

Financial Crisis

Class 2: Role of Central Bank

Pop Economics



EVROPSKÁ UNIE
Evropské strukturální a investiční fondy
Operační program Výzkum, vývoj a vzdělávání

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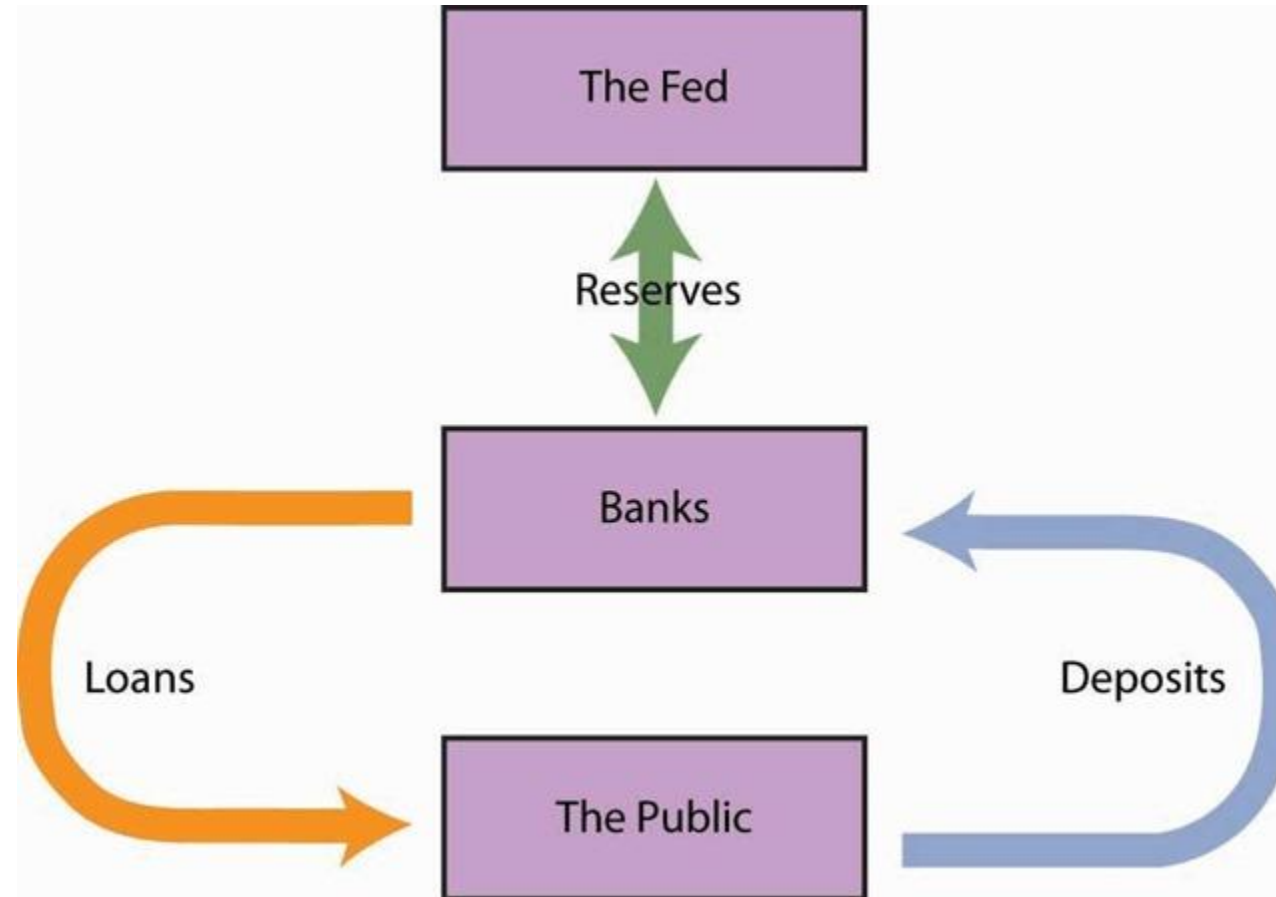
Functions of Central Bank in Economy

- Printing/issuing new money in cash

BUT

- Commercial banks can also create new **cashless** money.
 - Issue of new money is not related to any commodity any more. Gold standard, in form of Breton Woods system, was abandoned in 1971.
 - **Loans (credits) are a source of new money in economy.**
 - **Payments (instalments) to the banks decrease amount of money in economy.**

How do commercial banks create new money?



Source: saylordotorg.github.io

Liquidity requirements

- Liquidity: degree to which an asset or security can be quickly transferred into cash in the market without affecting the asset's price.
- John Exter – liquidity pyramid



Source: Harbor Gold

Interbank Lending Market

- Market where central bank and commercial banks can provide loans to one another at the **interbank rate**.
- **Why?** Banks are required to keep liquidity and reserve requirements. They need to hold an adequate amount of cash, in case their clients wanted to withdraw cash. Some banks have excess liquid assets above and beyond the liquidity requirements. Some will borrow, some will lend money in the interbank market.
- During the financial crisis of 2007, a sharp decline in transaction volume in this market contributed to the collapse of several financial institutions.
- Examples of interbank rates: federal funds rate (USA), LIBOR (UK), Euribor (Eurozone), PRIBOR (Prague)

Base Interest Rate

- Interest rate set by Central Bank („REPO“ interest rate – repurchase interest rate)
- Interest rate provided to commercial banks who borrow money from Central Bank

Liquidity Surplus

- Surplus liquidity occurs when
 - people deposit to banks more money than the banks can lend.
 - cashflows into the banking system exceed withdrawals of liquidity from the market by the central bank.
 - holdings of reserves in excess of the **central bank's required reserves**.
- More deposits → higher margins for banks

Who owns central banks

- USA: FED (Federal Reserve System): quasi public institution, privately owned by commercial banks
- Czech Republic: ČNB (Česká národní banka): state-owned independent bank
- Greece: privately owned
- Italy: privately owned by large banks

„**Seigniorage**“: effortless profit for printing money, i.e. difference between the value of money and the cost to produce and distribute it

Inflation vs. deflation

- Inflation: prices go up
- Deflation: prices go down



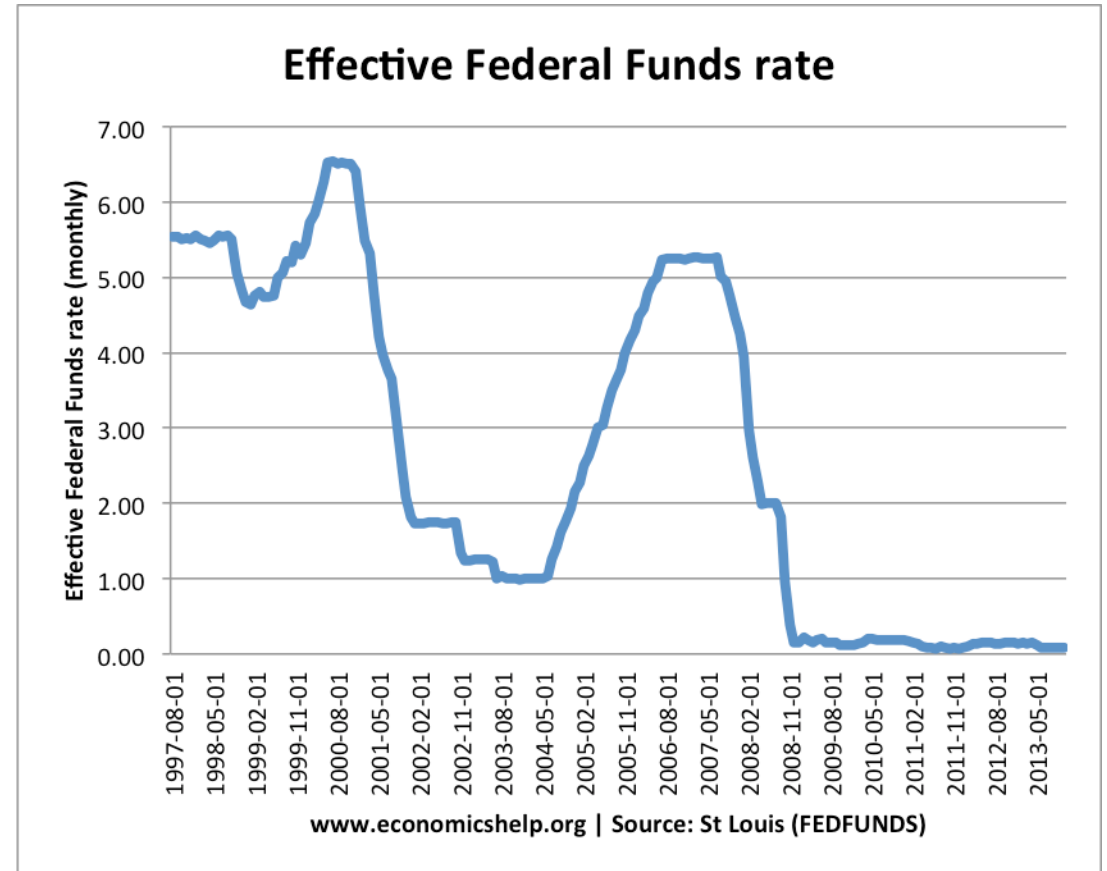
Source: SNB.CHF.com

FED vs. CNB

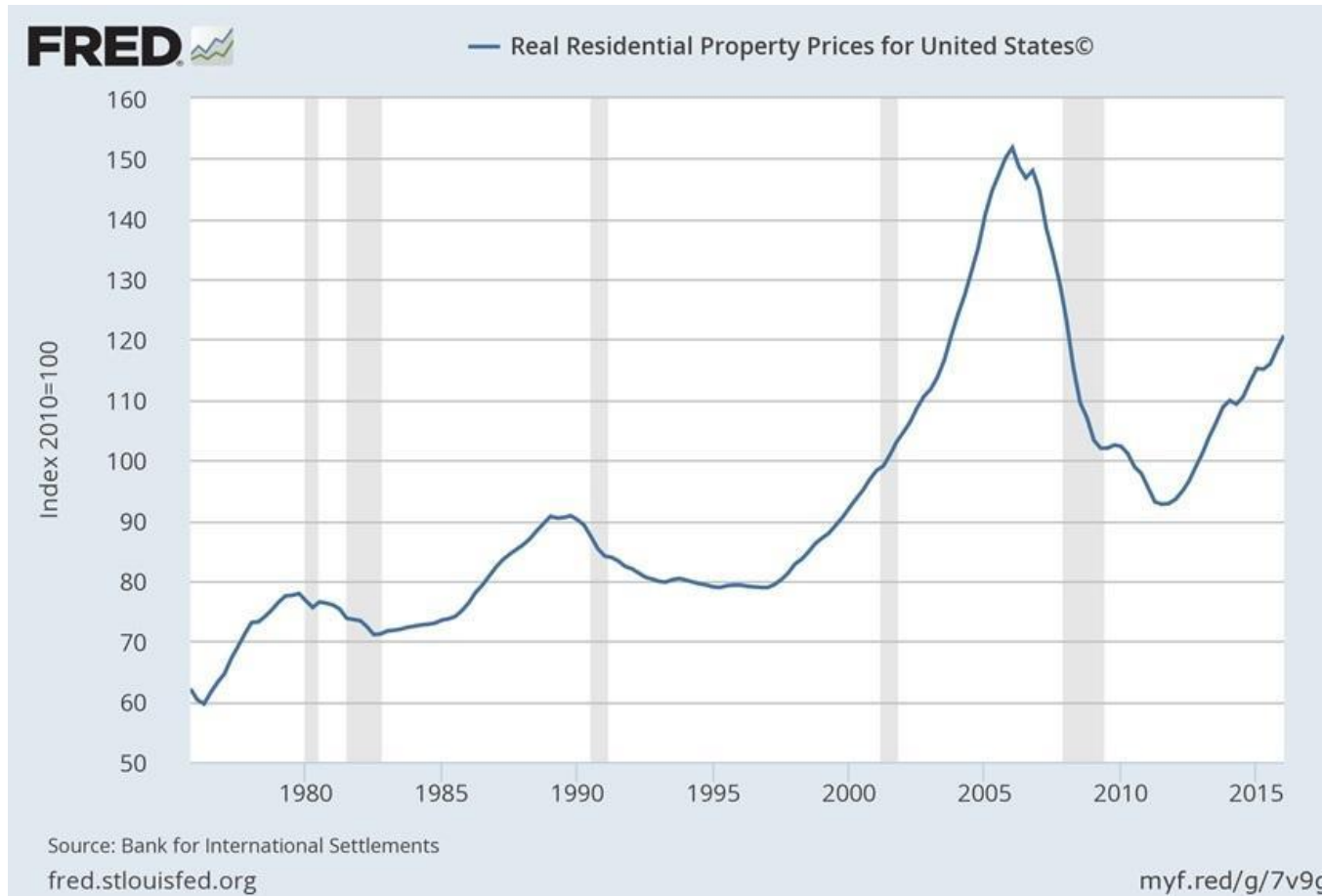
- FED has a dual mandate:
 - Price stability
 - Employment rate
- CNB does not have a dual mandate:
 - Price Stability

FED as a Cause of Financial Crisis

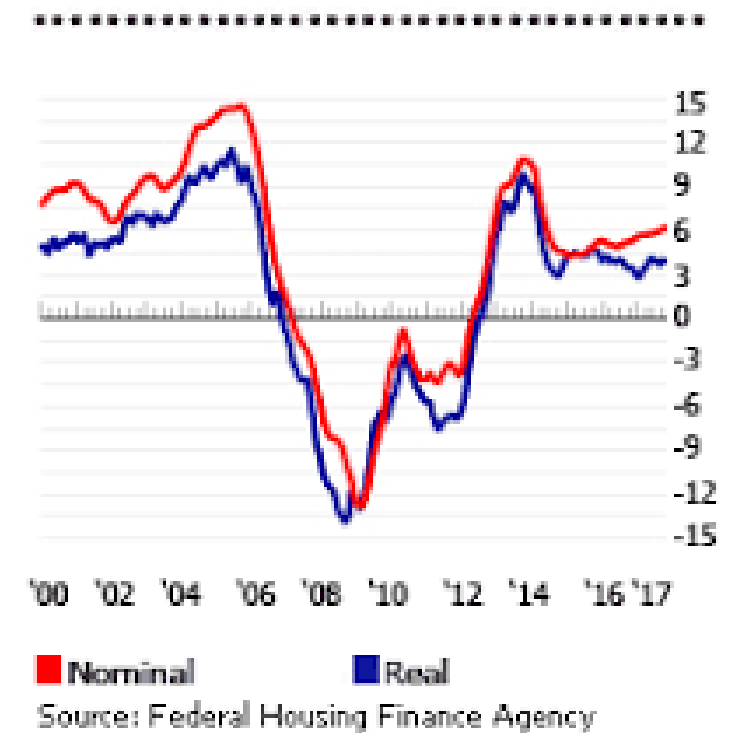
- 2000- Dot-com Bubble
- 2001- September 11 attacks: stock Exchange closed for a week
- 2003- FED set interest rate at 1 % in order to prevent high unemployment
- 2007- FED increased the interest rate to 5,25 % - NINJAs are not able to pay their mortgages



Real Estate Prices in the U.S.



House Price Change, Annual (%)



Why did the Financial Crisis avoid Czechia?

- Czech banks did not invest into toxic assets to a large extent.
- Monetary crisis 1997-2002 cleared Czech banking sector. Mortgage interest rates were app. 5-6 %.
- Czech banks had higher profits from banking fees.

What to remember

- Creation of money in economy
- Interbank lending market
- Liquidity
- Base interest rate
- REPO interest rate
- Liquidity surplus
- Bank reserves
- Seigniorage
- Inflation
- Deflation
- Deflationary Spiral
- Dual mandate of FED

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