Volume 17 Issue 24
Originally issued as C5

Global Journal of Management and Business Research: C Finance
Volume 17 Issue 5 Version 1.0 Year 2017
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Using Event Studies to Evaluate Stock Market Return Performance

By Dr. Alhassan Ndekugri & Dr. Gordana Pesakovic
Allen University

Abstract- This research used event study methodology to evaluate stock market return performance of three multinational companies using three historical events. The sample of the study consisted of daily historical stock data of the three multinational companies from Yahoo Finance, a month before and a month after the announcement of the November 7, 2000, November 4, 2008, and November 8, 2016 elections. The multinational companies in this study were Exxon Mobil, Toyota Motors, and Gazprom. A t-test was used to examine the significance of the means and stock returns of the three companies and the market index (S&P 500). Also, the Capital Asset Pricing Model (CAPM) was used to determine the abnormal stock return. This analysis was inconsistent with event announcements that state they do have an effect on the stock market returns. The finding showed there was both negative and positive abnormal return in all three historical events. Actual return fluctuates within a period prior and after announcements.

Keywords: historical data, adjusted stock price, expected return, actual return, volatility.

GJMBR-C Classification: JEL Code: E22



Strictly as per the compliance and regulations of:

© 2017. Dr. Alhassan Ndekugri & Dr. Gordana Pesakovic. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License http://creativecommons.org/licenses/by-nc/3.0/), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Using Event Studies to Evaluate Stock Market Return Performance

Dr. Alhassan Ndekugri [α] & Dr. Gordana Pesakovic [σ]

Abstract- This research used event study methodology to evaluate stock market return performance of three multinational companies using three historical events. The sample of the study consisted of daily historical stock data of the three multinational companies from Yahoo Finance, a month before and a month after the announcement of the November 7, 2000, November 4, 2008, and November 8, 2016 elections. The multinational companies in this study were Exxon Mobil, Toyota Motors, and Gazprom. A t-test was used to examine the significance of the means and stock returns of the three companies and the market index (S&P 500). Also, the Capital Asset Pricing Model (CAPM) was used to determine the abnormal stock return. This analysis was inconsistent with event announcements that state they do have an effect on the stock market returns. The finding showed there was both negative and positive abnormal return in all three historical events. Actual return fluctuates within a period prior and after announcements.

Keywords: historical data, adjusted stock price, expected return, actual return, volatility.

Chapter One

I. Introduction

Event studies measure the stock price reaction to an unanticipated announcement of an event, event studies are used to test that market incorporates this new information efficiently and are therefore used to determine the effect of the event on the value of investors (Binder, 1998). Event studies follow a market hypothesis. It holds that financial markets are efficient, as a result, the stock price respond instantly to all available information relating to the profitability of the firm (Fama, 1976). Kumar, Mahadevan, and Gunasekar (2012) investigated the impact of an event on a specific dependent variable. The basic and indispensable assumption followed in the event study methodology is that market is always efficient. Miglani (2011) explored the impact of right shares issued by Indian companies that were placed between 2005 and 2010. The study reveals statistically significant abnormal returns on the announcement and surrounding dates.

Author α: Assistant Professor, Allen University 1530 Harden Street, Columbia SC, 29204. e-mail: andekugri@allenuniversity.edu
Author σ: Professor, Argosy University, 5250 17th St, Sarasota, FL, 34235. e-mail: gpesakovic@argosy.edu

Vithessonthi and Techarongrojwong (2013) examined the effect of monetary policy announcement in Thailand. The study revealed the expected change rather than the expected change in interest rates and how it affects stock price. Barunik and Vacha (2013) studied the stock splits' liquidity analysis of the Warsaw stock exchange and the Vienna stock exchange and found out there was a significant growth in the market liquidity of stock splitting firms over 36 months following the split for both capital markets that is indicative of lower transaction costs for investors.

Bechtel (2009) indicated that a democratic political system had an effect on systematic investment risk. The study objective was to find out a relationship between democratic politics and systematic investment risk. Daily stock data from Germany from 1991 to 2005 suggested the right-wing government (e.g., supporters/acceptors of social hierarchy, free market led to lower investment risk), whereas left leaning governments had the opposite effect. The study discovered that systematic risk decreases if electoral prospects of a rightist government improve, while good prospects for a leftist government increases the systematic risk. Aamir and Shah (2011) undertook a research to understand the impact of dividend announcement for the companies belonging to cement, oil, and gas sectors, listed on the Karachi Stock Exchange (KSE) in Pakistan during the period between 2004 and 2008. A total of 26 dividend announcements were taken using CAAR for the period 21 days prior to the announcement and 31 days after the announcement.

The findings showed that some firms whose abnormal returns were negative on the dividend announcement date became positive immediately after the dividend announcement date. Mahmood, Irfan, Iqbal, Kamran, and Ijaz (2014) investigated the impact of political events on the stock market in Pakistan using event methodology. Their study looked at the Karachi stock exchange change (KSE-100 Index) and concluded that political events do have an influence on the stock market return performance. However, their research never compared the performance of the KSE to the global market, including the S&P 500, which is considered the most referenced world index. Their research focused only on one company that is a Pakistani stock. This research expanded further to look

© 2017 Global Journals Inc. (US)

at multinational companies within and outside of the United States of America.

All research was based on a problem and Chapter One served as an introduction to the problem.

a) Problem Background

Information plays a crucial role in the stock market performance for both companies and investors. As a result, this may have an influence in both directions as a determinant for buy, sell, or hold decisions. Any time there is an inflow of information, a negative or positive result is expected. Information could take the form of an announcement such as dividend payment, company takeover, or election results. This research interest was on election announcements and how they affect stock market return performance of multinational companies.

b) Purpose of the Study

The purpose of this research was to evaluate the stock market performance of Exxon Mobil, Toyota Motors, and Gazprom before and after the announce of the results of the three historic presidential elections of the United States of America in the 2016, 2008, and 2000 presidential polls.

c) Questions and Hypotheses

i. *Research Questions*

RQ 1: What is the relationship between election announcement and stock market performance?

RQ 2: Is there a difference between the stock return of multinational companies?

RQ 3: Does the volatility of stock market of multinational companies have any effect on investors?

ii. *Null Hypotheses*

Ho1 Rational investors will not cause the effect of the event to be reflective in the prices of stocks.

Ho2 There is no a significant difference on stock return before and after the announcement of a presidential results in the United States.

Ho3 There is no difference of volume of stock traded before and after the announcement of the presidential results of the United States.

iii. *Alternative or Directional Hypotheses*

Ha1 Rational investors would caused the effect of the event to be reflective in the price of stocks.

Ha2 There is a significant difference in stock returns before and after the announcement of the presidential election results in the United States.

Ha3 There is an excessive volume of stock traded before and after the announcement of the presidential results of the United States.

d) Significance of the Study

Understanding the stock market in the 21 st century is important for business success, Multinational Companies gets financing for their business by issuing stocks to investors. This research will contribute enormously to academia in terms of understanding the stock market of publicly traded and Multinational companies. This research would also contribute knowledge in understanding the basics of investment, risk analysis by understanding the volatility of stocks and the implication on stock investment, making stock selection for investment, understanding dividends payment. The Capital Asset Pricing Model used in the analysis of abnormal return will also contribute significant in modern day finance, especially in the stock market.

Chapter Two

II. Literature Review

Event study analysis compares the day-to-day percentage change in the market price of a company's common stock to the return predicted by a stock by a market model that uses the market index, such as the S&P 500 Index or the NASDAQ composite Index (Torchio, 2009). The market model therefore describes the normal relation between the return on the company's common stock and the return on the market and industry indexes. Stocks of companies, such as Exxon Mobile, Toyota Motors, and Gazprom, were used in this event study.

Mahmood et al. (2014) investigated the impact of political events on the stock market in Pakistan, using the KSE and concluded that political events make the KSE more volatile for a short period (maximum of 10-15 days). Mukhejee and Leblang (2007) investigated the link between diplomat's policies, rate of interest, and rise and fall in stock prices in the USA and UK. It was observed that investors hope for high interest rates when the Democratic and labor parties are on government benches in the USA and UK, respectively. On the other hand, trading communities anticipate low interest rates when the Republican Party and conservative party are ruling in both the USA and the UK. Huang (1985) and Lobo (1999) investigated the effects of political risk element "elections" on stock returns. It was realized that stock returns were negative in the election year and positive in the preceding years. It was also discovered in the study that stock volatility was very high during the period. As a result, elections were an important source of uncertainty as a political risk factor for the stock market.

Chan and Wei (1996) researched into the effect of political news in Hong Kong on the stock market volatility by using the GARCH model: reliable shares represented by the Hang Seng Index and Chinese shares were represented by the Red-chip Index,

© 2017 Global Journals Inc. (US)

respectively. It was discovered that the volatility of the shares in both indexes increase corresponding to political news. There was the existence of positive relationship between the positive and negative political news and the Hang Seng Index returns, whereas there was not any relationship between political news and the Red-chip Index returns.

Fitzsimons and Sun (2012) investigated the political risk factors of the United Kingdom, Mexico, China, and Iran on the returns and volatility of the market by using the GARCH model. The risk of the relevant countries was identified by the indexes calculated by the International Country Risk Guide (ICRG) and found that the less developed countries were exposed to political risk more than the developed countries.

a) Toyota Motors Company

Toyota Motors manufactures and sells vehicles globally. The company is noted for producing durable cars and believes in quality vehicles for its customers by exceeding the expectation of their customers for a greater smile. The Headquartered of Toyota Motors is in Japan. Toyota Motors has a total of employee strength of 348,877 and has a capital of 635 billion Yen, as of March 31, 2016. The President of Toyota Motors is Akio Toyoda. Toyota Motors operates around the globe, including in Asia, the Americas, Europe, the Middle East, and Africa.

Toyota Motors was chosen from the automobile industry because of the product durability and quality of the vehicles. The oldest Toyota brand still functions in the market and has a long-life span. In terms of supply chain, Toyota had employed an innovative method of supply chain management. These include total quality management (TQM), total productive maintenance (TPM), and Enterprise Resource Planning (ERP) systems (Cagliano, Caniato, & Spina, 2006; Modi & Mabert, 2007; Govindan, Kannan, & Noorul Haq, 2010). Toyota Motors applies international Organization Standard (ISO) for its international subsidiaries in China, Thailand, and the Middle East.

b) Collaborative with Suppliers

Toyota works with suppliers to produce products that win customer's satisfaction. The company provides open and fair opportunities for entry to any supplier wishing to conduct business with them by taking into consideration quality, cost, technology, delivery reliability, and customer services relationship. On innovation, Toyota aims for the integration of IT services and automobiles. The company is also developing T- connect and G-Link information services that use telematics-based on board information terminals and more expanding efforts overseas into China and the Middle East. As a result of the excellent customer service for its customers, Toyota has seen a great performance in the stock market around the globe, indicating that more and more people are investing in the company.

c) Exxon Corporation

Exxon Mobile Corporation explores and produces crude oil and natural gas in the United States, Canada/South America, Europe, Africa, Asia, and the Middle East. The company was founded in 1870 and is headquartered in Irving, Texas. Exxon Mobil was incorporated in the state of New Jersey in 1882. On November 30, 1999, Mobil became a wholly owned subsidiary of Exxon Corporation, and the enlarged entity changed its name to Exxon Mobil Corporation (Exxon).

d) Brands

Exxon Mobil brands include Esso, Exxon, and Mobil. The company has a broad portfolio of petrochemical product brand and service solutions. These products play a key role in enabling the manufacture of affordable sustainable and safe products that are helping meet the growing demands of an increasing population. Reliable commercial economic supplies of natural gas and power has become fundamental to the world's economic growth. Exxon Mobil employs a worldwide team of commercial experts to maximize the value of the company's natural gas and power interests.

e) Gazprom Corporation

Gazprom (2017) is a global energy company focused on geological exploration, production, transportation, storage, processing and sales of gas, gas condensate and oil, sales of gas as a vehicle fuel, as well as generation and market of heat and electric power. The company's strategic goal is to establish itself as a leader among global energy companies by diversifying sales market, ensuring reliable supplies, improving operating efficiency and fulfilling its scientific and technological potential. Gazprom holds the world's largest natural gas reserve. The company's share in the global and Russian gas reserves amount to 17 and 72%, respectively (Gazprom, 2017). Gazprom is a reliable supplier of gas to Russian and foreign consumers. The company owns the world's largest gas transmission system with a total length of 171.2 thousand kilometers. Gazprom sells more than half of its gas to Russian consumers and exports gas to more than 30 countries. Gazprom is among Russia's top four oil producers and ranks number one in the world in terms of thermal energy generation (Gazprom, 2017).

According to the security and exchange commission (SEC), stocks are defined as a type of security that gives a stockholder a share of ownership in a company. Stocks are also called equities. The equities market is a place for buying and selling of stocks between companies and investors. As noted by the SEC, common and preferred stocks can be grouped into one or more of the following:

© 2017 Global Journals Inc. (US)

1. Growth stocks: These stocks have earnings growing at a faster rate than market average. These stocks do not often pay dividends and investors buy them with the hope of capital appreciation for them to make more money.
2. Income stocks: These stocks pay dividends consistently and investors buy them for the income they generate.
3. Value stocks: These stocks have low price to earnings (PE) ratio. This means they are cheaper to buy than stocks with a higher PE ratio. Value stocks may either be growth stocks or income stocks. As a result, their low PE ratio may reflect the fact that they have fallen out of favor with investors. People therefore buy value stocks with the hope the market has overreacted and the stock price will rebound.
4. Blue-chips: These stocks are shares in large, well-known companies with a solid history of growth and they generally pay dividends.

f) Why Companies Issue Shares

As noted by the SEC, most companies issue share for the following reasons:

1. Pay off debt: As companies' issues stocks, they get money to be able to pay off their debt. For this reason, companies are able to keep up with suppliers, creditors, and bondholders.
2. Launching a new product: Many companies who intend to launch a new product or introducing a new business line can also issue shares to get money to carry the intended plan.
3. Expanding into the new market or regions: Most companies that operate in a city or country may want to expand their market into other cities, countries, or regions. To do so successfully, these companies can issue shares to enable them to gather enough money for this expansion.
4. Capital appreciation: occurs when a stock rises in price and investors sell these stocks to make profit, thereby earning a good return on investment.
5. Dividend payment: comes when the company distributes some of its earning to stockholders and dividend payments take the form of cash or stock payment. Cash payment is when the company pays its stockholders in cash. In this case, the money is taken out of the company. On the other hand, when stock payment is made by a company, the stockholders reinvest these stocks into the company for it growth.
6. Ability to vote and influence the company: Common stockholders have voting rights where they vote to elect board of directors who also hire senior management to run the company. Prefered stock holders do not have voting right.

g) Dividend Policy

Corporate dividend policy includes that of cash dividend and stock. Research indicates stock dividends will neither decrease the free cash flow of a corporation nor change the equity structure. It only processes financial transactions, as well as distributes pro rata to shareholders' existing holdings. Wei and Xiao (2009) discovered that during the period between 1993 and 2006, 34% of Chinese listed companies issued stock dividends. Cheng, Fung, and Leung (2009; Anderson, Chi, Ing-aram, & Liang, 2011; Nguyen & Wang, 2013) also discovered that stock dividend policy can provide excess of stocks. Chen et al. (2014) examined the preferences of Chinese individuals and institutional investors to stock dividends. After controlling the firm size and market performance, they realized the higher the ratio of stock dividends is, the more likely institutional investors will increase their overall holdings of the stock-dividend firm in the week after annual report.

Coulton and Ruddock (2011) found that dividend paying firms in Australia tend to be larger compared to non-dividend paying firms. Firm size may also act as a proxy for the degree of information available compared to smaller firms. Coulton and Ruddock (2011) discovered that dividend-paying firms in Australia are profitable as compared to non-dividend paying firms. This was re-echoed by the corporate life cycle theory that stated that matured firms pay dividends as compared to start up or growing firms.

On the other hand, any time cash dividends are paid, investors take their money out of the corporation. In China, cash dividends are immediately taxable to shareholders as income, while stock dividends are not taxable. In the absence of cash dividend payments, shareholders must sell shares to extract their ratable portion of accumulated firm wealth in the form of capital gains. There is no capital gains tax in China. As a result, stock dividends may provide a convenient-vehicle for managing capital gains' extraction for individual shareholders, also known as the tax clientele theory.

h) Stock Market Volatility

Uncertainties exist in the investment of stocks globally. These uncertainties may have an effect on the return to the investor. For instance, Agarwal (2014) indicated that exchange rate can affect stock prices for both multinational and domestic firms.

Exchange rate looks at trading between two or more currencies that may result in change in value of foreign operations reflected in profitability in the income statement of firms. As a result, a country that devalues its currency may have a repercussion on export firms (Agarwal, 2014). Fang and Miller (2002) discovered there was an effect of daily currency depreciation on Korean stock returns, which resulted in a bidirectional causality between the Korean foreign currency market

© 2017 Global Journals Inc. (US)

and the Korean stock market. Showing the level of exchange rate depreciation negatively affects stock market returns.

Dowling and Muthusamy (2005) examined the properties of the Australian implied volatility index (AVIX) in the form of seasonality and the information content of AVIX as a predictor of future volatility. The results indicated there was a strong seasonality between the AVIX and stock returns. Yang and Liu (2012), on the other hand, analyzed the forecasting power of TVIX as the predictor of future volatility index for the Taiwan stock market. The outcome showed the volatility index is a strong indicator of future markets. Kozyra and Lento (2011) studied the trading signal based on implied volatility levels and suggested that VIX level provides large amounts of profit, indicating that a relationship holds among the level of expected volatility and profitability.

Chapter Three

III. Methodology

a) Sample or Setting

This research used online resources, such as Google Search, to gather data. Three multinational companies were selected at random: Exxon Mobil from the United States of America, Gazprom from Russia, and Toyota Motors from Japan. Whiles Toyota Motors is in the automotive industry, both Exxon Mobil and Gazprom are both in the oil and gas industry.

b) Research Design

A quantitative method was used to carry out this research with data collected using the information on Exxon Mobile, Toyota Motors, and Gazprom, which are all multinational companies. These three companies stock performance information was obtained using Yahoo Finance. The event study estimates abnormal returns at and around the time the event occurred. A test of statistical significance (t-test) was applied to the adjusted stock price to determine if the event had an effect on the firm's share price (Toyota Motors, Exxon Mobil, and Gazprom) independent of the industry such as the S&P 500 or sector wide share price behavior. The researcher assumed that individual stock returns of Toyota Motors, Exxon Mobil, and Gazprom can be predicted to some degree. A Capital Asset Pricing Model was used to determine the abnormal return of the three companies compared to the S&P 500.

Capital Asset Pricing Model (CAPM)

$$Re = Rf + \beta\,(Rm - Rf) \quad \ldots\ldots (1)$$

Where Re is the expected return of stock, Rf is the risk free rate, β is beta, and Rm is the market rate.

$$\text{Abnormal Return} = \text{Actual Return} - \text{Expected Return} \quad \ldots (2)$$

c) The Events Studied

This study investigated the stock market performance using three significant events that took place in the United States. The 2000 election that was contested between then vice president Al Gore and the Republican counterpart, George W. Bush, the son of the former president, George H.W. Bush, with George W. Bush winning the election.

This event took place on the 7th of November, 2000. The 2008 election witnessed the first Black president. This event took place on the 4th of November, 2008. The election was contested between Barack Obama representing the Democratic Party and John McCain representing the Republican Party.

On November 8, 2016, the United States voted to elect its 45th President, Donald John Trump, a Republican nominee being elected as the President of the United States of America for a four (4) year term. The keenly contested election was between Hillary Diane Rodham Clinton and Donald John Trump. During the political campaign period, information on the daily performance on any of the candidates had an influence on the stock market, including the S&P 500 and Dow Jones Industrial average, which are the stock market index and served standard measure for stock market performance.

d) Data Collection and Analysis

A monthly historical stock market data of Exxon Mobil, Toyota Motors, and Gazprom were collected using Yahoo Finance. The researcher gathered data samples based on 30 days before the election announcement and 30 days after the announcement of election results of the three Presidential elections. The data were analyzed using SPSS and Excel software. The hypothesis of this research was tested based on the data available on the three historical events on the three multinational companies. The stock returns of the three multinational companies were compared to that of the returns of the industry S&P 500 index.

e) Methodological Assumptions

Leedy and Ormrod (2010) posited, "Assumptions are so basic that without them, the research problem itself could not exist" (p. 62). Assumptions should be justified as being "probably" true otherwise the study cannot progress. In this research, the researcher assumed that data collected using electronic records through Yahoo Finance for the three multinational companies were reliable for the analysis to determine the stock market return performance.

f) Limitations

Limitations are potential weaknesses in a research that are out of the control of the researcher. In this research, the limitation was that Gazprom's data were only available for 2016 and 2008 and data for 2000

© 2017 Global Journals Inc. (US)

year were unavailable or could not be obtained. However, data for Exxon Mobil and Toyota Motors are available for all the three significant events. For this reason, there was a partial analysis for the 2000 year while a full analysis occurred for 2016 and 2008. Data from Internet sources may have been compromised, as a result, this also served as a limitation in this research. Different data sets, such as 63, 64, and 65 of dissimilar industries, were used.

g) Delimitations

Delimitations are characteristics that limit the scope and define the boundaries of a study. Therefore, delimitations were under the control of the researcher. These included research questions, research objectives, and variables of interest. In this research, the delimitations were that data from the three multinational companies were obtained using electronic records which the researcher had the firms believe that this helped to simplify work in terms of travel and interviewing to collect data.

Chapter Four

IV. Results

Data analysis in this chapter consisted of two parts. The t-test where the absolute value of the t-statistics of the three companies were Exxon Mobil, Toyota Motors, and Gazprom, was compared with the Z-value of 1.96 and the analysis for the abnormal stock return analysis where the expected return, abnormal, and the return of the market index (S&P 500) was compared for the three election years (2016, 2008, and 2000).

2016 Analysis of Stock Market Performance

V2 = stock value for Exxon Mobil
V3 = stock value for Toyota Motors
V4 = stock value for Gazprom
V5 = stock value for S&P 500

Table 1: Year 2016 Volatility Analysis

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
V2	63	84.37774887	10.810511879	1.361996475
V3	63	114.99555537	14.730866463	1.855914727
V4	63	.6327	.43707	.05507
V5	63	2157.79332138	281.229468297	35.431582593

Table 2: Year 2016 T- Test Analysis

One-Sample Test

	Test Value = 4					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
V2	59.015	62	.000	80.377748873	77.65515671	83.10034103
V3	59.806	62	.000	110.995555365	107.28563469	114.70547604
V4	-61.151	62	.000	-3.36730	-3.4774	-3.2572
V5	60.787	62	.000	2153.793321381	2082.96659697	2224.62004579

© 2017 Global Journals Inc. (US)

2008 Data Analysis

Table 3: Year 2008 Volatility Analysis

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
V2	65	33.66892315	5.356123619	.664345372
V3	65	63.02329848	8.919319006	1.106305366
V4	65	58.12402371	7.790756978	.966324474
V5	65	885.44907791	121.140827979	15.025670446

Table 4: Year 2008 T- Test Analysis

One-Sample Test

	Test Value = 4					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
V2	44.659	64	.000	29.668923154	28.34174070	30.99610560
V3	53.352	64	.000	59.023298477	56.81319944	61.23339751
V4	56.010	64	.000	54.124023708	52.19356865	56.05447877
V5	58.663	64	.000	881.449077908	851.43185048	911.46630533

V2 = stock value for Gazprom
V3 = stock value for Toyota Motors
V4 = stock value for Exxon Mobil
V5 = stock value for S&P 500

2000 Data Analysis

Table 5: Year 2000 Volatility Analysis

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
V2	64	65.10090452	9.813357808	1.226669726
V3	64	28.85176923	3.404225128	.425528141
V4	64	1335.90077781	173.771557591	21.721444699

© 2017 Global Journals Inc. (US)

Table 6: Year 2000 T-Test Analysis

One -Sample Test

	Test Value = 3					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2 -tailed)	Mean Difference	Lower	Upper
V2	50.626	63	.000	62.100904516	59.64960067	64.55220836
V3	60.752	63	.000	25.851769234	25.00141910	26.70211937
V4	61.363	63	.000	1332.900777813	1289.49393423	1376.30762140

V2 = stock value for TYT
V3 = stock value for Exxon Motors
V4 = stock value for S&P 500

Abnormal Return Estimation
To determine the abnormal return, the Capital Asset Pricing Model was used.

Capital Asset Pricing Model (CAPM) 2016 Year Analysis

$Re=Rf+\beta\ (Rm-Rf)$

Where Re is the expected Return of stock, Rf is the risk free rate, β is beta, and Rm is the market rate.

Expected Return for TYT Company = 2.09%+0.67 (11.96%-2.09%)
Expected Return for TYT Company = 8.7029
Expected Return for Gaz Company = 2.09%+2.32 (11.96-2.09%)
Expected Return for Gaz Company = 24.9884
Expected Return for Exx Company = 2.09%+0.65 (11.96-2.09%)
Expected Return for Exx Company = 8.5055

CAMP Model 2008 Year Analysis

Expected Return for TYT Company = 3.74+0.67 (-37%-3.74%)
Expected Return for TYT Company = -23.556
Expected Return for Gaz Company = 3.74%+2.32 (-37%-3.74)
Expected Return for Gaz Company = -90.777
Expected Return for Exx Company = 3.74%+0.65 (-37%-3.74%)
Expected Return for Exx Company = -22.741

CAMP Model 2000 Year Analysis

Expected Return for Exx Company = 6.66+0.65 (-9.1%-6.66%)
Expected Return for Exx Company = -3.584
Expected Return for TYT Company = 6.66%+0.67% (-9.1%-6.66%)
Expected Return for TYT Company = -3.899
Expected Return for Gaz Company = N/A

Abnormal Return 2016 Year = Actual Return-Expected Return

TYT Company = 3.44-8.7029
Abnormal Return = -5.2629
Exx Company = 41.05-8.5055
Abnormal Return = 32.5445
Gaz Company = -1.16-24.9884
Abnormal Return = -26.1484
Compare with market index (S&P 500) 2016 Year = 5.2%

© 2017 Global Journals Inc. (US)

Abnormal Return 2008 Year = Actual Return- Expected Return

TYT Company = 7.11- -23.556
Abnormal Return = 30.666
Exx Company = 11.89- -22.741
Abnormal Return = 34.631
Gaz Company = -2.82- -90.777
Abnormal Return = 87.957
Compare with market index (S&P 500) 2008 Year = -2.82%

Abnormal Return 2000 Year = Actual Return - Expected Return

TYT Company = -19.3- -3.899
Abnormal Return = -15.401
Exx Company = -7.91- -3.584
Abnormal Return = -4.326
Compare with Market index (S&P 500) = -6.99%

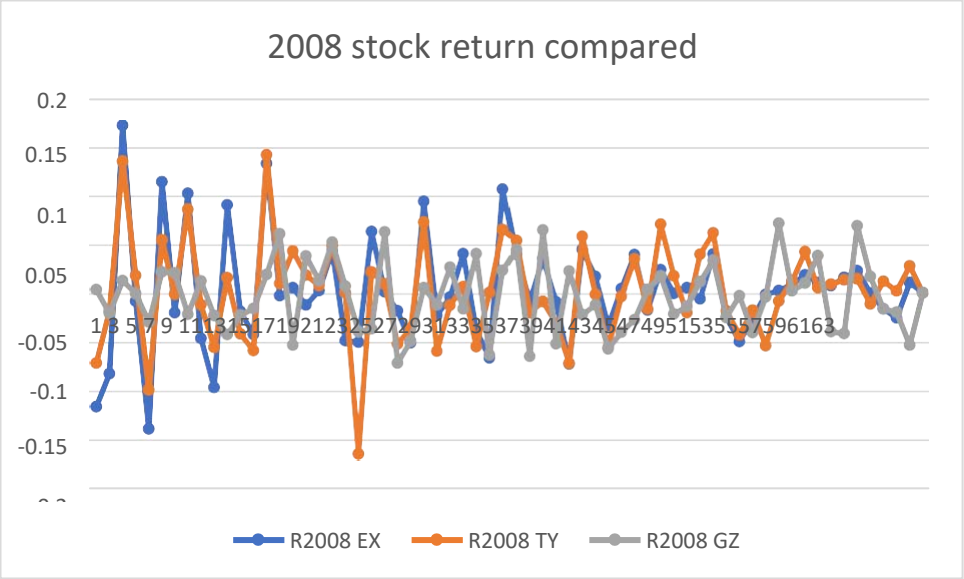

Figure 1: 2008 stock return compared.

R2008Ex = Exxon Mobil stock market return
R2008TY = Toyota Motors stock market return
R2008GZ = Gazprom stock market return

© 2017 Global Journals Inc. (US)

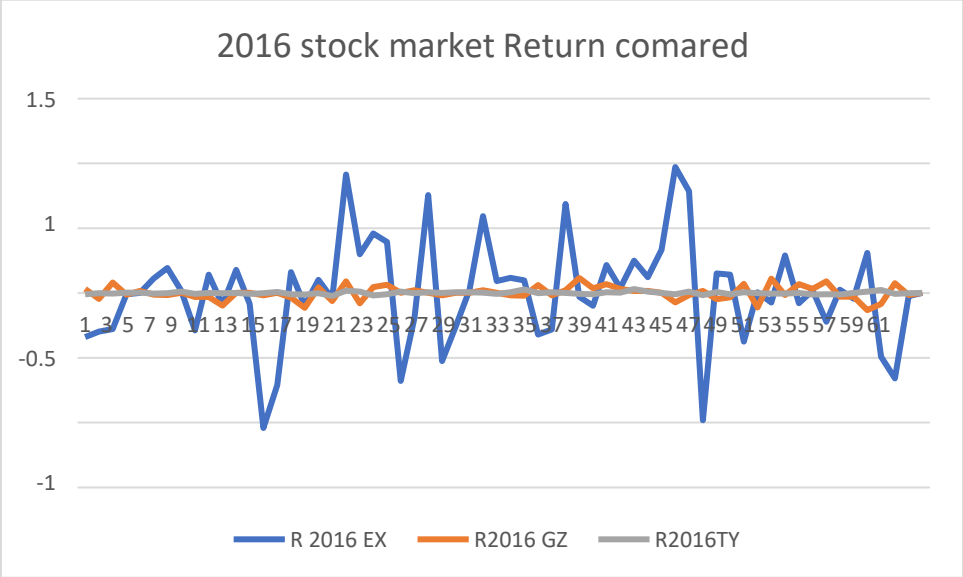

Figure 2: 2016 stock market return compared.

R2016EX = Exxon Mobil stock market return
R2016GZ = Gazprom stock market return
R2016TY = Toyota Motors stock market return

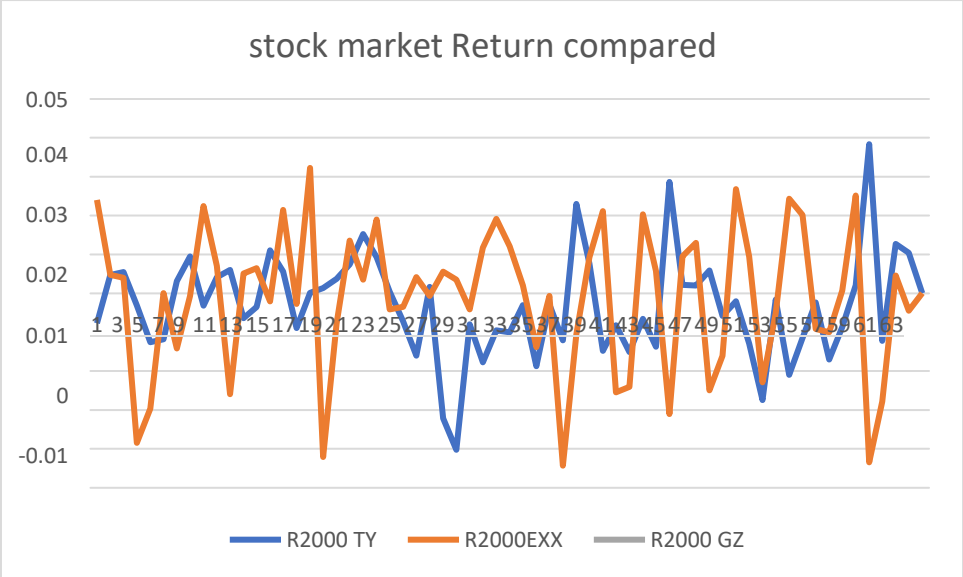

Figure 3: 2000 stock market return compared.

R2000TY = Toyota Motors stock market return
R2000EXX = Exxon Mobil stock market return
R2000GZ = Gazprom stock market return

© 2017 Global Journals Inc. (US)

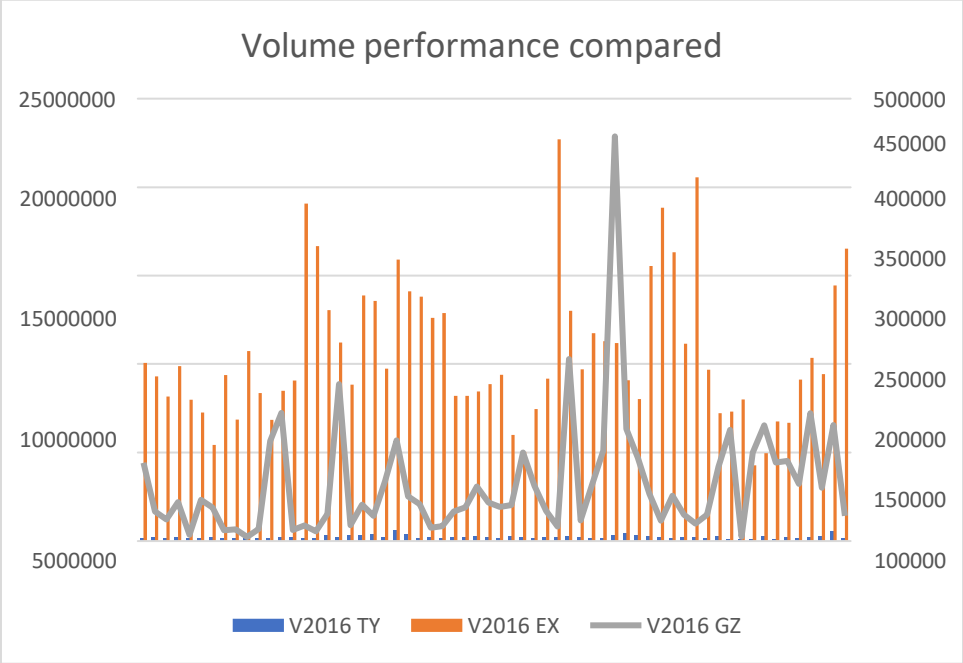

Figure 4: 2016 stock volume traded compared.

V2016TY = Toyota Motors volume traded
V2016EX = Exxon Mobil volume traded
V2016GZ = Gazprom volume traded

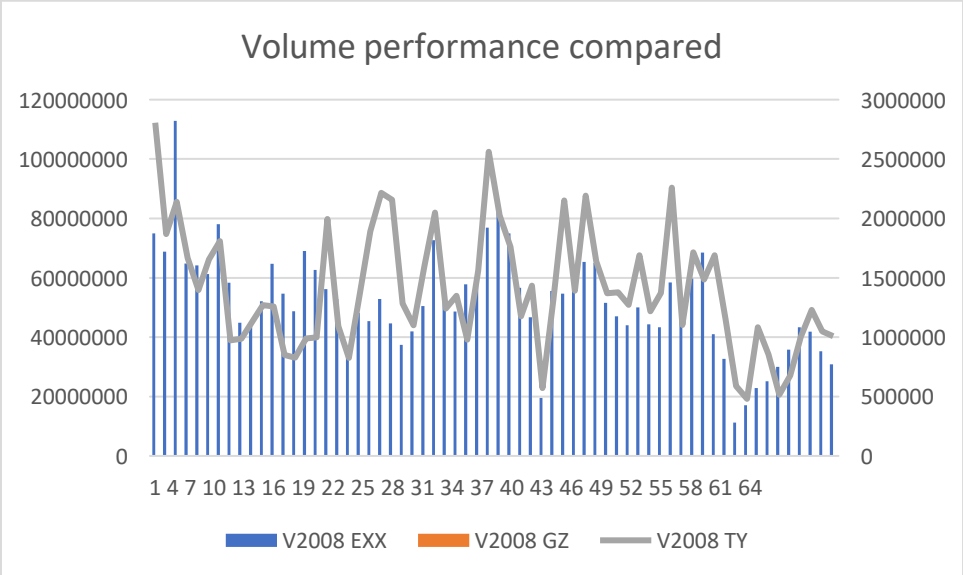

Figure 5: 2008 stock volume traded compared.

V2008EXX = Exxon Mobil volume traded
V2008GZ = Gazprom volume traded
V2008TY = Toyota Motors volume traded

© 2017 Global Journals Inc. (US)

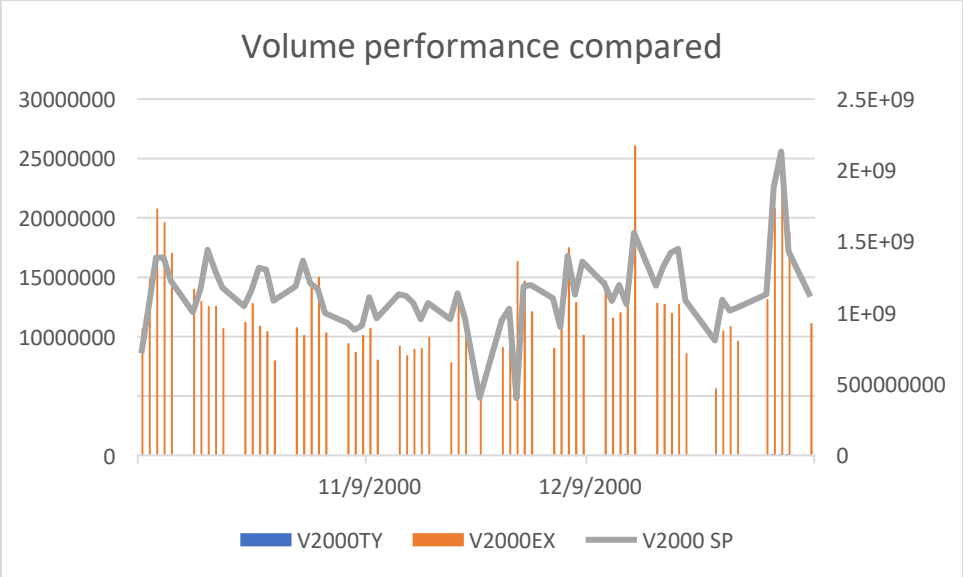

Figure 6: 2000 stock volume traded compared.

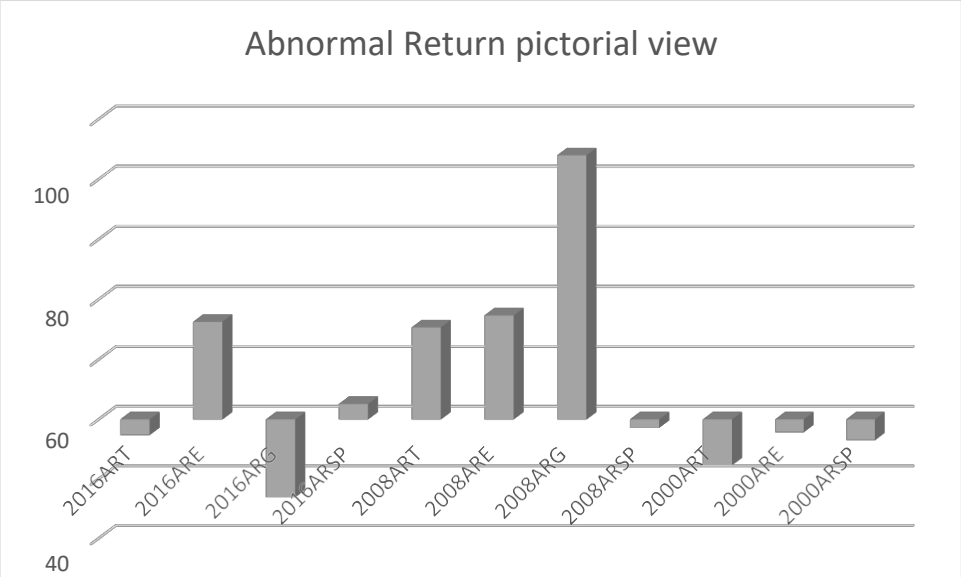

Figure 7: Abnormal return compared.

ART = Abnormal return for Toyota Motors
ARE = Abnormal return for Exxon Mobil Company
ARG = Abnormal return for Gazprom Company
ARSP = Abnormal return for S&P 500 (Market index)

a) Data Interpretation

The independent sample t-test compares the means of two independent variables in order to determine whether there is a statistical significance to either accept or reject the null hypothesis. In this research, the adjusted stock values of the three multinational companies, Toyota Motors, Exxon Mobil, and Gazprom during the three historical elections (2000, 2008, and 2016), were analyzed using SPSS software. A t-test was conducted and the absolute values of the three companies (p-values = 0.000, 0.000, and for the year 2000, 2008, and 2016), respectively, which were less than the critical value of 0.05. As a result, the null hypothesis was rejected in favor of alternative hypothesis and concluded:

- Rational investors would cause the effect of the event to be reflective in the prices of stocks.
- There was a difference in the stock return before and after the announcement of the presidential results.

© 2017 Global Journals Inc. (US)

- There was a difference of volume of stocks traded before and after the announcement of the presidential results.

A comparative stock return analysis of the three companies on election day was also measured against the market index, that is for the S&P 500, and the results indicated that for November 8, 2016, the return values were Exx = 0.461, TYT = -0.018, Gaz = 0.044, and S&P 500 = 0.011. The previous means that Exx and Gaz outperformed the market index, while TYT was losing to the market index.

For the election held on November 4, 2008, the stock return values of the three multinational companies as compared the market index were: Exx = 0.915, TYT = 0.017, Gaz = 0.088, and S&P 500 = 0.022. Again, the analysis showed that Exx and Gaz were able to outperform the market, while TYT underperformed the market.

For the election held on November 7, 2000, only two multinational companies' stock returns were analyzed (Exx and YTY). Gaz stock values were unavailable for the 2000 year. The stock returns were: Exx = 0.019, TYT = 0.009, and S&P 500 = -0.016. Here again, Exx and TYT outperformed the market index.

b) Election Year 2016, Volatility Interpretation

The stock market volatility of the three multinational companies were also analyzed and the results showed that for the election held on November 8, 2016, Exx had a volatility = 10.811, TYT = 14.731, Gaz = 0.437, and S&P 500 = 281.229. This indicated that the market index (S&P 500) was highly volatile during the 2016 election year. TYT was also volatile among the three multinational companies. This was followed by Exx, with Gaz being the least in terms of volatility.

c) Election Year 2008 Volatility Interpretation

During the 2008 election, volatility of the three multinational companies results indicated that Exx = 7.791, TYT = 8.919, Gaz =5.356, and the market index, S&P 500 = This means that during the 2008 election year, the market index was again high and among the three multinational companies, TYT was the most volatile, followed by Exx, with Gaz being the least volatile.

d) Election Year 2000 Volatility Interpretation

During the 2000 election, stock market volatility analysis indicated that Exx =3.981, TYT = 9.813, and S&P 500 = 173.772. TYT exhibited a high volatility among the three multinational companies. This was followed by Exx. Stock data for Gaz were unavailable. S&P 500 volatility was the highest. Comparatively, the market index volatility was highest during the 2016 election year with a value of 281.229. The second highest of S&P 500 occurred during the 2000 election, with a value of 173.772, with the 2008 election being the least in terms of S&P 500 volatility, with a value of 121.141.

In terms of volatilities among the three multinational companies, the highest volatility occurred during the 2016 election with TYT having the highest value of 14.731, followed by Exx and then Gaz. The second highest volatility of the three companies occurred during the 2000 election with TYT having the highest volatility value of 9.813. This was followed by Exx with a value of 3.981. Based on the stock returns and volatility analysis of the three historical elections in the United State of America, there is evidence to believe that:

1. There was a relationship between election results' announcements and stock market return performance.
2. There existed a difference of stock market returns of the three multinational companies.
3. The difference in stock market volatility would have an effect on investors.

e) Abnormal Return Interpretation

Different models exist for the calculation of abnormal return of stocks, such as the Capital Asset Pricing Model, the Mean Adjusted Returns Model, and the Market Adjusted Model. In this research, the abnormal return calculation used the Capital Asset Pricing Model (CAMP) to determine the abnormal returns of the three multinational companies. Abnormal returns could be negative or positive and Beta (β) plays a role in the final results. Analysis of the results showed the following during the 2016 election announcements: TYT = -5.263%, Exx = 32.545%, Gaz = -148%, and S&P 500 =5.2%. For the 2008 election announcement, the analysis of results indicated that TYT=30.666%, Exx =34.631%, Gaz =-87.957%, and S&P 500 = -2.82%. During the 2000 election year, the analysis of results showed: TYT = -15.401%, Exx = -4.326, and -6.99%.

Chapter Five

V. Conclusions and Discussion

In this research, the conclusion covers two parts, a test of statistical significance using the adjusted stock prices of the three multinational companies and the market index using the S&P 500. These adjusted stock prices spanned from the three historical events of the election announcements following the November 4, 2000, November 7, 2008, and November 8, 2016 elections. The second part of the analysis looked at the abnormal stock market return determination using the same historical events and the same multinational companies applying the Capital Asset Pricing Model (CAPM). Here, the Treasury bill rates of the various historical years were obtained from government treasuries and beta were from the multinational companies obtained from Yahoo Finance daily historical

© 2017 Global Journals Inc. (US)

data. Analysis of the results showed: There was a relationship between election results announcements and stock market return performance.

There existed a difference of stock market returns of the three multinational companies. The differences in stock market volatility would have an effect on investors owed that. Also, the abnormal return analysis proved there exists an abnormal performance of the three multinational from a lowest low of -15.401% during the 2000 election event to a highest low of -26.148% in the 2016 election, to a high of 87.957% in the 2008 election event. This analysis is inconsistent with Mahmood et al.'s (2014) event announcements that stated they do have an effect on the stock market returns.

a) Recommendations

For future studies, the researcher recommends that:

1. Further study involving three decades to be carried out to find out how return and abnormal return patterns occur.
2. This could also be extended to developing economies to find out if major events, like the election announcements, do have any effect on different country's stock markets.
3. Multinational companies of similar industries could be used in the future research to determine the trend in abnormal return.

References Références Referencias

1. Aamir, M., & Shah, S. Z. A. (2011). Dividend announcements and the abnormal stock returns for the event firm and its rivals. Australian Journal of Business and Management Research, 1(8), 72.
2. Agarwal, N. (2014). Buying high return low volatility technology stocks. Economics, Management and Financial Markets, 9(3), 73.
3. Anderson, H. D., Chi, J., Ing-aram, C., & Liang, L. (2011). Stock dividend puzzles in China. Journal of the Asia Pacific Economy, 16(3), 422-447.
4. Baruník, J., & Vacha, L. (2013). Contagion among Central and Eastern European stock markets during the financial crisis. arXiv preprint arXiv:1309.0491.
5. Bechtel, M. M. (2009). The political sources of systematic investment risk: Lessons from a consensus democracy. The Journal of Politics, 71(2), 661-677.
6. Binder, J. (1998). The event study methodology since 1969. Review of quantitative Finance and Accounting, 11(2), 111-137.
7. Cagliano, R., Caniato, F., & Spina, G. (2006). The linkage between supply chain integration and manufacturing improvement programmes. International Journal of Operations & Production Management, 26(3), 282-299.
8. Chan, Y. C., & Wei, K. C. J. (1996). Political risk and stock price volatility: The case of Hong Kong. Pacific-Basin Finance Journal, 4(2), 259-275.
9. Cheng, L. T., Fung, H. G., & Leung, T. Y. (2009). Dividend preference of tradable-share and non-tradable-share holders in Mainland China. Accounting & Finance, 49(2), 291-316.
10. Coulton, J. J., & Ruddock, C. (2011). Corporate payout policy in Australia and a test of the life-cycle theory. Accounting & Finance, 51(2), 381-407.
11. Dowling, S., & Muthuswamy, J. (2005). The implied volatility of Australian index options. Review of Futures Markets, 14(1), 117-155.
12. Fama, E. F. (1976). Foundations of finance: portfolio decisions and securities prices. Phoenix, AZ: Basic Books (AZ).
13. Fang, W., & Miller, S. M. (2002). Currency depreciation and Korean stock market performance during the Asian financial crisis.
14. Fitzsimons, E., & Sun, M. (2012). An exploration of: How political risk components affects the stock return and volatility considering different countries of varying economic development. Lund University.
15. Gazprom. (2017). Retrieved from http://www.gazprom.com/
16. Govindan, K., Kannan, D., & Noorul Haq, A. (2010). Analyzing supplier development criteria for an automobile industry. Industrial Management & Data Systems, 110(1), 43-62.
17. Huang, P. (1985). The peasant economy and social change in North China. Stanford University Press.
18. Kozyra, J., & Lento, C. (2011). Using VIX data to enhance technical trading signals. Applied Economics Letters, 18(14), 1367-1370.
19. Kumar, S., Mahadevan, A., & Gunasekar, S. (2012). Market reaction to dividend announcement: an empirical study using event study technique. Prestige International Journal of Management & IT-Sanchayan, 1(1), 141.
20. Leedy, P. D., Ormrod, J. E. (2010). Practical research: Planning and design (9th ed.). New York, NY: Merrill.
21. Lobo, B. J. (1999). Jump risk in the US stock market: Evidence using political information. Review of Financial Economics, 8(2), 149-163.
22. Mahmood, S., Irfan, M., Iqbal, S., Kamran, M., & Ijaz, A. (2014). Impact of political events on stock market: Evidence from Pakistan. Journal of Asian Business Strategy, 4(12), 163-174.
23. Miglani, P. (2011). An empirical analysis of impact of right issues on shareholders returns of Indian listed companies. Researchers World, 2(4), 169.
24. Modi, S., & Mabert, V. (2007). Suppliers development: improving supplier performance through knowledge transfer. Journal of Operations Management, 25, 42-64.

© 2017 Global Journals Inc. (US)

25. Mukherjee, B., & Leblang, D. (2007). Partisan politics, interest rates and the stock market: Evidence from America and British returns in the twentieth century. Economics and Politics, 19(2), 135-167.
26. Nguyen, N. H., & Wang, D. Y. (2013). Stock dividends in China: signalling or liquidity explanations?. Accounting & Finance, 53(2), 513-535.
27. Torchio, F. (2009). Proper event study analysis in securities litigation. Journal of Corporation Law, 35, 159-168.
28. Vithessonthi, C., & Techarongrojwong, Y. (2013). Does monetary policy announcement affect stock prices in emerging market countries? The case of Thailand. Journal of Multinational Financial Management, 23(5), 446-469.
29. Wei, G., & Xiao, J. Z. (2009). Equity ownership segregation, shareholder preferences, and dividend policy in China. The British Accounting Review, 41(3), 169-183.
30. Yang, M. J., & Liu, M. Y. (2012). The forecasting power of the volatility index in emerging markets: evidence from the Taiwan stock market. International Journal of Economics and Finance, 4(2), 217.

© 2017 Global Journals Inc. (US)

This page is intentionally left blank

© 2017 Global Journals Inc. (US)