University of Tennessee, Knoxville
Trace: Tennessee Research and Creative Exchange

University of Tennessee Honors Thesis Projects
University of Tennessee Honors Program

5-1997

Fundamental Analysis of Delta Air Lines, Inc.

James Leon Thornton
University of Tennessee - Knoxville

Follow this and additional works at: https://trace.tennessee.edu/utk_chanhonoproj

Recommended Citation
Thornton, James Leon, "Fundamental Analysis of Delta Air Lines, Inc." (1997). *University of Tennessee Honors Thesis Projects.* https://trace.tennessee.edu/utk_chanhonoproj/243

This is brought to you for free and open access by the University of Tennessee Honors Program at Trace: Tennessee Research and Creative Exchange. It has been accepted for inclusion in University of Tennessee Honors Thesis Projects by an authorized administrator of Trace: Tennessee Research and Creative Exchange. For more information, please contact trace@utk.edu.

Fundamental Analysis of Delta Air Lines, Inc.

Senior Project
James Thornton
May 13, 1997

Abstract

My senior project is a compilation of many classes taken as an undergraduate business major. I have used the skills that I acquired in order to determine if Delta Air Lines is a good long term investment. I essentially took the role of an investment analyst at a major brokerage house. After garnering information through library research and brief phone interviews, I decided that three things must be done in order to determine the worthiness of any investment: economic outlook, industry outlook, and company outlook. The following paper is a compilation of my findings and my opinion as a semi-expert on the matter.

Fundamental Analysis of Delta Air Lines, Inc.

Introduction

When considering an investment, the intelligent investor does thorough research before making a decision. This analysis was conducted to decide the worthiness of Delta Air Lines, henceforth called Delta, as a long term investment. Many issues must be considered for this analysis to be complete. First, the overall outlook of the economy must be examined to determine the timeliness of the investment. Since the stockmarket often reflects the economy as a whole, people do not usually wish to purchase a stock before a drop in the market. It would be wiser to wait until the price drops and then invest in the company. It is also necessary to understand the industry in which Delta operates. This is necessary because an investor would like to understand the competitive pressures of the industry as well as the prospects for the entire industry. Finally, a company outlook, complete with financial ratios and other observations, is given to find out the health of Delta within the industry.

Economic Analysis

Determining what the economy might do is one of the major mysteries of the twentieth century. Almost all indices which are observed by economists and other experts are inconsistent; John Maynard Keynes considered predicting the economy as a daunting and almost impossible task. any statement as to the future state of the economy should be interpreted as a best guess rather than as fact. therefore, the following information must be seen as the best possible interpretation of data rather than a definite outlook.

After a major recession in the early 1990s, the economy of the United States has seen slow steady growth. This slow growth will continue for the next couple of years. Most of the factors that are considered to determine the strength of the economy are positive. The Gross Domestic Product continued to rise the last two quarters. The GDP rose 2.1% in the third quarter and 3.8% in the fourth quarter of 1996 (InterNet, www.whitehouse.gov). In addition, personal consumption rose almost an entire percent during the fourth quarter of 1996 (InterNet, www.whitehouse.gov). This is a positive sign because if people are increasing their expenditures then they believe that the economy is going to continue to grow. This is usually a self-fulfilling prophecy, meaning that people think the economy will continue to grow so they spend more money and consequently the economy grows. Another positive sign is unemployment dropping to 5.1%, and analysts expect unemployment to continue to slowly decline adjusting for seasonal variances (InterNet, www.whitehouse.gov). Due to the high costs of hiring and training employees, if businesses are hiring then these companies feel as though the economy will grow. Companies do not often increase hiring before an anticipated recession when there is often a need to reduce costs. A final positive statistic is the 1996 inflation-adjusted income grew 2.7% over 1995 levels (InterNet, www.whitehouse.gov). Greater purchasing power often translates into more or bigger purchases which helps spur the economy. Since Delta is a cyclical company which moves with the economy, these statistics bode well for Delta.

There have been some negative signs which could mean that the long period of growth has come to an end. The first sign is the raising of the Fed Funds rate and discount rate. Alan Greenspan, chairman of the Federal Reserve, recently raised interest rates to counter perceived inflation (McGee, C1). Another rate hike is expected soon. While raising the interest rates will keep inflation low, the rate hikes also cause the cost of capital to rise. The rise in the cost of capital or any shortage in the money supply often adversely affects the economy. If Greenspan continues to raise interest rates to slow inflation, then the economy might take a downturn. The other bad sign is the recent downturn in the stockmarket. The stockmarket is often an indicator of the future of the economy (Jones, 505). Jones states that "stock prices lead the economy." Recently, the stockmarket dropped 9.8% since the market high on March 11,1996 (McGee, C1). If this drop is an indicator of the economy, then a recession might be eminent. It is possible, however, that this drop is only a temporary correction of the market.

Industry Analysis

The airline industry, while immense, is often quite volatile. It is an industry characterized by intense competition, often uncontrollable costs, and slow growth in the domestic market (Swiercz, C154). Airlines are cyclical and follow the economy. This is logical because companies send more people on business trips and families spend more on leisure if the economy is strong. There are several issues which should be understood before investing in any airline. First, the deregulation in the 1980s of the airline industry has led to a shakeout which is continuing today. Large airlines such as Eastern, Pan Am, and TWA have been acquired by other airlines or have gone bankrupt since deregulation (Parks, C136). This trend is continuing today. Also, airlines are subject to intense price pressures (Parks, C134). Airlines will often go from being profitable to having large losses because of a small shift in oil prices. Jet fuel is necessary for airline to operate, but it is impossible to negotiate price. Therefore, any shift in cost is usually transferred to the airlines by the producers of the jet fuel (Parks, C134). This often causes unpredictable net income due to the inability to predetermine costs. Airlines are also subject to price pressures by buyers of tickets. Most buyers are worried about price only, so airlines are often forced to match promotional offers or other low ticket prices in order to retain passengers (Parks, C133). Therefore, it is often difficult for airlines to estimate future earnings.

Several recent trends in the airline industry should be mentioned. One recent trend has been the emergence of low-cost carriers (Swiercz, C162). These carriers emerged after deregulation and are regional carriers which offer low costs for customers. As mentioned earlier, price is the main determinate of which airline people choose. Therefore, these regional carriers have gained market share in the domestic market from some of the larger carriers.

Another trend is the rising importance of the global market (Swiercz, C162). Major airlines are attempting to gain access to the global market because that is where the largest growth is occurring. As the domestic market slows, the airlines are determined to continue growth by expanding overseas. Strategic alliances with foreign carriers, code sharing, and purchasing new foreign routes have become the industry norm.

A final trend in the industry is the problem with airport access (Swiercz, C163). Most major airports have all gates and terminals full. It is therefore often impossible for airlines to expand routes or new entrants to acquire routes to these burdened airports. The lack of access has caused growth in importance of so-called satellite airports(Swiercz, C163). These airports are older and often have gates and terminals available.

The airline industry is an interesting but difficult industry to analyze for investment purposes. The industry is volatile and subject to huge swings in earnings. Airlines have been known to make millions for years then lose a billion in one year. This is not an industry in which indecisive investors or those likely to leave after a large loss should invest. Warren Buffet said, "Despite the huge amounts of equity capital invested [in the airline industry], the industry in aggregate has posted a net loss since its birth at Kitty Hawk." The airline industry, however, does have the potential of creating a high return. This is possible only if the airlines expand abroad and severely cut their costs.

Company Analysis

Delta Air Lines was founded as a crop dusting service in 1928. Since that time it has expanded into the third largest air carrier in the United States (Swiercz, C156). In order to understand this phenomenal growth, it is important to understand the philosophy of Delta.

Delta places great emphasis on its employees. Its employees are non-unionized but are still the highest paid employees in the industry (Swiercz, C158). Delta had never laid off employees until it was forced to do so once in the early 1990s (Swiercz, C159). Delta feels that in order to maintain its position as a market leader it has to offer the best service for a reasonable price. This means getting and retaining the best employees.

Delta also understands the importance of being innovative. Delta was the first major carrier to use the hub-and-spoke system later adopted by all major carriers (Swiercz,C160). The hub-and-spoke system is a system in which one or two major hubs accept feeder flights in order to keep flight levels high. Delta also introduced the concept of the frequent-flyer program in order to increase customer loyalty (Swiercz, C160). These are two examples of how Delta started industry norms.

Another intangible asset that delta has over other carriers is the strength of its management. Delta's management has been shown to be responsive to problems. In addition, the consensus-style of management used by Delta has allowed them to achieve "cohesiveness and enduring stability." An example of the management's foresight is the waiting to purchase aircraft. In the early 1980s, Delta waited to purchase new aircraft until after flaws in the aircraft had been removed. Consequently, when oil prices began to rise in the 1980s Delta had the newest and most fuel efficient fleet. Delta estimated that the delay in purchasing the aircraft allowed Delta to save close to $500 million (Swiercz, C160). Delta's executives have been conservative in financing the company. Delta has a lower debt-to-equity ratio than any other major carrier, and Delta has continued to use retained earnings to reinvest into the company (Swiercz, C161). Delta also depreciates equipment over ten years instead of the industry norm of fifteen years (Swiercz, C161).

Management has also tackled some of the major trends in the industry. In response to the threat of low-cost carriers, Delta began its own low-cost division called Delta Express which shuttles passengers directly from city to city rather than using the hub system (McKenna, 25). Delta has also increased its international presence by forming strategic alliances with Singapore Airlines and SwissAir (McDonald, 5). Delta has also acquired new routes into Brazil and has signed a code sharing agreement with Air France (McDonald, 5).

A final look at the financial performance and the expected future performance of Delta is necessary before an investment decision can be made. As stated earlier, the earnings of airlines are often erratic. The same can be said for Delta. In 1993, Delta suffered a net loss of over $1 billion. In 1995 and 1996, Delta had net income of $408 million and $516 million. Earnings are expected to grow by nineteen percent in 1997 and by ten percent for the next five years (Disclosure database, Delta Air Lines). This is less than the five year average expected for the Standard and Poor's Index. If you look at the P/E ratio, or stock price per earnings ratio, Delta demands a higher price per earnings than any other airline. Delta trades with a P/E of 53 on April 15,1997(Disclosure database, Delta Air Lines). The industry average for P/E is closer to 25. Delta also has little chance of going bankrupt in the next five years. Delta's quick ratio and current ratio, both measures of liquidity to meet current debts, are better than industry norms, and Delta has avoided the large debt of other airlines (Disclosure database, Delta Air Lines).

The final element to consider is if an investor should buy Delta stock. As a value and risk adverse investor, I would want a high return on an investment while paying less than other investments with a similar return. Delta operates in a volatile industry that is still attempting to recover from deregulation over a decade ago. Yet, Delta is expected to have a lower return than the Standard and Poor's Index which is much safer. In addition, Delta has an extremely high P/E ratio. This means that an investor is paying a significant premium to own Delta's stock. If Delta's stock would drop to an appropriate P/E ratio of if the industry becomes more consistent then Delta would make an excellent investment. An appropriate price is probably close to $70, much less than the rate of 88 1/8 that Delta closed at on April 16, 1997. Remember that this information is dated and could rapidly change depending on delta's performance, the economic outlook, or the state of the airline industry.

Works Cited

Disclosure Database. Delta Air Lines, Inc. April 12, 1997.

Internet. White House Economic Statistics Briefing Room. Address: *www.whitehouse.gov/fsbr.html.* April 16, 1997.

Jones, Charles P. Investments: Analysis and Management. New York: Wiley & Sons, 1996.

McDonald, Michelle. "Delta, Air France sign Code-Share Agreement." Travel Weekly 14 Nov. 1996: 5.

McGee, Suzanne. "Stocks Rocket 135.26 on Good Inflation Report." The Wall Street Journal 16 April 1997, natl. ed., sec. C: 1.

McKenna, James T. "Delta Express Enters Low-Cost Flight Fray." Aviation Week and Space Technology 7 Oct. 1996: 25.

Parks, Don. "The U.S. Airline Industry." Annual Advances In Business Cases. Los Angeles: Southwestern University Press: 1993.

Swiercz, Paul. Delta Air Lines, Inc. Washington: George Washington University Press, 1992.