

# Equity Investment



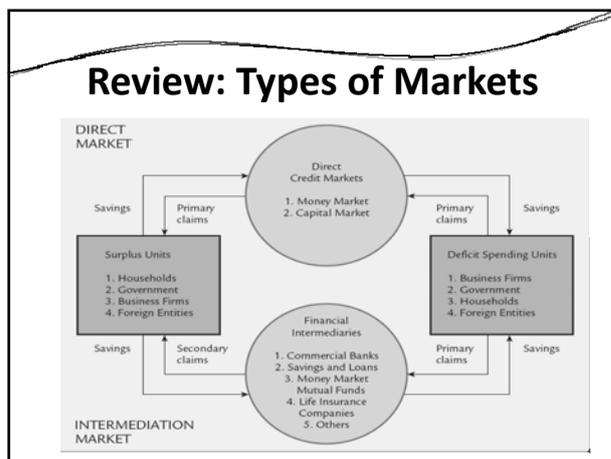
## Equity Investment

- Review Types of Market
- Stock Market
- How to start trading?
- 3 Indicators of Stock Market Valuation



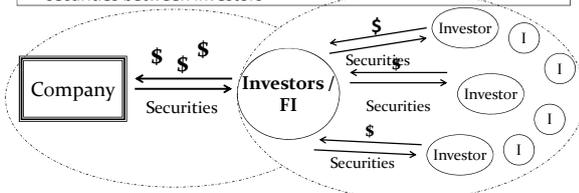
## Review: Types of Markets

- Money markets trade in short-term debt (less than one year maturity) instruments, typically in massive quantities.
  - Issued by governments, banks, and other private firms
  - High degree of liquidity and relatively low default risk.
- Capital markets exchange longer-term securities issued by government and private concerns.



## Review: Types of Markets

- **PRIMARY SECURITIES MARKET:** market involved in creating and issuing new securities, mortgages, and other claims to wealth
- **SECONDARY SECURITIES MARKET:** market for transferring existing securities between investors



The diagram shows a **Company** on the left and **Investors/ FI** on the right. Arrows indicate the flow of **Securities** from the company to investors and **money (\$)** from investors back to the company.

## Review: What are common stocks?

- **Shares** are claims of *ownership* in individual corporations.
- A company's stock share price reflects the opinion of the market about the corporation's continually changing prospects.
- Companies sell shares to raise fund
- Investors (shareholders) buy share to get Income
  - ✓ Dividends pay out
  - ✓ Capital gain/loss
- Shareholders = Owners of the company

## The Stock Market

Companies issue & sell millions shares of stock to raise funds



People buy shares to be part of ownership and get dividends and capital gain



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## Yield for Investors

- Stock Price Appreciation
- Dividends




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## Long-Term Stock Market Behavior

- Most economists favor the Standard and Poor's 500 index "S&P500" as the most representative index of broad trends in the stock market.
- To graph long-term stock market behavior, we use a logarithmic scale so that you can interpret changes in the *slope* of trends as indicating *growth rate* (% changes in the stock prices)

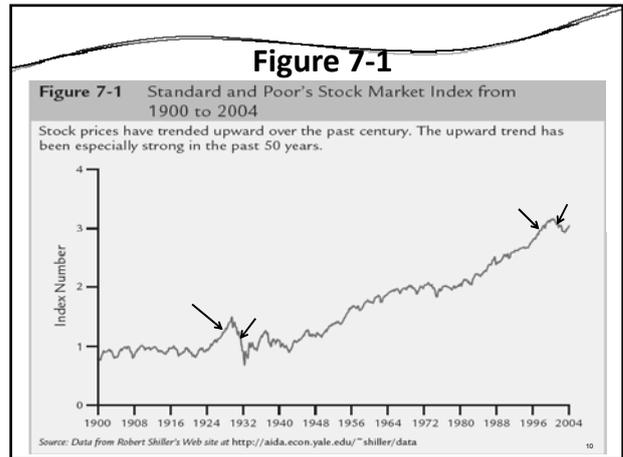
"Bull market"--period of above-normal growth of stock prices

"Bear market" is one with a significant decline below the normal growth

Over the long term, stock returns outpace returns from other assets



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## Table 7-1

**Table 7.1** Historic Returns from Stocks, Bonds, Treasury Bills, and Gold: Average Annual Compounded Rates of Return from 1926 to 2003

|         | Stocks (S&P 500) | 10-Year Government Bonds | 1-Month Treasury Bills | Gold |
|---------|------------------|--------------------------|------------------------|------|
| Nominal | 10.4             | 5.2                      | 3.6                    | 3.6  |
| Real*   | 7.4              | 2.2                      | 0.6                    | 0.6  |

All figures are given as percent.  
 \*Inflation rate of the consumer price index averaged 3.0 percent per year from 1926 to 2003.  
 Source: Calculated from data in Global Financial Data at <http://globalfindata.com>

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## Stock Prices as a Barometer of Economic Sentiment

A nation's stock market serves as a barometer of public sentiment about the economic prospects

- Strong performance of stock market reflects optimism about the future economy
- High public's confidence in the Fed. Ability
- Low inflation, low unemployment

Expectations for an economy's performance can become detached from reality

- Late 1920s and 1990s were examples of speculative "bubbles" in the U.S. stock market
- Bubbles occur when stock prices are far above those warranted by economic conditions and prospects

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## The Connection Between Stock Prices & Economic Activity

- The link between stock prices and economic performance reflects causation running in both directions (Two-Way)
- A good economy → rising stock prices: people are willing to pay higher prices for shares of stock as companies' sales & profits increase
- Rising stock prices → good economy: boosting consumption, investment, & economic activity

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## Stock Prices & Consumption

**Wealth Effect:** Effect of changes in individuals' net worth on their consumption and saving decision.

- Increase in stock prices → increase in people's wealth
- People spend a portion of their increased capital gains & dividend income
- More Wealth → Consumption/Savings Decision
- Higher Consumption → Economic Expansion

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## Stock Prices & Investment

Higher stock prices → lower **cost of capital** (cost of raising funds)

- Motivate companies to issue (sell) additional shares of stock
- Companies get more funds → make more investment

eg. If market price is 25 \$/share @ 1,000,000 shares = \$25,000,000  
If market price is 30 \$/share @ 1,000,000 shares = \$30,000,000

Investment (on new plants, equipments, technology)

- Capacity to produce G&S → Long-term economic growth
- Employment ↑ → Income ↑ → Spending ↑

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## What Determines The Price of A Share of Stock?

- The *Present Value* formula applies to stock prices, as it does to any financial asset
- The value of a share of stock is a function of the discounted flow of payments expected

PV or Price =  $R_1 / (1 + i) + R_2 / (1 + i)^2 + \dots + R_n / (1 + i)^n$

- Where  $R_n$  = Expected payment to be received at period n
- For Bond, R is the coupon payments to be received by bondholders
- For Stock, R is the Dividend payments to be received by stockholders
- $i$  is required rate of return (minimum return required by investors)

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## Components of Required Rate of Return

- Positive real interest rates (time value)
  - \$ 1 today worth more in the future
  - \$ 1 to be received in the futures worth less today
- Inflation
  - Discount the \$ to reflect the real purchasing power
- Risk (stocks are risky and investors are *risk averse*)
  - Stocks have greater Market risk & Default risk
  - The compensation for the additional risk inherent in buying stocks rather than bonds is called the *equity risk premium*

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## Impact of Various Events on Stock Prices

Stock prices can rise based on general types of factors:

- ✓ those that increase the numerators (future dividend payments expected from stocks)
  - Positive relationship between dividend and stock price
  - Investors expect co. will earn higher profits & pay more dividends
- ✓ those that decrease the denominators (the discount rate/required rate of return)
  - Negative relationship between required rate of return and stock price
  - Investors expect lower inflation
  - The nation's real interest rate may decline
  - The equity risk premium that investors require to buy stocks rather than bonds may decrease

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## Stock Exchange of Thailand (SET)

- The Stock Exchange of Thailand (SET) is a juristic entity set up under the Securities Exchange of Thailand Act, B.E. 2517 (1974).
- Operations started on April 30, 1975.
- It operates mandatory to be a market or center for the trading of listed securities, and promoter of financial planning.

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## Components of SET

1. Products → Listed Stocks
2. Traders → Investors
3. Brokers → Securities Firms

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## SET INDEX

- **SET Index** is a composite index which represents the price movement for all common stocks trading on the SET.
- Market Value Weighted Method is used to calculate index.

$$\text{SET Index} = \frac{\text{Current Market Value}}{\text{Base Market Value}} \times 100$$

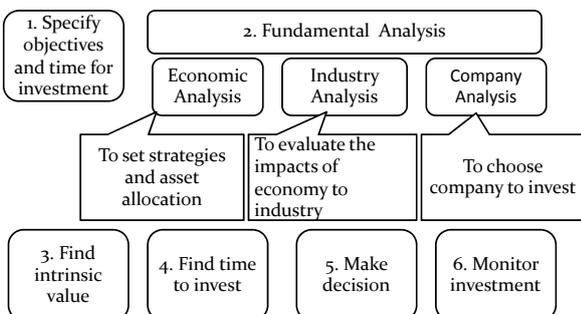
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## Trading Methods

1. Trade by Brokers
2. Trade through Internet

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## How to start trading stocks?



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## Stock Valuation Techniques

Technical analysis involves the development of trading rules (strategies) based on *past price and volume data* for individual stocks and the overall stock market.

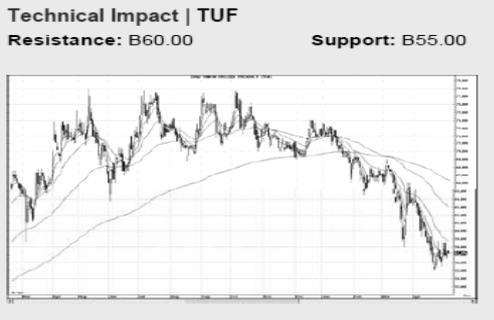
Fundamental analysis involves *economic, industry, and company analysis* that lead to valuation estimates for companies, which can then be compared to market prices to aid in investment decisions.

- Investment Decision Process
  - > *Estimated Intrinsic Value > Market Price, Underpriced stock* → Buy
  - > *Estimated Intrinsic Value < Market Price, Overpriced stock* → Sell



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### Example of Technical Analysis: TUF



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### Example of Fundamental Analysis : TUF

|                          |   |
|--------------------------|---|
| <b>Stock Rating</b>      | <b>BUY</b>  |
| Previous Rating          | BUY   |
| Fair Value               | 66.00   |
| Current Price            | B157.50   |
| Upside/(Downside)        | + 15%   |
| Consensus (median)       | B172.99   |
| <b>Sector</b>            | <b>Food and Beverage</b>                          |
| <b>Sector Rating</b>     | <b>NEUTRAL</b>                                    |
| <b>Financial Summary</b> |   |
| <b>YE Dec (Bt mn)</b>    | <b>2011</b> <b>2012</b> <b>2013E</b> <b>2014E</b> |
| Net profit               | 5,117    4,694    5,042    6,216                  |
| Net profit growth (%)    | 78    (8)    7    23                              |
| EPS (Bt)                 | 5.35    4.39    4.39    5.42                      |
| EPS growth (%)           | 67    (18)    0    23                             |
| BV (Bt)                  | 28.3    35.2    37.4    40.1                      |
| DPS (Bt)                 | 1.56    2.10    2.20    2.71                      |
| P/E (X)                  | 10.7    13.1    13.1    10.6                      |
| P/BV (X)                 | 2.0    1.6    1.5    1.4                          |
| Yield (%)                | 2.7    3.7    3.8    4.7                          |
| ROE (%)                  | 18.9    11.6    11.8    13.5                      |

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## Fundamental Analysis

- Top-Down Approach (Our focus)
- Review the macro-economy
  - Analyze different industries & sectors
  - Determine buy/sell candidates

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## A QUICK REVIEW OF ECONOMIC CONCEPTS

### 1. Domestic Economic Activity

- Forecasting trends in major economic variables
  - GDP, inflation, interest rates

- Consumption
- ↑ - Investment
- Government expenditures
- Export/import activity

### 2. Domestic Economic Policies

Monetary policy (MS, interest rate, inflation)  
 Fiscal policy (Tax, Gov. Spending)

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## INDUSTRY ANALYSIS

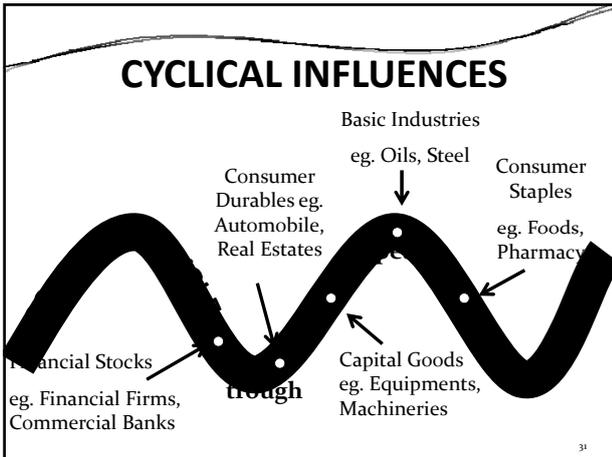
- Many stock research firms organized analysts by industry grouping
  - Industry-specific expertise is valuable
- **Industry:** a set of businesses that produce similar products used by customers for similar purposes

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## Types of Competition

- Pure Competition:- The market condition where there is a large number of suppliers offering very similar products. Property sector
- Monopolistic:-The market in which there are many firms competing with products that are somewhat different.
- Oligopoly:-The market in which a few businesses offer very similar products or services
- Monopoly:-The market condition in which one supplier offers a unique product : AOT,TTA

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- ### INDUSTRY LIFE CYCLE
- 5-stages industry life cycle model:
1. Pioneering development  
high investment in R&D, firms still get low profits or losses
  2. Rapidly accelerating industry growth  
high demand of product, profits grow up faster than economic growth. Low competition
  3. Mature industry growth  
higher competition from new comers. Profits grow up at decreasing rate but still higher than economic growth rate
  4. Stabilization & market maturity  
longest stage, high competition degree. The successful firms gain profits equal to economic growth rate
  5. Deceleration of growth & decline  
firms who can not compete lose market shares and need to quit
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- ### Company Analysis
- Goal: select undervalued stocks within a desirable industry
- Determine well-positioned industries
  - Find well-positioned firms within those industries
1. Qualitative Analysis
  2. Quantitative Analysis
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- ### 1. Qualitative Analysis → SWOT Analysis
- Examination of a firm's:
    - Strengths
      - Competitive advantages in the marketplace
    - Weaknesses
      - Competitors have exploitable advantages over the firm
    - Opportunities
      - External factors that make favor firm growth over time
    - Threats
      - External factors that hinder the firm's success
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- ### 2. Quantitative Analysis
- Numerical analysis eg financial statements analysis. Ratios are the tools in analysis
  - Find intrinsic value of stock → study in investment class
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- ### Financial Statements
- Balance Sheet → in Financial Statement Analysis
  - Income Statement → in Financial Statement Analysis
  - Statement of Cash Flows → Reporting how a firm generated and used its cash. Knowing where the cash comes from is important in projecting whether cash will be generated from those sources in the future. → will study in FIN 3701
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## Statement of Cash Flows

- Shows the effects on the firm's cash flow of income statement items & changes in various items on the balance sheet
- Three sections show cash flows from
  - Operating activities
  - Investing activities
  - Financing activities

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## 3 Indicators of Stock Market Valuations

1. The **price earnings ratio (P/E)** : ratio of the stock share price to the current annual earnings per share

$$\text{Stock Price per share} / \text{Earnings per share}$$

- Higher P/E → Stocks are overvalued → Sell
- Lower P/E → Stocks are undervalued → Buy

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## Indicators of Stock Market Valuations

| Stock | Average P/E (over 10 years) | This year's P/E |
|-------|-----------------------------|-----------------|
| CPF   | 33.20                       | 48.86           |
| THAI  | 13.15                       | 10.20           |
| KBANK | 14.48                       | 12.96           |
| PTT   | 9.62                        | 11.55           |

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## Indicators of Stock Market Valuations

2. The **dividend yield**

The annual dividend per share expressed as a percentage of the current price of the stock

$$\text{DY} = \text{Dividend per share} / \text{stock price}$$

Low DY → Stocks are overvalued → Sell  
High DY → Stocks are undervalued → Buy

| Stock | 10-year Average DY | This year's DY |
|-------|--------------------|----------------|
| CM    | 5.22%              | 7.63%          |

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## Indicators of Stock Market Valuations

3. The **price-to-book ratio (P/B)**

The ratio of the price of a share of stock to the book value of the company

- Price of a share of stock = Market Value, reflect investors expectation/demand
- Book value = accounting value, residual value, value of the co. after liquidating all assets and paying all debts
- Higher PB indicates higher stock price → Stocks are overvalued → Sell
- Lower PB indicates lower stock price → Stocks are undervalued → Buy



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## Indicators of Stock Market Valuations

| Stock | Price | P/E   | P/BV | Dvd Yield (%) |
|-------|-------|-------|------|---------------|
| TRUBB | 19.80 | 4.47  | 0.79 | 15.15         |
| STA   | 13.80 | 5.79  | 0.65 | 10.87         |
| TLUXE | 2.48  | 6.07  | 1.09 | 11.13         |
| LEE   | 3.58  | 7.25  | 1.55 | 8.38          |
| UPOIC | 50.00 | 7.89  | 1.61 | 6.00          |
| RANCH | 36.50 | 8.70  | 1.94 | 9.59          |
| CM    | 2.98  | 11.66 | 0.91 | 7.63          |

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