Industry Analysis

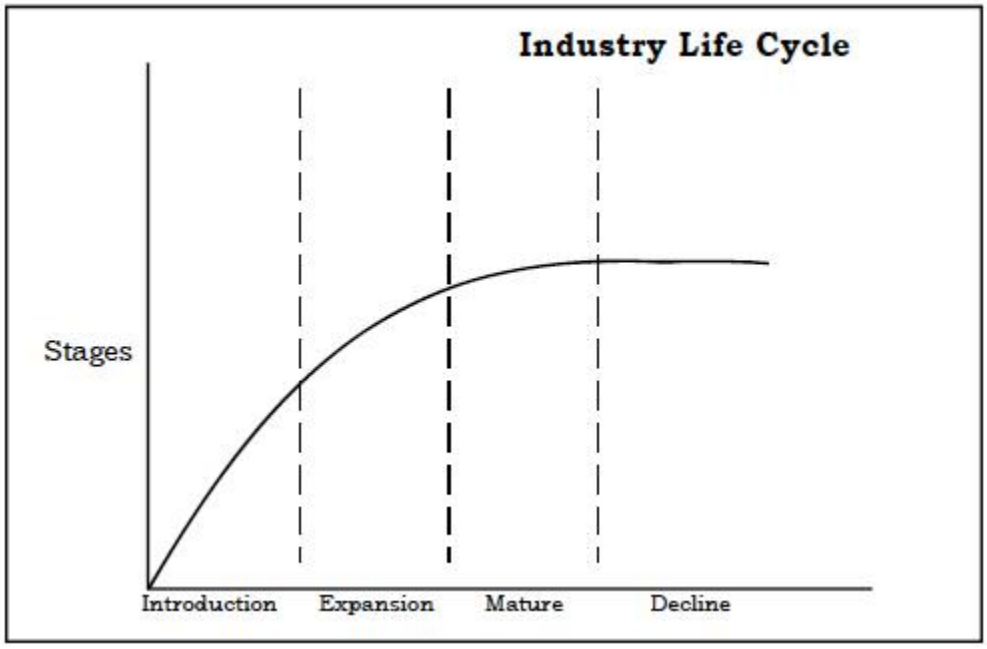
Industry analysis is a type of investment research that begins by focusing on the status of an industry or an industrial sector. A form of fundamental analysis involving the process of making investment decisions based on the different stages an industry is at during a given point in time. The type of position taken will depend on firm specific characteristics, as well as where the industry is at in its life cycle.

INDUSTRY LIFE CYCLE ANALYSIS

Many industrial economists believe that the development of almost every industry may be analyzed in terms of following stages (Figure-):

1. Pioneering stage: New technologies like personal computers or wireless communication portray the initial stages of an industry. At this stage, it is very difficult to anticipate which firms will succeed; some firms will be a total success while some might fail completely. Hence, the risk involved in selecting any specific firm in the industry is quite high at this stage. However, at this stage, since the new product has not yet flooded its market, there will be a rapid growth in sales and earnings at industry level. Like, for example, in 1980's, personal computers were a part of very few houses, while on the other hand, products like fans or even refrigerators were part of almost every household. So naturally, the growth rate of products like refrigerators will be much less.
2. Rapid growth stage: Once the product has proved itself in the market, several leaders in the industry start surfacing. The start-up stage survivors become more stable and market share can be easily envisaged. Thus, the performance of the industry in general will be more minutely tracked by the performance of the firms that have survived. As the product breaks through the market place and is used commonly, the growth rate of the industry is still faster than the rest of economy.
3. Maturity and stabilization stage: The product has attained the full aptitude to be consumed at this stage by the users. So, any growth from this point just tracks the growth of the economy in general. At this stage, as the product gets more and more standardized, it compels the producers to compete heavily on price basis. As a result, the profit margins are lowered and add to the pressure on profits. Most often, firms at this stage are referred to as *cash cows* as their cash flows are quite consistent but offer very little opportunity for growth of profit. Instead of reinvesting the cash flows in the company, they are best *milked from*.

Industry Life Cycle



4. Decline stage: In this stage following features are identified.

- Costs become counter-optimal
- Sales volume decline or stabilize
- Prices, profitability diminish
- Profit becomes more a challenge of production/distribution efficiency than increased sales

CLASSIFICATION OF INDUSTRY

Industry means a group of productive or profit making enterprises organizations that have a similar technically substitute goods, services or source of income. Besides Standard Industry Classification (SIC), industries can be classified on the basis of products and business cycle i.e. classified according to their reactions to the different phases of the business cycle. These are classified as follows:

1. ***Growth Industries:*** A sector of the economy experiencing a higher-than-average growth rate. Growth industries are often associated with new or pioneer industries that did not exist in the past and their growth is related to consumer demand for the new products or services offered by the firms within the industry. If companies across and industry exhibit solid earnings and revenue figures, that industry may be showing signs that it is in its growth stage. Growth industries tend to be composed of relatively volatile and risky stocks. Often investors must be willing to accept increased risk in order to take part in the potentially large gains offered by stocks within a particular growth industry.
2. ***Cyclical Industries:*** A type of an industry that is sensitive to the business cycle, such that revenues are generally higher in periods of economic prosperity and expansion, and lower in periods of economic downturn and contraction. Companies in cyclical industries can deal with this type of volatility by implementing cuts to compensations and layoffs

during bad times, and paying bonuses and hiring en masse in good times. Cyclical industries include those that produce durable goods such as raw materials and heavy equipment For example, the airline industry is a fairly cyclical industry; in good economic times, people have more disposable income and, therefore, they are more willing to take vacations and make use of air travel. Conversely, during bad economic times, people are much more cautious about spending. As a result, they tend to take more conservative vacations closer to home (if they go at all) and avoid expensive air travel.

3. ***Defensive Industries:*** Defensive industries are those, such as the food processing industry, which hurt least in the period of economic downswing. For example- the industries selling necessities of consumers withstands recession and depression. The stock of defensive industries can be held by the investor for income earning purpose. Consumer nondurable and services, which in large part are the items necessary for existence, such as food and shelter, are products of defensive industry.
4. ***Cyclical-growth Industries:*** These possess characteristics of both a cyclical industry and a growth industry. For example, the automobile industry experiences period of stagnation, decline but they grow tremendously. The change in technology and introduction of new models help the automobile industry to resume their growing path.

CHARACTERISTICS OF AN INDUSTRY ANALYSIS

In an industry analysis, the following key characteristics should be considered by the analyst. These are explained as below:

1. Post sales and Earnings performance: The historical performance of sales and earnings should be given due consideration, to know how the industry have reacted in the past. With the knowledge and understanding of the reasons of the past behavior, the investor can assess the relative magnitude of performance in future. The cost structure of an industry is also an important factor to look into. The higher the cost component, the higher the sales volume necessary to achieve the firm's break-even point, and vice-versa.
2. Nature of Competition: The top firms in the industry must be analyzed. The demand of particular product, its profitability and price of concerned company scrip's also determine the nature of competition. The investor should analyze the scrip and should compare it with other companies. If too many firms are present in the industry, this will lead to a decline in price of the product.
3. Raw Material and Inputs: We need to have a look on industries which are dependent on raw material. An industry which has limited supply of raw material will have a less growth. Labor in also an input and problems with labor will also lead to growth difficulties.
4. Attitude of Government towards Industry: The government policy with regard to granting of clearance, installed capacity and reservation of the products for small industry etc. are also factors to be considered for industry analysis.
5. Management: An industry with many problems may be well managed, if the promoters and the management are efficient. The management has to be assessed in terms of their capabilities, popularity, honesty and integrity. A good management also ensures that the future expansion plans are put on sound basis.

6. Labor Conditions and Other Industrial Problems: The industries which depend on labor, the possibility of strike looms as an important factor to be reckoned with. Certain industries with problems of marketing like high storage costs, high transport costs etc leads to poor growth potential and investors have to careful in investing in such companies.
7. Nature of Product Line: The position of industry in the different stages of the life cycle is to be noted. And the importance attached by planning commission on these industries assessment is to be studied.
8. Capacity Installed and Utilized: If the demand is rising as expected and market is good for the products, the utilization of capacity will be higher, leading to bright prospects and higher profitability. If the quality of the product is poor, competition is high and there are other constraints to the availability of inputs and there are labor problems, then the capacity utilization will be low and profitability will be poor.
9. Industry Share Price Relative to Industry Earnings: While making investment the current price of securities in the industry, their risk and returns they promise is considered. If the price is very high relative to future earnings growth, the investment in these securities is not wise. Conversely, if future prospects are dim but prices are low relative to fairly level future patterns of earnings, the stocks in this industry might be an attractive investment.
10. Research and Development: The proper research and development activities help in increasing economy of an industry and so while investing in an industry, the expenditure should also be considered.
11. Pollution Standards: These are very high and restricted in the industrial sector. These differ from industry to industry, for example, in leather, chemical and pharmaceutical industries the industrial effluents are more.

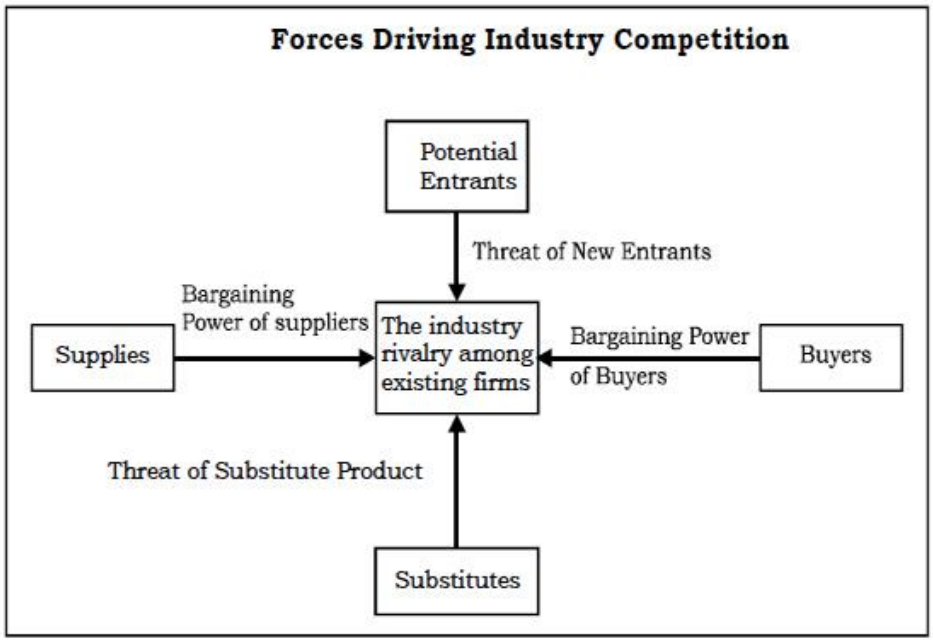
PROFIT POTENTIAL OF INDUSTRIES: PORTER MODEL

Michael Porter (Harvard Business School Management Researcher) designed various vital frameworks for developing an organization's strategy. One of the most renowned among managers making strategic decisions is the five competitive forces model that determines industry structure. According to Porter, the nature of competition in any industry is personified in the following five forces:

- Threat of new potential entrants
- Threat of substitute product/services
- Bargaining power of suppliers
- Bargaining power of buyers
- Rivalry among current competitors

The five forces mentioned above are very significant from point of view of strategy formulation. The potential of these forces differs from industry to industry. These forces jointly determine the profitability of industry because they shape the prices which can be charged, the costs which can be borne, and the investment required to compete in the industry. Before making strategic decisions, the managers should use the five forces framework to determine the competitive structure of industry.

Forces driving industry competition



Let's discuss the five factors of Porter's model in detail:

Risk of entry by potential competitors: Potential competitors refer to the firms which are not currently competing in the industry but have the potential to do so if given a choice. Entry of new players increases the industry capacity, begins a competition for market share and lowers the current costs. The threat of entry by potential competitors is partially a function of extent of barriers to entry. The various barriers to entry are-

- Economies of scale
- Brand loyalty
- Government Regulation
- Customer Switching Costs
- Absolute Cost Advantage
- Ease in distribution
- Strong Capital base

Rivalry among current competitors: Rivalry refers to the competitive struggle for market share between firms in an industry. Extreme rivalry among established firms poses a strong threat to profitability. The strength of rivalry among established firms within an industry is a function of following factors:

- Extent of exit barriers
- Amount of fixed cost
- Competitive structure of industry
- Presence of global customers
- Absence of switching costs
- Growth Rate of industry

- Demand conditions

Bargaining Power of Buyers: Buyers refer to the customers who finally consume the product or the firms who distribute the industry's product to the final consumers. Bargaining power of buyers refer to the potential of buyers to bargain down the prices charged by the firms in the industry or to increase the firms cost in the industry by demanding better quality and service of product. Strong buyers can extract profits out of an industry by lowering the prices and increasing the costs. They purchase in large quantities. They have full information about the product and the market. They emphasize upon quality products. They pose credible threat of backward integration. In this way, they are regarded as a threat.

Bargaining Power of Suppliers: Suppliers refer to the firms that provide inputs to the industry. Bargaining power of the suppliers refer to the potential of the suppliers to increase the prices of inputs(labor, raw materials, services, etc) or the costs of industry in other ways. Strong suppliers can extract profits out of an industry by increasing costs of firms in the industry. Supplier's products have a few substitutes. Strong suppliers' products are unique. They have high switching cost. Their product is an important input to buyer's product. They pose credible threat of forward integration. Buyers are not significant to strong suppliers. In this way, they are regarded as a threat.

Threat of Substitute products: Substitute products refer to the products having ability of satisfying customer's needs effectively. Substitutes pose a ceiling (upper limit) on the potential returns of an industry by putting a setting a limit on the price that firms can charge for their product in an industry. Lesser the number of close substitutes a product has, greater is the opportunity for the firms in industry to raise their product prices and earn greater profits (other things being equal).

The power of Porter's five forces varies from industry to industry. Whatever be the industry, these five forces influence the profitability as they affect the prices, the costs, and the capital investment essential for survival and competition in industry. This five forces model also help in making strategic decisions as it is used by the managers to determine industry's competitive structure.

Porter ignored, however, a sixth significant factor- complementary. This term refers to the reliance that develops between the companies whose products work is in combination with each other. Strong complementors might have a strong positive effect on the industry. Also, the five forces model overlooks the role of innovation as well as the significance of individual firm differences. It presents a stagnant view of competition.

TECHNIQUES FOR EVALUATING RELEVANT INDUSTRY FACTORS

The techniques (long term and short term) for evaluating industry factors are explained in the following sections. These are:

1. End-Use and Regression Analysis: End-use analysis for product demand analysis refers to a process whereby the analyst attempts to diagnose the factors that determine the

demand for output of the industry. In a single product firm, units demanded multiplied by price will equal sales revenue. The analyst frequently forecast the factors like disposable income, per capita consumption, price elasticity of demand etc. that influence the demand of the product. For studying the relationship between various variables simple linear regression analysis and correlation analysis is used. Industry sales against time, industry sales against macro economic variables like gross national product, personal income disposable income and industry earnings over time may be regressed. When two or more independent variables are better able to explain variability in the dependent variables, the multiple regression analysis is used.

2. Input-Output Analysis: Input-output analysis is an economics term that refers to the study of the effects that different sectors have on the economy as a whole, for a particular nation or region. This type of economic analysis was originally developed by Wassily Leontief (1905 – 1999), who later won the Nobel Memorial Prize in Economic Sciences for his work on this model. Input-output analysis allows the various relationships within an economic system to be analyzed as a whole, rather than individual components. Input-output analysis seeks to explain how one industry sector affects others in the same nation or region. The analysis illustrates that the output of one sector can in turn become an input for another sector, which results in an interlinked economic system. The analysis is represented as a matrix, where different rows and columns are filled with values representing the inputs and outputs of various sectors.
3. Growth Rate: The growth rate of different industry should be forecasted by considering historical data. Once the growth rate is estimated, future values of earnings or sales may be forecast. Since the growth rate is such an important factor in determining the stock prices, not only its size but its duration must be estimated. Sometimes, patents expire, competition within an industry becomes more aggressive because foreign firms begin to compete, economically depressed periods occur or other factors cause growth rate to drop.