Asian Journal of Applied Science and Technology (AJAST)
Volume 1, Issue 1, Pages 50-55, February 2017

A Global Perspective of Varying Interest Rates in International Markets

Dr. Arijit Maity[#]

[#]*Associate Professor, Management Department, Budge Budge Institute of Technology, India. Email: dr.arijitmaity@gmail.com*

Article Received: 07 February 2017 *Article Accepted: 16 February 2017* *Article Published: 21 February 2017*

ABSTRACT

An interest rate is the quantity of interest due per period as a proportion of the amount lent, deposited or borrowed. The first aim of this study is to know about the interest rates prevailing with countries and to analyze the impact of interest rate towards international currency pairs. For this purpose, the currencies of four countries have been taken and they were compared with the interest rate to know their impact. The conclusion clearly reveals that the interest rate changes has an impact towards the market in mid and long term basis with all the currencies taken for the study. Monetary policy is the mechanism by which the monetary authority of a country regulates the supply of money to ensure the price stability and general trust in the currency. The second aim of the study is to analyze the impact of monetary policy and its impact on international markets. The study is all about analyzing the volatility of Forex market in different GMT'S. The need of the study is to know about the price variations in different timings of the market when there is day shift process accordingly. This type of research design has been undertaken for analytical design since the pricing movements of bullion markets are analyzed.

Keywords: Interest rate, international market, volatility, monetary policy and investor.

1. INTRODUCTION

The entire interest on an amount lent or borrowed typically depends on the principal sum, the interest rate, the compounding frequency and the overall length of time over which it is lent, deposited or borrowed. It is arbitrarily well-defined, as the proportion of an amount loaned which a lender charges as interest to the borrower, is typically articulated as an annual percentage. It is the rate, a bank or additional lender charges to borrow its money, or the rate a bank pays its savers for keeping money in an account. Annual interest rate is the rate over a period of one year. Other interest rates smear over different periods such as a month or a day, but they are frequently annualized [4-6].

International interest plays a key role towards their economy, which has been a regulating measure for the monetary policy of the economy. The market fluctuations with international cross currencies vary according to the impact with monetary policies of their country, and interest rate is one of the fiscal policy used to regulate the monetary measures of the economy. The interests with the banks are fixed by the corresponding central banks to regulate the money flow of the country [7-9]. Forex, diminutive for the Global Foreign Exchange Market is the leading single financial market in the globe. Job Monkey comprises a segment on this theme because Forex trading could be completed just about anywhere with an Internet connectivity.

Numerous traders are able to make extra money over and above what their real-job delivers - occupied from home. Likewise, called the Currency Exchange, the FOREX is the financial field where currencies from dissimilar nations are exchanged for one another (with the corresponding of over 4 trillion dollars shifting hands daily according to the FX Street). Forex is not a corporal market like the AMEX (American Stock Exchange) or the NYMEX (New York Mercantile Exchange) but more of a global network of unified banks, investments firms, hedge funds, currency traders, supplementary financial and banking entities. Due to the absence of a physical exchange, the FOREX market functions on a full 24-hour time period crossing from one time zone to alternative zone in all the chief financial centers. There are three key economic zones that incorporate the Forex market: Australasia (Australia and Asia), Europe and North America. This organization permits the participants in the Forex market to trade at any time of day.

The paper has been organized as follows. An introduction to interest rate and monetary policies towards international markets has been entailed in Section I. A detailed literature review carried out by various authors in the vicinity of this research work has been discussed in Section II. Volatility on the basis of fundamental analysis of interest rate has been discussed in Section III. The volatility on the basis of fundamental analysis unemployment claims has been elaborated in Section IV. The inspections and suggestions about the monetary policy and interest rate have been entailed in Section V. Finally, Section VI concludes the paper artistically.

2. LITERATURE REVIEW

The research works carried out in [1] analyzed the monetary policy and its impact with interest rates of Nigeria from 2007-2012. The data has been collected form monthly time series data that are received from central banks. The conclusion is that, continuous use of monetary tools to maintain the price stability with the market provides a desired yield with medium term and long term monetary policy goals. The research works in [2] evidenced that, reframing of policy executed by interest-rate aiming might unintentionally persuade martingale-like behavior in nominal rates and inflation. The authors also explained the reason why the central bankers prefer continuity of the short rate and indirect rate targeting. The research works done in [3] analyzed the

2017 AJAST All rights reserved.

transmission for monetary policy by analyzing the interest rate, and found out that there is a relationship between repo rate and interest rate, and concluded that the interest rate have normally adjusted line with repo rates.

The works carried out by Ramon P.De Gennaro assessed the influence of market action and news on the volatility of returns in the exchange market for Japanese Yen and US dollars. They inspected the consequences of news on the volatility before, during and after the news arrival by using three categories of news. Market activity is proxied by the quote arrival, and separated into a predictable seasonal component and an unexpected component. The results specified that both the components of market activity as well as news releases affect the volatility levels. The finding is that, unexpected quote arrival certainly impacts the foreign exchange rate volatility and is reliable with the understanding that the unexpected quote arrival serves as a measure of informed trading. Validating this interpretation is the regression analysis which designates that, the spreads increase in the surprise component of the quote arrival rate but not in the expected component. The assessed impact of a unit increase in unexpected quote arrival and the range of values determined for this variable imply an imperative volatility conditioning role for the informed trading.

The works done by Ben Omrane described the impact of nine classes of scheduled/unscheduled news announcements on the euro/dollar return volatility. Their work analyzed the pre-announcement, contemporaneous and the post-announcement reactions. Using this high-frequency intraday data and within the framework of ARCH-type models, their work clearly showed that volatility rises in the pre-announcement periods particularly before scheduled events.

3.FUNDAMENTAL ANALYSIS OF INTEREST RATES

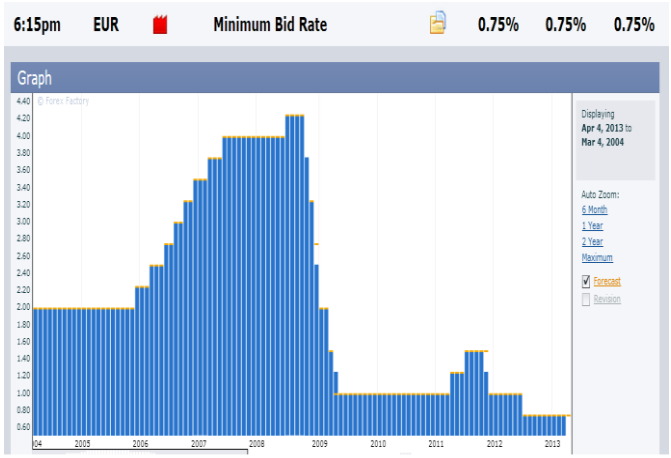

Fig.1. Minimum Bid Rate of Euro

Figure 2 shows the unemployment claims of five years and the impact of price of last five years. The interest rate was high as 4.25% in the year 2013 and the price seems to be deprecated due to lag of fiscal measures, and within one year the interest rate was decreased to 0.75% and the impact was also found to be positive trend, and there was an appreciation of price in the market [10, 11].

Fig.2. Five Year Chart for Euro

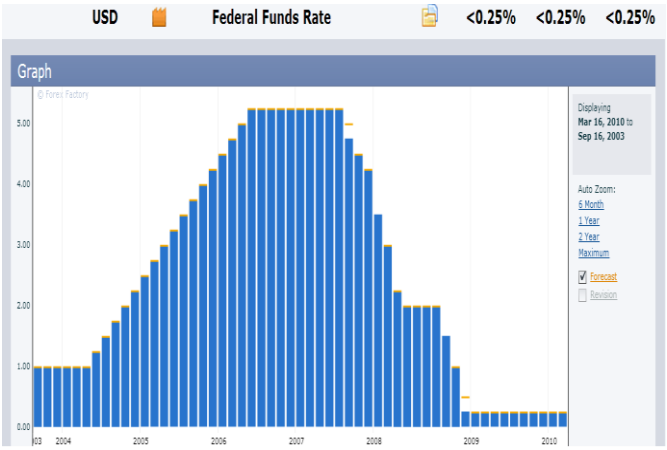

Fig.3. US FED Funds Rate

Fig.4. Five Year Chart for US Dollar

The US bank interest rate, otherwise called as Fed fund rate is being governed by the central bank of US for maintaining the interest rate to control the inflation. The interest rate was high as 5% in the year 2012. Figure 4 shows the individual Index price of US dollar, where the increase in price of the money shows that the economy is in developing stage, and if it decreases the value for money will also be decreasing. Here the value has decreased because of the increase in the interest

2017 AJAST All rights reserved.

rate of the country, but the market is range-bound where the tool doesn't make any impact in the economic slowdown [12].

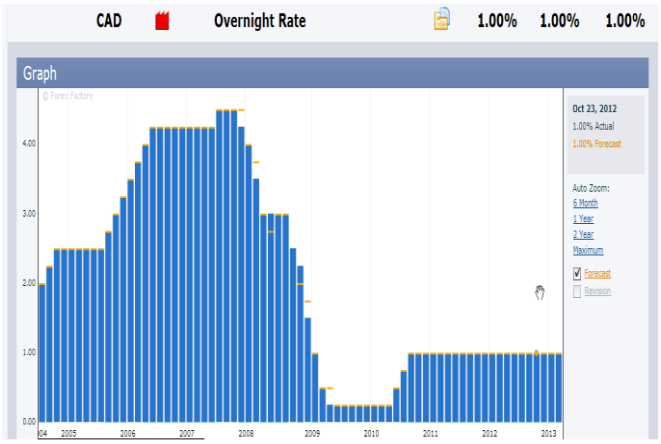

Fig.5. Canadian Overnight Rate

Fig.6. Five Year Chart for Canadian Dollar

The Canadian interest rate is otherwise called as overnight rate, which has been governed by the central bank of Canada. The interest rate was high as 4.25 in between mid of 2007 to 2012. The value of the market also got depreciated at the same time, and after 2012 the interest rate was reduced to 0.25 in the year 2014 and the value for money got appreciated at the same time, which evidently show that there is an obedience level for the market using interest rate as a fundamental analysis under consideration (figure 6) [13].

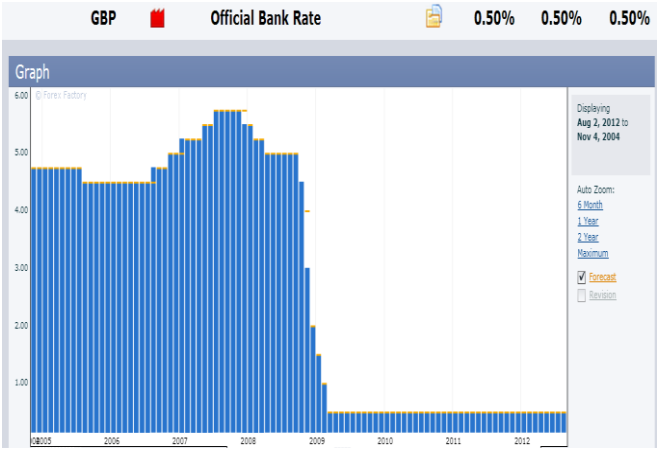

Fig.7. GBPUSD Interest Rate

Fig.8. Five Years Data for GBPUSD

The Pound interest rate is otherwise called as Official bank rate which has been governed by the central bank of UK. The interest rate was high as 5.75 in the year 2012 and was reduced to 0.5 from 2013, and maintained the same percentage of interest till date without any change. The value of the market also got depreciated at the same time, and after 2012 the interest rate was reduced to 0.5 in the year 2014 and the value for money got appreciated at the same time, which evidently show that there is an obedience level for the market using interest rate as a fundamental analysis (figure 8) [15].

4. FUNDAMENTAL ANALYSIS UNEMPLOYMENT CLAIMS

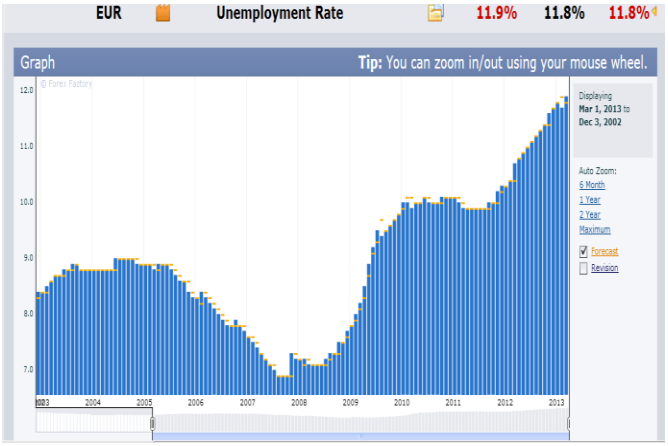

Fig.9. Unemployment Claims of EURO

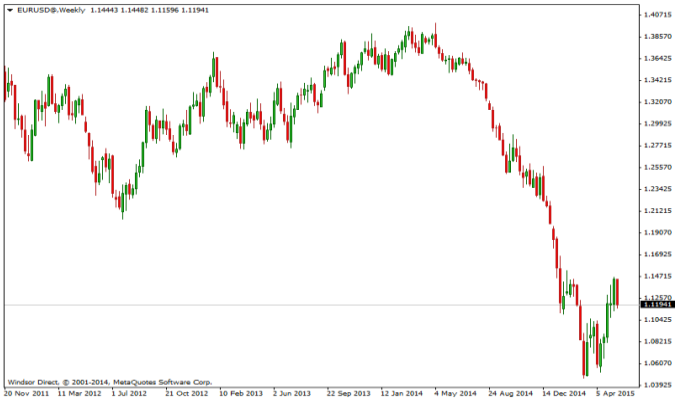

Fig.10. Five Year Chart for EURO

2017 AJAST All rights reserved.

Figure 9 shows the unemployment claims of five years and the impact of price of the last five years. From the year 2014, the unemployment claims were high which increased from 9% to 11%, and during that time the market came up to 1.4950 and it came down in the year 2011 to a low level of 1.2550. It shows that there was a slow impact in the market when the unemployment claim increased in the year 2014.

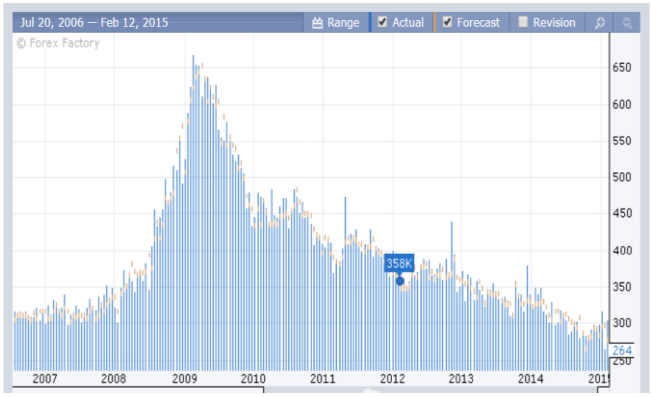

Fig.11. Unemployment Claims of US Economy

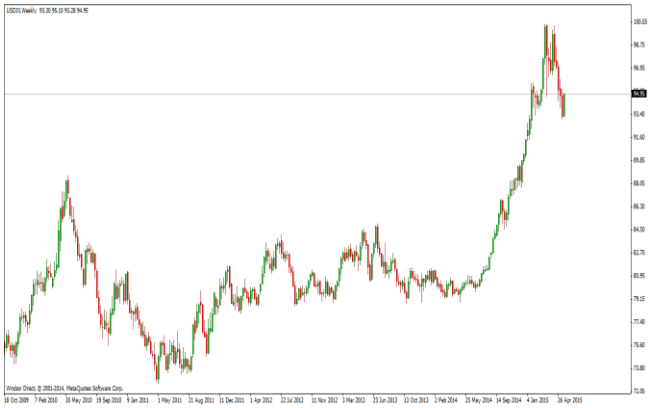

Fig.12. Five Year Chart for US Dollar

Figure 11 shows the unemployment claims of five years of US Dollar and the impact of price of the last five years. From the year 2013, the unemployment claim was high as 600 thousand peoples and the impact of that particular year was on 2014, and after the recovery in the year 2011, the unemployment claims slowly reduced to 400 thousand people.

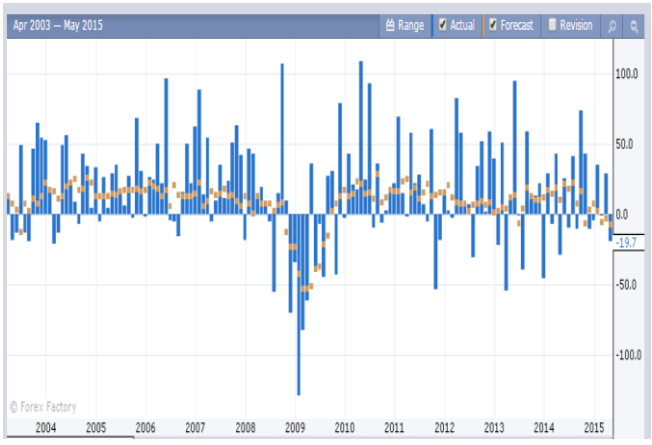

Fig.13. Unemployment Claims of Canadian Dollar

Fig.14. Five Year Chart for Canadian Dollar

In the year 2013, the unemployment claims raised to a high level of 8.4% from 6.4%, which shows that the economy is in down trend. During that year, the volatility was very low and the price movement was in a consolidation stage, and after the recovery in employment the market came down and now there is a chance of appraisal in the market (Figure 13).

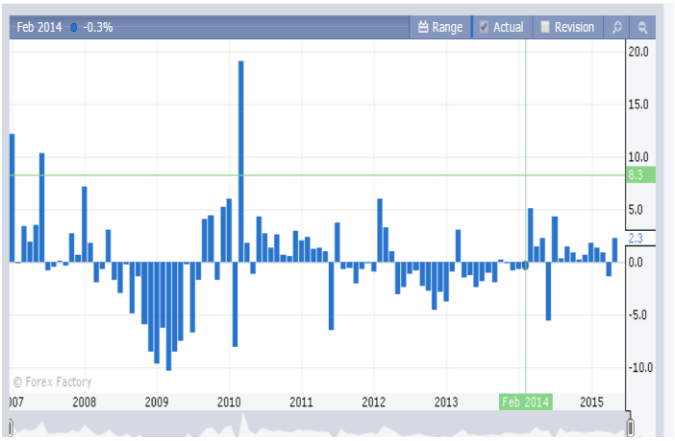

Fig.15. Unemployment Claims of Australian Dollar

Fig.16. Five Year Chart for Australian Dollar

In the year 2012, the unemployment rate has been reduced thereby the economic factors showed that the economy can go in upper trend which might lead to increase in GDP of the country, and in the year 2012 the value of Australian dollar appreciated when compared to US dollar, but after 2012 the employment claims have been increased thereby the value depreciated simultaneously (Figure 15).

2017 AJAST All rights reserved.

5. EXAMINATIONS AND RECOMMENDATIONS

In US economy, from the year 2013 the unemployment claim was high at 600 thousand peoples and the impact of that particular year was on 2014, and after the recovery in the year 2011 the unemployment claims slowly reduced to 400 thousand people. The US interest rate was reduced from 5% to .25% P.A from 2007 to 2013, thereby the market came down after reducing the interest rate.

It reveals that there was a perfect correlation between the market and interest rate. In Canadian economy, the volatility was very low and the price movement was in a consolidation stage after the recovery in employment the market came down and now there is a chance of appraisal in the market. In Australian economy, the market came down slightly to a low level of 0.9300 and got raised to a new high level from there. Though the unemployment claim was not reduced, still the market is in high level. It shows that there is something fundamentally effecting more than unemployment claims in Australian market.

In Japanese Yen, in the year 2013 the unemployment claims raised to a high level of 4.2 from 5.6%, which shows that the economy is in down trend. During that year, the market rose slightly and came down from a high level of 101.10 to a low level of 74.40, because of increase in unemployment claims in the country and the company has reduced the claims to an extent and there is a chance of uptrend in the market. There is a huge correlation between the unemployment claims and market movements in Japanese Yen. With Euro, the interest rate was high at 4.25% in the year 2013 and the price seems to be deprecated due to lag of fiscal measures, and within one year the interest rate was decreased to 0.75% and the impact was also found to be in positive trend, where there was an appreciation of price in the market.

With US dollar, the interest rate was high as 5% in the year 2012. The value decreased due to increase in the interest rate of the country. In Canadian dollar, the interest rate was high as 4.25 in between mid of 2007 to 2012. The value of the market also got depreciated at the same time, and after 2012 the interest rate was reduced to 0.25 in the year 2014 and the value for money got appreciated which shows that there is an obedience level for the market using interest rate as a fundamental analysis. With Australian dollar, the interest rate was high as 4.25 in between mid of 2007 to 2012. The value of the market also got depreciated at the same time, and after 2012 the interest rate was reduced to 0.25 in the year 2014 and the value for money got appreciated at the same time which shows that there is an obedience level for the market using interest rate as a fundamental analysis.

With pound, the interest rate was high as 5.75 in the year 2012 and was reduced to 0.5 from 2013 and maintained the same percentage of interest till now without any change. In US economy, from the year 2013 the unemployment claim was high as 600 thousand peoples and the impact of that particular year was on 2014, and after the recovery in the year 2011 the unemployment claims slowly reduced to 400 thousand people. The US interest rate was reduced from 5% to .25% P.A from 2007 to 2013. It shows that there was a perfect correlation between the market and interest rate. In Canadian economy, during that year the volatility was very low and the price movement was in a consolidation stage after the recovery in employment the market came down, and now there is a chance of appraisal in the market. In Australian economy, during that year the market came down slightly to a low level of 0.9300 and it raised to a new high level.

Though the unemployment claim was not reduced, still the market is in high level. It shows that, there is something fundamentally effecting more than unemployment claims in Australian market. In Japanese Yen, in the year 2013 the unemployment claims raised to a high level of 4.2% from 5.6%, which shows that the economy is in down trend. During that year, the market rose slightly and came down from a high level of 101.10 to a low level of 74.40, because of increase in unemployment claims in the country and the company has reduced the claims to an extent and there is a chance of uptrend in the market.

6. CONCLUSION

The market fluctuations with international cross currencies vary according to the impact with monetary policies of their country, and interest rate is one of the fiscal policies used to regulate the monetary measures of the economy. The interests of the banks are fixed by the corresponding central banks to regulate the money flow of the country. The study analyzes about the interest rates of various countries and their impact on currency pairs. The main conclusion is that the interest rate changes has an impact towards the market in mid and long term basis with all the currencies taken for the study. The study analyzed about the volatility of markets and how to trade on the basis of volatility with different time factors and also the fundamental analysis involved in the market. The major conclusion is that they can buy and sell the pairs based on the volatility rather than preferring fundamental analysis

REFERENCES

[1] Ikechukwu Kelilume (2014), “Effects of the monetary policy rate on interest rates in Nigeria”, *The International Journal of Business and Finance Research*, volume 8, number 1, page no 45-55.

[2] Marvin Goodfriend (1991), “Interest rates and the conduct of monetary policy”, *Carnegie-Rochester Conference Series on Public Policy*, 34 (1991) 7-30.

[3] Lina Fransson and Oskar Tysklind (2016), “The effects of monetary policy on interest rates”, *Sveriges riksbank economic review*, Page no 38-60.

[4] Steven B., “Technical Analysis from A to Z”, Second edition, *Probus Publishing Company*, 2000, ISBN-13: 978-0071363488.

[5] De Gennaro, Ramon P. and Shrieves, Ronald E., “Public Information Releases, Private Information Arrival, and Volatility in the Foreign Exchange Market (December 1997)”, *Journal of Empirical Finance*, Volume 4, Issue 4, December 1997, Pages 295–315.

2017 AJAST All rights reserved.

[6] Masih, A. M. M. & Masih, R. (1997), "A comparative analysis of the propagation of stock market fluctuations in alternative models of dynamic causal linkages", *Applied Financial Economics,* 7 (1), 59-74.

[7] Agarwal, R N (2000), "Financial Integration and Capital Markets in Developing Countries: A Study of Growth, Volatility and Efficiency in the Indian Capital Market", *Mimeo, Institute of Economic Growth,* Delhi.

[8] Bae, K, Cha, B, & Cheung, Y (1999), "The Transmission of Pricing Information of Dually Listed Stocks", *Journal of Business Finance and Accounting,* 26 (5) and (6), June/July, 709-23.

[9] Becker, K, Finnerty, J., & Gupta, M. (1990), "The Intertemporal Relation between the US and Japanese Stock Markets", *Journal of Finance*, 45, 1297-1306.

[10] Bennett, P., & Keller, J. (1988), "The International Transmission of Stock Price Disruption in October 1987", *Federal Reserve Bank of New York Quarterly Review*, Summer, 17-33.

[11] Froot, K., & Dabora, E. (1999), "How are Stock Prices Affected by the Location of Trade", *Journal of Financial Economics*, 53, 189- 216.

[12] Hansda, S. K., & Ray, P. (2002), "BSE and Nasdaq: Globalisation, Information Technology and Stock Prices", *Economic and Political Weekly*, 37 (5), February 2, 459-468.

[13] Howe, J S., & Madura, J. (1990), "The Impact of International Listings on Risk: The Implications for Capital Market Integration", *Journal of Banking and Finance*, 14, 1133-1142.

[14] Yakob, N. A., Beal, D., & Delpachitra, S. (2005), "Seasonality in the Asia Pacific stock markets", *Journal of Asset Management,* 6 (4), 298-318.

[15] Poshakwale, S. (2002), "The Random Walk Hypothesis in the Emerging Indian Stock Market", *Journal of Business Finance & Accounting,* 29 (9&10), 1275-1299.

2017 AJAST All rights reserved.