purchase top rated asset backed commercial paper (ABCP) from the money markets. The Fed also created

Commercial Paper Funding Facility (CPFF), through CPFF the Fed directly engaged in lending to issuers of commercial papers.

The Federal Reserve also lent to investors in the asset backed securities (ABS) market, "*where more than one third consumer lending had been financed in recent years." (p.8). Non* availability of leverage from the security lender affected ABS market severely. The ABS market is the main resource of loans for durable goods and services such as, cars and student loans, which hold a huge proportion of consumer spending. To help the ABS market the Fed established Term Asset-Backed Securities Loan Facility (TALF). *"This Facility aims to improve the availability and affordability of credit for households and small businesses and to help facilitate the financing and refinancing of commercial real estate properties" ("Reflections on a Year of Crisis", p.4).* Under the TALF, the Fed lent to investors in the AAA-rated bracket of ABS by applying the Bagehot principles such as: penalty rate against good collateral with haircuts.

The Dodd -Frank Act has played a vital role to resolve the problems in the financial system during the great recession. It has also made some regulations regarding lending to non-bank institutions. Under Dodd-Frank Act, the Federal Reserve lent via broad-based facilities to nonbanks with support of the Secretary of the Treasury. Broad-based facilities are essential to provide liquidity to markets and help non-banks to satisfy their investor's withdrawal requests. In this way, money market mutual funds were able to attain short-term liquidity from investors, which in turn made available funding for securitization. Securitization is one of the main resources of business and household investment and spending such as loans to students and small businesses.

To sum up, the 2008 crisis started with the sharp decline in house prices and spread to the financial markets and institutions. The Federal Reserve used its tools and resources to mitigate the effects and spread of the crisis while keeping the macroeconomic objectives, stable prices and maximum employment through providing funds and liquidity to the markets. In order to maintain its macroeconomic objectives and stabilize the economy, the Fed lent to both banks and non-banks entities over the course of the crisis. The Fed used a variety of broad-based facilities to lend to non-bank entities. The Fed established TSLF and PDCF in order to lend to primary dealers and investment banks and created AMLF and CPFF to relieve the money market mutual funds and issuers of the commercial papers. The Fed also lent to investors in the AAA-rated bracket of ABS through TALF. Untraditional lending to non-bank institutions was possible thanks to the Dodd- Frank Act. Therefore, the Fed successfully provided liquidity and maintained the availability of funding for financial markets.