# 1 Introduction

Study: Financial Market, Financial Institution, Financial Management.

#### 1.1 Financial Market

**Financial Market:** Markets where the funds flow from lenders to the borrowers. It's the *channel* funds from servers to investors and can *promote* economic efficiency.

#### 1.1.1 The Bond Market and Interest Rate

A security (financial instrument) is a claim on the issuer's future income or assets. it includes **Bond** and **Stock**.

**Bond** is a debt security that promises to make payments periodically for a specified period of time.

Stock: Common stock represents a share of ownership.

**Interest Rate**: Cost of borrowing or the price paid for rental of funds. When it increases, It can affect consumption, saving and investment.

## 1.1.2 The Foreign Exchange Market

**Definition**: where funds are converted from one currency into another.

**Foreign Exchange Rate**: the price of one currency in terms of another currency. It mainly influence the imports and exports. There three methods of quotations:

Direct:  $100 \ FOREX = e_x \ Domestic \ Currency$ Indirect:  $100 \ Domestic \ Currency = e_y \ FOREX$ USD  $1 \ USD = e_z \ Domestic \ Currency$ 

(de)appreciate: the influence of market;

(de)valuate: the influence of government

US Dollar Index(USDX): To evaluate the value of Dollar by exchange rate with other countries.

## 1.1.3 Factors of Foreign Exchange Rate

The Exchange rate is something rated to the Demand & Supply of foreign currency. For e - Q(foreign currency) graph, it satisfies the normal demand and supply curve. All the exchange rate is discussed in direct quotations.

Balance of Payment(BOP): surplus (FOREX  $\uparrow$ , e  $\downarrow$ ), deficit(FOREX  $\downarrow$ , e  $\downarrow$ ).

Economic Performance can be apparent in some time point(end of the year). Good performance will lure foreign  $cash(e \downarrow)$ .

Interest rate will also affect( $i \uparrow, e \downarrow$ , for it can lure foreign investment). Price will affect as well( $p \uparrow, e \uparrow$ ).

# 1.2 Banking and Financial Institutions

#### **Functions**:

- a. They make financial markets work
- b. Financial intermediary for funds flowing from savers to investors

c. Important effects on the performance of the economy as a whole

# Examples:

Insurance Company;

Banks;

Securities Firm;

Trust Company;

Credit Union;

Financial Company:

Financial Leasing Company;

Credit Rating Agency;

Exchanger;

Funds Management;

All examples can be divided to two types: banks-institution and non-banks-institution. Banks are the largest financial intermediaries in our economy, including Central Bank; Commercial Bank; Policy Bank(non-profitable); Specialized Bank. There is a trend of disintermediation.

#### 1.2.1 Financial Innovation

Anything new in Finance.

New financial product, financial institution, financial services and more appear, such as e-finance and financial derivatives.

# 1.3 Money and Money policy

**Definition**: Money is defined as anything that is *generally* accepted in payment for goods or services or in the repayment of debts. It is linked to changes in economic variables that affect all of us and are important to the health of the economy.

Money affect business cycle (including four stages: recession, depression recovery and boom.

Money growth rate will have a severe decrease and rapid growth. The recession will cause the money decreasing, for example, people are don't intend to consume. After a big recession, government will get in and add the amount of money in the market to boost economy. This phenomena can be used to predict the performance.

## 1.3.1 Relationship between Money and Inflation

The aggregate price level: the average price of goods and services in an economy.

**Inflation**: A continue rise in the price level which affects all economic players.

The rise of money supply will lead to the rise of inflation.

### 1.3.2 Money and Interest Rates

Interest Rates are the price of money. The increase of money supply will lead to the decrease of interest rate, something like demand and supply.

### 1.3.3 Monetary and Fiscal Policy

Monetary policy is the management of the money supply and interest rates. (Central bank)

**Fiscal Policy** is government spending and taxation, which is set by department of Treasure. (fiscal revenue and expense, the department of treasury)

Both policies make government be able to manage and manipulate markets. Government raise money from taxation, profit of state-owned company, fee, etc. Government spends on procurement, investment, transfer payment, interest payment, etc.

The effect on aggregate demanding (C+I+G+NX): Money policy influences C, I, NX, has a indirect effect to AD. Fiscal policy will have a direct effect on G and AD.

Interest rate change  $(\uparrow, \text{ as example})$  will affect exchange market, stock market  $(\downarrow, \text{ as it's more difficult to raise money})$ , national bond market, commercial market  $(\downarrow, \text{ as it will lower the need for consumption})$ .

# 2 Financial Market

### 2.1 Function of Financial Markets

Perform the essential function of channeling funds from lenders to borrowers. It can also promote *economic efficiency* by producing a efficient allocation of capital. It will also directly improve the well-being of consumers by allowing them to time purchases better (allow consumers to use the money in the future to purchase by loans or something else).

## 2.1.1 Channel of Financing

**Direct Finance**: Borrowers borrow funds directly from lenders in financial markets by selling them securities. More specifically, the relationship between lender and borrower is direct and clear.

**Indirect Finance**: Involves a financial intermediary that stands between the lender-savers. The relationship between intial lender and final borrower is indirect. (Banks)

The graph of flow of funds can be referred to ppt.

### 2.2 Structure of Financial Market

### 2.2.1 Debt and Equity Markets

**Debt instrument** is a *contractual agreement* by the borrower to pay the holder of the instrument fixed dollar amount (interest and principal payments) at regular intervals until a specified date (the *Maturity Date*, when a final payment is made, includes: *bonds*, *mortgage*.

It has different terms includes: short-term(M < 1yr): T-Bill intermediate term(1yr < M < 10yr): T-Note long-term (M > 10yr): T-Bond

**Equity instrument** is claim to share in the net income (income after expenses and taxes) and the asset of a business, includes: *common stock*, *preferred stock*.

The difference between common stock and preferred stock: Preferred stock has priority in dividends receiving and liquidation during the corruption. Common stock owner has *voting right* based on the share owned while limited in priority stock owner. And the common stock has priority to buy new shares to avoid dilution. From the crisis perspective, common stock holder has bigger crisis than preferred stock.

Priority stock has two type: accumulative and non-accumulative. Accumulative has a right to claim the unpaid dividends in the later year while non-accumulative can just claim current dividends. Accumulative stock is more analogous to long-term bond.

The main disadvantage of owning a corporation's equities rather than its debt is that an equity holder is a *residual claimant*.

# 2.2.2 Primary and Secondary Markets

**Primary markets** are those where new security issues sold to initial buyers. Investment Banks will *underwrite* securities in primary markets.

**Second markets** are markets where securities previously issued are bought and sold between investors. Broker(agency) and dealers work in secondary markets.

### 2.2.3 Exchanges and Over-the-Counter(OTC) Markets

**Exchanges markets**: Trades conducted in central locations(eg. New York Stock Exchange, NASDAQ) **OTC markets**: Dealers at different locations buy and sell(eg. OTCBB).

## 2.2.4 Money and Capital Markets

Money Markets deal in short-term debt instrument.

Capital markets deal in longer-term debt and equity instruments.