

Chapter 1: Industry Trends, Life Cycles & Data Sources

A macro overview of a company's industry and the economy are critical starting points for any valuation analysis. In many cases, the industry trends are better indications of the future than a review of the company's historical operations.

Overview

For publicly traded companies, an economic/industry overview is usually straight forward since a wide range of information is available. For a privately held company, information is less abundant. However, reviewing information on similar publicly traded companies is usually a good place to begin. Within the same industry, a strong correlation exists between a publicly traded company's economic performance and a privately held company's economic performance.

Critical Economic Data Sources

The following six factors (market, economics, productivity, profit, demographics, and government policy) may have a significant impact upon the future of a closely held businesses. The Bostonian Group provides an example of how two different types of companies should be looked at based upon these six economic factors, which can be seen in Table 1-1 on page 24.

In order to have a broad overview of non-quantifiable trends in the economy, it is necessary to focus upon business periodicals and statistical services, private company data, and regional economic data.

National economic data can provide variables such as economic growth for gross national product (GNP), real gross state product (GSP), inflation, employment, consumer spending, business investment, construction, interest rates, and population trends.

Table 1-1: How Economic Factors Affect Consumer Goods vs. Capital Intensive Companies

	Consumer Goods Company	Capital Intensive Company
Demographics	Aging population implies weaker consumer economy and slower household formation	Aging population implies higher savings and capital investment
Economics	Consumer heavily indebted implies weaker spending in recovery Consumer purchase mix down-scaled by necessity Home real estate weak	Corporate competitiveness heavily dependent on capital investment Emerging world economy implies need for capital exports Infrastructure rebuilding needs
Government Policy	Anti-consumption tax policy expected	Pro-investment initiatives expected
Productivity	Low-productivity industries Higher labor costs (services)	High-productivity industries Lower labor costs (manufacturing)
Profits	Profit vulnerability to consumers and government	Profit resilience in recession implies strong rebound
Valuations	High relative Price/Earnings ratio Lower dividend yield 10-year above average performance	Low relative Price/Earnings ratio Higher dividend yield 10-year below average performance

Source: Bostian, David B. and AIMR. *Improving the Investment Decision Process-Better Use of Economic Inputs in Securities Analysis and Portfolio Management*, pp. 12.

There are a number of governmental publications which can aid in finding economic data. Four of the most widely used monthly publications are the *Federal Reserve Bulletin*, *Survey of Current Business*, *Business Conditions Digest*, and *Monthly Labor Review*. Two widely used annual publications are the *Statistical Abstract of the United States* and the *Economic Report of the President*.

The business periodicals which should be reviewed are *Business Week*, *Forbes*, *Fortune*, *Barron's*, *Business Month*, and *The Wall Street Journal*. Standard & Poor's (S&P) *Statistical Service* is one of the best sources of summary economic data. Aside from the public sources, many private companies also track data.

Regional economic data are available from various state and local agencies, as well as local chambers of commerce. However, these sources may be suspect, since they promote economic growth in their area. One useful source of

regional economic information is Sales and Marketing Management's *Annual Survey of Buying Power*.

Understanding Industry Trends & Life Cycles

Industry analysis is important, since the health of the economy affects a company's industry, which in turn affects the company. A useful method for analyzing industry trends is to view the industrial life cycle. The life cycle is important, because it influences the growth or decline in earnings, sales, and other economic activities of a firm. If high growth is projected for a mature company, then there would be either an over-valuation of the company or an overpayment for the acquisition.

The basic life cycle model has four stages as originally put forward by Professor Michael Porter:

- (1) Early development
- (2) Rapid expansion
- (3) Mature growth, and
- (4) Stabilization or decline

A summary of these stages is described in Table 1-2, and is more easily seen in Figure 1-1.

Figure 1-1: Basic Life Cycle Model

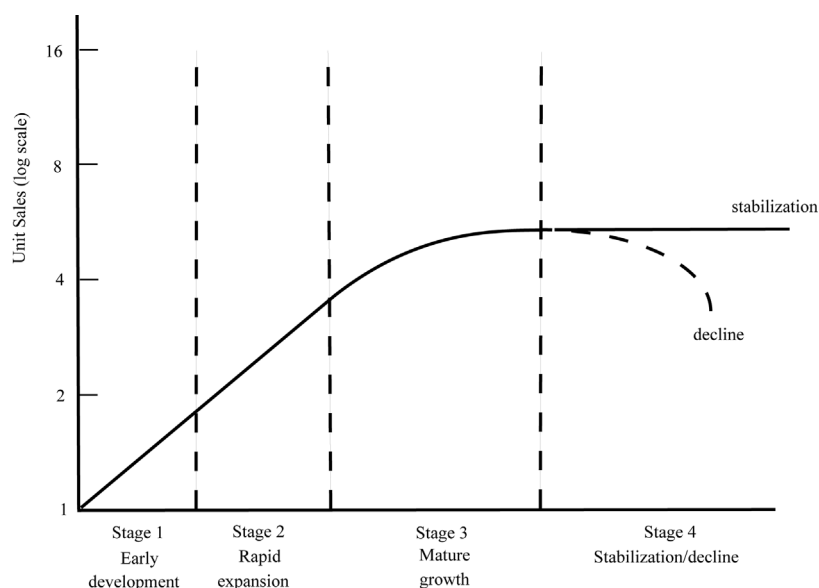


Table 1-2: Summary of Life Cycle Stages

Stage	Comments
Early development	High rate of growth; perception of large profits, leading to fierce competition and high rate of bankruptcies.
Rapid expansion	Through consolidations and internal expansion, a few companies dominate the market. Prices fall and quality increases. Risk is minimized from early development stages. Focus sometimes becomes lost as businesses expand into other markets.
Mature growth	Market approaches saturation, and industry expansion is difficult to obtain through price reductions or quality improvements.
Stabilization or decline	Industry is aged and follows one of three paths: (a) slow growth; (2) level output; (3) decline or disappearance of industry.

Duration and Speed of Life Cycle

It is important to determine how quickly a company or industry will move through these stages. Since the late 1800’s the industry life cycle has accelerated. According to Morgan Stanley Dean Witter, an investment bank, “the span of time between the introduction of a new household appliance and the peak of production declined from 34 years for those appliances introduced before 1920 to eight years for products introduced between 1929 and 1959. For the video cassette recorder and the personal computer, the period would be two to three years.¹” Service firms also go through these life cycles, as can be seen by the retailing industry, shown in Table 1-3.

Table 1-3: Life Cycle of Five Types of Retail Businesses

Retailing Type	Introduction Period	Maximum Market Share	Elapsed Time
Downtown Department Store	1860	1940	80 years
Variety Store	1910	1955	45
Supermarket	1930	1965	35
Discount Store	1950	1970	20
Home Improvement Center	1965	1980	15

Source: William R. Davidson, Albert D. Bates, and Stephen J. Bass, “The Retail Life Cycle,” *Harvard Business*, November-December 1976, pp. 94, taken from *Investment Analysis and Portfolio Management*

1. *Investment Perspectives*, June 11, 1985, pp. 5.

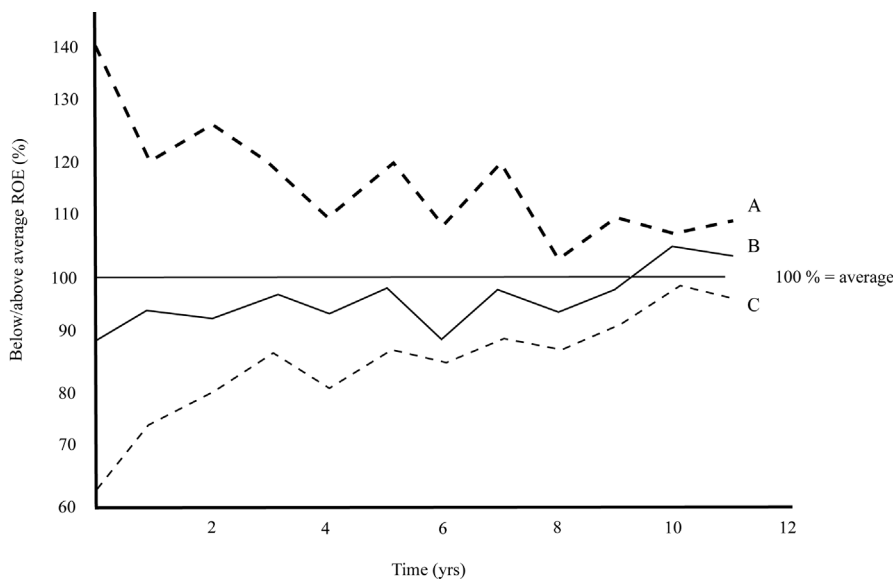
For some industries, these cycles can be even shorter. For instance, internet companies sometimes have a cycle of six months to two years.

The industry life-cycle can be seen through sales volume and profit margins. Every stage has a specific impact on sales volume. The profit life cycle has the following characteristics:

Life Cycle of Profits

- The growth path of revenues mirrors unit sales. Both rise sharply for a time, then continue somewhat more slowly, and finally level off.
- The profit margin is negative until the industry’s revenues reach a critical mass. At that point, profit margins rise rapidly along with increasing revenues, causing the level of earnings to soar.
- Profit margins continue to expand until the mature growth stage, when they level out. Sometime during this stage, but before the stabilization stage of revenues is reached, margins begin to decline.
- Despite the gradual reduction of profit margins during stage three, the actual level of earnings continues to rise during most of the period because revenue growth, while slowing, is sufficient to offset the deteriorating profit margins.
- Finally, revenue and profit margin trends either offset each other and earnings stabilize, or earnings actually decline, as falling revenues and deteriorating profit margins have a cascading effect.¹

Figure 1-2: Different Industry ROEs Trending to the Average



In addition to the above characteristics, many industries have returns on investment or equity which (over the long term) will gravitate toward the average. The same can be said for businesses within the same industry-over the long

1. Cohen, Zinbarg, Zeikel. *Investment Analysis and Portfolio Management*, pp. 375.