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Redefining Capitalism: The Changing Role of the Federal Reserve throughout the Financial Crisis (2006–2010)

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research article

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—Chris Celi (Edited by Brigid C. Casellini)

In fall 2009, the Dow plunged 700 points and a financial crisis began to unfold. Following the news throughout my senior year of high school, I became obsessed with learning about how the economy works. The first book that really had an impact on me was *Capitalism and Freedom* by Milton Friedman. Reading so many different opinions on what the role of government and especially what the role of the Federal Reserve (Fed) should be made me interested in formulating my own views.

Soon thereafter, I entered the University of New Hampshire as an economics and philosophy dual major, and the summer after my freshman year was nominated for the Research Experience and Apprenticeship Program (REAP). This grant allowed me to explore the topic I had read about so passionately over the past few years: an opportunity to look in depth at the way the Fed handled the recent financial crisis. Each day I read articles dating back to 2006 from the *Wall Street Journal* and the *Economist*, and browsed various economic blogs to collect information on the Fed's actions throughout the financial crisis.

Comparing the Fed's traditional role to the measures that were taken during the crisis demonstrates the gravity of the crisis, as well as how far outside its traditional boundaries the Fed went to mitigate the chaos. The Fed's role was notable because their powers extended beyond their traditional role of maintaining stable inflation and promoting economic growth. Their role became to save too-big-to-fail institutions by employing unconventional lending facilities amongst other means in order to avert a collapse of the world economy. I concluded that this, combined with the Fed's response to the freeze in credit markets, has redefined capitalism as we know it. As a result, we have now reached a new normal within our economy.

The author in Dimond Library at UNH

History and Purpose: Capitalism and the Federal Reserve

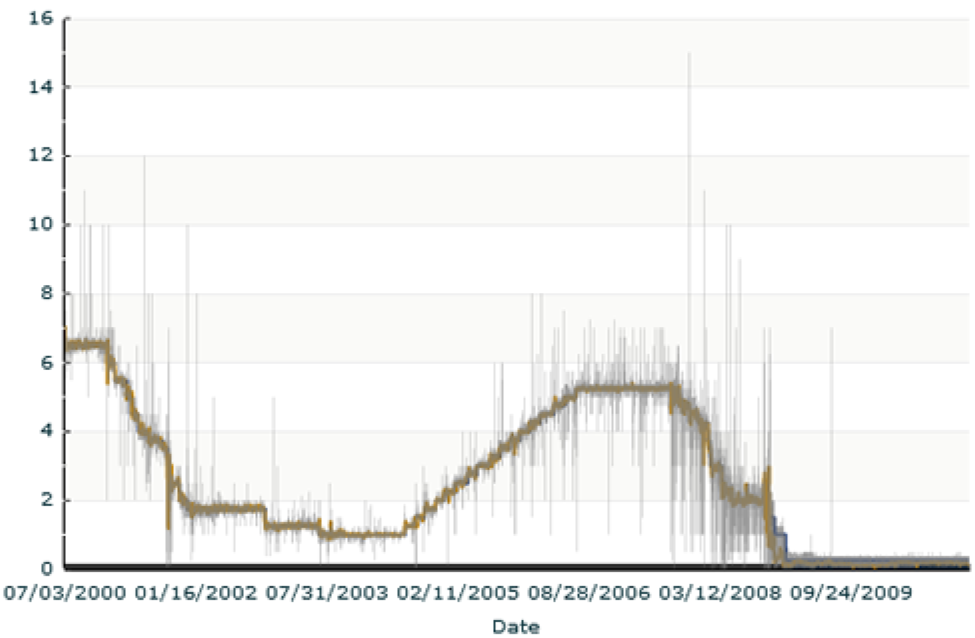
It is important to understand the basic axioms of capitalism in order to understand just how unorthodox the Federal Reserve's actions were during the financial crisis. In capitalism, if a company, bank, small business, or any type of institution fails due to inefficiency or mere bad luck, it declares bankruptcy without the help of any particular public entity. True capitalism can be seen as Darwinism for commerce, where only the best companies survive and the weak fail.

It is also important to understand why the Fed originally came into existence and its traditional role prior to the crisis. The United States went without a central bank from 1837 to 1913. During this time, the US experienced a great deal of turbulence because banks were abusing their customers, performing fraudulent business practices and generally managing their business poorly as a result of being unregulated. After the serious banking panic that occurred in 1907, it was determined that the need for a central bank was imperative (Federal Reserve Education, 2010).

In 1913, President Woodrow Wilson signed into law the Federal Reserve Act. The Federal Reserve is a public-private entity: private because it is independently run and does not report directly to any branch of government, and public because its officials are appointed by the President and confirmed by Congress, and serve to benefit the people of the United States. The goal of the Fed is to create economic stability by insuring banks have adequate capital for their operations. The Fed also performs counter-cyclical policies to fight inflation during booms and ameliorate economic conditions during recessions. To accomplish these goals, the main functions of the Fed up until the recent financial crisis were to supply the economy with fiduciary currency; oversee and clear transactions made by bank customers and the banks themselves; hold depository institutions' reserves; act as government fiscal agent; supervise depository institutions; serve as the lender of last resort; regulate the money supply; and intervene in foreign currency markets (Colander 2008).

Prelude to the Financial Crisis

After the dot-com bubble burst in 2000 and the events of 9/11, the US economy experienced a light recession. Federal Reserve Chairman Alan Greenspan responded by lowering interest rates until they reached 1% in June of 2003. Greenspan left rates at this extremely low level for exactly a year before beginning to raise rates in June of 2004.



Fed Funds Rate 2000–present

Leaving rates so low for such a long period of time created an excessive amount of liquidity for an economy that was not yet damaged very badly. Because banks do not gain interest on reserves that sit in their vaults, there was an incentive to lend out this abundance of money in order to earn interest on loans. The result was a misallocation of money and the creation of a bubble in the housing sector as banks lent at record rates to borrowers both worthy and unworthy. The unworthy are the subprime borrows, or, borrowers who under normal credit conditions would not have received loans.

The creation of the subprime market opened up new opportunities for banks and mortgage brokers that were never seen before. The demand for houses by lower-income borrowers also led to an increase in housing prices since there was now a larger population of people seeking and able to obtain mortgages for real estate. The high demand for real estate contributed to the inflation of housing prices, which caused consumers to feel wealthier and spend beyond their income. What came next was a series of cataclysmic events that reshaped the way the world sees finance and economics for many years to come.

The Great Recession and the Fed's Reaction

The Fed's main concern throughout 2006 was inflation. In order to curb the possibility of high inflation, the Fed raised the Fed Funds Rate until it reached 5.25% in June. As interest rates rose, costs to business increased and access to cheap credit diminished. The rise in interest rates eventually caused the housing market bubble to pop.

In the short run, banks avoided losses by bundling together many mortgages, some risky, some safe, to create a sound AAA-rated mortgage-backed security (MBS) with minimal risk of default. They then sold these securities to investors who were more focused on higher risk and larger profits. Therefore, banks avoided losses and passed the risk down the line. Spreading the risk throughout the financial system created what has become known as "systemic risk" (*Economist*, September 2006).

However, when interest rates rose and easy credit disappeared, demand for these MBSs declined. People realized that MBS investments were not profitable, so banks experienced extravagant losses by holding these worthless securities on their balance sheets. Higher interest rates also meant higher payments for home-owners, leading to delinquencies and defaults. The game of musical chairs was over for the housing and banking industry, the two industries that frequently keep our economy running.

By the end of 2006, Gross Domestic Product (GDP) began to decline, led by a plunge in construction in the real estate market. In December, subprime delinquencies reached 8%, double what they were the previous year (*Economist*, December 2006). At the same time, Morgan Stanley, Merrill Lynch, Bear Sterns and Lehman Brothers were buying mortgage lenders for cheap because these lenders were going bankrupt.

In early 2007 there was still no immediate cause for concern regarding the health of the US economy. Fed Chairman Bernanke made a claim that household finances were “remarkably solid” thanks to a decrease in long-term interest rates that allowed for families to continue consuming (*Economist,* September 2007). However, by August the bad news was piling up. Foreclosures were up 93% from the year before, diminishing the value of assets like MBSs and drying up short-term lending. Lehman Brothers became the first investment bank to shut down its subprime mortgage division in August of 2007. This shutdown foreshadowed the meltdown the market would experience in the near future (*Economist,* December 2007).

In an attempt to ease credit conditions, in January 2008 the Fed began rapidly cutting the Fed Funds Rate until it reached 2% in April (*Economist*, May 2008). People were becoming more skeptical as this same action caused the housing bubble that created the crisis in the first place. Cutting interest rates so heavily, the Fed faced a trade-off. That trade-off was between supplying liquidity for the economy and weakening the dollar. The declining value of the dollar contributed to a price increase in dollar-denominated commodities. Among these commodities was oil, which would spike to almost $140/bl (*Economist*, May 2008). It was becoming apparent that the conventional tools of monetary policy were not going to be sufficient to heal an economy this badly broken.

Preventing the Failure of the “Too-Big-To-Fail”

In conducting my research, I observed that unconventional lending facilities became a tool the Fed heavily relied on during the crisis to prop up credit and keep the economy running. Traditionally, the Fed would only lend to institutions that had accounts with the Federal Reserve. However, the Fed implemented new lending facilities that allowed for certain institutions in need of liquidity to benefit from the Fed’s assistance as well. More specifically, these lending facilities enabled the Fed to purchase distressed assets while in turn equipping the firms participating in the lending program with sufficient amounts of capital needed to stay alive. Under conventional capitalism, these failed institutions would not have been given rescue funds or allowed to shift their bad assets onto the Fed.

On March 16, 2008 the Fed rescued Bear Sterns by facilitating JPMorgan’s purchase of Bear’s remnants. Bear Sterns was the country’s fifth largest investment bank. The Fed also provided government assistance to JPMorgan and Goldman Sachs, two of the largest investment banking firms on Wall Street that conducted risky business practices by investing in subprime mortgages and purchasing MBSs. In July, the US and world economies were looking disaster in the face with the near-collapse of mortgage financers Fannie Mae and Freddie Mac, two Government-Sponsored Enterprises (GSEs) who were responsible for $5.2 trillion worth of mortgages (*Economist*, July 2008). The Fed responded to this threat by extending an infinite line of credit to Fannie and Freddie, another unconventional feat.

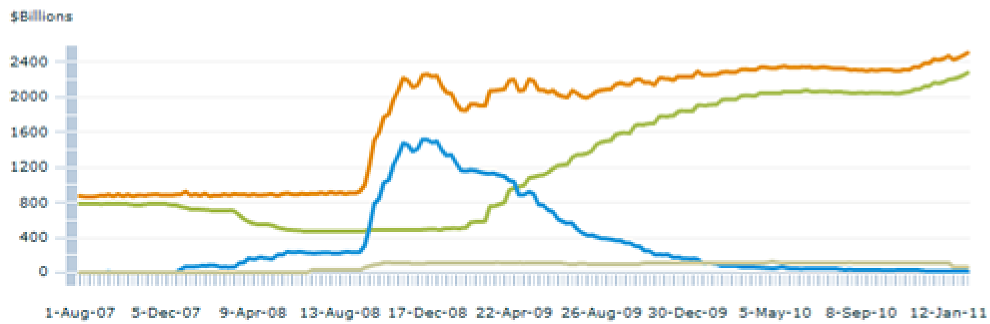
Continuous housing-market trouble led to the downfall of Lehman Brothers in September of 2008, triggering the credit crisis that exacerbated the financial crisis. The government did not find a buyer for Lehman, and Lehman collapsed, triggering a freeze-up of short-term lending throughout the entire financial system. Most frightening was the collapse of the Reserve Primary Fund, a money market-fund renowned as being one of the safest places to store money. It collapsed after it wrote off $800 million of Lehman debt (Mamudi, September 2008).

It is worth noting that letting Lehman Brothers fail is an example of true capitalism. The firm’s success was undermined by its own business practices, and it wasn’t strong enough to survive. Under capitalism, many businesses do not survive. Under true capitalism, similar institutions would learn from the mistakes that Lehman made, thereby emerging from the crisis stronger and wiser than before. Rescuing an institution, as the government did by saving Fannie, Freddie and Bear Sterns creates a situation in which companies expect not to be held accountable for the consequences of the risks they run.

However, going against the principles of capitalism once again, in October of 2008 Congress passed the Troubled Asset Relief Program (TARP), a $700 billion program intended to save too-big-to-fail institutions from the plunge in the price of their assets. The Fed's program proved to be a success as it extended credit to businesses who were worthy of this liquidity but could not obtain it, due to poor credit conditions. GE and American Express were the two companies who participated in this program (Shrivastava, October 2008).

Two additional unconventional lending facilities employed by the Fed were buying commercial paper and adjusting payments made on bank reserves. Commercial paper is a bond of a company that usually matures in 30–90 days, so by buying commercial paper the Fed made unsecured loans directly to companies. The goal was to prop up the commercial paper market because it is a vital component to the short-term lending market. This policy may be considered unconventional, as the Fed never was intended to be a debt holder of private companies. By paying less on banks' reserves, the Fed encouraged banks to lend that money out. Such policy innovation was imperative, since the Fed's primary policy tools were becoming less effective.

All of these lending facilities aside, perhaps the Fed's most potent policy tool is its balance sheet, where all of its asset purchases can be observed. In other words, the Fed can and will purchase whatever asset they deem as necessary in order to take the toxins out of the financial system and absorb the risk during a crisis. There is apparently no limit to the number of purchases the Fed is permitted to conduct, making their balance sheet a very powerful policy tool.



The Federal Reserve's Balance Sheet from 2007–present

Redefining Capitalism

Through the course of my research, I observed the Fed's transformation from an institution influencing the financial market to becoming the financial market. The Fed now participates in taking over and disbursing failed financial institutions' assets and seeking buyers of those assets; they oversee the entire financial system and evaluate all forms of "systemic risk," and they bear the responsibility and are obligated to intervene if they suspect a potential catastrophe. I also have concluded that the Fed will dump as much money as it possibly can into the economy in order to fix or avert disasters. All of these roles did not exist before the crisis, at least not to the extent that they will be relied on from here on out.

The Fed's actions during the crisis threaten capitalism's fundamental principle that only the strongest firms will survive, because without the unconventional lending facilities employed by the Fed, many companies who otherwise would not exist today received lines of credit that helped them stay afloat. Therefore, competition is essentially discouraged, and too-big-to-fail institutions possess an edge on newcomers as their failure must be avoided at any cost.

In the next crisis we should expect the Fed to perform similar anti-capitalist responses in order to avert a depression. These responses will result in further inflation of too-big-to-fail companies and continue to distort the true values of the companies that drive our nation's economy.

Using hindsight, I would suggest that the Fed could have broken down these too-big-to-fail institutions and distributed their assets to other banks through an exchange such as an auction. This would have reduced the size of firms that were a risk to the entire financial system when in trouble, and would benefit the firms who bought the assets, increasing competition in the financial sector.

The New Normal

In regard to whether the crisis is over or not, one would determine that it is. The market bottomed out in March of 2009 but has recovered strongly since then, largely due to the Fed's unconventional lending facilities which revived the balance sheets of essential institutions. By the end of 2009, growth in the manufacturing sector began pulling the US economy out of its rut, as companies' balance sheets were rejuvenated and businesses began to return to normalcy.

The National Bureau of Economic Research (NBER) declared that the recession officially ended in July of 2009 (Isadore, September 2010). However, when we look at essential indicators of economic health such as GDP and unemployment, we still see a 9% unemployment rate and a GDP which is not growing at a rate fast enough to bring unemployment to acceptable levels. Furthermore, housing prices continue to decline, further damaging consumer confidence and causing more people to owe more than their house is worth, or worse, to lose their homes.

With all of that said, it is worth speculating that we are experiencing a "new normal." This new normal comes with a higher unemployment rate, slower rates of GDP growth, and a seemingly less wealthy country, at least for the next ten years. Given these factors, we cannot experience sustainable growth if we continue to spend the way we have been spending from 2000 to the present. Economic fluctuations happen for a reason, and we as should be warier and begin saving more of our income in order to avoid another crisis. In the short run, we will consume less, we will focus on reducing our debt and we will feel less wealthy. However, in the long run that caution will result in stronger household finances and embellished credit backgrounds due to our becoming more knowledgeable and responsible consumers.

This project further deepened my interest in economics and has inspired me to continue doing research for several reasons. It is very rewarding to look back and see a piece of work as detailed as this one, and I am proud to have conducted research on such a critical topic that has shaped the way we know capitalism and the science of economics. I also know that I will be able to call upon my research experience in the future when evaluating how to approach an economic disaster, and I will be able to anticipate how our central government entities will react and how markets will respond. It is rewarding to be equipped with this kind of knowledge.

I want to express my gratitude towards Professor Bruce Elmslie for overseeing my research. Since economics is such an intricate subject, and I had minimal experience in the field as a freshman, it was a gracious gesture for him to guide me through the process of doing research. The experience allowed me to see firsthand how experts in the field conduct their work and gave me the drive to want to continue to do this type of work in the future. Also, thank you to Professor David Hiley for introducing me to the REAP program and guiding me through the application process. Lastly, I want to thank my high-school economics teacher, Mrs. Labelle, for encouraging such vibrant debate in our senior economics class. Without that engaging experience during such an interesting period in history, my passion for this field would most likely not exist.

References

Colander, David C. *Macroeconomics.* Boston: McGraw-Hill/Irwin, 2008. Print.

Isidore, Chris. "NBER Declares Recession Ended in June 2009–Sep. 20, 2010." *Business, Financial, Personal Finance News. CNNMoney.com*. 20 Sept. 2010. Web. 30 Mar. 2011. <http://money.cnn.com/2010/09/20/news/economy/recession_over/index.htm>.

Mamudi, Sam, and Jonathan Burton. "Money Market Fund Breaks the Buck, Freezes Redemptions." *MarketWatch–Stock Market Quotes, Business News, Financial News*. 17 Sept. 2008. Web. 02 Apr. 2011. <http://www.marketwatch.com/story/money-market-fund-breaks-the-buck-freezes-redemptions>.

Shrivastava, Anusha. "Federal Reserve Starts Lending Plan." *Business News & Financial News. The Wall Street Journal–WSJ.com*. 28 Oct. 2008. Web. 19 July 2010. <http:// http://online.wsj.com/article/SB122511106207171675.html>.

"Banks and Markets: Twin Twisters." *World News, Politics, Economics, Business & Finance*. *The Economist.* 17 July 2008. Web. 18 July 2010. <http://www.economist.com/node/11750402>.

"Central Banks: Unclogging the System." *World News, Politics, Economics, Business & Finance*. *The Economist.* 13 Dec. 2007. Web. 16 July 2010.
<http://www.economist.com/node/10278482>.

"The Credit Markets: In the Shadows of Debt." *World News, Politics, Economics, Business & Finance*. *The Economist.* 21 Sept. 2006. Web. 15 July 2010. <http://www.economist.com/node/7941780>.

"The Fed: Looking Down." *World News, Politics, Economics, Business & Finance*. *The Economist.* 18 Sept. 2007. Web. 16 July 2010. <http://www.economist.com/node/9826026>.

"Global Monetary Policy: Ben's Bind." *World News, Politics, Economics, Business & Finance*. *The Economist.* 1 May 2008. Web. 18 July 2010. <http://www.economist.com/node/11294547>.

"History of the Federal Reserve." *Federal Reserve Education*. Web. 30 Mar. 2011.
<http://www.federalreserveeducation.org/about-the-fed/history/>.

"Mortgage Lending: Subprime Subsidence." *World News, Politics, Economics, Business & Finance*. *The Economist.* 13 Dec. 2006. Web. 15 July 2010. <http://www.economist.com/node/8424086>.

Author Bio

Cultivating an interest that first developed in high school, ***Chris Celi*** *looked at the Fed's response to the recent financial crisis with a grant from the Research Experience and Apprenticeship Program (REAP) at the University of New Hampshire. He was nominated for the REAP program as a freshman by Philosophy Professor David Hiley. Chris is a double major in philosophy and economics.*

"I learned that economics is very much a social science," he says. "One simple policy affects millions of people." Chris plans to call upon his research experience, which he says brought much satisfaction both personally and professionally, in a future career as a consultant. "I like the idea of doing research for the purpose of fixing a problem or delivering insight," he explains. Chris, a native of Maynard, Massachusetts, will graduate in 2013.

Mentor Bio

Bruce Elmslie *is a professor of economics at the University of New Hampshire and is a visiting professor at the University of Waikato in New Zealand for the spring 2011 semester. He joined the faculty at UNH in 1989 after obtaining his PhD from the University of Utah. Since coming to UNH, Professor Elmslie has published over sixty-five articles and reviews. His major areas of expertise are in international trade, economic growth and the history of economic thought.*