

The Determinants of Industry Analysis: An Application to Practitioners of Money Management

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Abstract

This research study examines whether practitioners of money follow the precepts of the Finance profession. The theory of finance believes in the efficiency hypothesis. It states that an investor may not beat the averages consistently, and so s/he should invest in an index fund. We discover that practitioners of money believe they can surpass the return of an index, and, thus, they invest aggressively. One of the techniques they use is the analysis of industries. Thus, they analyze the external environment, the business cycle, the industry life cycle and finally the competitive environment.

Keywords: Behavioral Finance, Demographics, Efficiency market hypothesis, Industry analysis, Practitioners of money management

Introduction

There are two basic approaches to investments. First, there is the bottoms up approach, according to which the investment manager chooses the companies and then the industries and finally the stock markets or/and macro-economies. Secondly, there is the approach where the investment manager follows the exact opposite sequence. In a top down approach to stock investing, practitioners analyze first the market/economy, second the industry, and third the company. They analyze the market/economy and the industry based on the premise that “no firm is an island unto itself.” First, they decide on which economy and market in which to invest. They, of course, choose markets/economies which have superior growth prospects and avoid the ones which will grow slowly in comparison. Second, they choose industries which will grow faster rather than slower. Once they identify a more rapidly growing market/economy and industry, then they can identify a more rapid company. Their job becomes easier in this manner. It would be hard to attain a higher rate of return (ROR) for a firm which is in a slowly growing market and industry. It is easier to generate a higher ROR for their investment if the market and industry has more rapid growth prospects (Meyers, 1973).

There are two variables we want to know about in terms of industry analysis. One variable is the return and the other is risk. It seems reasonable that industries affect the firms inside those industries in terms of both ROR and risk.

In terms of ROR, we want to know two questions. First, is the influence of the industry increasing or decreasing? Secondly, is the effect of ROR of the industry the same or different across time? An increasing (decreasing) effect on the firms by the industry induces the industry to be more (less) important. A consistent behavior of industries makes forecasting more or less predictable. The implication is that if the analysis is more (less) constant, the more (less) consistent is the industry effect (Livingston, 1977).

Firstly, there is an effect which the industry has on firms, but that is decreasing. Secondly, we want to know whether the performance of an industry is consistent or inconsistent intertemporally and especially between bullish and bearish markets. It seems that the behavior of industries has been inconsistent. Thus, it becomes crucial to forecast and examine industry developments issues because they are constantly altering and affecting the firms inside them.

As an example of the altering ROR of an industry, we will use the pharmaceutical industry in the last fifteen years. In the middle of the nineties, the Clinton administration discussed regulating drug companies and their prices dropped precipitously. After the administration reversed its intent, drug stocks had a great bull market for several years in the late nineties. In the early part of this century the fear of generics, lack of substantial new patents and the threat of importation have combined to keep prices of pharmaceutical stocks quite low.

On the matter of risk, we want to know the following:

- 1) At one point in time, did industries exhibit similar or different risk among themselves?

2) Intertemporally, does that risk alter?

In the cross section analysis of many industries on the first point, diverse industries depicted diverse risk at a particular time period. Also, over the stock market cycle, the risk difference increases for bull and bear markets among the different industries.

On the second point, the risk of industry overtime, the results were that it does not alter much. The stability of risk for a particular industry applies to numerous industries (Reilly and Brown).

Industry analysis comprises several aspects. They are:

- A. External Factors and Structural Alterations
- B. The Business Cycle and Effects on Diverse Industries
- C. The Industry Life Cycle
- D. The Competitive Environment

External factors comprise regulations, technology, demographics, and social and foreign effects. Regulations are crucial for some industries such as pharmaceutical and almost totally immaterial for others such as the textile industry. A few examples of regulations and their importance are one of the increased regulations of air travel. As a result of the tragedy of 9/11, regulations have increased the scrutiny of travelers via airplane. This has increased the cost and time of traveling.

Technology secondly affects the ROR of industries. As an example of tech growth, the internet is moving from the PC to the mobile device. This has the effect that firms which are mobile-centric are gaining at the expense of firms which are PC-centric.

Demographics can affect substantially the ROR of industries. Many people entering their 50s and 60s induce a lot of savings which in turn induces people to demand investment advice. Additionally, numerous people retiring mean that the demand for condos and coops increases and the demand for single houses decreases.

Social changes importantly affect ROR of industries. The visits to movie theaters would be many more had people not started to substitute DVDs and rentals of movies for movie going. The key variables influencing social changes are lifestyles and fashion alterations.

Finally, industries are affected by foreign influences. Two industries which are intimately affected by foreign issues are energy and defense. On the energy front, the U.S. imports a lot of oil. Without that importation, prices could be much higher. The defense industry is different in that it exports a lot of its production. Thus, the domestic defense industry depends on the foreign demand quite a lot.

The second basic determinant of industry return is the business cycle. Recessions help the utility industry. Recessions coincide with middle or pronounced bear markets. In contrast,

capital goods industries excel at the top of economic cycles, which coincide with middle bull to late bull markets (Dudley & McKelvey, 1997).

The third crucial factor in industry analysis is industry life cycle. The stages are introduction, rapid growth, maturity, continued maturity, and decline. It is important to understand in which stage of the industry life cycle this particular industry is in. The reason is that the profit, sales, and costs of the firm depend on the particular stage the particular industry is in that we are describing. Specifically, the food industry is in the continued maturity stage. We cannot forecast that it will grow by a 10% ROR. In contrast, the internet search industry is in the rapid growth stage, so that it could grow by 10% in the next year for 5-10 years (Raymond Vernon).

Fourthly, the competition of the industry is critical. The competitive environment of an industry dictates that those with more (less) rivalry within them will have smaller (larger) profits. Take in contrast, for example, the airline versus the pharmaceutical industries.

A second attribute of competition is the threat of substitute products. The lower or higher the threat means the higher or lower the profitability of the industry is.

A third aspect is the bargaining power of buyers, for which the higher/lower it is, the lower/higher the profitability of the industry; contrast the textile industry to pharmaceuticals.

Fifthly, an important aspect of competition is the bargaining power of suppliers whereby the higher (lower) it is, the lower (higher) the profit of the industry is to which they sell. A comparison can be made between suppliers to retailers having little power versus oil-producing countries exporting oil to consumer nations.

Empirical Results

The respondents answered our questions which intended to ask them about the determinants of industry profitability. In addition to that we asked them two questions about profitability and cost structure specifically. The most popular choice of our respondents was the rivalry of competitors with 87% of the answers. Tied for second place were the life cycle of the industry and the threat of new entrants with 536 or 81% of the answers each. Next in line was the answer that practitioners focus on profit with 530 or 80% of the answers. Afterward, we had 74% or 490 saying that they emphasize cost structure. Threat of substitute products, bargaining power of buyers received 72%, 58%, and respectively. Demographics and technology were chosen by 62% and 61% of our respondents. Finally, 21% and 19% chose legality and legislative aspects of an industry as welfare psychographics.

Conclusion

In this research piece we give evidence that practitioners do take into account industry analysis strongly. They emphasize all the important aspects including business cycles, industry life cycles, external environment, and the competitive environment. A thorough approach to investments therefore should definitely consider the diverse issues of industry analysis.

References

- Aber, J. (1976). Industry Effects and Multivariate Stock Price Behavior. *Journal of Financial and Quantitative Analysis*, 11(5). <http://dx.doi.org/10.2307/2330216>
- Cavaglia, S., Brightman, C., & Aked, M. (2000). The Increasing Importance of Industry Factors. *Financial Analysts Journal*, 56(5), 41-54. <http://dx.doi.org/10.2469/faj.v56.n5.2389>
- Dudley, W. C., & E. F. McKelvey. (1997). *The Brave New Business Cycle: No Recession in Sight*. New York: Goldman Sachs and Co.
- Fama, E. F. (1970). Efficient Capital Markets: A Review of Theory and Empirical Work. *Journal of Finance*, 25(2), 383-417. <http://dx.doi.org/10.2307/2325486>
- Goodman, D. A., & Peavy, J. (1983). Industry Relative Price –Earnings Ratios as Indicators of Investment Returns. *Financial Analysts Journal*, 39(2), 60-66. <http://dx.doi.org/10.2469/faj.v39.n4.60>
- Levy, R. A. (1966). Conceptual Foundations of Technical Analysis. *Financial Analysts Journal*, 22(4), 83. <http://dx.doi.org/10.2469/faj.v22.n4.83>
- Livingston, M. (1977). Industry Movements of Common Stocks. *Journal of Finance*, 32(2), 861-874. <http://dx.doi.org/10.1111/j.1540-6261.1977.tb01994.x>
- Meyers, S. L. (1973). A Re-examination of Market and Industry Factors in Stock Price Behavior. *Journal of Finance*, 28(3), 695-705. <http://dx.doi.org/10.1111/j.1540-6261.1973.tb01390.x>
- Porter, M. E. (1980a). *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. New York: Free Press.
- Porter, M. E. (1980b). Industry Structure and Competitive Strategy: Keys to Profitability. *Financial Analysts Journal*, 36 (4). <http://dx.doi.org/10.2469/faj.v36.n4.30>
- Porter, M. E. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*. New York: Free Press.
- Rosenberg, B., Reid, K., & Lanstei, R. (1985). Persuasive Evidence of Market Inefficiency. *Journal of Portfolio Management*, 11(3), 9-17. <http://dx.doi.org/10.3905/jpm.1985.409007>
- Selling, T., & Stickney, C. (1983). The Effects of Business Environment and Strategy on a Firm's Rate of Return on Assets. *Financial Analysts Journal*, 39(1).

Appendix A. Survey Industry Analysis

A. If you use industry analysis, which aspects of the industry do you emphasize?

1. Life cycle -----
2. Profit margins -----
3. Cost structure -----

4. Legality and regulation -----
5. Demographics -----
6. Psychographics -----
7. Technology -----
8. Rivalry of competition -----
9. Threat of new entrants -----
10. Threat of substitute products -----
11. Bargaining power of suppliers -----
12. Other, please specify -----

B. If you use demographics and/or psychographics to forecast profitability potential in a certain market, how do you weigh the following different aspects of the market?

1. Geographic distribution -----
2. Age distribution -----
3. Income distribution -----
4. Population growth -----
5. Family size -----
6. Family formation -----
7. Ethnic distribution -----
8. Head of the family -----
9. Education of family -----
10. Occupation of family -----
11. Attitudes of family -----
12. Other, please specify -----