## Money and finance Vladan Hodulak

This powerpoint serves as a study material for the students of the course Introduction to economics (MEB435) at FSS MU in Fall 2018. Using this presentation for other purposes without consent of the author is prohibited.







#### Essential questions about money

• What is money?

• How is money produced?

• How does it get/lose value?

### The standard economic story (metallist)

- With this theory, money is first and foremost a **means of exchange**, its other functions (unit of account and store of value) are secondary
- A. Smith, C. Menger
- Problems of rational actors engaged in economic exchange
  - Double coincidence of wants
- Type of an evolutionary explanation increasing effectiveness of the economic exchange
  - Precious metals (gold, silver) were selected due to their properties, particularly their high exchangeability
  - Paper and later electronic money were introduced as a transaction cost saving device, originally they were to represent the "real money" deposited in vaults
- Barter -> money -> credit
- Problems with the standard approach (internal inconsistency, role of the state, historical facts)

#### State/credit theory of money

- Money is firstly a **unit of account** for recording debts
- It is an IOU and is created when an IOU is issued
- Its value depends on the **credibility** of the promise
- Money is an institution a generalized and formalized type of an obligation (debt)
- Anyone can issue money (obligations) and almost anything can represent it (cattle, salt, wood, paper)
- The crucial problem is: **How to make people accept it?** How to make it generally recognized? (only then a generalized means of exchange is possible)
- Hierarchy of money (government > banks > firms > households)
- Problems (role of the private sector, legitimacy issues)

#### Essence of money

- What is money?
  - measure of value (unit of account)
  - It's vital to differentiate between money of account and money things (what represents money)
  - A tool for economic coordiantion (technology)
  - People coordinate their economic behavior in various ways, the most common in-group coordination mechanism is some form of credit -> money usually measures debts (credits)
  - credit -> money (-> barter)
- How is money produced?
  - By issuing an IOU (× destruction of money)
- How does it get/lose value?
  - Money vs wealth
  - Credibility × quantity theory of money (but it's complicated)
  - $M \times V = P \times Q$

#### Money and states

- A state is able to determine its money (unit of account) once it enforces taxes/fees in it
- Governments use money to **mobilize resources** for public purpose
- Money is accepted for several reasons: trust, habit, authority, but the ultimate reason is power
- The fact that a state issues its money and declares that it will accept it back in the form of taxes is an expression of **power** (+legal tender)
- Governments can buy anything that is for sale in its currency and is in theory able to **overbid** anyone
- Money has distributional consequences and is therefore prone to be abused for political gains
- Debtor × creditor interests

#### Modern money

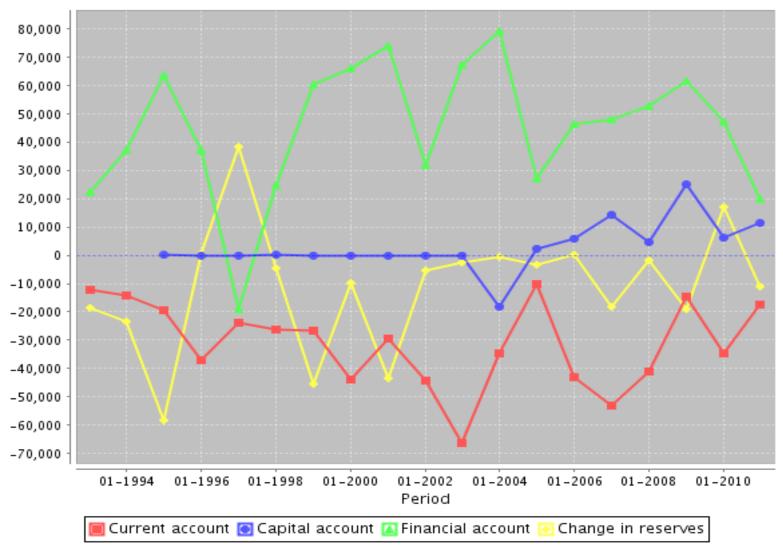
- Usually one state one currency rule
- Governments owing in their own currency can't be forced to go bankrupt but they can decide to do so
- Fallacy of composition what is true for a part (an individual) doesn't have to be true for the whole
  - Individuals × states
  - Expenditure = income
- Governments are for historical and political reasons **limited** in their power to exploit their monetary systems
- Most money today is issued by **private commercial banks** 
  - Exogenous money money multiplier
  - Endogenous money credit creation ex-nihilo

#### Limits of domestic monetary power

- Political and institutional constraints
  - Central bank independence
  - Deficit limit
  - Debt ceiling
  - Limited money supply (metal standard, currency peg)
- Inflation and real constraints (output level)
- International constraints
  - Balance of payments constraints
  - Debt in a foreign currency

#### International constraints

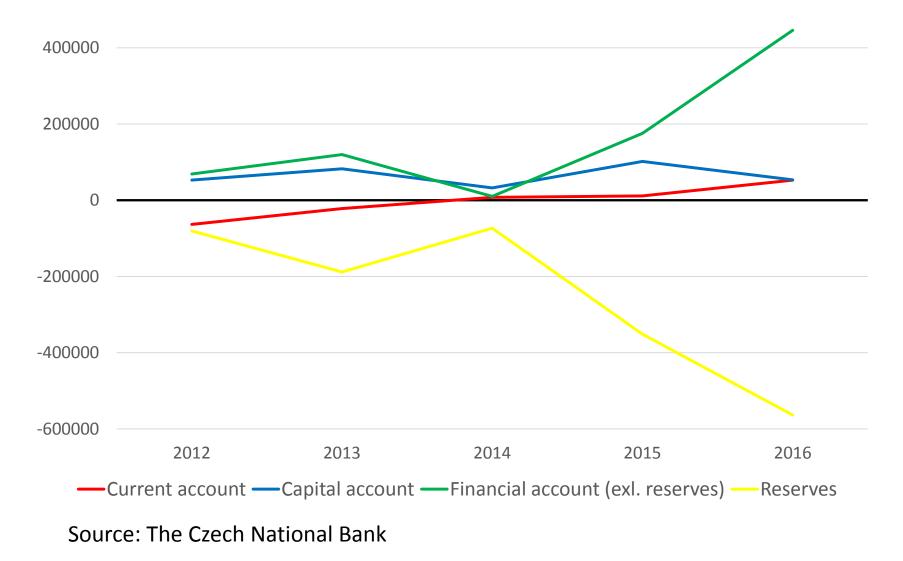
- Balance of payments (flow)
  - Accounting accord of all monetary transactions between a country and the rest of the world
  - The sum of all accounts has to be equal 0 by definition
- Composition (IMF × USA!)
  - <u>Current account</u> trade + factor income
  - <u>Financial (capital) account (including the reserve account)</u> net change of ownership of international assets
  - Balancing item (statistical errors)
- Relations between individual accounts
- Net international investment position (stock)
  - Accumulated CA, asset price changes, currency moves



Balance of payment statistics (in millions of CZK)

Source: The Czech National Bank

#### Balance of Payments of the Czech Republic 2012-2016



# Net international investment position (% of GDP in 2014)

Switzerland	119,6	United States	-39,7
Japan	74,8	Slovakia	-70
Germany	36,4	Spain	-94,5
China	17,1	Ireland	-106,7
Russia	16,7	Portugal	-111,6
CZ	-35,6	Greece	-121,9

Source: IMF

#### Balance of payments adjustment

- Most countries can't run CA deficits for prolonged periods of time
- Relationship to government deficits and debts
- Balancing mechanisms
  - Exchange rate adjustment
  - Internal prices adjustment
  - Various others (debt forgiving, war, emigration)
- Adjustment cost
  - Transitional cost
  - Continuing cost

#### Monetary power

- Autonomy × influence
- Power to delay
  - Liquidity
  - Borrowing capacity
  - Special cases
- Power to deflect
  - Sensitivity (openness)
  - Vulnerability (adaptability)
- Who adjusts?
  - Deficit × surplus countries
- Distributional consequences