Industry Analysis

(A) Introduction

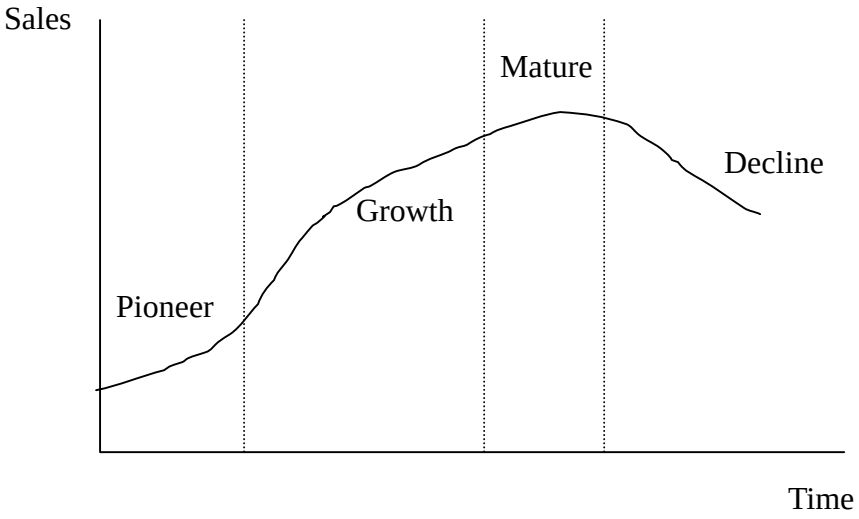
- In completing a valuation, an analyst usually starts the process with an assessment of the attractiveness of the industries in which a firm competes
  - Economic forecast
  - Size & growth of the industry
  - Supply vs. demand
  - Recent developments
  - Qualitative factors
- Top-down industry analysis
  - Macroeconomic forecasts ➔ industry overview ➔ individual firms
  - requires consideration of six factors: industry classification, external factors, demand analysis, supply analysis, profitability analysis & international competition

Model of an Industry Analysis

Industry classification:
Life cycle position
Business cycle
External factors:
Technology
Government
Social
Demographic
Foreign
Demand analysis
End-users
Real & nominal growth
Trends & cyclical variation around trends
Supply analysis
Degree of concentration
Ease of entry
Industry capacity
Profitability
Supply/demand analysis
Cost factors
Pricing
International competition & markets

(B) Industry Classification

- Although industry classification provides a convenient point of reference, not all firms in the industry are the same and classifications can change over time
- **Industry life cycle**



	Pioneer Stage	**Growth Stage**	**Mature Stage**	**Decline Stage**
Acceptance of product or service	Unproven	Established	Established	Established
Competitive strategy	Unclear	Not determined	More important	Important
Growth	Weak	Accelerating	Average; above-average growth can only be attained by ***gaining market share***	Falling demand
Profitability	Negative	Above average	Average	Below average
Risk	Very high	Low	Medium	High
Competition	Very little	Little	Intense	Lessening

- **Business Cycle Reaction Approach**
  - **Growth Industries**: above-normal expansion in sales & profits occurs independent of the business cycle
    - e.g. computer software and hi-tech companies

- **Defensive Industries**: stable performance during both economic expansion & contraction
  - e.g. cigarette & food suppliers, beverage and utility companies
- **Cyclical Industries**: profitability tracks the business cycle, often in an exaggerated manner
  - e.g. auto manufacturers, heavy equipment producers & brokerage firms

(C) External Factors

- Every industry is subject to a variety of outside forces
  - **Technology**:
    - Pioneer phase: Will the market accept the innovation?
    - Established industries: Does the industry face obsolescence from competing technologies?
      - Copying or acquiring the competition to survive?
  - **Government**:
    - Regulations, taxes & subsidies
      - e.g. litigation against tobacco companies, environmental mandates & export subsides
  - **Social Changes**:
    - **Lifestyle changes** generally occur over a long-term horizon and are easier to incorporate into analysis
      - e.g. ↑ health consciousness
        - → ↑ demand for natural foods & nutritional products
        - → ↓ demand for liquor

        ↑ two-income families
        - → ↑ demand for convenience food & child day care
    - **Fashion changes** tend to be short-term in nature & are relatively unpredictable
  - **Demography**: population's important statistics
    - **Broad shifts in population distribution, age & income**
      - Occur over a very long time period & are easy to identify
      - Harder to quantify trends & determine their influence on a particular industry
        - e.g. aging of population
          - → ↑ demand for health care & financial services
  - **Foreign Influences**
    - **Globalization** of trade has a major impact on many industries & tends to disrupt patterns of demand & supply

- ✧ Foreign competitors, e.g. Japanese cars
- ✧ Export demand, e.g. MacDonald
- ✧ Imported inputs, e.g. oil

- The analyst should concentrate on how each factors impacts an industry over a 3-to 5-year horizon
  - When possible, effects should be presented in a *quantitative* form

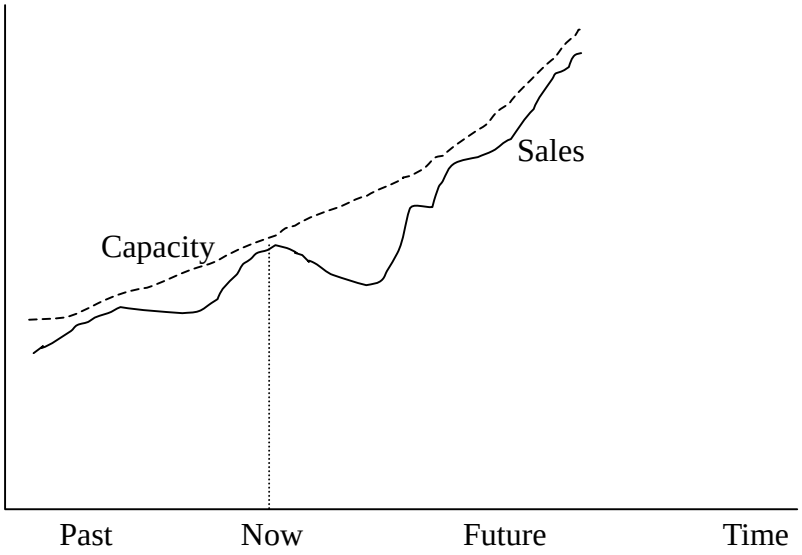
(D) Demand Analysis

- Macroeconomic forecast ➔ industry classification (life cycle, business cycle) ➔ external factor review ➔ assess future *demand for the industry's output*
  - **Top-down economic analysis**
    - Macroeconomic factors (e.g., GDP growth)➔ industry's revenue
  - **Industry life cycle**
    - Industry classification: e.g. increase the base revenue growth estimate for growth industries
  - **External factors**
    - Governmental action regarding the industry
    - Foreign competitor entering the industry
- Two additional sources of info may also be useful in forecasting demand
  - **Customer analysis**
    - e.g. market segment (such as residential, commercial, industrial) analysis
  - **Industry's inputs & outputs**
    - Chain of industries: e.g. semiconductor ➔ computer

(E) Supply Analysis

- It is easier to forecast supply if there are only a few competitors in the industry, all products are manufactured at several facilities, & imports are economically unfeasible or constrained by trade barriers
- In the long term, supply = demand
- In the short term, demand > supply
  - lead time to add new capacity or natural disaster ➔ shortage
  - potential supply of output ➔➔ projected demand for the industry's outputs
    - capacity utilization data

Industry Capacity vs. Unit Sales



(F) Profitability & Pricing Practices

- Interaction of demand and supply indicates future pricing trends. Additional factors contribute to a firm's profitability & pricing decisions:
  - Product segmentation
    - Branded vs. generic products ➔ price differentiation
  - Degree of industry concentration
    - ↑ concentration ➔ ↓ probability of price competition
  - Ease of industry entry
    - ↑ entry barriers ➔ ↑ price premium
  - Price changes in key supply inputs
    - e.g. oil price ➔ profitability of chemical industry

(G) International Competition

- Changes in economic activities across borders
  - For example, massive sales of oil by Russian firms that are not bound by OPEC agreement led to over-supply of oil in the first half of 2002, which decreased the cists of many industries in developed nations
- Foreign exchange rates
  - Examples of how an appreciation in the domestic currency may affect a given industry:
    - If the industry exports some or all of its production, an appreciating currency will be bad news because it will become less competitive in overseas markets

- If the industry imports many of its production inputs & sells the majority of its product domestically, then an appreciating domestic currency will be beneficial because it will reduce production costs
- If the industry competes with foreign imports, those imports will become relatively less expensive, thereby hurting the domestic industry's competitiveness

