GLOBAL MARKET TIME ZONE EFFECT ON INDIAN MARKET

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ABSTRACT

This paper focuses on NIFTY volatility and its fluctuations influenced by the selected countries equity indices. Regression analysis has been applied to predict the future openings of NIFTY based on time zone analysis. Volatility of NIFTY is found to be similar with the Japanese index NIKKIE. Standard Deviation has been applied on SENSEX and NIFTY to find in which exchange index is having more deviation. Beta analysis shows that the risk of investments in BSE is found to be more than NSE.

This paper is useful to the investors who trade for short term period, for long term investors this analysis is helpful to take constructive decision how global markets are having the influence on NIFTY volatility.

Key Words: CAC**, DAX, FTSE, HANGSENG, NASDAQ, NIFTY, NIKKIE and SCI**.

INTRODUCTION

Stock Market integration is generally perceived as a real barometer for the economic growth. This integration is because of globalization and liberalization. With financial integration, emerging economies have become increasing attractive place for the portfolio investors who generally seek marginal amount of return than what available in other developed countries. There are several benefits associated with financial integration such as real price discovery, market efficiency, higher savings and investments, low transaction costs and that would lead to overall economic development.

Thus diversifying the investments in the emerging market will give scope to reduce unsystematic risk or to improve the marginal returns. If all markets are highly correlated then the crash in one market will ripple to other markets too. In January 2008, national stock markets declined sharply due to credit market developments in the United States. India has the distinction of having the second largest number of listed companies after the USA. Number of firms in emerging markets now cross-list on international exchanges to get benefit of lower cost of capital and more liquidity-traded shares. There are some debates whether stock market integration brought economic development or will cause economic disruptions.

There have been numerous reasons forwarded for rapid growth in some of the selected countries. Firstly, Governments in less developed and emerging countries have become more liberal in adopting market-oriented reforms geared to privatize previously public enterprises such as transport and communications and public utilities; secondly financial sectors in these countries have been opened to foreign private sector investment; thirdly, the corporate sectors are now becoming increasingly competitive in these countries, even on an international level; state owned enterprises continue to become more privatized, paving the way for shares being distributed amongst a wider span of the population. The objective of this paper is to study co-

movement of Indian stock markets index with developed as well as developing countries' stock market indices.

In investigating these issues, we take Nifty index as the core barometer of the Indian stock market as it captures the major chunk of Indian stock market. On the other hand, the other stock markets are selected based on India's significant trade and financial relations with foreign countries. We have selected stock markets of India, China, U.S, U.K, Hong Kong, Japan, Germany, and Australia as a developed market.

OBJECTIVES:

- To know the relationship between the global markets with Indian market based on Time
- To find which global markets mostly influence the Indian market.
- To find the correlation between MSCI Index and Indian Stock Market(NSE and BSE)
- To find the volatility of Nifty with global markets.

SCOPE:

	COUNTRY	STOCK MARKET	INDICES	ABBREVIATION
1	INDIA	National Stock Exchange	NIFTY	NIFTY-50
2	CHINA	Shanghai composite Index	SCI	SCI
3	U.S	National Association of Securities Dealers Automated Quotations	NASDAQ	NASDAQ
4	U.K	Financial Time Stock Exchange	FTSE	FTSE
5	GERMANY	Deutrcher Aktien Index	DAX	DAX
6	FRANCE	CAC quarante	CAC	CAC
7	JAPAN	Tokyo Stock Exchange	NIKKEI	NIKKEI
8	HONG KONG	Hong Kong Stock In dex	Hang seng	HANGSENG

The analysis has been emphasized how the global markets will affect the Indian markets with time. As Indian markets will open at 9.15am and closes at 3.30pm.

EMPHARICAL STUDY

NSE- National Stock Exchange
SCI- Shanghai composite Index
NASDAQ- National Association of Securities Dealers Automated Quotations
FTSE- Financial Time Stock Exchange
DAX- Deutrcher Aktien Index
CAC- CAC quarante
NIKKEI- Tokyo Stock Exchange

LITERATURE REVIEW:

Gretchen Gordon: The current model for a global trade in biofuels is one of industrial export agriculture, which brings with it negative environmental and social impacts. Efforts to mitigate these impacts through narrow regulation of biofuels without addressing the regulatory dynamics of agriculture, energy, and financial markets will be ineffective. Gretchen Gordon argues that such a free market in industrial biofuels threatens to detract from real solutions to the energy crisis and equitable development needs.

Ranald Michie: This book presents a history of the global securities market. It is the product of over thirty years of research. It covers many aspects of the history of the securities markets from its beginnings in Medieval Venice through Amsterdam and London to its operations in Tokyo and New York today. It integrates the history of both stocks and bonds, established and emerging markets, stock exchanges and over-the-counter trading, and the crises and continuity that have made the global securities market such a force in the world over the centuries.

Susan P. Douglas, C. Samuel Craig, Rapid and dramatic changes in the global landscape have profound implications for marketing strategy. This chapter explores four key areas that impact global marketing strategy. The most fundamental change is a shift in emphasis from developed markets to those in emerging market economies. A related change is the increasing cultural diversity and heterogeneity in markets throughout the world. Third, marketers must develop mechanisms to transfer skills and learning from one market to others. Finally, the notion of configural advantage – that is, leveraging the geographic configuration of dispersed assets, capabilities and resources to compete more effectively in world markets – is proposed as a way to develop successful marketing strategies for the 21st century.

New York University, New York, NY, USA Global marketing strategy involves formulating marketing strategy across a range of countries. A number of different approaches have been taken in studying global marketing strategy, including the transaction cost perspective, standardization/adaptation, configuration/coordination perspective, global integration perspective, and the evolutionary perspective. Typically, each focuses on different decisions or aspects of global marketing strategy and corresponds in many respects to differences in the experience of the firm in international markets. New York University, New York, NY, USA, Global marketing strategy involves formulating marketing strategy across a range of countries. A number of different approaches have been taken in studying global marketing strategy, including the transaction cost perspective, standardization/adaptation, configuration/coordination perspective, global integration perspective, and the evolutionary perspective. Typically, each focuses on different decisions or aspects of global marketing strategy and corresponds in many respects to differences in the experience of the firm in international markets.

M.V. Subha, S. Thirupparkadal Nambi: The process of globalization has had a deep impact of the financial markets worldwide. With the liberalization of the Indian capital markets and relaxation of restrictions on international flow of capital and trade, it is likely to expect the Indian stock market to be integrated with other world markets. The recent policies of our government have given way to many foreign institutional investors to invest in our stock markets. These policy changes and initiatives would definitely have a profound impact on behavior of stock markets. The present study aims to test whether the Indian stock market is interdependent on the American Stock Markets.

RESEARCH METHODOLOGY:

Beta:

Beta coefficient is a measure of sensitivity of a share price to movement in the market price. It an important input in capital asset pricing model to calculate required rate of return on a stock. It is the slope of the security market line.

$$\beta = \frac{\text{Correlation Coefficient}}{\text{Between Market and Stock}} \times \frac{\text{Standard Deviation of Stock Returns}}{\text{Standard Deviation of Market Returns}}$$

Correlation:

Correlation coefficients are used in statistics to measure how strong a relationship is between two variables.

$$r = \frac{n(\Sigma xy) - (\Sigma x)(\Sigma y)}{\sqrt{[\, n\Sigma x^2 - (\Sigma x)^2\,]\,[\, n\Sigma y^2 - (\Sigma y)^2\,]}}$$

Standard deviation:

The standard deviation is a numerical value used to indicate how widely individuals in a group vary.

$$\sigma = \sqrt{\frac{\sum_{i=1}^{N}(X_i - \mu)^2}{N}}$$

Volatility:

It is a rate at which the price of a security increases or decreases for a given set of returns. Volatility is measured by calculating the standard deviation of the annualized returns over a given period of time.

$$\text{VOLATILITY} = \sqrt{SD}/p$$

Regression:

A regression is a statistical analysis assessing the association between two variables.
It is used to find the relationship between two variables.

Regression Equation(y) = a + bx
ANOVA
Anova is a statistical test which analyzes variance. It is helpful in making comparison of two or more means which enables a researcher to draw various results and predictions about two or more sets of data.

$$F = \frac{MST}{MSE}$$

Formula for MST is given below:

$$MST = \frac{SST}{p-1}$$
$$SST = \sum n(x - \bar{x})^2$$

Formula for MSE is given below:

$$MSE = \frac{SSE}{N-p}$$
$$SSE = \sum (n-1)S^2$$

LIMITATIONS:

1. Asian and the Euro market openings figures has been considered to predict the future direction of Nifty.
2. Fundamental and Technical analysis not been considered to the analysis.
3. The analysis has been confined to know the day effect on market long term investors can't depend on this analysis.
4. Select countries like Japan, Hong kong, China, UK, Germany and France were considered for this purpose. There may be a chance of other countries influence may be more.

CALCULATION OF BETA

NSE-TCS   BSE-TCS

DATE	NSE	TCS	Date	BSE	TCS
2-Dec-13	6217.85	2013.9	2-Dec-13	20898.01	2014.2
3-Dec-13	6201.85	2020.80	3-Dec-13	20854.92	2020.2
4-Dec-13	6160.95	2000.05	4-Dec-13	20708.71	2002.6
5-Dec-13	6241.1	1987.15	5-Dec-13	20957.81	1990.15
6-Dec-13	6259.9	2000.30	6-Dec-13	20996.53	1999.95
9-Dec-13	6363.9	2004.85	9-Dec-13	21326.42	2003.05
10-Dec-13	6332.85	2082.75	10-Dec-13	21255.26	2082.25
11-Dec-13	6307.9	2058.05	11-Dec-13	21171.41	2056.55
12-Dec-13	6237.05	2028.90	12-Dec-13	20925.61	2026.85
13-Dec-13	6168.4	2001.80	13-Dec-13	20715.58	2002.9
16-Dec-13	6154.7	2019.15	16-Dec-13	20659.52	2017.3
17-Dec-13	6139.05	2045.35	17-Dec-13	20612.14	2046.1
18-Dec-13	6217.15	2055.80	18-Dec-13	20859.86	2054.3
19-Dec-13	6166.65	2081.50	19-Dec-13	20708.62	2081.35
20-Dec-13	6274.25	2120.55	20-Dec-13	21079.72	2119.55

Beta=0.34135772   Beta=1.12708101

Interpretation:

The above analysis of beta has been done of TCS with NIFTY and the risk is found to be less bench mark i.e. 1

Risk of TCS has been measured with sensex and it has been observed with the risk is higher than the bench mark i.e.1

Investors who prefer less risk they can invest in NSE and investors who wanted to take higher risk and expected higher returns BSE is the best platform.

CALCULATION OF CORRELATION AND STANDARD DEVIATION

DATE	INFOSYS	NIFTY	DATE	INFOSYS	SENSEX
1/7/2014	3457.4	6162.25	1/7/2014	3457.4	20693.24
1/8/2014	3428.5	6174.6	1/8/2014	3428.5	20,729.38
1/9/2014	3451.05	6168.35	1/9/2014	3451.05	20,713.37
1/10/2014	3548.9	6171.45	1/10/2014	3548.9	20,758.49
1/13/2014	3665.7	6272.75	1/13/2014	3665.7	21,134.21
1/14/2014	3688.85	6241.85	1/14/2014	3688.85	21,032.88
1/15/2014	3710.55	6320.9	1/15/2014	3710.55	21,289.49
1/16/2014	3724.7	6318.9	1/16/2014	3724.7	21,265.18
1/17/2014	3728.05	6261.65	1/17/2014	3728.05	21,063.62
1/20/2014	3749.9	6303.95	1/20/2014	3749.9	21,205.05
1/21/2014	3755.65	6313.8	1/21/2014	3755.65	21,251.12
1/22/2014	3767.1	6338.95	1/22/2014	3767.1	21,337.67
1/23/2014	3792.8	6345.65	1/23/2014	3792.8	21,373.66
1/24/2014	3759.05	6266.75	1/24/2014	3759.05	21,133.56
1/27/2014	3732.6	6135.85	1/27/2014	3732.6	20,707.45
1/28/2014	3677	6126.25	1/28/2014	3677	20,683.51
1/29/2014	3717.65	6120.25	1/29/2014	3717.65	20,647.30
1/30/2014	3704.75	6073.7	1/30/2014	3704.75	20,498.25
1/31/2014	3699.45	6089.5	1/31/2014	3699.45	20,513.85
2/3/2014	3628.7	6001.8	2/3/2014	3628.7	20,209.26
2/4/2014	3566.65	6000.9	2/4/2014	3566.65	20,211.93
2/5/2014	3581.55	6022.4	2/5/2014	3581.55	20,261.03
2/6/2014	3563.45	6036.3	2/6/2014	3563.45	20,310.74
2/7/2014	3566.7	6063.2	2/7/2014	3566.7	20,376.56

Correlation=0.52092   Correlation=0.577517

Standard Deviation=1281.95   Standard Deviation= 8673.105

Interpretation:

The above table depicts the relationship between index stock i.e. INFOSYS and NIFTY and it has been found positively moderately correlated. This indicates that the Infosys movement is in the same direction with NIFTY.

CALCULATION OF VOLATILITY FOR ONE DAY

$$\text{VOLATILITY} = \sqrt{SD}/p$$

On 5-3-2014

India - Sensex		Japan - NIKKEI		Hongkong - hangseng		China - Shanghai	
9:15am	21322.89	9:30am	14962.68	9:30am	22804.63	9:30am	2074.2
10:15am	21224.02	10:30am	14953.37	10:30am	22676.19	10:30am	2061.11
11:15am	21240.01	11:30am	14942.78	11:30am	22700.73	11:30am	2067.41
12:15pm	21194.27	12:30pm	14965.38	1:30pm	22705.62	12:30pm	2067.41
1:15pm	21298.1	1:30pm	14964.46	2:30pm	22551.56	1:30pm	2062.93
2:15pm	21290.76	2:30pm	14925.09	3:30pm	22579.1	2:30pm	2055.04
3:15pm	21291.14	3:28pm	14897.63			3:30pm	2053.08
Volatility = 2.79037		Volatility = 2.05071		Volatility = 4.298281		Volatility = 1.111498	
Points change = 31.75		Points change = 65.05		Points change = 225.53		Points change = 21.12	

UK-FTSE		Germany-DAX		France-CAC	
9:30am	6802.67	9:03am	9554.94	9:00am	4381.37
10:30am	6795.53	10:03am	9582.3	10:00am	4393.55
11:30am	6786.13	11:03am	9567.01	11:00am	4384.47
12:30pm	6788.58	12:03pm	9562.29	12:00pm	4384.65
1:30pm	6788.89	1:03pm	9555.79	1:00pm	4379.6
2:30pm	6786.69	2:03pm	9572.18	2:00pm	4390.84
3:30pm	6792.5	3:03pm	9564.9	3:00pm	4391.28
4:29pm	6771.5	4:03pm	9560.02	4:00pm	4395.12
		5:03pm	9566.37	5:00pm	4397.49
Volatility = 1.131255		Volatility = 1.029378		Volatility = 0.891955	
Points change = 31.17		Points change = -11.43		Points change = -16.12	

Interpretation:

For the above countries volatility has been applied. It has been observed that India and Japan volatility seems to be equal but Hongkong market is very high, china market Shanghai is found to be low volatile on that day. The European market of UK, Germany and France volatility measurement has been applied. All these countries volatility is found to be more or less same.

DIFFERENCE BETWEEN CLOSE AND OPEN PRICES

	S&P BSE SENSEX					CNX NIFTY		
DATE	CLOSE	OPEN	DIFFERENCE		DATE	CLOSE	OPEN	DIFFERENCE
10-Jan-14	20,758.49	20,850.54	-92.05		10-Jan-14	6171.45	6189.55	-18.1
13-Jan-14	21,134.21	21,115.00	19.21		13-Jan-14	6272.75	6260.25	12.5
14-Jan-14	21,032.88	21,091.46	-58.58		14-Jan-14	6241.85	6265.95	-24.1
15-Jan-14	21,289.49	21,366.91	-77.42		15-Jan-14	6320.9	6341.35	-20.45
16-Jan-14	21,265.18	21,236.65	28.53		16-Jan-14	6318.9	6306.25	12.65
17-Jan-14	21,063.62	21,083.53	-19.91		17-Jan-14	6261.65	6261.75	-0.1
20-Jan-14	21,205.05	21,237.96	-32.91		20-Jan-14	6303.95	6320.15	-16.2
21-Jan-14	21,251.12	21,251.65	-0.53		21-Jan-14	6313.8	6309.05	4.75
22-Jan-14	21,337.67	21,319.69	17.98		22-Jan-14	6338.95	6325.95	13

CALCULATION OF REGRESSION

Date	Shanghai			Nifty		
	Open	At 11:45	Difference	Close	Open	Gap
02/06/2014				6036.3	6077.65	-41.35
02/07/2014	2022.323	2028.35	-6.0275	6063.2	6072.8	-9.6
02/10/2014	2049.984	2080.49	-30.5056	6053.45	6072.45	-19
02/11/2014	2086.177	2093.58	-7.4032	6062.7	6085.35	-22.65
02/12/2014	2103.828	2104.91	-1.0816	6084	6087.55	-3.55
02/13/2014	2106.934	2111.59	-4.6556	6001.1	6023.75	-22.65
02/14/2014	2097.32	2108.91	-11.5896	6048.35	6057.1	-8.75
02/17/2014	2124.88	2126.98	-2.1004	6073.3	6071.3	2
02/18/2014	2134.143	2125.01	9.1326	6127.1	6132.05	-4.95
02/19/2014	2116.919	2132.42	-15.5014	6152.75	6127.15	25.6
02/20/2014	2152.891	2156.83	-3.9391	6091.45	6108.3	-16.85

Correlation = 0.032089054, Standard Deviation = 14.05338, Regression = 6091.284

Interpretation:

The above analysis has been done with Shanghai markets to Nifty where Shanghai market open influence has been found on India and the relationship between these two is slightly correlated. Regression equation has been applied on Nifty with Shanghai market and it is expected neutral movement on Nifty in near future.

Date	Nikkei 225			Nifty		
	Open	At 12:45	Difference	Close	Open	Difference
02/06/2014	14233.42	14222.67	10.75	6036.3	6077.65	-41.35
02/07/2014	14387.11	14382.77	4.34	6063.2	6072.8	-9.6
02/10/2014	14647.83	14626.79	21.04	6053.45	6072.45	-19
02/11/2014				6062.7	6085.35	-22.65
02/12/2014	14821.73	14855.57	-33.84	6084	6087.55	-3.55
02/13/2014	14785.84	14633.83	152.01	6001.1	6023.75	-22.65
02/14/2014	14538.2	14265.25	272.95	6048.35	6057.1	-8.75
02/17/2014	14343.73	14369.78	-26.05	6073.3	6071.3	2
02/18/2014	14514.47	14678.18	-163.71	6127.1	6132.05	-4.95
02/19/2014	14729.48	14769.94	-40.46	6152.75	6127.15	25.6
02/20/2014	14701.14	14532.32	168.82	6091.45	6108.3	-16.85

Correlation = -0.30663673, Standard Deviation = 88.98212, Regression = 6059.036

Interpretation:

The above analysis has been done with Nikkei markets to Nifty where Nikkei market open influence has been found on India and the relationship between these two is slightly correlated. Regression equation has been applied on Nifty with Nikkei market and it is expected to go down side on Nifty in near future.

Date	Hangseng			Nifty		
	Open	At 11:45	Difference	Close	Open	Difference
02/06/2014	21320.91	21386.91	-66	6036.3	6077.65	-41.35
02/07/2014	21498.09	21594.98	-96.89	6063.2	6072.8	-9.6
02/10/2014	21646.75	21614.98	31.77	6053.45	6072.45	-19
02/11/2014	21623.79	21877.03	-253.24	6062.7	6085.35	-22.65
02/12/2014	22057.7	22172.73	-115.03	6084	6087.55	-3.55
02/13/2014	22297.7	22248.07	49.63	6001.1	6023.75	-22.65
02/14/2014	22382.72	22257.79	124.93	6048.35	6057.1	-8.75
02/17/2014	22463.4	22488.55	-25.15	6073.3	6071.3	2
02/18/2014	22535.2	22555.28	-20.08	6127.1	6132.05	-4.95
02/19/2014	22600.6	22575.83	24.77	6152.75	6127.15	25.6
02/20/2014	22595.91	22410.72	185.19	6091.45	6108.3	-16.85

Correlation = 0.135844427, Standard Deviation = 83.59932, Regression = 6087.657

Interpretation:

The above analysis has been done with Hangseng markets to Nifty where Hangseng market open influence has been found on India and the relationship between these two is strongly correlated. Regression equation has been applied on Nifty with Hangseng market and it is expected to go down side on Nifty in near future.

	FTSE			SENSEX		
Date	Close	Open	Difference	at 1:44pm	at 1:54pm	Difference
02/19/2014	6796.71	6796.71	0	20682.51	20675.01	7.5
02/20/2014	6812.99	6812.99	0	20607.61	20626.92	-19.31
02/21/2014	6838.06	6838.06	0	20692.91	20669.39	23.52
02/24/2014	6865.86	6862.73	3.13	20774.74	20793.6	-18.86
02/25/2014	6830.5	6830.5	0	20808.96	20838.67	-29.71
02/26/2014	6799.15	6799.15	0	20967.2	20960.48	6.72

Correlation = -0.32962705, Standard deviation = 14.18982, Regression = 20960.471

Interpretation:

The above analysis has been done with FTSE markets to Nifty where FTSE market open influence has been found on India and the relationship between these two is slightly correlated. Regression equation has been applied on Nifty with FTSE market and it is expected neutral movement on Nifty in near future.

	DAX			SENSEX		
Date	Close	Open	Difference	at 1:44pm	at 1:54pm	Difference
02/19/2014	9660.05	9524.58	135.47	20682.51	20675.01	7.5
02/20/2014	9618.85	9665.08	-46.23	20607.61	20626.92	-19.31
02/21/2014	9656.95	9619.64	37.31	20692.91	20669.39	23.52
02/24/2014	9708.94	9676.56	32.38	20774.74	20793.6	-18.86
02/25/2014	9699.35	9708.5	-9.15	20808.96	20838.67	-29.71
02/26/2014	9661.73	9660.55	1.18	20967.2	20960.48	6.72

Correlation = 0.504151922, Standard deviation = 46.77252, Regression = 21010.323

Interpretation:

The above analysis has been done with DAX markets to Nifty where DAX market open influence has been found on India and the relationship between these two is moderately correlated. Regression equation has been applied on Nifty with DAX market and it is expected to go upside on Nifty in near future.

	CAC40			SENSEX		
Date	Close	Open	Difference	at 1:44pm	at 1:54pm	Difference
02/19/2014	4341.1	4294.16	46.94	20682.51	20675.01	7.5
02/20/2014	4355.49	4370.17	-14.68	20607.61	20626.92	-19.31
02/21/2014	4381.06	4373.57	7.49	20692.91	20669.39	23.52
02/24/2014	4419.13	4405.93	13.2	20774.74	20793.6	-18.86
02/25/2014	4414.55	4414.11	0.44	20808.96	20838.67	-29.71
02/26/2014	4396.91	4399.67	-2.76	20967.2	20960.48	6.72

Correlation = 0.361730626, Standard deviation = 21.0797, Regression = 20964.307

Interpretation:

The above analysis has been done with CAC markets to Nifty where CAC market open influence has been found on India and the relationship between these two is moderately correlated. Regression equation has been applied on Nifty with CAC market and it is expected to neutral movement on Nifty in near future.

REGRESSION ALL INDICES WITH NIFTY					
INDICES	a	b	X	Y = a+bx	EXPECED MOVEMENT
ASIAN MARKETS					
SHANGHAI	6091.45	0.023106	-7.18137	6091.284	Neutral
NIKKIEI 225	6091.45	-2.21519	14.6325	6059.036	Downwards
HANGSENG	6091.45	0.956843	-3.96403	6087.657	Downwards
EURO MARKETS					
FTSE	20960.48	-0.02048	0.418778	20960.47	Neutral
DAX	20960.48	1.519857	32.79475	21010.32	Upwards
CAC	20960.48	0.371465	10.30432	20964.31	Upwards

FINDINGS:

➢ It has been observed the risk of investment for the short term investors found to be more to the BSE and less in NSE.
➢ Correlation has been measured for index stock i.e. Infosys with Nifty and Sensex.
➢ It has been observed that in both the exchanges it is moderately correlated but deviation has been found more in BSE than in NSE.
➢ Japanese index Nikkei volatility found to be same with sensex for one day i.e. 05-03-2014.
➢ European market volatility found to be nearly same during the analysis time.

> ➢ Based on the regression equation it has been estimated that Nifty is expected to be neutral with Shanghai and FTSE, It is expected to go downwards with Nikkei and Hangseng. And will go upwards when compared with DAX and CAC.

CONCLUSION:

In the modern economy investments are taking place across the globe. Flows of funds are rolling with the growing nations in the form of FII's. This analysis is done to find out the correlation between Asian and European markets with that of India based on time-zone analysis.I found that SHANGHAI and HANGSENG are highly correlated with India.

So we can interpret that NIFTY is interdependent on Developed countries stock markets and except NIKKEI. Hence there is a scope for the further research to measure the impact of global markets on Indian stock market.

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