Lesson 8

Financing decisions

Structure

1. The financial system
2. Financial assets
3. Financial sources
4. Cost of capital

1. The financial system

Consists of financial intermediaries and financial markets which facilitate the flow of funds from savers to borrowers and vice versa

Goals of the financial system:

- To promote the private savings
- Efficient allocation of the financial funds
- To guarantee that institutions, financial tools and markets have flexibility to adapt to the new changes that promote the two previous goals

The financial system II

Economic agents or spending units:

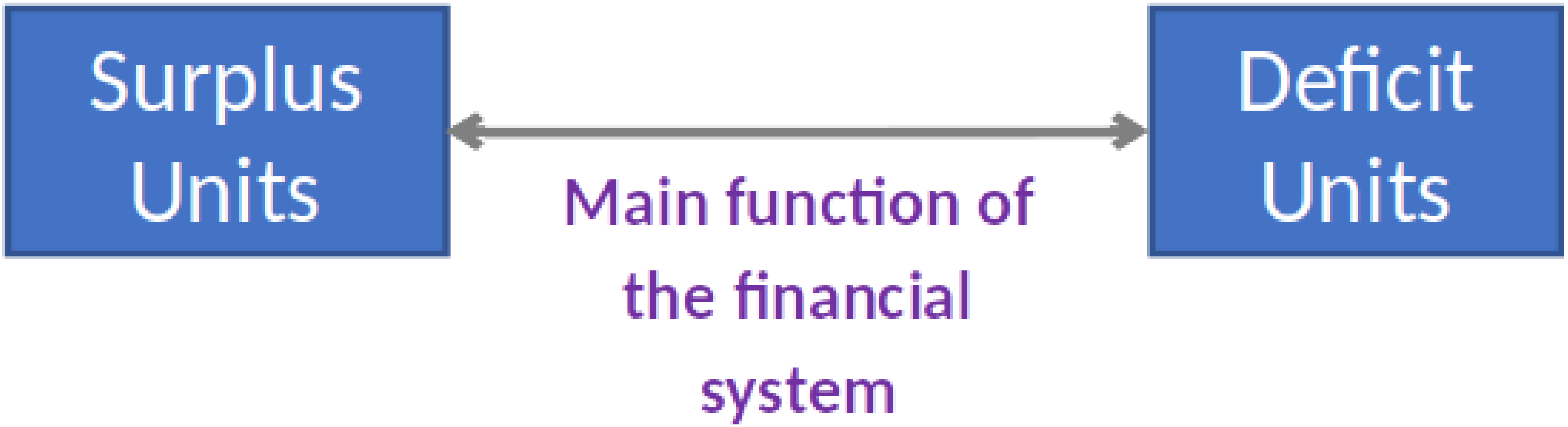
- Families: domestic economies or households
- Private sector: corporations, firms, businesses
- Public sector
- Countries

Spending units produce, consume, save and invest

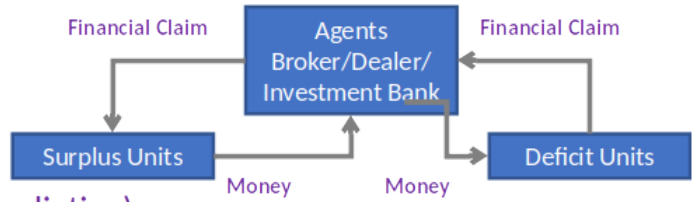
The spending units will be termed as deficit spending units or surplus spending units. This situation depends on several factors:

- Wealth
- Current income and expected income
- Age and social position
- General economic expectations

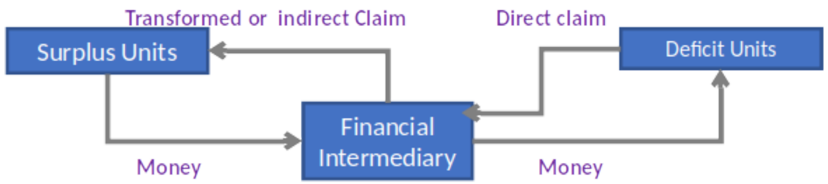
The financial system III



- Deficit Spending Units (DSUs): (borrowers) : spending exceeds income
- Surplus Spending Units (SSUs): (savers, lenders): income exceeds spending
- Differences between savers and investors
- Adressing liquidity, security and return saver wishes do not meet investor wishes
- Financial intermediaries are needed (middle-man)



Indirect Financing (Financial intermediation)



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Financial markets

Financial market: related to the place, mechanism or system that allows the trade of the financial assets between the agents

The price is determined by the market (market value, “fair value”), providing liquidity

Functions:

- Meeting point of demand and supply
- Determine “fair value” of the assets: supply=demand
- Provide liquidity
- Reduce the costs and intermediation periods
- Efficiency, better return-risk features. Improve conditions of trading (less commissions, cutting costs)

Financial markets II

Classification of the markets:

By the level of transformation of the assets:

- Direct markets (non transformed securities)
- Intermediated markets (transformed securities)

By the level of trading of the assets:

- Primary markets (where financial claims are initiated)
- Secondary markets (financial claims are resold an repriced)

By the features of the asset:

- Money markets (to finance liquidity in the short-term)
- Capital markets (funds that can be uses for long-term capital investment)
- Foreign exchange markets (foreign currencies are bought and sold)

2. Financial assets

- A financial claim on an asset that is usually documented by some type of legal representation
- Examples include bonds and shares of stock but not tangible assets such as real estate or gold
- They are issued by agents looking for financial sources (investors) and are acquired by agents with surplus of liquidity (an investment= expecting a return)
- They are instruments of transferring funds and risk between agents
- They are a liability for the issuer and an asset for the investor
- The most important assets issued by companies are: stocks (variable return) and corporate bonds (fixed return)

Basic features of a financial asset:

- Liquidity: ease to cash
- Return: economic profit/gains/ yield
- Risk: solvency and guaranty

3. Financial sources

- Internal financing: Retained earnings, depreciations
- External financing: stock, corporate bonds, loans
- Equity financing: capital, earnings, depreciations
- Non-equity financing: liabilities (bonds, loans and payables)
- Not all the equity financing is internal financing but all the internal financing is equity financing.
- Not all the external financing is non-equity financing but all the non-equity financing is external financing.

4. Cost of capital

- Cost to finance investments
- Two main components:
  - Cost of equity
  - Cost of debt
- Together they form the cost of capital
- WACC: Weighted Average Cost of Capital

Cost of debt

- The financial systems links SSU and DSU. SSU lend funds to the DSU. These funds are not free, they do have a cost called interest

Concepts:

- Principal: borrowed amount
- Amortization (principal repayment or capital repayment)
- Outstanding capital or capital balance: amount due to satisfy the payoff of the principal
- Paid capital: principal already repaid
- Interest (financial costs): they are calculated on the outstanding loan balance (principal balance)
- Installment (periodic payment): amortization + interest

Cost of debt

- The cost of debt is the AER of the financial sources of the company
- Reference interest rate: EURIBOR

Cost of equity

- Return required by the investors or shareholders
- Usually a risk-free rate plus a premium
- Risk-free rate –> bonds

Weighted Average Cost of Capital

- WACC

$$\mathrm{WACC} = k_E \cdot \frac{Equity}{Equity + Liabilities} + k_D \cdot \frac{Liabiliti}{Equity + Lia}$$

📝Exercise 8.1

The equity of a company is worth 40 m.u while the liabilities are 70 m.u.

The AER of the debt is 4.2% after tax

We also know that the return of long term bonds is 2.9% and the risk premium that the investors are considering is 7%.

Compute the cost of capital