

The Business Environment

Chapter II in

*Investments: Spot and Derivatives
Markets*

Flow of Funds

- $\text{Saving} = \text{Income} - \text{Consumption}$
- $\text{Financial Surplus} = \text{Saving} - \text{Investment}$
- The Financial Market brings together those with surplus funds with those that have a shortage of funds.

Financial Intermediaries

- Banks, building societies, life assurance and pension funds.
- Advantages:
 - assess creditworthiness
 - Portfolio reduced risk-exposure to idiosyncratic events → risk-spreading
 - Economies of scale in sale and purchase of financial assets because of transactions, search and information costs
- Asset transformation: hold low-yield short-term liabilities and higher-yield long-term assets.
- Process of Disintermediation

Money Markets & Open Market Operations

- Liabilities of banks constitute main element of money supply, which is a central bank target variable.
- Law of large numbers imply reserve ratios.
- Influenced via Open market operations (OMO): buying and selling of financial assets
 - Purchase of bonds pushes up price → fall in yield (interest)
 - Also leads to increase in money supply (base money and the multiplier)

Asset Returns

- Nominal Return:
 $(\text{Capital Gain} + \text{Income}) / \text{Investment}$
- Real Return:
 $\text{Nominal Return} / \text{Inflation Rate}$
- Fisher Equation:
 $\text{Nominal} = \text{Real} + \text{Inflation}$
- HPR:
 $\text{Capital gain (loss)} + \text{Income}$

Risk

- General Risks:

- Market
- Inflation
- Default
- Liquidity

- Other Classification:

Systematic vs. Idiosyncratic Risk

→ Risk Premium

- Equity premium puzzle
- Efficient Market Hypothesis: price reflects fundamentals & price changes only on news. But, herding, chartists, excessive price volatility.

Term Structure of Interest Rates

- Central Bank sets short-term rates. How are the rates of longer term investments determined?
 - Average of current and expected future rates
 - Risk premium (inflation for Government backed bonds)
- Ambiguous effect due to inflation expectations.
- Downward sloping yield curve and recessions

MP & Business Environment

- Transmission Mechanism
 - Ripple effect: Eventually all asset prices and rates of return should be affected.
 - First affected by s.r. rate change are close substitutes, similar instruments with similar characteristics, such as risk, liquidity, and length to maturity. This percolates through to all by arbitrage.
 - Long and variable lags
 - Asset prices and incomes adjust

Interest Rate & Real Expenditure

- Real investment responds to real rates
- Internal funds have opportunity cost
- *Income gearing*: if (s.r.) liabilities/income is large, changes in MP may have a large effect on Cash flow and spending, especially if *credit constrained*.
- Fall in Income and asset value may lead to *credit crunch*.
- Exchange rates (overshooting & UIP)

Setting the Official Rate

- CB keeps banks and Money Market short of funds
- Balance daily receipts and spending
- If unbalanced perform OMO with Monetary Policy Committee determined *repo* rate.
- Interbank Market, LIBOR and Fed Funds Rates