

**Research Proposal**

**Stock Market Efficiency: Is the US Capital Market**

**Really Efficient**

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### **Research Question**

The following proposal aims at testing the Stock Market Efficiency and to determine whether the real life scenarios pertain to the theoretical ideas of an efficient capital market. The primary objective of this report is to sketch the reality about stock markets and to provide a set of guidelines to amateurs. In this context the Us stock market will be tested and the results attained would be used as the basis for answering the following questions

1. *Are Stock Markets really Efficient?*
2. *How far does the Efficient Market Hypothesis hold true in a functioning market?*

### **Research Objectives**

As mentioned above, the primary aim of the assignment is to analyze stock markets and to test for their degree of efficiency. In this regard some of the long held theories will be tested and deductions will be made as a result of an extensive research of the ground reality. Hence a number of important aspects of stock markets will be examined in order to achieve the stated aim:

- Political conditions of United States and condition of its 'War against Terror'
- The Status of the current US Capital market
- Trends in the US Stock market for the last six months
- A brief overview of the US Capital market since the economic of the 1990's
- Extent of the availability of information to the buyers and sellers
- Extent of irrationality in the market

- Analysis of the high performing companies in the market like Starbucks
- Analysis of the availability of unique information and the existence of out-performers
- Extent of reflection of future information through stock prices
- Analysis of the barriers to the existence of an amateur
- Test of the extent to which stock price movements are random or trendy
- Qualitative data gathering; interviews and open ended questions and their analysis for making them comprehensible.
- Putting forth a strategy as a recommendation for future course of action to help the investors in their venture in the US market

This is an extensive assignment and would require tremendous research work, and scheduling is an important portion of this report, as without appropriate time management, the meeting of deadlines would not be possible. A number of people will have to be interviewed and a broad qualitative analysis would be required to achieve the goal of this research.

## **Background**

‘Stock Market Efficiency’ is the key phrase that will be concentrated on throughout the research.

Stock Market is a term that refers to a concept for the mechanism that enables the trading of company stocks (collective shares), other securities, and derivatives. Stock markets take their roots from the early 17<sup>th</sup> Century and today the worldwide market is estimated to have a value of excess of \$51 trillion.

Economists define market as a place where buyers and sellers meet and a transaction is reached between the two, the same theory applies to a stock market. It offers a platform for the buyers and sellers of stocks to interact and cause a transaction. These buyers and sellers are mostly the investors and institutions but the ordinary even has access to the stock exchange.

Stock exchange is the heart of a stock market, it is a physical location where transactions are carried out on a trading floor, by a method known as open outcry. This type of auction is used in stock exchanges and commodity exchanges where traders may enter verbal bids and tenders simultaneously. By a general rule buyers would buy only if they feel they are underpaying and sellers would sell when they think they are being overpaid, a negotiation between the two is the key and this is brought about by the existence of a broker.

Like commodity market, the market for stock is also subject to variations in prices and the success of the market revolves around the successful prediction of future price trends. This deduction is made with the help of information available in the market.

### **Market Efficiency**

By the definition of economics a market is efficient when the prices of commodities accurately reflect the current information and the conditions prevailing in the market. Viewing it in terms of the Capital Market it refers to a market in which new information is very quickly and accurately reflected in share prices.

For a market to be efficient it has to be large and liquid. Information has to be widely available in terms of accessibility and cost, and released to investors at more or less the same time. Transaction costs have to be cheaper than the expected profits of an investment strategy. Investors must also have enough funds to take advantage of inefficiency until, it disappears again. Most importantly, an investor has to believe that she or he can outperform the market. Outperforming refers to the ability of an investor to take advantage of the fluctuating prices.

An efficient market is assumed to be free of out-performers and this is where the real objective of the report comes in i.e. determining whether the markets are efficient, inefficient or a compromise. Stock markets throughout the world at large are not free of out-performers. Giant investors are dominating stock markets throughout the world be it be US, UK or even Pakistan, in these circumstances it becomes important to determine whether the existence of out-performers just another aspect of efficiency or is it the main reason for the fierce stock market crashes of the 20<sup>th</sup> century.

### **Importance of Stock Market Efficiency**

Last two decades and especially the dawn of the 21<sup>st</sup> century has seen a lot of interest developing in the stock markets and investments in this sector of the economy has increased to record levels it is thus imperative to determine the efficiency of the market, as it affects the economy of a country at large. Three possible reasons can be cited that account for the importance of the Capital Markets.

- **To encourage share buying:** Accurate pricing is required if individuals are to be encouraged to invest. If shares are incorrectly priced many potential candidates will refuse to invest due to the fear of a perverse price at the time selling, which may not represent the fundamental attractions of the firm. Such an action seriously reduces the availability of funds to companies and inhibits growth. Investors need to be confident that they are paying a fair price and that they will be able to sell at a fair price. Thus an efficient market gives investors a chance to play a fair game. Provisions regarding this aspect would improve the stakeholders trust in the company and larger investments would hence result in the economic growth that would benefit the company and the economy at large.
- **To give correct signals to company managers:** The maximization of shareholder wealth will be represented by the share price in an efficient market and thus sound financial decision-making relies on the correct pricing of the company's shares. In implementing a shareholder wealth-enhancing decision the manager will need to be assured that the implication of the decision is accurately signaled to shareholders and stakeholders through a rise

in the share price. It is important that managers receive feedback on their decisions from the share market so that they can be encouraged to pursue with shareholder wealth strategies.

- **To help allocate resources:** Allocation efficiency requires both operating efficiency and pricing efficiency. If a poorly operated company in a waning industry has highly priced shares because the stock market is not pricing appropriately then this firm will be able to issue new shares, and thus attract more of society's savings for use within its business. This would be socially unethical as the money spent in the company could have been better utilized elsewhere, but with the current company the invested sum would inevitably be wasted.

All the above points stress the importance of efficiency in the stock market and hence highlight the functionality and relevance of the research work to be carried out as its implications to the market are huge.

### **Efficient Market Hypothesis**

Researches have been conducted previously and various theories have been developed to trace the behavior of stock markets. One of the most theories in this regard is the Efficient Market Hypothesis (EMH), formulated by Eugene Fama in 1970. Thus, according to the EMH, no investor has an advantage in predicting a return on a stock price since no one has access to information not already available to everyone else.

The above stated theory is widely accepted but, whether this theory actually holds true is what will be tested as one of the most important aspects of this research. EMH

undermines the role of investors in the market and the above theory has been tested and analyzed throughout the years by various researchers, hence a lot of published material is available in this regard which will be utilized in analyzing it.

### **Study of political situation in US**

Political stability is the major differentiating factor between an efficient and inefficient market. Instable political conditions especially in the Third World countries results in the stock markets being manipulated by the governments. It is imperative to study the effect of political situations on market efficiency.

A number of anomalies result in the irrational behavior of the market, whether or not such an attitude is applicable in the US market and the extent of its pertinence will be tested through a comparison of the stock market patterns and political conditions for the past five years.

The above literature will be used as the basis to proceed with research that primarily aims at determining the degree of efficiency in the real markets, the extent to which stock prices are susceptible to irrationality and outperforming and the level of pertinence of EMH in the real markets.

### **Methodology**

The focus of this section is to determine how the data would be collected, gathered and analyzed. Selection of correct data collection procedure is the key so as to hit the right spot and to collect relevant information. The data collection would involve both primary and the secondary research.

**Secondary Research**

This research would more be based on qualitative factors and procedures for data gathering rather than numbers and quantifiable values. There are loopholes of this procedure such as:

- Extensive complexity associated to analyzing the qualitative data, because comprehension of qualitative data and its judgment depends on the nature and knowledge of the individual analyzing it.
- There are no standardized data categories or collection mechanisms within the predefined methods and techniques of data collection.

For the maximum appropriateness and to eliminate the biasness associated to the judgment of data, the initial data gathering shall be through publications published electronically as well as in forms of magazines, and web links. The findings from this literature shall be merged with the data collected from other sources primarily to eliminate biasness of opinion (as mentioned earlier) and to add credibility to the findings. A number of magazines and journals have been selected the details of which has been provided in the bibliography in the end.

One limitation associated with the secondary research is the absence of latest information and point of views of the people involved in order to determine a primary research will also be conducted.

### **Primary Research**

A number of methods will be utilized in collecting data from the ground sources, these are:

- Personal Interviews with the managers of companies.
- A panel interview with a number of brokers
- A Telephone Interview with some influential capital market personals

One of major limiting factor in the above is that of time, as it will be difficult to get time from these personals. Moreover designing a questionnaire will also be a complex task as it will be required to cover the relevant points presented in the best way possible. Finally analysis of the qualitative data would again be a difficult task for which published help will be taken and a conclusion would be based on the results of the primary and library research.

### **Timeline**

Following table shows the weekly distribution of the time that will be required to complete the project report

<b><u>Weeks</u></b>	<b><u>Task</u></b>
1	<b>Synopsis Submission</b>
	<b>Secondary Research:</b>
2	1. Standard Texts
3	2. Academic Journals
4	3. Published Articles
5	4. Published Journals
6	5. Magazines

7	6. Internet Resources
8	7. Online Databases
9	8. CD ROM Databases
10	Write up findings
11	Research methods of data collection
	<b>Primary Research/Data Collection:</b>
12-13	Write up interview questions
14	Contact GAP for interview permission
15	Carry out GAP interviews
16	Find volunteers for Focus Group
17	Write up discussion topics
18	Conduct Broker interviews
19	Conduct Broker interviews
20	Write up findings
21	Dissertation written and typed
22	Proof reading and amendments
23	Dissertation sent for binding
24	<b>Dissertation Submission</b>

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