

Government Policy: Conventional Monetary Policy

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- **How is monetary policy conducted?**
- **What are monetary policy instruments?**
- What is reserve-based monetary policy?
- How does monetary policy affect the lending behavior of banks? (i.e., the transmission mechanism of MP)

Some useful terms

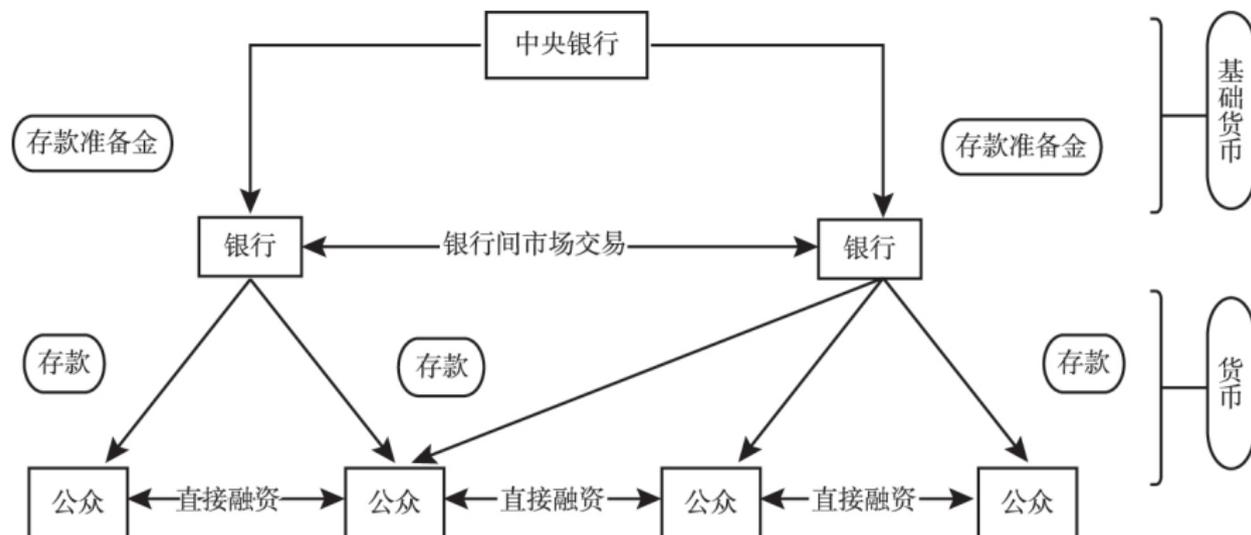
- Open market operations (OMOs)
- "The interest rate" (or bank rate, policy rate, fed rate, etc.)
- Operational standing facilities (OSFs)
- Lending facility and deposit facility
- Discount window rate

One common misunderstanding

- **One common misunderstanding:** MP works through changing quantity of reserves or reserve requirements
- The textbook "money multiplier" approach

- Banks and liquidity; a review
- Banking crisis or bank run: a liquidity perspective
- Why banks want our deposits?
- A question: why do we need central banks?

The two-layered system



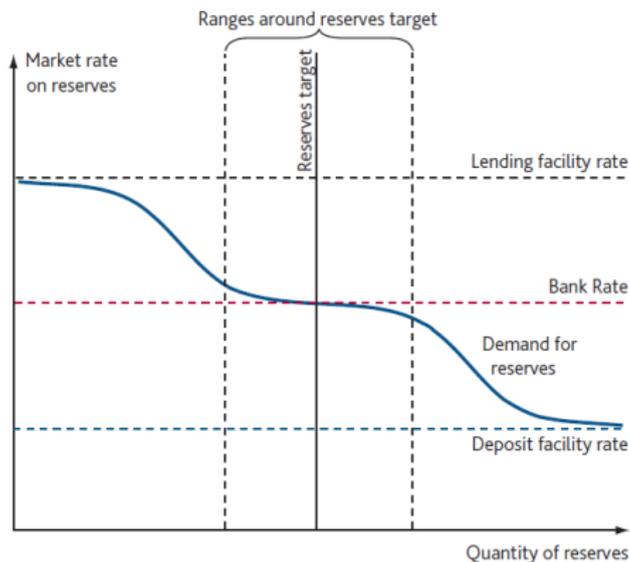
Source: Sun (2019)

Conventional monetary policy: the case of UK

- Reference: "The Bank of England's Sterling Monetary Framework", 2015, Bank of England
- "The Red Book"
- In short, MP works through the "**corridor system**" (been suspended since March 2009)

The "corridor system"

Chart 1 SMF participants' demand for reserves



Source: Bank of England (2015)

- MPC: monetary policy committee
- SMF participants: sterling monetary framework participants (mainly banks)
- Reserves target
- **Bank rate: interest rate paid on reserves** (also the risk-free interest rate)

How does it work? step by step

- Step 1: MPC decides the bank rate for the next period (they usually meet once a month)
- Step 2: **Each participant sets a target** for the average amount of reserves they will hold over the period, taking into account their own liquidity management needs

How does it work? step by step

- **Note:** a) the target can change from period to period
- b) participants can vary the holdings from day to day
- c) those holdings are remunerated at bank rate, as long as they are within a small range around the target
- d) holdings an average level of reserves outside the target range attracts a charge

How does it work? step by step

- Step 3: The central bank **supply the targeted reserves** through OMOs
- Step 4: Transactions are settled; think of stochastic withdrawal shocks (or payment shocks)
- Step 5: To meet the target, banks can borrow reserves from **interbank market** or from the **lending facility** provided by the central bank

Questions: Why do banks borrow from the central bank? Aren't there enough reserves in aggregation? Why don't SMF participants set a higher target?

How does it work? step by step

- The lending facility rate serves as a "cap": no one would like to borrow at a higher rate
- Banks with excess reserves can lend to other banks (who have deficits) or deposit the reserves through the **deposit facility** provided by the central bank
- The deposit facility rate serves as a "floor": no one would like to lend at a lower rate
- The first choice for banks with excess reserves is to lend at the **bank rate**

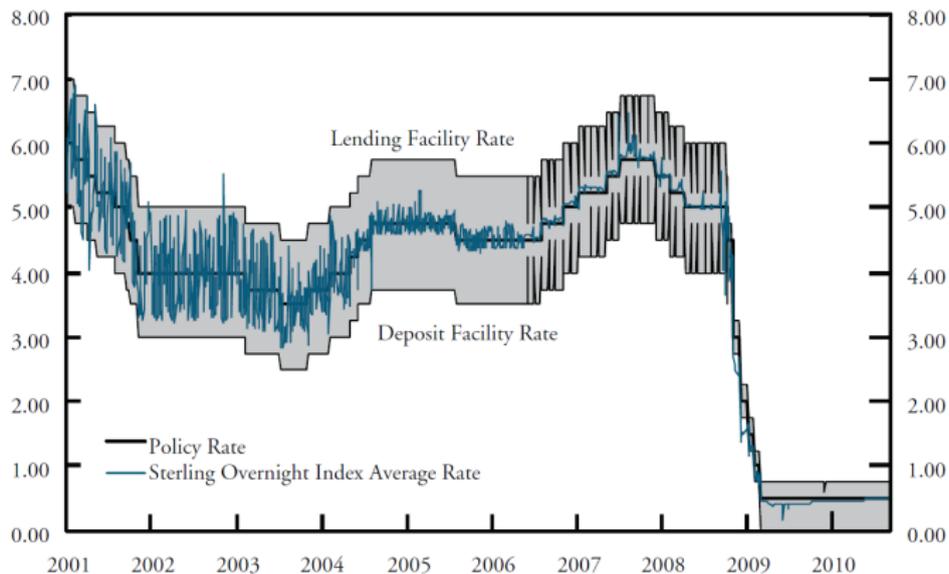
How does it work? step by step

- How to understand the interbank market rate?
- How to make sure the market rate i^m is set at the bank rate i^b ?
- Note that the demand curve around the bank rate is very flat, why?

How does it work? step by step

- For example, if one day, $i^m > i^b$, lending would be more profitable, thus more lending and less demand, both would drive down the rate to i^b
- In essence, **the possibility of arbitrage** between i^m and i^b is the main mechanism through which market rates are kept in line with bank rate

BANK OF ENGLAND



Source: Bank of England

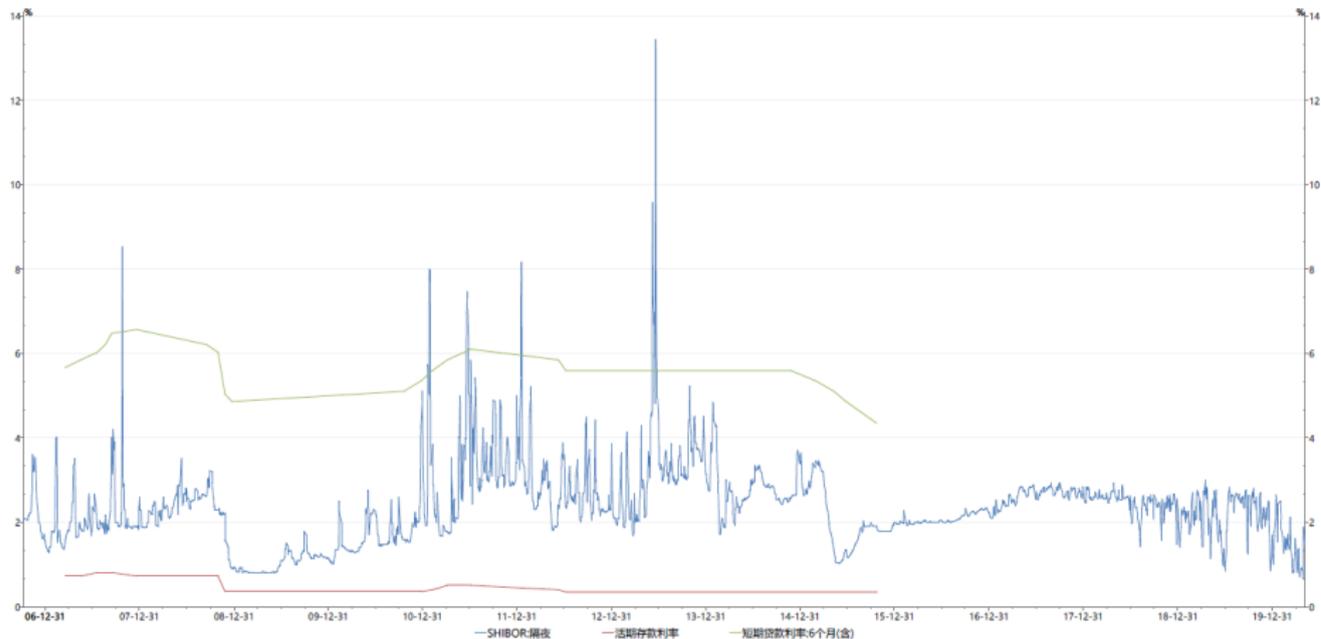
Different interest rates

- Usually, the lending facility rate (the deposit rate) is a fixed markup (markdown) on bank rate
- Thus, the most important policy instrument is **bank rate**

How does the policy rate affect banks' deposit and lending rates

- Bank rate is the risk free interest rate through which banks obtain funds
- It reflects the funding cost of banks
- Deposit rate, also the funding cost for banks, is usually set as: bank rate + liquidity premium
- Note that the liquidity premium can be negative as it reflects the liquidity cost of deposits
- Lending rate, is usually set as: deposit rate + risk premium (e.g., credit risk)

SHIBOR, deposit rate, lending rate



数据来源: Wind