“Introduction to Industry and Company Analysis” – Chapter 3

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Learning Outcomes

- Explain uses of industry analysis and the relation of industry analysis to company analysis.
- Compare methods by which companies can be grouped, current industry classification systems, and classify a company, given a description of its activities and the classification system.
- Explain the factors that affect the sensitivity of a company to the business cycle and the uses and limitations of industry and company descriptors such as “growth,” “defensive,” and “cyclical.”
- Explain how a company’s industry classification can be used to identify a potential “peer group” for equity valuation.
- Describe the elements that need to be covered in a through industry analysis.
- Describe the principles of strategic analysis of an industry.
- Explain the effects of barriers to entry, industry concentrations, industry capacity, and market share stability on pricing power and price competition.

Learning Outcomes

- Describe industry life cycle models, classify an industry as to life cycle stage, and describe limitations of the life-cycle concept in forecasting industry performance.
- Compare characteristics of representative industries from the various economic sectors.
- Describe macroeconomic, technological, demographic, governmental, and social influences on industry growth, profitability, and risk.
- Describe the elements that should be covered in a thorough company analysis.

Introduction

- **<u>Key questions to address</u>**
  - What are the similarities and differences among industry classification systems?
  - How does an analyst go about choosing a peer group of companies?
  - What are the key factors to consider when analyzing an industry?
  - What advantages are enjoyed by companies in strategically well-positioned industries?

Uses of Industry Analysis

- Industry analysis is useful in a number of investment applications that make use of fundamental analysis. It uses the following:
  - Understanding a company's business and business environment
  - Identifying active equity investment opportunities
  - Portfolio performance attribution

- Industry classification attempts to place companies into groups on the basis of commonalities. Three major approaches to industry classification are:
  - Products and/or services supplied
  - Business-cycle sensitivities
  - Statistical similarities

Approaches to Identifying Similar Companies

- Examples of classification systems based on products and/or services include the commercial classification systems namely:
  - Global Industry Classification Standard (GICS)
  - Russell Global sectors (RGS)
  - Industry Classification Benchmark

- Business sensitivity can be either:
  - Cyclical - profits are strongly correlated with the strength of the overall economy.
  - Non-cyclical - a company whose performance is largely independent of the business cycle - demand remains relatively stable through the business cycle.
  - One limitation of the cyclical/non-cyclical classification is that business-cycle sensitivity is a continuous spectrum rather than an either/or issue.

Industry Classification Systems

- Commercial Industry Classification Systems – classification by major index providers; MSCI, Standard & Poors, Russell Investments, etc.
- Global Industry Classification Standard – GICs sector classifications; 154 sub-industries, 68 industries, 24 industry groups, and finally now 11 sectors with the addition of the new REIT sector.
- Russell Global Sectors – a three tier structure to classify companies globally on the basis of products or services a company produces.
- Industry Classification Benchmark – a four-tier structure to categorize companies globally on the basis of the source from which a company derives the majority of its revenue.
- There are also governmental industry classification systems, European, Australian and New Zealand, North American Industry Classification System.

Industry Classification Systems

- Strengths and weaknesses of current systems include:
  - Most government systems do not disclose information about a specific business or company so an analyst cannot know all the constituents of a particular category.
  - Commercial classification systems are adjusted more frequently than government classification systems which may be updated only every five years or so.

- Government classification systems do not distinguish between:
  - Small and large businesses
  - Between for-profits and not-for-profit organizations
  - Between public and private companies.
  - Commercial classification systems have the ability to make these distinctions by association with a particular equity index.

Constructing a Peer Group

- Steps in constructing a preliminary list of companies:
  - Examine commercial classification systems.
  - Review the subject company's annual report for a discussion of the competitive environment.
  - Review competitors annual reports to identify other potential comparable companies.
  - Review industry trade publications to identify comparable companies.
  - Confirm that each comparable company derives a significant portion of its revenue and operating profit from a business activity similar to the primary business of the subject company.

Constructing a Peer Group

- Questions that may improve the list of peer companies:
  - What portion of the revenue and operating profit is derived from business activities similar to those of the subject company?
  - Does the potential peer company face a demand environment similar to that of the subject company?
  - Does the potential company have a finance subsidiary?
  - It is important to distinguish between a company's industry as defined by one or more of the various classification systems, and its peer group.
  - A company’s peer group should consist of companies with similar business activities whose economic activity depends on similar drivers of demand and similar factors related to cost structure and access to financial capital.
  - In practice, out of the necessity this frequently results in a smaller group (even a different group) of companies than the most narrowly defined categories used by the common commercial classification systems.

Describing and Analyzing an Industry

- Investment managers and analysts also examine industry performance:
  - In relation to other industries to identify industries with superior/ inferior returns
  - Overtime to determine the degree of consistency, stability, and risk in the returns in the industry over time.

- Criteria for selecting a strategic group might include:
  - Complexity of the product or service
  - Its mode of delivery
  - Barriers to entry

Describing and Analyzing an Industry

- The life-cycle stage is often used to classify industries. The curve tends to decline:
  - Because as the utilization of capital equipment increases, fixed costs (administration, overhead, advertising, etc.) are spread over a larger number of units of production.
  - Because improvements in labor efficiency and management of facilities.
  - Because of advances in production methods and product design.

- Macroeconomic influences include:
  - Stage of business cycle
  - Longer term growth
  - Structural economic trends

Describing and Analyzing an Industry

- Supplier bargaining forces include:
  - Number of industries buying suppliers' products
  - Supply substitutes
  - Switching costs of suppliers' customers
  - Industry and customer ability to enter the industry
- New entrant threats include:
  - Economic
  - Group of complimentary industries
  - Industry
- Life-cycle analysis stages include:
  - Embryonic
  - Growth
  - Shake-out
  - Mature
  - Declining

Describing and Analyzing an Industry

- Customer bargaining forces include affected by:
  - Number of suppliers
  - Number of purchasers
  - Size/power of the purchasers
  - Switching costs to other suppliers
  - Number of contracted suppliers
  - Customers ability to produce the product themselves
- When you assemble these various forces on a macro level you need to evaluate them as:
  - Demographic influences
  - Macroeconomic influences
  - Governmental influences
  - Technological influences
  - Product/service substitution threats
  - Social influences

Describing and Analyzing an Industry

- Internal competitive forces are affected by:
  - Economies of scale
  - Cost advantages
  - Other brand loyalty
  - Customer's switching costs
  - Product government regulation
  - Industry competitive structure
  - Corporate rivalries
  - Cost conditions
  - Entry and exit barriers

Five Determinants of Industry Competition

- Porter identified five determinants of the intensity of competition in an industry:
  - Threat of entry - depends on barriers to entry or how difficult it would be for new competitors to enter the industry.
  - Power of suppliers - they may be able to raise prices or restrict the supply of key inputs to a company.
  - Power of buyers - this can affect the intensity of competition by exerting influence on suppliers regarding prices (and possibly other factors such as product quality).
  - Threat of substitutes - this can negatively affect demand if customers choose other ways of satisfying their needs. Low price brands can impact premium brands when consumer budgets are constrained.
  - Rivalry among existing competitors - a function of the industry's competitive structure.

Five Determinants of Industry Competition

- Intense rivalry usually exists when the following characteristics exist:
  - Industries are fragmented among many small competitors.
  - Have high fixed costs
  - Provide undifferentiated (commodity-like) products, and
  - Have high exit barriers

Assessing the Level of Industry Competition

- Addressing the following questions should help the analyst evaluate the threat of new entrants and the level of competition in an industry and therefore provide an effective base for describing and analyzing an industry.
  - What are the barriers to entry - difficult or easy for a new competitor to challenge incumbents?
  - How concentrated is the industry - do a small number of competitors control a large share of the market or are their many players each with a small market share.
  - What are capacity levels - based on existing investment, how much of the goods or services can be delivered in a given time frame? Does the industry suffer chronic over-or-under-capacity, or do supply and demand tend to come into balance reasonably quickly in the industry.
  - How stable are market shares - do companies tend to rapidly gain or lose share, or is the industry stable?
  - Where is the industry in its life-cycle - does it have meaningful growth prospects, or is demand stagnant/declining?
  - How important is price to the customer's purchase decision?

Assessing the Level of Industry Competition

- High economic profits lead to:
  - Entry of new competitors if high barriers to entry do not exist.
  - If new competitors can easily enter the industry the industry will be highly competitive.
  - High returns on capital can be competed away if new entrants can grab their share of economic profits.
  - Industries with low barriers often have little pricing power because price increases that raise returns on capital often attract new competitors to the industry.
- High barriers to entry lead to:
  - A lower threat of new entrants into the industry.
  - A more benign competitive environment as potential competitors find it difficult to enter the industry and undercut incumbents prices.
  - High barriers do not guarantee pricing power because incumbents may fiercely compete among each other.

Assessing the Level of Industry Competition

- Another way to think about this is to answer the following questions:
  - What would it take for new players to compete in an industry?
  - How much money would they have to spend?
  - What kind of intellectual capital would they need to acquire?
  - How easy would it be to attract enough customers to become successful?

- Historical evaluation of the industry could include:
  - How often have new companies tried to enter the industry?
  - Is the list of industry participants significantly different than it was 5 or 10 years ago?
  - If the same ten companies have dominated the industry for a long period of time it is likely that barriers to entry are fairly high.

Assessing the Level of Industry Competition

- High barriers to entry do not automatically lead to good pricing power and attractive industry economics:
  - The auto industry
  - Commercial aircraft manufacturing
  - Refining industries

- The above three industries:
  - Are quite competitive
  - Have limited or non-existent pricing power
  - Few of them generate returns on capital in excess of their costs of capital

Assessing the Level of Industry Competition

- Two reasons this paradox of high entry barriers and poor pricing power exist:
  - Price is a large component of the customer's purchase decision when buying from companies in these industries as users of the product are looking to lower their operating costs.
  - These industries have high barriers to exit which means they are prone to over capacity.
  - It is hard to redeploy capital elsewhere and exit the industry if conditions become unprofitable.
  - Finally barriers to entry can change over time within an industry
- Industry concentration analysis should start with market share.
  - What percentage of the market does each of the largest players have?
  - How large are those shares relative to each other and to the remainder of the market?
  - Relative market shares of competitors matter as much as their absolute market shares.

Assessing the Level of Industry Competition

- Fragmented industries tend to be highly price competitive for several reasons.
  - The large number of companies makes coordination difficult because there are too many companies to monitor effectively.
  - Each player has such a small piece of the market that even a small gain in market share can make a meaningful difference in its fortunes causing them to undercut prices and attempt to steal market share.
  - The large number of players encourage industry members to think of themselves individualistically rather than as members of a larger group leading to fierce competition.

- In concentrated industries:
  - Each player can relatively easily keep track of what its competitors are doing.
  - Tacit coordination is much more feasible.
  - Leading industry members are large therefore they have more to lose and less to gain by destructive price behavior.
  - Large companies are also tied to the overall fortunes of the industry as a whole.
  - Generally a good indicator that an industry has pricing power and rational competition.
  - Industry fragmentation is a much stronger signal that the industry is competitive with limited pricing power.

Assessing the Level of Industry Capacity

- The effect of pricing on industry capacity is clear:
  - Tight or limited capacity gives participants more pricing power as demand for the product or service exceeds supply.
  - Overcapacity leads to price cutting and a very competitive environment as excess supply chases demand.
  - Generally capacity is fixed in the short term and variable in the long-term because capacity can be increased.
  - Long term pricing benefits can vary depending on how long it takes to put new capacity in place.
- Types of new capacity:
  - If new capacity is physical (i.e., auto manufacturing) it will take longer for new capacity to come on line to meet an increase in demand.
  - New capacity could be in the form of reinsurance wherein the spike in rates caused a flood of new capital into the reinsurance market which eventually brought rates down.
  - Financial and human capital can be quickly shifted to new uses.
  - Occasionally long term capacity comes on stream just as demand for new supply slows.

Stability of Market Share

- Examining the stability of industry market share is similar to thinking about:
  - Barriers to entry and the frequency with which new players come into the market.
  - Both of these conditions together with such factors as product differentiation all affect market shares.
  - Stable market shares typically indicate less competition.
  - Unstable market shares often indicate highly competitive industries that have limited pricing power.
  - Low switching costs plus a relatively high benefit from switching caused market shares to change quickly in the stent market.
  - High switching costs for orthopedic devices coupled with slow innovation resulted in a lower benefit from switching resulting in greater market stability in orthopedic devices.

Industry Life-cycle

- Industry life-cycle model:
  - Industries tend to evolve over time and usually experience significant changes in the rate of growth and level of profitability along the way.
  - Industry analysis is a continuous process to identify changes that may be occurring or likely to occur.
  - The industry life-cycle model is useful as it identifies the sequential states that an industry typically goes through.

Industry Life-cycle

- The five stages of the industry life-cycle model include:
  - Embryonic - slow growth, high prices, low volumes until customers become familiar with the product and companies are able to get meaningful economies of scale.
  - Growth - rapidly increasing demand, improving profitability, falling prices, and relatively low competition among companies in the industry. The threat of new competition entering the industry is usually highest at this stage a sentry barriers are still relatively low. Industry profitability tends to rise as economies of scale are attained.
  - Shakeout - slowing growth, intense competition, and declining profitability.   Growth depends increasingly on market share gains requiring increased focus on reducing their cost structure and building brand loyalty.

Industry Life-cycle - Continued

- The five stages of the industry life-cycle model include:
  - Mature - little or no growth, industry consolidation, and relatively high barriers to entry. Industry growth limited to replacement demand and population expansion as at this stage the market is completely saturated. Efficient cost structures and brand loyalty are significant barriers to entry during this stage and avoiding price wars maintains stability.
  - Decline - industry growth turns negative, excess capacity develops, and competition increases. Technological substitution (i.e., cable news for newspapers) social changes and global competition (i.e., low cost foreign textiles) often results in weaker companies exiting the industry, merging, or redeploying capital.

Growth vs. Mature Industries

- Companies in growth industries should be building customer loyalty:
  - As they introduce customers to new products or services
  - Build scale
  - Reinvest heavily in their operations to capitalize on increasing demand
  - Investing their human and financial capital with the goal of becoming more successful.
- Companies in mature industries are:
  - Likely to be pursuing replacement demand rather than new buyers
  - Are focused on extending successful product lines rather than introducing new products.
  - They are focused on cost rationalization and efficiency gains rather than on taking lots of market share.
  - They have strong cash flows, but fewer growth opportunities and more limited avenues for profitably reinvesting capital.
  - Typically they will return capital to shareholders via share repurchases or dividends.

Retailers and Capital Allocation

- How retailers coped with their transition to maturity stage by reallocating capital away from opening new stores to:
  - Increased inventory efficiency (Home Depot)
  - Improving customer experience (McDonalds)
  - Increased dividends and share repurchases (Home Depot, McDonalds, and Walmart)
  - These actions resulted in better returns on capital and shareholder returns.

Industry Life-Cycle Limitations

- Limitations to the industry life-cycle analysis include:
  - Technological changes - an industry could experience an abrupt shift from growth to decline. Examples include: Vacuum tubes --> transistors, typewriters --> word processors.
  - Regulatory changes - the deregulation of the US telecommunications industry in the 1990s. This resulted in a wider range of product and service offerings and lower consumer prices.
  - Social changes also have the ability to affect the profile of an industry, such as dual-income families have helped the casual dining industry grow.
  - Demographics impacts the demand for healthcare services as the baby boomers continue to age.
  - The key objective is for the analyst to identify the potential winners while avoiding the losers in the industry.
  - Highly profitable industries can exist in competitive industries with below average profitability and vice versa.

Price Competition and Macroeconomic Influences

- Price competition - industries for which price is a major factor in the customers purchase decision tend to be more competitive than industries in which customers value other attributes more highly.
  - Asset management industry - one of a few industries that is fragmented and characterized by strong pricing power despite having index options the majority of their customers do not make decisions based on price, but on longer term historical returns.
  - Heavy-equipment manufacturers are subject to price comparisons given the large outlay price, but the importance of product reliability and a large service network to maintain the equipment are important differentiators.
- Macroeconomic influences usually have a significant effect on the demand for a company's products or services and these trends are:
  - Often cyclical - related in changes in economic activity caused by the business cycle.
  - Structural - related to enduring changes in the competition or magnitude of economic activity.

Variables Impacting Revenues and Profits

- Among the variables that usually affect an industry's revenues and profits are:
  - Gross domestic product or the measure of the value of goods and services produced by an economy, either in current or constant currency (inflation-adjusted) terms.
  - Interest rates which represent the cost of debt to consumers and businesses and are important ingredients in financial institutions revenues and costs.
  - Availability of credit which affects business and consumer spending, and financial solvency.
  - Inflation which reflects the changes in prices of goods and services, and influences costs, interest rates, and consumer and business confidence.

Moore's Law and Technological Advances

- Moore's Law - the number of transistors that can be inexpensively placed on an integrated circuit chip doubles approximately every two years. This helped the computer hardware industry dominate the fields of word processing, and many forms of electronic communication and home entertainment.
  - This circuit innovation resulted in increased economies of scale.
  - Erected large barriers to new entrants because of the capital cost of innovation and production became very high.
  - Intel capitalized on both factors to become the dominate supplier of microprocessors the highest value component in personal computers because of its cost advantage, brand power, and access to capital.

Demographic Influences

- Demographic influences include:
  - Changes in population size
  - Changes in the distribution of age and gender,
  - Other demographic changes which may have significant effects on economic growth and on the amounts and types of goods and services consumed.
- The baby boomer generation born between 1946 and 1964 impacted the demand for goods and services:
  - The teenage pop culture and its impact on records, movies, clothes, and fashions associated with it.
  - The surge in demand for housing in the 1970's and 1980's.
  - The increasing demand for retirement-oriented investment products in the 1990's and early 2000's.
  - All of these are examples of the range of industries affected by this demographic bulge working its way through the age categories of the population.

Government Influences

- Government influence on industries revenues and profits is pervasive and important.
  - Governments affect profits and incomes by setting tax rates and rules for corporations and individuals.
  - Governments are also major purchasers of goods and services from a range of industries.
  - Income trusts (and also REITs) are examples of situations wherein they avoid double taxation (once at the corporate level and once at the investor level).

Government Influences

- Governments can also exert their influence indirectly by empowering regulatory and self-regulatory organizations to govern the affairs of an industry.
  - Financial industry - the acceptance of savings deposits from and the issuance of securities to the investing public are usually tightly controlled by governments and their agencies.
  - These rules are imposed to protect investors from fraudulent operators and to ensure that investors receive adequate disclosure about the nature and risks of their investments.
  - The government also may set standards for medical associations and for medications that patients receive which must be approved by government agencies.
  - Industries that supply the military, public works, law enforcement departments, and government contracts directly affects the revenues and profits of the suppliers.

Social Influences

- Social influences involve:
  - How people work
  - How they spend their money
  - How they enjoy their leisure time,
  - How they conduct other aspects of their lives
  - These and other aspects can have a significant effect on the sales of various industries.
- The effects on various industries because of more women entering the workforce:
  - Restaurant business - less time spent preparing meals at home.
  - Manufacturers - more demand for work clothes by working women.
  - Home and child care services - needed by working mothers.
  - Automobile manufacturers - extra vehicles to transport two members of a household to work.
  - Housing for aging - with more working women the need for caregivers who are non-family members grew.

Company Analysis

- Company analysis includes:
  - An analysis of the company's financial position
  - Analysis of products and/or services
  - An analysis of competitive strategy
- Company analysis generally takes place after the analyst has gained an understanding of the company's external environment:
  - Macroeconomic
  - Demographic
  - Governmental
  - Technological
  - Social forces influencing the company's competitive structure

Porter – Low Cost Strategies

- Porter's two chief competitive strategies are a low cost strategy and a product/service differentiation strategy.

- Low cost strategy companies focus on:
  - Becoming low cost producers
  - Gaining market share by offering their products at lower prices than the competition.
  - Executing on this while still being able to make a profit margin sufficient to generate a superior rate of return based on higher revenues achieved.

Porter – Low Cost Strategies

- Low price strategies can be pursued for either defensive or offensive purposes:
  - Defensively - protect market positions and returns
  - Pricing can also be defensive when the competitive environment is one of low rivalry
  - Offensively to gain market share and increase returns
  - Pricing can be aggressive when rivalry is intense and may even become predatory aimed at rapidly driving competitors out of business at the expense of near-term profitability.
  - The hope with this last strategy is that having achieved a large market share the company can later increase prices to generate a higher return.

Porter – Low Cost Strategies

- Companies seeking to follow low-cost strategies must:
  - Have tight cost controls
  - Be efficient operators
  - Good reporting systems
  - Appropriate managerial incentives

- Additional commitments by low cost strategy companies include:
  - Painstaking scrutiny of production systems
  - Scrutiny of their labor forces
  - Low cost designs
  - Low distribution costs

Porter – Product Differentiation Strategies

- Product differentiation strategies companies attempt to establish themselves as the supplier of products or producers of products and services that are unique in:
  - Quality
  - Type
  - Means of distribution
- Long-term success depends on:
  - Price premiums must be above their cost of differentiation
  - That differentiation must be appealing to customers and sustainable over time
  - Strong market research teams to identify and match customer needs with product development and marketing.
  - This strategy puts a premium on employing creative and inventive people.

Company Analysis – Research Reports

- A thorough company analysis as presented in a research report should:
  - Provide an overview of the company (corporate profile), including a basic understanding of its business, investment activities, corporate governance, and perceived strengths and weaknesses.
  - Explain relevant industry characteristics
  - Analyze the demand for the company's products and services
  - Analyze the supply of products and services, which include an analysis of costs.
  - Explain the company's pricing environment; and
  - Present and interpret relevant financial ratios, including comparisons over time and comparisons with competitors.

Corporate Profiles

- Corporate profile:
  - Identity of company's major products and services, current position in industry, and history
  - Composition of sales
  - Product life-cycle stages/experience curve effects (i.e., the tendency for cost of producing a good or service to decline with cumulative output).
  - Research and development activities
  - Past and planned capital expenditures
  - Board structure, composition, electoral system, anti-takeover provisions, and other corporate governance issues.

Corporate Profiles

- Corporate profile - Continued
  - Management strengths, weaknesses, compensation, turnover, and corporate culture
  - Benefits, retirement plans, and their influences on shareholder value.
  - Labor relations
  - Insider ownership levels and changes
  - Legal actions and the company's state of preparedness
  - Other special strengths and weaknesses

Industry Characteristics

- Industry characteristics:
  - Stage in life-cycle
  - Business-cycle sensitivity or economic characteristics
  - Typical product life cycles in the industry (short and marked by technological obsolescence or long, such as pharmaceuticals protected by patents.)
  - Brand loyalty, customer switching costs, and intensity of competition
  - Entry and exit barriers
  - Industry supplier considerations (concentration of sources, ability to switch suppliers or enter suppliers' business)

Industry Characteristics

- Industry characteristics – Continued:
  - Number of companies in the industry and whether it is, as determined by market share, fragmented or concentrated
  - Opportunity to differentiate products/services and relative product/service price, cost, and quality advantages/disadvantages
  - Technologies used
  - Government regulation
  - State and history of labor relations
  - Other industry problems/opportunities

Analysis of Demand and Supply for Products and Services

- Analysis of **demand** for products/services:
  - Sources of demand
  - Product differentiation
  - Past record, sensitivities, and correlations with social, demographic, economic, and other variables
  - Outlook - short, medium, and long term, including new product and business opportunities

- Analysis of **supply** of products and/services
  - Sources (concentration, competition, and substitutes)
  - Industry capacity outlook - short, medium, and long term
  - Company's capacity and cost structure
  - Import/export considerations
  - Proprietary products or trademarks

Analysis of Pricing

- Analysis of pricing:
  - Past relationships among demand, supply, and prices
  - Significance of raw material and labor costs and the outlook for their cost and availability
  - Outlook for selling prices, demand, and profitability based on current anticipated future trends