IJISET - International Journal of Innovative Science, Engineering & Technology, Vol. 6 Issue 4, April 2019
ISSN (Online) 2348 – 7968
www.ijiset.com

Impacts of Interest Rate on Stock Market: Challenges for Investors

Nepal Ramsharan, BCA, EMBA, DBA/PHD

Abstract

The article is about the stock market and the impacts of interest rate on stock prices. Objective: The objective of the paper is to identify the challenges faced by an investor due to changes in interest rates. Methods: The research is exploratory in nature. Area of Study: The coverage is the industrial sector, stock market and government sector. Multiple books, PDFs, online resources like articles, journals and magazines have been employed to come out with the conclusion. Findings: After the heavy efforts on our research model we came to know that the stock market and interest rates are inversely related. The small changes in interest rate may cause a big change in the stock market. With the fluctuation in the stock market the investor finds insecure investment which is a bigger challenge for the economy since investment is the source of productivity and economic growth. Hence government should maintain a investment friendly environment to protect the investor and promote economic growth.

Keywords: Interest Rate, Stock Market, Fluctuation, Investment Friendly Environment.

1.

1.1 Introduction

It is simple to say that one always seeks a good return upon the investment. I am trying to talk here about the investor and stock market. This paper has been designed to see how an investor plays in the stock market and the challenges one can face. We don't limit the paper here also some of the tackling tools will be discussed. Investment is return oriented and stock market is the one where investment on stocks takes place. Will Kenton(2019) defines the term stock market as collection of market and exchanges where buying, selling and issuances of shares of publically held companies take place. So it means the stock market is a big market composed of share transactions. There are several organizations or institutions those are holding such transactions. Stocks are traded at certain rates and it is changeable every day. So the rate or return also varies as per the change in interest rate. A good investor always seeks a good rate of return to make investment.

The stock market does not include only the shares but also bonds and various other securities are also transacted. It provides a secured environment to bring numbers of stock holders and buyers. Traditionally stocks were used to be transacted based on paper ownership and it was quite important to meet for the transactions. Now due to technology and availability of several smart devices the transactions has been changed into electronic. So E-Certificates can be generated and the transactions can be made at distance as well. But along with the arising new technology and flaws in the technology security has become a serious concern for all. Numbers of false and fake businesses have been created in the website. One can easily fool an investor with the fake profile. So along with the developing and transforming marketing trend risk factors are also suffering. The market is the platform which is trying to minimize these risks by using control mechanisms. There is a leading force of the market called interest rate. Mary Hall (2019) has defined as a discount rate which is charged for borrowing money in his paper entitled with "How Do Interest Rates Affect the Stock Market?" He says that it depends on supply of money. If the money supply decreases the higher demand for money pushes up the interest rates and vice versa. This paper is trying to dig out the relationship between the stocks and interest rate and multiple challenges that an investor faces in the stock market.

1.2 Background

Going back to the history of stock and stock market we can get clear idea of what does the term stock refer to and how stock market is composed of? Stock market has its own long history and different authors have published many articles to point out the starting of stock exchange. It seems that there were no formal stock markets before 15th century although the similar other markets were existing there. In the Johnson Hur's paper "History of the Stock Market" he has mentioned different phases of the stock market and early to future of stock market. According to his paper it is clear that the brokerage was the first firm of stock in the market in the 11 the century. Similarly in the 13th century government in the European Countries started to trade securities in the market. For the very minute detail of the history of Stocks we can have look into the following table with the timeline.

History of Stocks

Major incidents in the early phase of stocks

Date	What Happened?	Remarks
11th Century	Brokerage started	Effectively traded debt.
13th Century	Government Securities started trading in Pisa, Florence etc.	
14- 15th Century	World's First Stock introduced in Antwerp.	Antwerp the Commercial Centre of Belgium.
16th Century	East India Company was formally established.	Used the limited liability formula.
1602 AD	Dutch East India Company officially released the shares.	Amsterdam Stock Exchange.

1825 AD	Government of UK banned for some time to issue shares.	Company stopped paying dividends.
1801 AD	London Stock Exchange was formed.	
1817 AD	New York Stock Exchange	NYSE
1861 AD	Canada first Developed its stock market.	Third largest market.
1929 AD	Economic Depression.	Doe Jones loosed 50% of its value.
1971 AD	NASDAQ was created.	
2007 AD	NYSE Euronext was formed.	Merging of two stock markets.
2008 AD	Economic Crisis.	
19^{th} and 20^{th}	Plenty of stock markets opened.	

Although the plenty of the markets were working in the business there was no system of trading company shares and stocks. Only government was selling securities in the limited country and context. The system of business and individual debt was quite popular instead. The East India Company is termed as publicly traded company. It is mentioned in the Johnson's paper and in other articles as well for several times. East India is the first to introduce and use the limited liability formula. It means the company and the owner is limited to pay how much they have invested and no one can claim on the personal property at the time of company's liquidation.

We can say that Amsterdam Stock Exchange market was the first to trade shares in the market. Dutch East India Company issued their shares in this market and formally it was traded. As per the rule of the company the investors were given bonds and the stocks and promised a certain percentage of company profits as a return. It is little bit interesting to say that the coffee shops and café were chosen as a place to make trading activities. Since the stocks were handwritten that time the investor and the broker or any agent used to meet at the coffee shop and make a deal. The process used to be quite faster and easier to make it less crowd and even without ordering coffee.

In the 1825 the government of United Kingdom banned from issuing shares and stock transactions were totally stopped for some time. The reason was due to sudden appearance of multiple firms and issuance of numerous stocks over a night. It became a good business and slowly changed into fraudulence. The company stopped paying dividends to the stock holders or to say investor. After some time along with the newly introduced proper rules and regulations the stock exchanges again appeared and continued. But this time there was legitimate standard and the almost impossible to do any fraud.

1.3 Problem Statement

a. Research Objective: To identify the challenges faced by investors due to change in highly liquated interest rates.
b. Research Questions:
    - How to differentiate good interest rate and bad interest rate?
    - What are the best strategies for investor to be benefited?
    - Why does interest rate changes?
    - What are the relationships between investor and interest rates?
    - How do securities, bonds and stocks rates fluctuate?
    - What are the obstacles faced by an investor due to such changes?

1.4 Scope of the Study

The scope of this study is to cover Industrial sector, Government Sector, Stock market and E-Commerce.

2. Literature Review

We have gone through multiple literatures for this research. Most of the papers look similar and some of them are quite similar to our research areas as well. Due to space and content limitation we cannot address all the papers here. So we have enlisted the following:

a. Jim Berg (2011) has mentioned some important terms used in the stock market. The most frequently used terms have been clearly defined in the paper in order to give clear idea before entering into the investment or trying to know about the market. One finds harder to understand the terminology in the market. So with the help of this article we took some terms in our paper as well. We might have frequently heard about the term arbitrage which means to find the better market with relative benefits. There are several such terms used in the paper which can be helpful for the market understanding.
b. Victor Murinde (2006) has introduced some challenges and roles of capital market in the paper entitled with "Capital Market: Roles and Challenges." The objective of the paper is to identify the roles and challenges of the capital markets in Africa. There are several unresolved issues, liquidation and some the territory of markets. The paper talks about the capital markets in terms of consumption, investment and economic growth. Since the paper is more especially focused in Africa. It talks about the micro and macroeconomic environment which determines the overall structure of the market.
c. Md. Gazi Salah Uddin(2009) mentions the relationships between interest rates and stock market in his paper "Relationship between Interest Rate and Stock Price: Empirical Evidence from Developed and Developing Countries." The objective of the paper is to identify the relationship between interest rate and the share prices. The

changes in the interest rate has obvious impacts upon the market so to minimize the market risks, understand the monitory policy and fiscal policy it is important to know the relationship.

d. Keith C. Brown and Michael V. Raymond have mention the risk management and corporate takeovers in the market in the paper "Risk Arbitrage and the Prediction of Successful corporate takeover." The objective of the paper is to clarify the arbitrage opportunity and the risk minimization generated by the arbitrage situation in the corporate world. We can take idea of risk identification and tackling those obstacles in the stock market which is the implication of this paper here.

3. List of Hypothesis

a. Stock market is highly volatile and risky.
b. Interest rates and stock prices are inversely related.
c. More volatile interest rates generate more challenges in the market.

4. Data collection, Discussion and Results

After getting a map of whole research we need the information either in the form of already proven facts or raw figures. As already mentioned that this paper has resources from multiple sources like already published papers, journals, industrial reports etc. we are sticking to that information here. So far stock exchange market concerns there are several stock exchange markets actively competing with each other. The best stock is with the best interest rate or to say return. The currently published article presents the following top 10 stock market and the corresponding market capitalization. The paper entitled with "List of Stock Exchange in the World" by Suri Gangula has given short explanation about the market as well.

List of World's Top 10 Stock Market

SN	Stock Exchange, Country	Market Capitalization
1.	New York Stock Exchange, USA	$19.223 Trillion
2.	NASDAQ, USA	$6.831 Trillion
3.	London Stock Exchange, UK and Italy	$6.187 Trillion
4.	Japan Exchange Group, Japan	$4.485 Trillion
5.	Shanghai Stock Exchange, China	$3.986 Trillion
6.	Hong Kong Stock Exchange, Hong Kong	$3.325 Trillion
7.	Euronext, UK, Belgium, Portugal, France, and Netherlands	$3.321 Trillion
8.	Shenzhen Stock Exchange, China	$2.285 Trillion
9.	TMX Group, Canada	$1.939 Trillion
10.	Deutsche Borse AG, Germany	$1.762 Trillion

These ten of the stock exchange market are leading market in the world which have leading role to determine the changes or to say fluctuation in the other small to bigger markets. Now-a-days, each of the country has their own stock market and the rate of interest also varies as per the market. The above mentioned 10 of the markets also have their own return rates.

Before entering into the stock market challenges and investors risks let me give some idea of interest rate. This is the cost of the money which one has to pay back for the use of someone else's use of money. Either bank, government or an individual can provide the loan. But there are some interesting factors which affects the interest rates. Kimberly Amadeo (2019) has published one article called "How Interest Rates Are Determined?" Mainly there are three forces described in the article.

a. Federal Reserve (FED) affects short-term Interest Rates

   This is the interest rate that a bank charges to another bank for the reserve requirements. So the rate charged for the fund also makes changes in interest rates.

b. Treasury Investors

   For treasury investment there are separate rate of interest since they are for long term normally of 30 years. Such loans are for lease property, education, Furniture or something big. Since they don't follow the fed reserve fund rate it is also another force to create direct impact on the market interest rates.

c. Bank's interest rates

   People ask banks for the loan with the purpose of either business, housing, or any individual need. The bank has its own policy for the different sorts of loan. This rate of interest does not follow the fed reserve rate or any treasury fund rate. So it has also been another factor or force of interest rates.

What is the relationship between the stock market and interest rates?

Marry Hall (2019) has shown the clear picture of inverse relationships between interest rates and stock prices in the article "How Do Interest Rates Affect The Stock Market?" We discussed about the forces determining the interest rates in the market. Out of three the most important is the Federal Reserve fund rate. This is the rate of interest rate which a Reserve Bank or Central Bank charges to other banks for the borrowing money. So the central bank plays a controlling role here. If the stock market is suffering by higher rate of stock prices and the rate of increase in stock is highly liquidated then central bank makes indirect control to balance this situation. The bank decreases the money supply to the other bank by increasing Reserve Fund rates. Consequently, the financial institution increases the interest rates to its consumers. The rational consumer does not borrow the money with higher rate of interest. And due to higher supply of stock and lower demand for the stock will decrease the price of the stock. This is the vice versa in other case too. In this way the stock market is balanced and interest rates and stock prices maintain inverse relationship.

After the discussion we came to know the following possible challenges for investor in the market:

4.1 Highly Fluctuating Interest Rates

This is the biggest and the frequent challenges that one can face as an investor. Since the central bank of one country changes its Reserve Fund rates frequently to keep control upon inflation the result will have direct and indirect impacts on interest rates. The rise of the Fed rate will decrease the supply of money in the market and vice versa. If there will be very higher level of increase in Fed rate then it's obvious that the monetary shortage will increase the interest rate in the market. No business firms want to borrow money from bank to buy stock of the company and the company cannot collect fund for the economic activity. So there will be the loss if someone is in need of money and has to sell the stock that he/she is holding since the stock price is lower in the market. Also a producer finds decrease in productivity due to the highly affected fund of the industry. Hence it can be a bigger challenge for the investor or any entrepreneur.

4.2 Higher Inflation Rate

Jean Folger (2019) defines the inflation as the increase in the price of goods and services. We can see the impacts of interest rate on inflation and inflation to interest rates. Our concern here is to see the impacts of this relationship to investor. The interest rate is determined by central bank which is also called Reserve Fund. The fund rate is maintained for those who borrow from the central bank. As the inflation increases the value of the money goes down. So the same thing we are paying $100 today will be $105 tomorrow. It seems that money will have lesser value the next day. So the investors who are holding money want to compensate themselves through the interest rate. It's not that that much easy to immediately increase the rate of interest. So it is a challenge in the market.

4.3 Government Interference

Government role comes via central bank indirectly and direct is to declare something in the market. Sometime takes over the company under control. There are several examples of such government actions in the world market. The stock holder and investor have to pay very big value since either they will be compensated very less or nothing at all. Also the central bank can increase the interest rate or make decrease unexpectedly. It may cause sudden fluctuation in the demand and supply of money in the market. Consequently, the investor may suffer via huge losses.

4.4 Technology and the Fraud

The pace of technology has changed the world's business pattern drastically. It's been highly digitalized and advanced. Along with the changing technology and online means to make transactions the fraudulence has also been increased. There are several companies available in the internet with very high technology. But some of them are not in the government directory. People are lured with higher returns and with the greed of such high value they make blind investment. As a result they get nothing at all. Scamming, monetary fraud, fake calls and several examples are there in the market which are misusing the technology means. Investor finds hard to identify such fraud and wasting their money for no return at all. Also the information volume has been increased and it is very tough to process and come out with the true finding.

4.5 Unstable Economy

The world's economy is highly unstable. Every day there are several changes in the economy. Increase of decrease in interest rates, inflation and depression. These results are quite enough to liquidate the economic stability. As a result the economy may enter into the financial crisis which is a very sensitive issue in the market. The financial crisis may alter everything in the market. Stock value will go to very lowest point and the investor and the company will lose very huge amount of money with this. No one can predict in the very unstable market. The world economy is highly globalized and the markets and the firms are competing globally beyond the country's territory. It can be a biggest challenge for the investor to forecast the crisis and make a wise investment.

5 Conclusion

The very last moment of this paper I would like to say that the market is very hard to predict and make a forecast. Every investor and business firms they may have trend analysis and probability tools. But sometime things happen which is out of the box. The sudden fall and rise in economy is the one which is inviting the economic crisis in the market. So investor has to be very aware with the unstable market. Also the digitalized world has brought the several challenges in the market. Due to excessive misuse of the technology the fraudulence has been increased. It is also a headache in the market. There are several stock markets in the world which are fighting with each other. But the competition sometime turns into the unhealthy strategic forms. It may ruin the market of both parties and investor finds unsafe in such market. As we know if someone makes investment then it is possible to utilize into the production of goods and services. The increase in production is the growth in the economy. So government has to understand that the source of economic growth is the investment and investor are the one and only means who makes it happen. It means the government and the stock markets should develop and implement the rules, regulation and overall environment investment friendly.

References

Jean Folger, 2019, "What is the Relationship between Inflation and Interest Rates?" paragraph 1-4.

Jim Berg, 2011, " A to Z of the Stock Market."

Johnson Hur, "History of Stock Market". The article is available at http://www.bebusinessed.com/historyofstockmarket/?

Keith C. Brown and Michael V. Raymond, "Risk Arbitrage and the Prediction of Successful Corporate Takeovers." Par:1-3.

Marry Hall, 2019, "How Do Interest Rates Affect The Stock Market?" Available at http://www.investopedia.com/interestratesandstockmarket/

Mary Hall, 2019, "How do Interest Rates Affect the Stock Market?" Par. 2-5.

Md. Gazi Salah Uddin, 2009, "Relationship between Interest Rate and Stock Price: Empirical Evidence from Developed and Developing Countries."

Suri Gangula, "List of Stock Exchanges in the World." Available at http://www.google.com/worldstockmarket?/

Victor Murinde, 2006, "Capital Market: Roles and Challenges." Available at http://www.afdb.org/capitalmarketchallenges/

Will Kenton, 2019, "Stock Market." Available at http://www.investopedia.com/stockmarketdefinition?/