

**Analysis of three eras of U.S stock Market
and
Equity analysis of Indian automobile industry**

**Rishi Kumar Gandhi
PGDM Number: 11164**

**Srilakshminarayana G.
Assistant Professor-Quantitative Methods and
Operations Research**

Comments by the Faculty

An investment in stock market has been considered as one of the important investments. Individuals tend to invest in stock market by selecting a stock that gives them optimum returns. Selecting an investment strategy needs expertise and proper guidance. Matins Capital Management is a finance advisory firm which creates investment plans for its clients. It is very interesting to note that financial plans decide an individual's or company's growth. Proper investment at appropriate time helps an individual to earn more returns. But it involves risk and one has to be prepared to face the loss. Here comes risk management. The companies which advises its clients regarding the investments also indicates the chances of loss along with the chances of getting good returns. It needs an in-depth knowledge about the stock market and the behavior of stock market prices. When, where and how much to invest are some of the questions that one has to think before investing. It is because one has to think several times before choosing a stock. Sometimes people who are experienced in trading can take a quick decision regarding the stocks. But when an individual decides to approach a financial advisory firm, the firm takes the help of experts in the field and also uses standard softwares to analyze the data obtained. It is very important for the firm to assure its clients about the returns. It should be open to its clients and should be very careful in developing a financial plan.

The present study has been divided into two parts. Part A deals with understanding the behavior of US stock market, which has been divided in to three eras and Part B studies the Indian automobile industry.

Mr.Rishi Kumar Gandhi has taken necessary steps to ensure that the study has been carried out with utmost care. He collected the data from secondary sources, analyzed the same and gave proper conclusions which were discussed in detail in the paper. It is interesting to learn that US stock market was divided into three eras: Era I, the age of comfort, Era II, the age of Angst, and Era III, the age of Exuberance. The main focus was on understanding the behavior of returns in these eras separately.

Part B deals with Equity analysis of Indian automobile industry. He had considered Tata motors, Maruthi Suzuki and Mahindra and Mahindra for the analysis. Ratio analysis was used to analyze the data gathered with respect to the three automobile companies and appropriate suggestions were made with respect to investments in these companies.

Finally, I would like to conclude by saying that the study gives the reader an understanding about the behavior of returns in US stock market in three eras. It also gives the reader to understand the behavior of the returns of the three automobile companies considered for the study, which are playing an important role in Indian automobile industry.

G. Srilakshminarayana

Analysis of Three Eras of U.S Stock Market and Equity Analysis of Indian Automobile Industry

Company Profile and Overview

The financial climate around the world has structurally changed after 2008 and the basic premise of “finance” and “economics” has taken a hit for the worst. Market participants across the globe are in a fix whether “efficient market hypothesis” is still valid or not. Under these circumstances, a holistic approach towards “asset management” is required.

An important debate among stock market investors is whether the market is efficient - that is, whether it reflects all the information made available to market participants at any given time. The efficient market hypothesis (EMH) maintains that all stocks are perfectly priced according to their inherent investment properties, the knowledge of which all market participants possess equally.

According to the EMH, stocks always trade at their fair value on stock exchanges, making it impossible for investors to either purchase undervalued stocks or sell stocks for inflated prices. As such, it should be impossible to outperform the overall market through expert stock selection or market timing, and that the only way an investor can possibly obtain higher returns is by purchasing riskier investments.

Matins capital Management is a finance advisory firm, advising clients to allocate their assets in the most appropriate and optimal manner to maximize their yields. Matins Capital Management has started in the fall of 2002 at Bhopal with staff strength of just two. Mainly, the work at the Matins Capital Management was managing some High Net worth Individuals wealth. The money at initial stage, Matins was advising was Rs.2 crores. Today, the advisory part is one of the product that is offered by the company and Rs.20 Crore plus money is managed by the company.

Matins Capital Management with its in-depth knowledge tries to fill the void in this space, specifically in tier II and tier III cities of India. This strategy of the company is in direct synchronization with thinking of famed management guru, Dr. C.K. Parkland’s “Market at the bottom of the pyramid” theory. Recently they have diversified into “Retail brokerage” to cater to a broader base of clients.

The Unique Selling Proposition (USP) of Matins Capital Management is its in house research department which allows the clients a direct access to take the benefits of the advisory services of the company. It holds reputation of good information provider.

The study was divided into two parts. The first part studies the three eras of US stock market.

Objectives of the Study

Part A deals with an exploratory study, which is about handicapping the financial race, a primer in understanding and projecting returns from stocks and bonds. The study will help in attaining the better odds of constructing a winning portfolio. The price levels of stocks and bonds, the two major determinants of net worth, fluctuate beyond the control. The emphasis was on financial market return during the period from 1946 to 2000, which according to returns has been divided into three era's. The three eras coincide with the three broad swings in stock market returns.

Part B analyzes the Indian automobile Industry for investment purpose by monitoring the growth rate and performance on the basis of historical data. This objective was divided into four sub-objectives:

- ◆ Detailed analysis of Indian automobile industry which is gearing towards international standards
- ◆ Analyze the impact of qualitative factors on industry's and company's prospects
- ◆ Comparative analysis of three tough competitors TATA Motors, Maruti Suzuki and Mahindra and Mahindra through fundamental analysis.
- ◆ Suggesting as to which company's shares would be best for an investor to invest.

Part-A

The Research Data

The study was an exploratory kind. The data includes the price levels of stocks and bond yields from 1946 to 2000.

The Research Tools

For Data Collection:

The data is collected from secondary sources; web and from the book by Burton.G.Malkiel (2012)

For Data Analysis:

The tools for the data analysis, in the exploratory study, were returns from bonds and stocks represented through a table.

Results

Very long returns from common stocks are driven by two critical factors: the dividend yield at the time of purchase, and the future growth rate of earnings and dividends. In principle, for the buyer who holds his or her stocks forever, a share of common stock worth is the present or discounted value of its stream of future dividends.

The stock returns are determined by

- ♦ The initial dividend yield at which the stocks were purchased
- ♦ The growth rate of earnings
- ♦ Changes in valuation in terms of price-earnings ratios.

Bond returns are determined by

- ♦ Initial yield to maturity at which the bonds were purchased
- ♦ Changes in interest rates and therefore in bond prices for bond investors who do not hold to maturity.

The three eras coincide with the three broad swings in the stock market returns from 1946 to 2000.

Table 1

	Era I: Age of Comfort Jan 1946 - Dec1968	Era II : Age of Angst Jan 1969 - Dec 1981	Era III: Age of Exuberance Jan 1982 March 2000
Common Stocks	14	5.6	18.3
Bonds(high quality, long term corporate)	1.8	3.8	13.50
Average Annual inflation Rate	2.30	7.8	3.00

Era I, the age of comfort covers the years of growth after World War II. Stock holders made out extremely well after inflation, whereas the meager returns earned by bondholders were substantially below the average inflation rate.

Era II, the age of Angst, widespread rebellion by the millions of teenagers born during the baby boom, economic and political instability created by the Vietnam War and various inflationary oil and food shocks combined to create an inhospitable climate for investors. No one was exempt; neither stocks nor bond fared well.

Era III, the age of Exuberance, the boomers matured and a non-inflationary prosperity set in. It was a golden age for stock holders and bondholders. Never before had they earned such generous returns.

Conclusion

The Age of the Millennium

Although it remains convinced that no one can predict short-term movements in securities markets, we do believe it is possible to estimate the likely range of long-run rates of return investors from financial assets. Looking first at the bond market, we can get a very good idea of the returns that will be gained by long term holders. Holders of good quality corporate bonds, such as those issued by telephone companies, will earn approximately 6 1/2 to 7 percent if the bonds are held to maturity. Holders of long-term zero coupon Treasury bonds until maturity will earn about 5 1/4 percent. Those who buy and hold long-term TIPS (the Treasury's inflation-protection bonds) will earn a real (after inflation) return of 3 3/4 percent. Such a real return is almost double the actual real return bondholders have earned from 1926 through 1998.

We can make reasonable estimates of at least the first two determinants of equity returns. We know that the 1998 dividend yield for the S&P 500 index was 1.5 percent. It is reasonable to assume that earnings can grow at about 6.5 percent over the long term, a rate consistent with historical rates during periods of restrained inflation and similar to estimates made by Wall Street securities firms late in 1998. This rate also reflects the fact that we start out at high employment and capacity utilization levels but takes into account a continuing focus of business management on efficiency and productivity improvement. Adding the initial yield and growth rate together, we get a projected total return for the S&P 500 of 8 percent per year-slightly higher

than bond yields but somewhat below the long-term average since 1926, which had been 11 percent. Of course, the major determinants of stock returns over short periods of time will be changes in the ways equities are valued in the market, that is, changes in market price-earnings multiples or price dividend multiples.

Changes in valuations are fundamentally unpredictable. Thus, all we can do is estimate what returns the market is likely to give us if valuation relationships do not change. And that figure is probably quite close to the 8 percent estimate. Investors should ask themselves, however, whether the valuation levels in the market during the summer of 1998 will in fact hold up. The valuation of U.S. stocks for the first time substantially exceeded the value of the country's total output and industrial stocks were selling well above the replacement value of the firms'.

Part-B

Scope of the Study

The scope of the study is identified after and during the study period. The project is based on tools like fundamental analysis and ratio analysis. Further, the study is based on information of last five years.

The analysis is made by taking into consideration five companies i.e. TATA Motors, Maruti Suzuki and Mahindra and Mahindra.

The scope of the study is limited for a period of five years and to only the fundamental analysis of the chosen stocks.

Methodology

Research design or research methodology is the procedure of collecting, analyzing and interpreting the data to diagnose the problem and react to the opportunity in such a way where the costs can be minimized and the desired level of accuracy can be achieved to arrive at a particular conclusion.

The methodology used in the study, for the completion of the project and the fulfillment of the project objectives.

The sample of the stocks for the purpose of collecting secondary data has been selected on the basis of Random Sampling. The stocks are chosen in an unbiased manner and each stock is chosen independent of the other stocks chosen. The stocks are chosen from the automobile sector.

The sample size for the number of stocks is taken as 3 for fundamental analysis of stocks as fundamental analysis is very exhaustive and requires detailed study.

Industry profile

Financial markets

Finance is the pre-requisite for modern business and financial institutions play a vital role in the economic system. It is through financial markets and institutions that the financial system of an economy works. Financial markets refer to the institutional arrangements for dealing in financial assets and credit instruments of different types such as currency, cheques, bank deposits, bills, bonds, equities, etc.

Financial market is a broad term describing any marketplace where buyers and sellers participate in the trade of assets such as equities, bonds, currencies and derivatives. They are typically defined by having transparent pricing, basic regulations on trading, costs and fees and market forces determining the prices of securities that trade. Generally, there is no specific place or location to indicate a financial market. Wherever a financial transaction takes place, it is deemed to have taken place in the financial market. Hence financial markets are pervasive in nature since financial transactions are themselves very pervasive throughout the economic system. For instance, issue of equity shares, granting of loan by term lending institutions, deposit of money into a bank, purchase of debentures, sale of shares and so on.

In a nutshell, financial markets are the credit markets catering to the various needs of the individuals, firms and institutions by facilitating buying and selling of financial assets, claims and services.

Data Analysis and Interpretations

Analysis of Automobile Industry

Over a period of more than two decades the Indian Automobile industry has been driving its own growth through phases. With comparatively higher rate of economic growth rate index against that of great global powers, India has become a hub of domestic and exports business. The automobile sector has been contributing its share to the shining economic performance of India in the recent years.

To understand this industry for the purpose of investment we need to analyze it by the following approach.

- ◆ Fundamental Analysis (E.I.C Approach)
- ◆ Economy analysis
- ◆ Industry analysis
- ◆ Company analysis

- ◆ **Fundamental Analysis**

Fundamental analysis is the study of economic, industry and company conditions in an effort to determine the value of a company's stock. Fundamental analysis typically focuses on key statistics in company's financial statements to determine if the stock price is correctly valued.

- ◆ **Economy Analysis**

Economic analysis is the analysis of forces operating the overall economy a country. Economic analysis is a process whereby strengths and weaknesses of an economy are analyzed. Economic analysis is important in order to understand exact condition of an economy.

Today, automobile sector in India is one of the key sectors of the economy in terms of the employment. Directly and indirectly it employs more than 10 million people and if we add the number of people employed in the auto-component and auto ancillary industry then the number goes even higher.

As the world economy slipped into recession hitting the demand hard and the banking sector takes conservative approach towards lending to corporate sector, the GDP growth has downgraded it to 7.1 per cent for 2008-09 and it has increased to 8.6% in 2010 by overcoming the setbacks of recession.

- ◆ **Industry Analysis (Automobile)**

The automobile industry in India is the ninth largest in the world with an annual production of over 2.3 million units in 2008. In 2009, India emerged as Asia's fourth largest exporter of automobiles, behind Japan, South Korea and Thailand. The Automobile Industry is one of the fastest growing sectors in India. The increase in the demand for cars, and other vehicles, powered by the increase in the income is the primary growth driver of the automobile industry in India. In 2009, estimated rate of growth of India Auto industry is going to be 9% .The Indian automobile sector is far from being saturated, leaving ample opportunity for volume growth.

◆ Company Analysis

The company analysis shows the long-term strength of the company that what is the financial position of the company in the market, where it stands among its competitors and who are the key drivers of the company, what are the future plans of the company, what are the policies of government towards the company and how the stake of the company divested among different groups of people. Here, I have taken three companies namely TATA Motors, Maruti Suzuki and Mahindra and Mahindra for the purpose of fundamental analysis.



Tata Motors Limited is India's largest automobile company, with consolidated revenues of Rs. 92,519 crores (USD 20 billion) in 2009-10. It is the leader in commercial vehicles in each segment, and among the top three in passenger vehicles with winning products in the compact, midsize car and utility vehicle segments. The company is the world's fourth largest truck manufacturer, and the world's second largest bus manufacturer.



Maruti Suzuki is a subsidiary of Suzuki Motor Corporation Japan. More than half the numbers of cars sold in India wear Maruti Suzuki badge. They offer a full range of cars – from entry level Maruti 800 & Alto to stylish hatchback Ritz, A star, Swift, Wagon R, Estilo and sedans Dzire, SX4 and Sports Utility Vehicle Grand Vitara. Since inception, it has produced and sold over 7.5 million vehicles in India and exported over 500,000 units to Europe and other countries. Its turnover for the fiscal 2008-09 stood at Rs. 203,583 Million & Profit after Tax at Rs. 12,187 Million.



The Mahindra Group's Automotive Sector is in the business of manufacturing and marketing utility vehicles and light commercial vehicles, including three-wheelers. It is the market leader in utility vehicles in India since inception, and currently accounts for about half of India's market for utility vehicles. The Automotive Sector continues to be a leader in the utility vehicle segment with a diverse portfolio that includes mass transport as well as new generation vehicles like Scorpio, Bolero and the recently launched Xylo.

Table 2**Ratio analysis of Tata motors, Maruti Suzuki and Mahindra & Mahindra**

Earnings Per share					
Years	Mar 07	Mar 08	Mar 09	Mar 10	Mar 11
TATA MOTORS	37.59	47.10	50.52	18.81	39.63
MARUTI SUZUKI	40.65	53.29	59.03	41.57	85.43
MAHINDRA & MAHINDRA	43.10	44.54	30.60	35.58	43.69

Interpretations

EPS measures the profit available to the equity shareholders per share, that is, the amount that they can get on every share held. Till 2009 TATA and Maruti had a rising EPS but in 2010 both of them fall and the effect is more on Tata motors because of the slump in domestic and international markets and sharp fall in sales and net profits which resulted in low EPS. In 2009 Mahindra is showing less EPS because of economic slowdown. But its sales have increased from the previous year shows Mahindra motors has potential so a shareholder can expect better in future.

Table 3**Sales**

Sales					
Years	Mar 07	Mar 08	Mar 09	Mar 10	Mar 11
TATA MOTORS	31611.21	32885.03	28088.35	37795.71	51183.95
MARUTI SUZUKI	17205.90	21025.20	23180.60	31947.70	40590.50
MAHINDRA & MAHINDRA	11183.50	12866.30	14513.87	20156.92	25555.02

Interpretations

Maruti and Mahindra show a positive trend in sales over the past five years. Though slowdown in the economy brought hurdles but these companies have potential to grow in future as lots of products are still to add in their portfolio. Moreover increased demand in foreign market also seems to be a positive signal for better future. TATA has witnessed a decline in sales in year 2009 but it again rise sharply in year 2011 and having a highest sales among the competitors. It shows TATA having a potential to grow in the market in coming future. Maruti and Mahindra are going swiftly.

Table 4 Dividend per Share

Dividend per share					
Years	Mar 07	Mar 08	Mar 09	Mar 10	Mar 11
TATA	15	15.01	8.08	16.71	23.67
MARUTI	4.5	5.00	3.50	6.00	7.50
MAHINDRA	11.86	11.82	10.23	19.51	25.03

Interpretations

Tata motors and Maruti Suzuki both the companies showed a positive trend in paying dividends till 2008, but the scenario changed in 2009 as both the company's dividend per share fell. Tata's dividend has fallen drastically while Maruti stick to below 5 per share. Mahindra has made a slight reduction from rs.11.8 per share in 2008 to rs.10 per share this year. Since Mahindra has not lost much value it is the best option for an investor.

Table 5 Return on investment

Return on Investment					
Years	Mar 07	Mar 08	Mar 09	Mar 10	Mar 11
TATA	27.85	25.88	8.07	15.13	9.05
MARUTI	22.79	20.56	13.04	21.10	16.50
MAHINDRA	30.07	25.36	15.96	26.67	25.81

Interpretations

ROI is one of the most important ratios used for measuring the overall efficiency of a firm and determines whether the investments in the firms are attractive or not. According to the graph, ROI of TATA has declined to a large extent in 2009, making it a quite risky investment. Maruti's ROI has also declined but Mahindra's ROI is showing a higher rate compared to TATA and Maruti in 2009. As investors would like to invest only where the return is higher, Mahindra would be attractive for investment.

Table 6
Price-Earnings Ratio

P/E Ratio					
Years	Mar 07	Mar 08	Mar 09	Mar 10	Mar 11
TATA	2.79	0.60	8.14	6.65	6.25
MARUTI	18.31	8.68	39.68	16.43	11.62
MAHINDRA	9.59	2.98	17.61	21.08	15.07

Interpretations

This ratio is widely used by investors to decide whether or not to buy shares in a particular company. As per the graph, in 2008, the P/E ratio of the three companies was the lowest compared to 2007. Mahindra has the highest P/E ratio in 2009 which indicates that it is overvalued, so investors can benefit by selling the shares. An investor can go for TATA as its P/E ratio is the lowest in 2009 which indicates that it is undervalued and there is a scope for growth in the future.

Findings

From the data analysis and interpretations of the ratios of three companies' viz. Tata Motors, Maruti Suzuki and Mahindra and Mahindra, the following findings have been given:

The three companies were performing well till 2008 with a positive trend in the earnings per share. But there was a downward trend in 2009. Especially, Mahindra has witnessed a steep fall in the year 2009.

The sales trend has been upward and positive in case of all the three companies. The sales growth looks positive but in the year 2009, TATA's sales have declined whereas Maruti and Mahindra have maintained the same upward positive trend.

In case of dividend per share, there were fluctuations during the period 2005- 2009. Due to recession, the dividends per share have declined in all the three companies. Tata's dividend has fallen drastically while Maruti stick to below 5 per share. Mahindra has made a slight reduction from rs.11.8 per share in 2008 to rs.10 per share this year.

By analyzing the current trend of Indian Economy and Automobile Industry I have found that being a developing economy there is lot of scope for growth and this industry still has to cross many levels so there are huge opportunities to invest in and this is being proved as more and more foreign companies are setting up there ventures in India.

Conclusion

The Automobile industry in India is the seventh largest in the world with an annual production of over 2.6 million units in 2009. The collapse in market place witnessed unprecedented turbulence in the wake of global financial meltdown. A runaway inflation touching a high point of 12% early in the year, the tight monetary policies followed by the authorities for most of the year to control inflation with the consequent high interest rates and weak consumer demand, have collectively had a devastating effect on the automotive sector. Maruti Suzuki India LTD. Company has a trend of growth from till 2008. During the financial year 2008-09 there is downfall in the growth of the company. The main reason behind this downfall is because of the global recession. The downfall of net profit during the financial year 2008-09 is 29.6% over the financial year 2007-2008. TATA Motors, which was trying to consolidate its leadership position in the market, also had to face the impact of global meltdown.

Inspite of it being a tough year for all the companies across the globe and in India, Mahindra has given a satisfactory performance. At present its shares are undervalued giving it a potential for growth. Global recession had a dampener effect on the growth of automobile industry but it was a short term phenomenon. The industry is bouncing back. One factor favoring this point is that India has become a hot destination for companies of diverse nature to invest in. Cut throat competition among top companies, lots of new car and vehicle model launches at regular intervals keeps the Indian auto sector moving.

References

Burton G. Malkiel (2012). A Random Walk Down Wall Street: The Time-Tested Strategy for Successful Investing. W. W. Norton & Company.

Web References

Part-A

<http://www.forecast-chart.com/historical-dow-industrial.html>

<http://www.nasdaq.com/markets/global-markets.aspx>

Part –B

<http://www.moneycontrol.com/stockmarketsindia/>

<http://capitaline.com/user/framepage.asp?id=1>

