THE FEDERAL OPEN MARKET COMMITTEE



Dear Delegates,

Welcome to The Federal Open Market Committee, this is Aparna Sivanandam and Aarti Rangarajan, your chairs for ChrisMUN 2017. We are extremely excited to chair this council which we hope you will find this to be a challenging yet a fun-filled and inspiring experience. Although this might be a very different experience for each one of you, we are determined to help you achieve your maximum abilities.

One of the primary tools used by the Federal Reserve (the Fed) to conduct monetary policy is open market operations: the buying and selling of federal government bonds in order to influence the money supply and interest rate. These operations are the primary responsibility of the Federal Open Market Committee (FOMC).

The Federal Open Market Committee (FOMC) is the branch of the Federal Reserve Board (the Fed) of the United States, which determines the direction of monetary policy. The FOMC meets several times a year to discuss whether to maintain or change the current policy. A vote to change the policy would result in either buying or selling US government securities in the open market to promote the growth of the economy.

Being a niche group in the larger picture, you are required to weigh the benefits and costs of the Fed's actions judging the sufficiency of them whilst considering how to offset the lack of investment and deal with financial troubles as well as proposing solutions for global economic threats and suggesting ways to avoid the crises and effective methods to strengthen the country's economy.

You are required to collaborate effectively to produce significant solutions to tackle issues that are of utmost importance in the modern day economy which millions are dependent on. We believe it is crucial to enjoy the experience socially but imperative that you understand and creatively debate and discuss the issues at hand. We have no doubt in our minds that you will propose perplexing solutions creating debates and discussions livelier than one would imagine and that you will discover more about yourself and your abilities.

Your Chairs.

Aparna Sivanandam and Aarti Rangarajan

Issue 1: A Liquidity Crisis

With a lack of investment and trouble for financial firms, tumbling stock prices signal the start of a crisis building. The FOMC, apprehensive about the Fed's actions suspect rating agencies grading of low risk investments. A liquidity crisis refers to an acute shortage of liquidity - the degree to which an asset or security can be quickly bought or sold in the market without affecting the asset's price.

On 9 August 2007, short-term money markets rates such as the overnight rate suddenly started to surge. The ECB was the first central bank in the world to react, and did so immediately, calming the markets, first, with a technical announcement via the relevant Reuters pages and, later in the course of the day, with the provision of unlimited central bank liquidity with overnight maturity at the prevailing policy rate.

The demand of banks turned out to be extraordinarily strong, totaling EUR 95 billion. Over the next two days, further liquidity-providing fine-tuning operations were conducted, so that tensions in short-term euro area money markets abated to some extent.

This series of fine-tuning operations turned out to be the starting point of the first phase of policy responses to the financial crisis, a phase that lasted until September 2008. During that time, the ECB addressed tensions in euro area money markets within its operational framework, mainly by "frontloading" credit extended via its main refinancing operations within the reserve maintenance period, while at the same time keeping the overall supply of central bank liquidity unchanged. Put simply, "frontloading" means that the ECB provided higher amounts of credit at the beginning and lesser amounts of credit at the end of each relevant period, the reserve maintenance period, instead of always extending the same amounts of credit in each operation.

Further important measures that fall into the early phases of the crisis were the lengthening of the average maturity of our liquidity provision by conducting supplementary refinancing operations with maturities of three and six months, the provision of US dollar liquidity against euro-denominated collateral, on the basis of a swap agreement with the US Federal Reserve System, and the conduct of a two-week full-allotment tender in the penultimate main refinancing operation of 2007 in order to address especially elevated funding concerns of banks over the year-end of 2007.

Until the end of August 2008, all these measures – which were taken within the Euro system's operational framework – proved broadly sufficient to align short-term money market rates with our policy rate, although the volatility in money market rates was higher than before August 2007 and money market spreads at longer maturities remained elevated.

Overall, during that time, the monetary policy implementation framework of the ECB proved extremely robust and suitable to address the challenges. In particular, our measures allowed the determination of the monetary policy stance to be kept separate from the way it is implemented, i.e. the ECB's management of the liquidity in the euro area money market. The interest rate hike of July 2008 is an example of the application of the separation principle. We took this step at the time, which is fully in line with our primary objective of maintaining price stability, to prevent second-round effects, with a view to avoiding the dis-anchoring of inflation expectations, even in times of money market tensions.

Solutions:

Provided liquidity

As short-term markets froze, the Federal Reserve expanded its own collateralized lending to financial institutions to ensure that they had access to the critical funding needed for day-to-day operations. Normally, the Federal Reserve provides loans only to institutions that take deposits, such as commercial banks, a process known as discount-window lending. However, amid a widespread collapse of confidence in early 2008, investment banks, including those that were primary dealers of government securities, also had trouble obtaining short-term funding and became vulnerable to credit cut offs similar to bank runs. In March 2008, the Federal Reserve created two programs to provide short-term secured loans to primary dealers similar to discount-window loans provided to banks. Conditions in these markets improved considerably in 2009.

Supported impaired financial markets

The Federal Reserve acted to improve conditions in two vital markets that broke down during the panic in the fall of 2008: money market mutual funds and short-term lending to businesses. Money market mutual funds collect funds from investors and put money into short-term investments such as Treasury bills and unsecured short-term loans to corporations, known as

commercial paper. The commercial paper market is a key source of funds for many businesses. But when the investment bank Lehman Brothers declared bankruptcy, investors feared that more failures could make some commercial paper nearly worthless. They began pulling money out of money market mutual funds that held commercial paper. Interest rates on commercial paper skyrocketed. The Federal Reserve provided secured loans to institutions in these markets, ensuring that adequate funding was available. Since then, rates on commercial paper have fallen to low levels and these markets are once again functioning well.

In response to intensifying financial sector problems, Fed officials created new lending procedures in the form of the Term Auction Facility (TAF) and the Primary Dealer Credit Facility (PDCF), and changed their securities lending program creating the Term Securities Lending Facility (TSLF). The TAF offers commercial banks funds through an anonymous auction facility that seeks to eliminate the stigma attached to normal discount borrowing. The PDCF extends lending rights from commercial banks to investment banks (technically to the 19 so-called primary dealers with whom the Fed does its daily open market operations). And the TSLF allows investment banks to borrow Treasury bills, notes and bonds using mortgage-backed securities as collateral. All of these programs offered funding for terms of roughly one month at relatively favorable interest rates.

Beyond creating these new facilities, the Fed made adjustments to existing procedures. First, they extended the term of their normally temporary repurchase agreements to 28 days and accepted mortgage-backed securities rather than the normal Treasury securities. Second, the Fed extended swap lines to the European Central Bank and the Swiss National Bank that allowed them to offer dollars to commercial banks in their currency areas. And third, they provided a loan that allowed the investment bank Bear Stearns to remain in operation and then be taken over by JP Morgan Chase.

These new programs are very different from the ones that had been in place prior to the crisis. To understand the difference, it is important to realize that a central bank's contact with the financial system is through its balance sheet, and there are two general principles associated with managing these assets and liabilities. First, policymakers control the size of their balance sheet – that is the quantity of what is commonly known as the monetary base. By changing the level of the monetary base (really commercial bank reserve deposits at the central bank) Fed officials keep the market-determined federal funds rate near their target.

Second, the central bank controls the composition of the assets it holds. Given the quantity of assets it owns, the Fed can decide whether it wants to hold Treasury securities, foreign exchange reserves, or a variety of other things. Each of the new programs implemented by the Fed involved changes in the assets the Fed holds. And in nearly every case, officials provided either reserves (cash) or Treasury securities in exchange for low quality collateral. By the end of March 2008, the Fed had committed more than half of their nearly \$1 trillion balance sheet to these new programs:

\$100 billion to the Term Auction Facility,

\$100 billion to 28-day repo of mortgage-backed securities,

\$200 billion to the Term Securities Lending Facility,

\$36 billion to foreign exchange swaps,

\$29 billion to a loan to support the sale of Bear Stearns,

\$30 billion so far to the Primary Dealer Credit Facility.

Changes in the composition of central bank assets are intended to influence the relative price a financial assets – that is, interest rate spreads. So, by changing its lending procedures, Fed officials hoped that they would be able to reduce the cost of 3-month interbank loans and the spread between U.S. agency securities and the equivalent maturity Treasury rate. At this writing, these programs have met with only modest success.

Assistance to Individual Institutions During the crisis

Bear Stearns Companies, Inc. acquisition by JP Morgan Chase & Co. (JPMC)

In March 2008, the Fed provided funds and guarantees to enable bank J.P. Morgan Chase to purchase Bear Stearns, a large financial institution with substantial mortgage-backed securities (MBS) investments that had recently plunged in value. This action was taken in part to avoid a potential fire sale of nearly U.S. \$210 billion of Bear Stearns' MBS and other assets, which could have caused further devaluation in similar securities across the banking system. In addition, Bear had taken on a significant role in the financial system via credit derivatives, essentially insuring against (or speculating regarding) mortgage and other debt defaults. The risk to its

ability to perform its role as a counterparty in these derivative arrangements was another major threat to the banking system.

Programs included a Bridge Loan, an overnight loan provided to JPMC subsidiary, with which this subsidiary made a direct loan to Bear Stearns Companies, Inc., and Maiden Lane (I), a special purpose vehicle created to purchase approximately \$30 billion of Bear Stearns's mortgage-related assets.

AIG Assistance

The Federal Reserve created five programs to give assistance to AIG:

Revolving Credit Facility, a revolving loan for the general corporate purposes of AIG and its subsidiaries, and to pay obligations as they came due.

Securities Borrowing Facility, which provided collateralized cash loans to reduce pressure on AIG to liquidate residential mortgage-backed securities (RMBS) in its securities lending portfolio.

Maiden Lane II, a special purpose vehicle created to purchase RMBS from securities lending portfolios of AIG subsidiaries.

Maiden Lane III, a special purpose vehicle created to purchase collateralized debt obligations on which AIG Financial Products had written credit default swaps.

Life Insurance Securitization, which was authorized to provide credit to AIG that would be repaid with cash flows from its life insurance businesses. It was never used.

Loans to affiliates of some primary dealers

The Federal Reserve provided loans to broker-dealer affiliates of four primary dealers on terms similar to those for PDCF.

Citigroup Inc. lending commitment

The Citigroup Inc. lending commitment was a commitment to provide non-recourse loan to Citigroup against ring-fence assets if losses on asset pool reached \$56.2 billion.

Bank of America Corporation lending commitment

The Bank of America Corporation lending commitment was a commitment to provide non-recourse loan facility to Bank of America if losses on ring fence assets exceeded \$18 billion (agreement never finalized).

References

https://www.ecb.europa.eu/press/key/date/2009/html/sp091109.en.html

https://oemmndcbldboiebfnladdacbdfmadadm/http://sffed-education.org/econanswers/fr_q1.pdf

http://voxeu.org/article/federal-reserve-policy-responses-crisis-2007-08

https://en.wikipedia.org/wiki/Federal Reserve responses to the subprime crisis

Transcripts:

https://www.nytimes.com/interactive/2014/02/21/business/federal-reserve-2008-transcripts.html

Issue 2: Fending off an economic apocalypse

The 2008 financial crisis was the worst economic disaster since the Great Depression of 1929. It occurred despite aggressive efforts by the Federal Reserve and Treasury Department to prevent the U.S. banking system from collapsing. It led to the Great Recession. Two years after the recession ended, unemployment was still above 9 percent.

Causes: The Precursor

The first sign that the economy was in trouble occurred in 2006. That's when housing prices started to fall.

Banks had allowed people to take out loans for 100 percent or more of the value of their new homes, The Gramm-Rudman Act allowed banks to engage in trading profitable derivatives that they sold to investors. These mortgage-backed securities needed mortgages as collateral. Hedge funds, mutual funds, corporate assets and pension funds and other financial institutions around the world owned the mortgage-backed securities.

The banks had chopped up the original mortgages and resold them in tranches. That made the derivatives impossible to price.

Banks panicked when they realized they would have to absorb the losses. They stopped lending to each other. They didn't want other banks giving them worthless mortgages as collateral. This mistrust within the banking community was the primary cause of the 2008 financial crisis, The Federal Reserve believed the subprime mortgage crisis would only hurt housing. It didn't know how far the damage would spread.

Consequences

Bear was rescued from bankruptcy by JPMorgan Chase, which agreed to buy it for a bargain-basement price of \$10 per share (about \$1.2 billion), and the Federal Reserve (Fed), which agreed to absorb up to \$30 billion of Bear's declining assets.

The rescue of Fannie Mae and Freddie Mac in September was indispensable. Fannie and Freddie suffered the same losses as other mortgage companies, only worse. The U.S. Department of the Treasury, unwilling to abide the turmoil that the failure of Fannie and

Freddie would entail, seized control of them on September 7, replaced their CEOs, and promised each up to \$100 billion in capital if necessary to balance their books.

With Bear Stearns disposed of, the markets bid down share prices of Lehman Brothers and Merrill Lynch, two other investment banks with exposure to mortgage-backed securities. Merrill Lynch, agreed on September 14 to sell itself to Bank of America for \$50 billion, half of its market value within the past year. Lehman Brothers, however, could not find a buyer, and the government refused a Bear Stearns-style subsidy. Lehman declared bankruptcy the day after Merrill's sale.

Next on the markets' hit list was American International Group (AIG), the country's biggest insurer, which faced huge losses on credit default swaps. With AIG unable to secure credit through normal channels, the Fed provided an \$85 billion loan on September 16. When that amount proved insufficient, the Treasury came through with \$38 billion more. In return, the U.S. government received a 79.9% equity interest in AIG.

By October 2008, the Federal funds rate and the discount rate were reduced by 11 times, from 6.5% to 1% and 1.75%, respectively hoping to create some flow of liquidity in the market.

International Repercussions

Central banks in England, China, Canada, Sweden, Switzerland, Netherlands and the European Central Bank (ECB) also resorted to rate cuts to aid the world economy. But rate cuts and liquidity support in itself were not enough to stop such a widespread financial meltdown.

Iceland found itself essentially bankrupt, with Hungary and Latvia moving in the same direction. Iceland's three largest banks with assets worth 10 times the entire country's annual economic output collapsed under their own weight. The national government managed to take over their domestic branches, but it could not afford their foreign ones.

Asia's major economies were swept up by the financial crisis. Japan's and China's export-oriented industries suffered from consumer retrenchment in the U.S. and Europe. Japan hit the skids in the second quarter of 2008 with a 3.7% contraction at an annual rate, followed by 0.5% in the third quarter. Its exports plunged 27% in November. The government announced a \$250 billion package of fiscal stimulus in December on top of \$50 billion earlier in the year. In China, exports were actually lower in November than in the same

month a year earlier. The government prepared a two-year \$586 billion economic stimulus plan, and the central bank repeatedly cut interest rates.

The U.S. government then came out with National Economic Stabilization Act of 2008, which created a corpus of \$700 billion to purchase distressed assets, especially mortgage-backed securities. Different governments came out with their own versions of bailout packages and government guarantees.

Timeline of The Fed's Actions

In 2007, the Federal Reserve began pumping liquidity into the banking system via the Term Auction Facility.

In March 2008, investors went after investment bank Bear Stearns. Bear approached JP Morgan Chase to bail it out. The Fed had to sweeten the deal with a \$30 billion guarantee.

The situation deteriorated throughout the summer of 2008. The Treasury Department was authorized to spend up to \$150 billion to subsidize and eventually take over Fannie Mae and Freddie Mac. The Fed used \$85 billion to bail out AIG. This later rose to \$150 billion.

On September 19, 2008, the crisis created a run on ultra-safe money market funds. That's where most companies put any excess cash they might have accrued by the end of the day. They can earn a little interest on it before they need it again. Throughout the day, businesses moved a record \$140 billion out of their money market accounts into even safer Treasury bonds. If these accounts went bankrupt, business activities and the economy would grind to a halt. Treasury Secretary Henry Paulson conferred with Fed Chair Ben Bernanke. They submitted to Congress a \$700 billion bailout package. Their fast response reassured businesses to keep their money in the money market accounts.

The other \$350 billion was for President Obama, who never used it. Instead, he launched the \$787 billion Economic Stimulus package. That put money directly into the economy instead of the banks.

References

https://www.theatlantic.com/business/archive/2014/02/how...fed...2008/284054/

https://www.thebalance.com/2008-financial-crisis-3305679

http://www.investopedia.com/articles/economics/09/financial-crisis-review.asp

https://www.britannica.com/topic/Financial-Crisis-of-2008-The-1484264

 $\frac{https://blogs.wsj.com/economics/2014/02/21/federal-reserve-2008-a-timeline-of-fed-actions-and-financial-crisis-events/$

https://www.federalreserve.gov/monetarypolicy/bst_crisisresponse.htm

MEMBERS OF THE FOMC-2, THEIR ROLES IN COMBATTING THE CRISIS AND THEIR TAKE ON THE ACTIONS OF THE FED:

MEMBERS	STANCE
Ben S. Bernanke	As the Great Recession deepened, Bernanke oversaw some
	unorthodox measures. Under his guidance, the Fed lowered its
	funds interest rate from 5.25% to 0.0% within less than a year.
	Bernanke defended actions that the Fed took starting in late
	2007, when the recession began. He argued that the policies
	helped the United States recover more strongly than other
	countries did. But, he conceded, the central bank should have
	recognized the dangers of rampant subprime lending sooner
	and realized that banks weren't sufficiently capitalized to protect
	themselves against such risky lending. But he faulted Congress
	and political leaders for not doing enough. The government
	shutdowns and Congress's refusal to approve additional
	stimulus measures for the economy slowed growth and
	impeded the recovery.
	Coithney were year, active in efforts by the Traceum and Foderal
Timothy F. Geithner	Geithner was very active in efforts by the Treasury and Federal Reserve to intervene in the 2008 financial crisis. Geithner was
	intimately involved in the bailout of insurance
	company AIG, Bear Stearns, Citigroup, Fannie Mae and
	Freddie Mac. As Treasury Secretary, Geithner became
	manager of the same TARP fund he coauthored. It
	added liquidity to failing investment and commercial banks, and
	much of it has been paid back. TARP was also used to bail out
	automakers, and provide mortgage assistance through
	the HARP program .Geithner also played a key role in guiding
	European leaders through the crisis. He acted as intermediary
	between nations when needed. Geithner argued that many
	employees of the International Monetary Fund (IMF), where he
	was a senior executive at the time, were confused about what

they owed and neglected to pay the full amount. Most Senators approved of the job he did during the financial crisis, and saw the tax shortfall as an oversight, not outright tax evasion

Elizabeth A. Duke

Elizabeth was a member in the board of governors. She effectively supported some of the measures taken by the Fed in resolving the crisis and easing the burden on the economy like targeted actions to prevent the failure

or substantial weakening of specific systemically important institutions, (2) liquidity programs for financial institutions (3) lending to support the functioning of key financial markets(4) large-scale purchases of high quality assets. She also supported and oversaw the enforcement of some facilities Term Securities Lending Facility etc.

Richard W. Fisher

Like many of the Fed's critics, Mr. Fisher emphasizes that he is deeply concerned about the damage caused by the Great Recession. He says he simply does not believe the Fed is helping. He says holding down interest rates has mostly enriched the rich. He was one of the first Fed officials to raise concerns about the health of the housing market. Yet he was also among the last to understand the depth of the resulting financial crisis. He warned throughout most of 2008 that inflation was the primary danger to the economy. In August, as the financial system teetered on the brink of collapse, he voted to raise interest rates, which would have made the situation even worse. In December that year, when the Fed reduced its benchmark interest rate nearly to zero in a move to spur a recovery, Mr. Fisher cast the only dissenting vote. He said the Fed should never have pushed interest rates below 2 percent, nor bought so many bonds.

D	Kohn was vice chairman of the Fed from 2006 to 2010, which
Donald L. Kohn	
	put him at Bernanke's side for many of the biggest, hardest
	decisions the Fed had to make during that era. When Fed
	leaders had to decide in the wee hours of the morning whether
	to bail out this investment bank or that insurance company,
	Kohn played a major role is sorting through the decisions. On
	the other, he bears part of the responsibility for unpopular
	bailouts of AIG and other firms assisted by taxpayers during the
	crisis. He was the strong influence which led to the historically
	large cuts in Fed's Fund rates.
Randall S. Kroszner	He was chairman of its Committee on Supervision and
	Regulation of Banking Institutions during the global financial
	crisis. He is highly supportive of the Fed's actions and believes
	the Fed had done its best.
Sandra Pianalto	Pianalto served the Federal Reserve System during an
	extraordinary period in our country's economic history, seeing
	the Fourth District through the financial crisis and severe
	recession of 2008-09, and leading the Bank to focus not just on
	operational excellence. She strongly supported the change in
	monetary policy.
Charles I. Plosser	He played in important role in constructing a strong monetary
Chartes I. I tossel	policy and regulating the monetary system in the aftermath of
	the crisis. He was supportive of fed's policies and decisions.
Gary H. Stern	He was much against the TALF and helping the banks during
Jan 9 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	crisis. The Term Asset-Backed Securities Loan Facility (TALF)
	is a program created by the U.S. Federal Reserve (the Fed) to
	spur consumer credit lending. The program was announced on
	November 25, 2008 and was to support the issuance
	of asset-backed securities (ABS) collateralized by student
	loans, auto loans etc. guaranteed by the Small Business
	Administration (SBA). Under TALF, the Federal Reserve Bank
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	of New York (NY Fed) lent up to \$1 trillion (originally planned to be \$200 billion) on a non-recourse basis to holders of certain AAA-rated ABS backed by newly and recently originated consumer and small business loans. Gary extensively criticized this.
Kevin M. Warsh	During and in the aftermath of the 2008 financial crisis, Warsh was a governor of the Federal Reserve System, and acted as the central bank's primary liaison to Wall Street. Mr. Warsh helped manage the Fed's response to the 2008 financial crisis, playing a crucial role in the decisions to broker the sale of Bear Stearns to JPMorgan Chase, to allow Lehman Brothers to go bankrupt and to bail out the American International Group.