# Portfolio Management

Module 10, Section 2

### **Outline**

MONDAY: Selecting the right sector

### **Selecting the right sector**

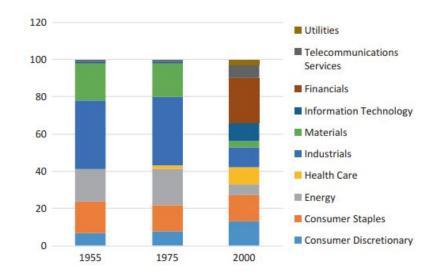
There were a number of fundamental changes in the US economy over the last quarter of the twentieth century.

The first was the appearance and growth in the components of a new knowledge economy.



### Industry sector weights.

### Largest 100 firms by revenues -1955, 1975, 2000. (Source: Fortune 100-1955, 1975 and 2000



#### **Global Industry Classification Standard**

- 11 sectors
- 24 industry groups
- 69 industries
- 158 sub-industries

#### **Global Industry Classification Standard**

- Consumer discretionary
- Consumers staples
- Energy
- Financials
- Health care
- Industrials

- Information technology
- Materials
- Communication services
- Utilities
- Real estate

#### **Consumer Discretionary**

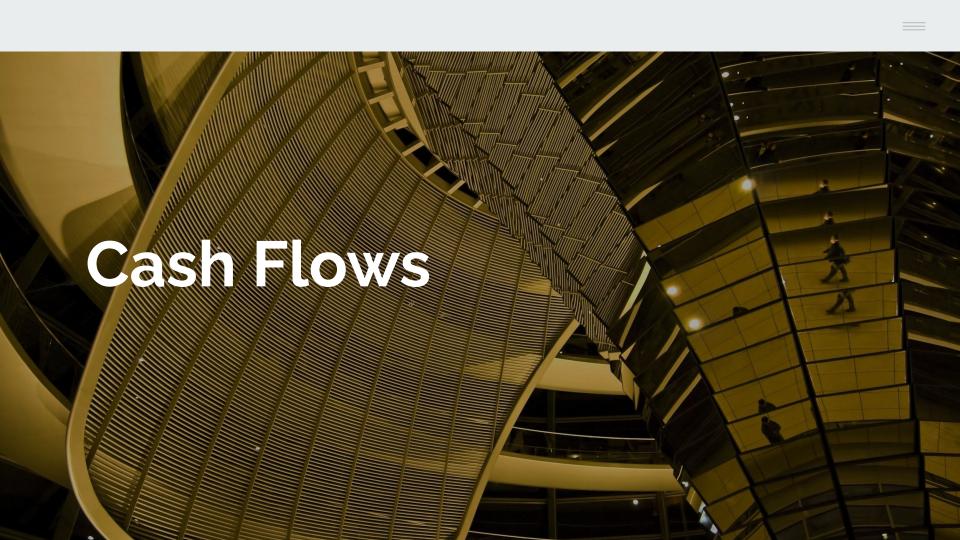
Durable goods, high-end apparel, entertainment, leisure activities, and automobiles.

#### **Consumer Staples**

Consumer staples are considered to be non-cyclical, meaning that they are always in demand, year-round,

no matter how well the economy is—or is not—

## **Portfolio Composition**



### The four cash flows

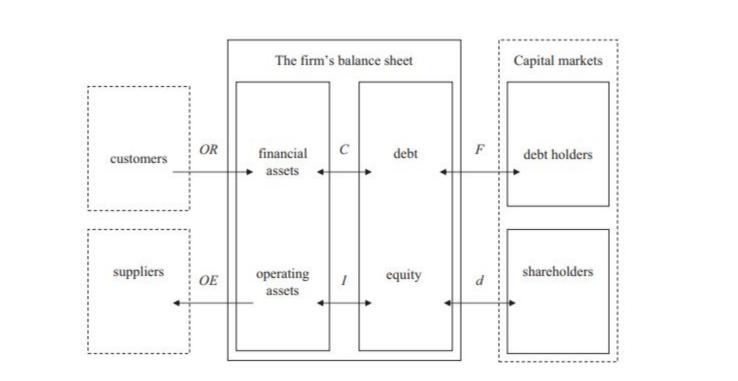
C Cash flow from operations

I Cash investment

**F** Net cash flow to debt holders and issuers

**d** Net cash flow to shareholders

$$C-I=F+d$$



### **Stocks and Flows**

The following identities also hold for corporate cash management. If

$$C-I-i>d$$

where *i* is the net interest cash flow, or the interest paid minus the interest received, then either lend or buy down the firm's debt. If,

$$C-I-i < d$$
,

then either borrow or reduce lending.

### P/E Ratio: Price/Earning Ratio

A multiple is the ratio of the market price of a firm's stock to some accounting measure per share that is used as an estimate of relative value. A price multiple summarizes the relationship between a firm's stock price and a measure such as earnings, book value or sales per share.

The price-earnings (P/E) ratio compares the current stock price with earnings, and anchors a valuation to an income statement. The ratio is interpreted as:

- the price or numerator reflecting future earnings, or the market's expectations of value added from future sales, and
- earnings, the denominator, reflecting current earnings, or the value added from current sales

The P/E ratio therefore evaluates the forecast of future earnings in relation to current earnings. Higher future earnings expectations relative to current earnings should result in a higher P/E ratio, while lower future earnings expec-

#### P/B Ratio: Price/Book Ratio

tations relative to current earnings should result in a lower P/E. The P/E ratio is, therefore, an indication of anticipated earnings growth.

The price-to-book ratio, or P/B ratio, compares a firm's book value to its current market price. The P/B is derived as:

- · the ratio of the firm's market capitalization over the firm's total book value, or
- a per-share value, the ratio of the firm's current share price over its book value per share, or the ratio of book value over the number of shares issued

By convention, book value does not include intangible assets.

A firm's book value represents the shareholders' investment in the firm, with the value derived on the expectations of how much the net assets will earn in the future. Book value can either increase or decrease, depending on the firm's future earnings expectations. While book value does not accurately determine value, the missing component is ultimately realized in the future earnings created by book value.

The stock price in the P/B ratio's numerator is based on expected future earnings. Therefore, the higher expected earnings are in relation to book value, the higher the P/B ratio. The book value rate of return, or profitability, is a measure that principally determines P/B ratios. The market price-to-book value ratio is the price-to-book ratio or the market-to-book ratio, while the intrinsic value-to-book value ratio is the intrinsic price-to-book ratio.

### **ROCE: Return on Shareholders Common Equity**

Return on shareholders' equity (ROE), or more specifically, return on shareholders common equity (ROCE) measures the rate of return on common stock:

$$\frac{\text{ROCE}}{\text{Average CSE}} = \frac{\text{Comprehensive income}}{\text{Average CSE}}$$

The measure assesses a firm's profitability efficiency per unit of shareholders' equity or book value. ROCE can be decomposed into three drivers:

Net profit margin × Asset turnover × Financial leverage.

or,

Net income / Sales × Sales / Total assets × Total assets / Average shareholder equity