Money and Banking
Lecture 13: Unconventional Monetary Policy

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Outline

Introduction

- In last lecture, we discuss how flaws in *shadow banking system* could fail the credit system, nearly money system, and the whole economy.
- Facing financial crisis, central banks are supposed to use the magic to bring the economy back to the normal level.
- However, most financial institutions, in particular non-bank institutions, are out of *deposit insurance* or central bank safety net.
- Bumping money as before seems not working good enough, and *unconventional monetary policy tools* (or should we call them *desperate measures*) are requested.

Outline

Financial Crisis

- The root of financial crisis of 2007-2009 is the crash on US real estate market.
- Falling price of real estate → highly levered households default → those mortgages become bad assets.
- Instead of bringing down the banking system, bad mortgages caught up the whole *shadow banking system*. ("originate-and-hold" to "originate-to-distribute").

Outline

Failure of Conventional Monetary Policy

- In last lecture, we learn that commercial banks hold a lot of MBS and CDOs (senior securities) to obtain higher return, and avoid capital regulation.
- When default happened in MBS and CDOs, they were catched up liquidity enhancement mechanism.
- The banks wrote off many assets, however, bank runs did not happen since they are deposit insured.
- Yet banks were unwilling to lend to each other, i.e., *credit rationing*.

Failure of Conventional Monetary Policy

- The key reason is value of MBS and CDOs continued to decline and had no sign to stop.
- Interest rates in interbank market jumped to historical high.
- The Fed responded as in the past to pour much liquidity into the system, but couldn't stop interest rates from rising.
- Network effect made one failure of system important financial institution rippled over other sectors.

Failure of Conventional Monetary Policy

- The failure of MBS and CDOs, fundamentally it is the failure of mortgage lending, made conventional monetary policy by lowering interest rates not working.
- Because end borrowers were not counterparties with commercial banking system, and liquidity providers of MBS and CDOs were not commercial banks, either.
- The liquidity crisis cannot be stopped until (1) falling financial institutions bailed out, and (2) MBS markets stabilized.

Outline

Bailout Non-Bank Institutions

- This course does not go details of bailouts in financial crisis of 2007-2009.
- The Fed assisted merger between Bear Sterns and JP Morgan in March 2008, and let Lethman Brothers fall in September 2008, but gave life line to AIG.
- Three investment banks either merged or bankrupt, and two investment banks Goldman Sachs and Morgan Stanley were transformed into bank-holding companies, which are able to access discount lending from the Fed.

Bailout Non-Bank Institutions

- The key argument for non-bank financial institution bailouts is they are too system important.
- But, bailout leaves *moral hazard* for future policy making and implementation, i.e., "*too big to fail*".
- There is no rule to play when the Fed bails out non-bank institutions. Why Bear Sterns, but not Lehman Brothers?
- Anyway, the purpose of bailout is to stop adverse running in shadow banking system.

OUTLINE

Credit Easing

- Stigma of central bank discount lending: *reputation cost*.
- In order to encourage borrowing from central banks (so that central bank has chance to know the liquidity problem in the market), the Fed established *Term Auction Faculty*.
- Banks which need liquidity support can auction for fixed amount of loans from the central bank, but the identity is anonymous.
- No information leakage prevent reputation cost, while higher bidding rate indicates severe liquidity problem.

Zero Lower Bound

- In financial crisis, central banks in U.S., U.K., and the Euro Zone confront with a tough problem, which happened in Japan before, *zero lower bound*.
- Zero lower bound constrains the central bank's capacity to lower the normal interest rate in order to lower down the real interest rate, by keeping expectation of inflation constant (i.e., $i_t = r_t + \pi^e_{t+1}$).
- If central bank cannot lower down (expected) short-term interest rates, there will be no chance for the lowering down long-term interest rates.
- Central banks need find another way to avoid ineffectiveness of conventional monetary policy tools.

Transmission Channel of Unconventional Monetary Policy

- The logic of quantitative easing, loosely speaking, includes three factors: (1) *zero short-term interest rate*, (2) *large scale asset purchase*, and (3) *forward guidance*.
- The Fed controlled the short-term interest rate, i.e., the rate of interbank market effectively at zero level, keeping it from rising.
- To use the capacity of central bank's balance sheet, the Fed purchased a large amount of long-term financial assets, e.g., mortgage-backed securities, from the market.
- In this way, the long-term interest rates have been brought down, and *liquidity premium* has been brought down as well (why?).

Transmission Channel of Unconventional Monetary Policy

- Besides, the Fed uses *forward guidance* to announce its monetary policy stance, information about current macroeconomic activities and forecast of future economic development, to convince market participants that the economy is backing on the right track.
- The logic behind *forward guidance* is that *rational* economic agents make decisions not only based on current information, but also based on government policy stance (e.g., ease monetary policy).
- When market participants know the Fed was going to take ease monetary policy action for quite a long time, investment decisions in the short term can be made.

Outline

Reflections

- Reckless financial lending boosts real estate bubbles in the US market as well as UK market.
- Funds has been misallocated in those areas which are unproductive for GDP growth.
- High levered households seems to increase consumption in the short run, but once deleverage kicks in, consumption slumped.
- Ease monetary policy has contributed to nearly a decade stock market boom in US.

Reflections

- Still the US economy is unbalanced.
- The lessons for China are (1) no speculation in real estate market, (2) regulated financial sector is supportive for economic growth, (3) monetary policy can be ineffective in zero lower bound, (4) macroprudence is need to guarantee *financial stability*, and (5) financial sector needs further reform.
- How to make Chinese monetary policy more effectiveness to support Chinese economic reform is the ongoing research for economists.