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Are BRICS Markets Equally Exposed to Trump's Agenda?

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Abstract

There is no doubt that politicians exert a significant impact on stock markets. The evolving financial market volatility over the United States presidential election is a prime example of how elections have an impact on financial markets. This study assessed whether BRICS stock markets were equally vulnerable to Trump's agenda using event-study methodology and regression-based intention votes over a period of 120 days toward the final election result on 08 November 2016. It was shown that although Trump's win had a negative effect on some markets, it had a positive effect on others. It had the most adverse impact on China together with Brazil. Although not to the same degree as these two countries, India and South Africa were also affected negatively. These adverse reactions can be explained by Trump's neo-mercantilist attitude, which involves cancelling trade deals and instituting tariffs. However, the effects on Russia appear to be positive due to the expectations about the easing of sanctions imposed on Russia because of the Russian role in the conflict of Ukraine.

JEL Classifications: E65, G10, G13, G14
Keywords: US Presidential Elections, Trump's Agenda, BRICS Stock Markets, Event-Study Methodology, Social Media, Public Opinion Polls

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I. Introduction

Even though a recent study (Bouoiyour and Selmi 2016a) has examined how United States stock markets would react to Trump's win, a number of other countries witnessed their markets respond significantly after the polls closed. Trump's *America First* protectionist plans may have a significant negative effect on the emerging markets including BRICS. Trump threatened to cancel the tariff-cutting Trans-Pacific Partnership trade agreement between the United Nations and various emerging countries. Although it remains unclear whether or not Trump's threats will translate into actual economic and political policies, market participants appear to be concerned by ongoing volatility because of Trump's protectionist rhetoric. All BRICS leaders have aimed, undoubtedly, to promote economic growth and curtail a loss of foreign capital while controlling political turmoil and overcoming harmful protectionism consequences. But the reduced trade would put the world on a lower economic growth trajectory (The International Monetary Fund, 2016). In this context, it may be beneficial for market participants to differentiate between the countries that are best able and those that are unable to avoid the adverse effects of uncertainty surrounding Trump's economic agenda.

Given these considerations, this study seeks to answer various critical questions, which follow. *What does Trump's election victory mean for BRICS shares? Are BRICS stock markets equally exposed to Trump's plans?* To address these questions, the standard market model event-study methodology, which was originally described by Dodd and Warner (1983) and Brown and Warner (1985), was employed. This study aims to investigate the average stock market response to a specific stock market event (in particular, the announcement of Trump's victory on November 08, 2016). Another purpose of this study is also to assess BRICS stock returns in relation to voter intentions based on social media (Twitter), search engine queries (Google Trends) and polling data as indicators of public interest-levels in the United States presidential election. We found that BRICS stock markets were

heterogeneously exposed to Trump's win at the polls. While some markets emerged as losers, namely, China, Brazil, India and South Africa, in that order, others appeared to be winners, in particular, Russia. Donald Trump's victory has been viewed as detrimental for BRICS markets especially because of his protectionist rhetoric. However, a potential factor, which has made investors more inclined toward Russian shares is the possible easing of western sanctions against Russian companies.

The outline of the paper is as follows: Section II discusses the theory on the effect of political uncertainty on financial markets. Section III describes the methodology and data employed in this study. Section IV reports the main findings, and Section V concludes.

II. Background

Political risk is associated with heavier stock return volatility. In general, stock markets are influenced by expected future economic policy decisions of a new government and the resulting circumstances of such policies (Brogaard and Detzel 2015, Schiereck *et al*. 2016). Such policy changes are inclined to place downward pressure on stock prices, particularly if the uncertainty is extreme (Pastor and Veronesi 2012). Once the political uncertainty becomes less pronounced, stock prices normally improve (Pantzalis *et al*. 2000). However, the effects of various events may be persistent. For instance, in relation to Brexit, the uncertainty is likely to remain high until the future relations between the United Kingdom and the European Union become clearer. In the interim, it continues to exert a harmful influence on stock prices (Bouoiyour and Selmi 2016b, Schiereck *et al*. 2016).

Even though political uncertainty may take various shapes and forms including changes in the government, and in the domestic and foreign policies, this study focused on a particular kind political uncertainty, namely, that associated with elections. The latter constitutes a major event for the

re-distribution of political power and accordingly, may have significant implications for the future political and economic prospects of a country. There has been considerable debate on the impact of elections on asset price variation (Kim and Mei 2001, Akmedov and Ekaterina 2004, Canes-Wrone and Jee-Kwang 2014, Bouoiyour and Selmi 2016a). Furthermore, there is a significant consensus that political uncertainty renders financial markets extremely volatile, particularly after close elections or in response to election results that may lead to radical policy changes (Canes-Wrone and Jee-Kwang 2012). There are three reasons an election may exacerbate financial market volatility. Firstly, heightened political uncertainty related to the election outcome may intensify the asymmetries between informed and uninformed market participants. Secondly, a deeper uncertainty over a presidential election in the United States may amplify the ambiguity across market participants about economic fundamentals and accordingly, have an impact on the value of shares. Trump's victory ignited uncertainty about the policies he would pursue. Several analysts proclaimed that the only certainty about the United States President-elect Donald Trump's incoming administration involved the uncertainty that it would generate. This has been seemingly true with regard to a principal area of policy that is regarded as sensitive. It was believed that if the Trump administration cut taxes and undertook a massive infrastructure program, America's budget deficits would increase substantially. This in conjunction with the Federal Reserve's gradual interest rate increases would appreciate the dollar and the so-called emerging-market currencies would deteriorate; this would result in money from the rest of the world being transferred to the United States. This was perceived as a very anxious prospect if not terrifying. Thirdly, political uncertainty in elections may disrupt the normal functioning of financial markets; this has been evident since Trump's proclamations on various topics such as the withdrawal from North America Free Trade Agreement (NAFTA) and the re-negotiation in free-trade agreements, which has resulted in more isolated and less open United States markets. This remains dependent on the opinion of congress

as well as the legal challenges from private firms, which may play a pivotal role in deterring Trump's administration from implementing these measures (Bouoiyour and Selmi 2016a). All of these considerations may be of the utmost relevance for politically sensitive industries, that is, companies whose economic fortunes are more likely to be significantly influenced by political continuity or discontinuity.

Much effort has been expended in refining measures of uncertainty (Bloom 2009, Bloom *et al*. 2012, Cesa-Bianchi *et al*. 2014, Jurado *et al*. 2015). Uncertainty may be defined as the conditional volatility of a disturbance that is unforecastable. A challenge in analyzing the uncertainty and its dependence on other macro-economic and financial phenomena empirically is that no objective measure of uncertainty exists. In this study, the uncertainty related to the United States political elections was analyzed through two dimensions: (i) the way in which the 2016 United States presidential election was communicated by the media and social networking as well as public opinion polls; and (ii) the time leading up to the election or the time of government transition after the election by using a dummy variable for the day of the announcement of the election result.

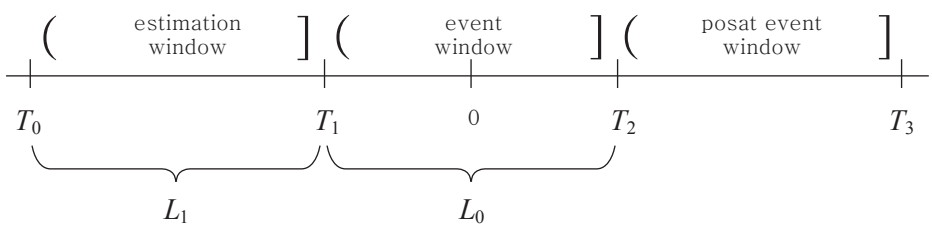
III. Methodology and Data

To quantify the effects of Trump's election on BRICS stock markets, two methodological steps were conducted. First, the impact of the 2016 United States election event, a dummy variable that takes a value 1 on November 8, 2016 and 0 otherwise, on the BRICS abnormal returns was analyzed. Second, the impact of the intentions of the voters on the BRICS stock returns was assessed. More specifically, a new approach to identify people's opinions about Trump's win by using data from social media, search engine queries and public opinion polls was provided.

A. Event-study methodology

Event-study methodology, first proposed by Warner (1983) and Brown and Warner (1985), is designed to examine the impact of a specific event on a dependent variable. The stock price is a dependent variable that is commonly used in event studies. An event study is an analysis of the changes in stock price beyond expectations (abnormal returns) during a precise period of time (event window) such that the abnormal returns are attributed to the onset of such event. Specifically, the purpose is to test if there is an abnormal stock price effect associated with an event. Day "0" is defined as the day of the event for given stocks. Thereafter, the estimation and event windows can be determined (Figure 1). The interval $[T_1+1, T_2]$ is the event window with length $L_2 = T_2-T_1-1$, whereas the interval $[T_0+1,T_1]$ is the estimation window with length $L_1 = T_1 - T_0 -1$. The length of the event window often depends on the ability to date the announcement accurately. If one is able to date it precisely, the event window will be less lengthy and capturing the abnormal returns will be more satisfactory.

Figure 1. Event-study windows



In this study, for each BRICS equity a maximum of 120 daily stock returns observations for the period around the final election result was employed; beginning at day -110 and ending at day + 5 relative to the event. The first 110 days (-115 through -5) was denoted as the estimation period and the following 11 days (-5 through +5) as the event period. The Cumulative Abnormal Return (CAR) for sector i during the event window $[\tau_1; \tau_2]$ surrounding the event day $t = 0$, where $[\tau_1;\tau_2] = \in [-5;+5]$, was expressed as follows:

$$CAR_{i,[\tau_1,\tau_2]} = \sum_{t=\tau_1}^{\tau_2} + (R_{i,t}\hat{\alpha}_i - \hat{\beta}_i R_{M,t}) \quad (1)$$

where $CAR_{i,[\tau_1,\tau_2]}$ is the cumulative abnormal return of share *i* during the event window $[\tau_1; \tau_2]$, $R_{i,t}$ is the realized return of stock *i* on day *t*, $R_{M,t}$ is the return of the benchmark index of stocks *i*, α_i and β_i are the regression estimates from an Ordinary Least Squares (OLS) regression for 110 trading day estimation period until $t = -5$. The MSCI emerging stock market return was employed as the benchmark index. The event day for the Trump election was determined as November 8, 2016.

Subsequently, an OLS regression of the observed cumulative abnormal return for each of the BRICS shares on the announcement day of the Trump victory was estimated. For this purpose, the daily data for the stock market indices of Brazil's Ibovespa, China's Shanghai index, Russia's Russia Trending System (RTS) index, India's National Stock Exchange (NSE) and South Africa's Financial Times Stock Exchange / Johannesburg Stock Exchange (FTSE/JSE) were employed.

The equation to estimate this was denoted as:

$$CAR_{i,[\tau_1,\tau_2]} = \delta_0 + \delta_1 Event + \varepsilon_i \quad (2)$$

where $CAR_{i,[\tau_1,\tau_2]}$ is the cumulative abnormal returns (the dependent variable), *Event* is a dummy variable, which was accorded the value of 1 on the day of the outcome of the United States election and 0 otherwise, and ε is the error term.

A further objective of this study was to determine whether the event-study findings were sensitive to the inclusion of potential control variables. In general, major global financial and economic factors could be channels through which fluctuations in the world's economic and financial conditions are transmitted to BRICS stock markets. These factors include the West Texas Intermediate (WTI) oil price, the world gold price (*Gold*) and the silver price (*Silver*). The *WTI* has

been widely used in literature as the benchmark price for global oil markets. *WTI* crude oil is among the most traded oil on world markets and, therefore, is significantly affected by macro-financial variables. Because of significant increases in uncertain circumstances, the precious metals of gold and silver have been perceived as a hedge against sudden shocks and also a safe haven in extreme stock market fluctuations (Baur and Lucey 2010, Hood and Mallik 2013). In accordance with Baur and McDermott (2010), the safe havens were characterized by their significant, negative correlations with asset markets during financial turmoil or troubled times. In addition, a considerable increase in Bitcoin's value alongside the announcement of Trump's victory has resulted in its validity as a safe haven investment. As a reaction to the uncertainty surrounding the results of the United States election, the asset markets throughout the world decreased as investors were concerned about ongoing volatility. This has resulted in a trend of questioning the effectiveness of standard financial structures. Possibly, the digital currency might be providing a decentralized alternative to fiat currencies during a time of economic or geopolitical unrest. The *WTI*, *Gold,* and *Silver* prices data were sourced from DataStream of Thomson Reuters, while the Bitcoin price data in United States dollars was obtained from CoinDesk at www.coindesk.com/price. The variables under study were transformed by employing natural logarithms to correct for heteroskedasticity and dimensional differences.

The function to estimate is expressed as follows:

$$CAR_{i,[\tau_1,\tau_2]} = \chi_0 + \chi_1 Event + \chi_2 WTI + \chi_3 Gold + \chi_4 Silver_t + \chi_5 Bitcoin_t \vartheta_i \quad (3)$$

where $CAR_{i,[\tau_1,\tau_2]}$ is the cumulative abnormal returns and υ_i is the error term.

B. A regression-based intention votes

Event-study methodology, is based on a regression estimation of abnormal returns that helps to answer whether BRICS equities uniformly responded to the announcement of Trump's victory. Including Internet concern as a quantitative measure is to see whether extracting public moods related to

Trump and the United States election exerted a significant influence on BRICS stock markets. Millions of people interact with search engines daily; thus, valuable sources of data in relation to Trump over the election period and the 2016 United States election were produced. The internet search is a possibility to analyze public opinions concerning the election.

Recent studies have evaluated how online information predicted Brexit (Mitchell *et al*. 2012, Bouoiyour and Selmi 2015, among others) as well as the economic and financial costs of it (Bouoiyour and Selmi 2016 a,b). These studies have attempted to demonstrate that social media discussion and engine search-related queries different events (Grexit, Brexit, 2016 US presidential elections etc.) could be of employed to track the evolution of markets' beliefs about the outcome of a particular event. Twitter has become very popular among financial professionals. It permits them to comment on economic and political events, and to express their views to either the followers and/or even a wider audience in an extremely rapid way. The advantage of using Twitter data for research purposes is that (i) users not only receive information, but can actively share information; and (ii) tweets can be used to extract not only a consensus opinion about such an event, but also the degree of agreement or disagreement.

Another objective of this study was to use public opinion polls to measure the intention votes toward Trump. The pollsters' reports and press releases are often initiated by asking a specific question and subsequently, graphs detailing the statistical proportions of poll respondents' answers are presented. In the particular United States presidential election, the question were: "*If the general election were held today, and the candidates were Hillary Clinton of the Democrats and Donald Trump of the Republicans, for whom would you vote? If you are not sure, or would not vote, toward which candidate would you lean?*" The results were employed to explain the variation of BRICS stock returns.

In brief, OLS regressions of the Stock Market Return (*STR*) for each BRICS country on three intention votes' indicators (Google Trends, Twitter searches and polling data transformed in log) were estimated. *STR* was calculated by considering the ratio stock price (in log) at time *t* and the lagged

stock price, i.e., $STR_t = \log(\frac{P_t}{P_{t-1}})$ where P_t is the stock price.

$$STR_t = \lambda_0 + \lambda_1 \, GoogleTrend_t + \upsilon_i \quad (4)$$

$$STR_t = \theta_0 + \theta_1 \, Twitter_t + \iota_i \quad (5)$$

$$STR_t = \delta_0 + \delta_1 \, polls_t + \tau_i \quad (6)$$

where υ_i, ι_i and τ_i are the error terms.

To avoid possible methodological bias with reference to omitted variables, a vector of additional explanatory variables, which was discussed previously was incorporated in the models (4), (5), and (6). The following equations were estimated:

$$STR_t = \eta_0 + \eta_1 GoogleTrends_t + \eta_2 WTI_t + \eta_3 Gold_t + \eta_4 Silver_t + \eta_5 Bitcoin_t + \xi_i \quad (7)$$

$$STR_t = \upsilon_0 + \upsilon_1 Twitter_t + \upsilon_2 WTI_t + \upsilon_3 Gold_t + \upsilon_4 Silver_t + \upsilon_5 Bitcoin_t + \zeta_i \quad (8)$$

$$STR_t = \beta_0 + \beta_1 polls_t + \beta_2 WTI_t + \beta_3 Gold_t + \beta_4 Silver_t + \beta_5 Bitcoin_t + \gamma_i \quad (9)$$

where ξ_i, ζ_i and γ_i are the error terms.

Daily time-series data related to the Trump and United States presidential election during the period from August 01, 2015 until 31 December 2016 was utilized. The search engine queries index for the the terms '*Trump*' and '*2016 US presidential elections*' were retrieved from Google Trends at http://www.google.com/trends/. Note that in Twitter, United States election was associated with Trump's victory and it was not possible to retrieve keywords in Twitter. Hashtags for # Trump were available only in Twitter (https://www.hashtags.org/). The polling data can be collected from The New York Times at https://www.nytimes.com/interactive/2016/upshot/presidential-polls-forecast.html#trend or Real Clear Politics at http://www.realclearpolitics.com/epolls/latest_polls/. For more details about how to extract data of the indicators of intention votes toward Trump (i.e., Google Trends, Twitter, polls), please see Appendix 2.

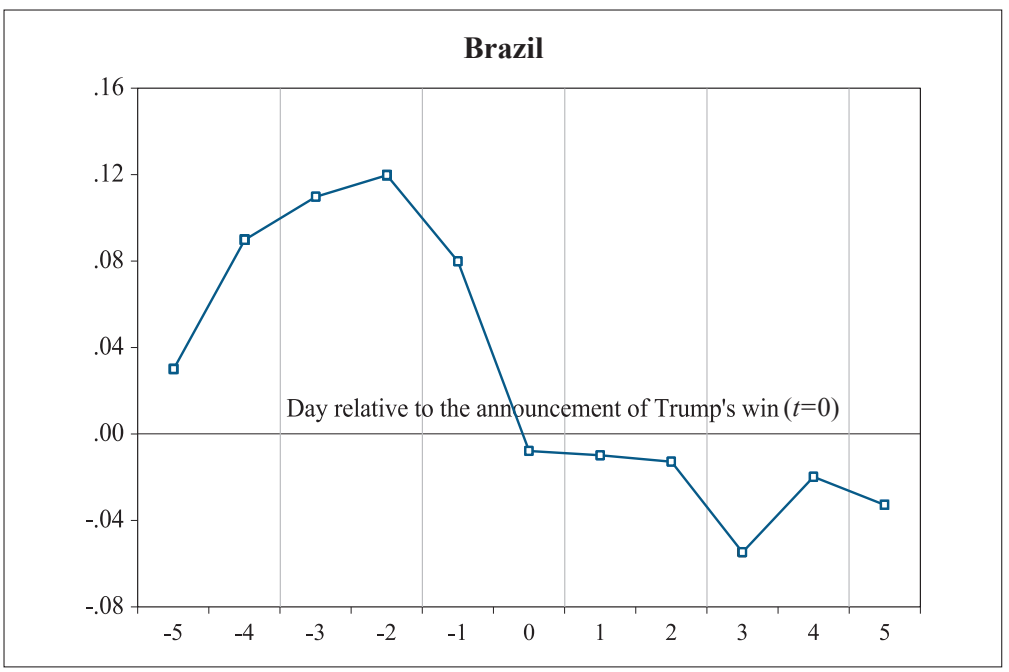
IV. Results

A. Event study results

In Figure 1, the CAR performance of BRICS stocks over the announcement of Donald Trump's win in United States presidential election on 8 November 2016 is graphically depicted. An examination of the graphs reveals that the BRICS stock markets were not equally exposed to the United States election outcome either for the day relative to the announcement of Trump's victory (t=0) or for the [−5; + 5] event window. Although all the emerging markets faced evolving volatility, Trump's unexpected triumph was likely to exert heterogeneous effects on BRICS equities. Two groups of countries may be distinguished. The first group includes Brazil, India, China, and South Africa where a sharp decrease in stock values was experienced during the election day and over the [+1; +5] event window. The second group comprised Russia where a marked increase in the abnormal stock returns over the [0; +5] event window was noted.

Figure 1. Cumulative abnormal returns of BRICS stocks

([−5; +5] event window)



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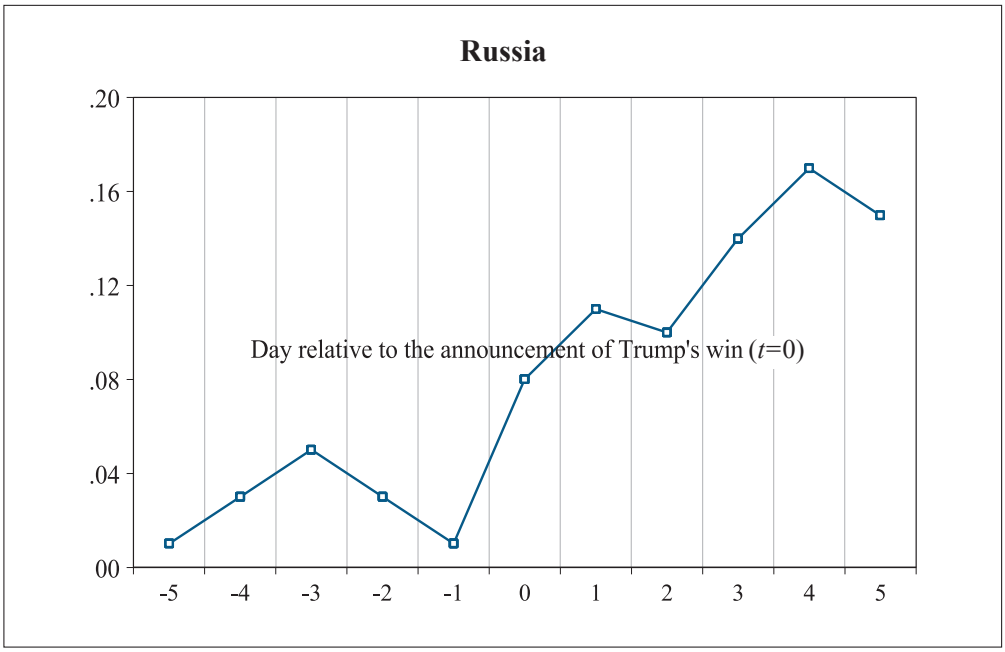
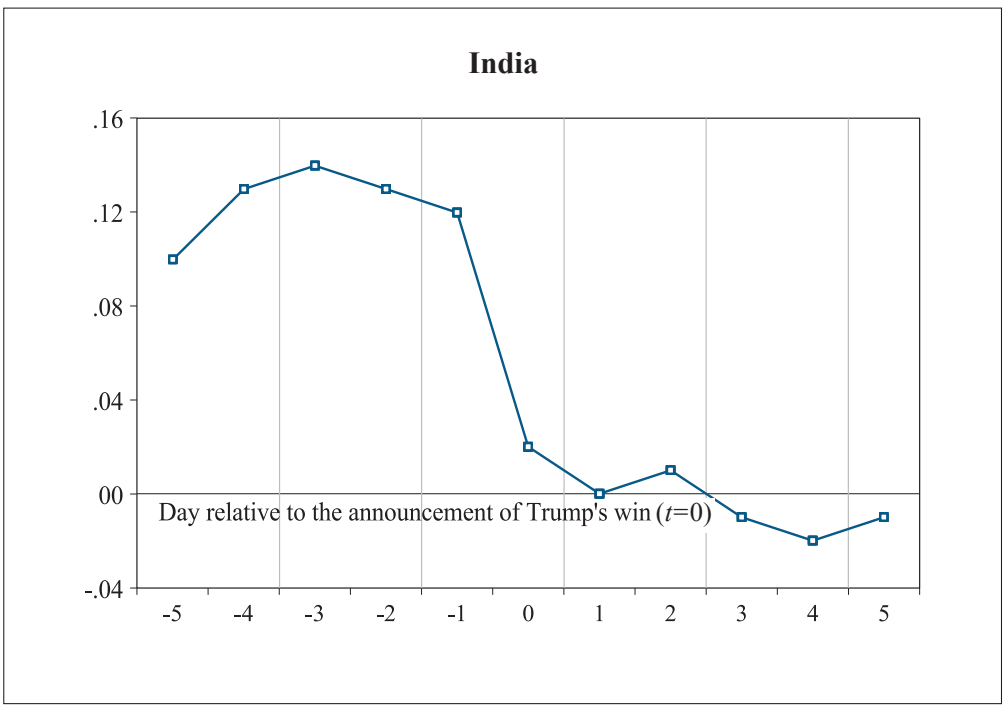
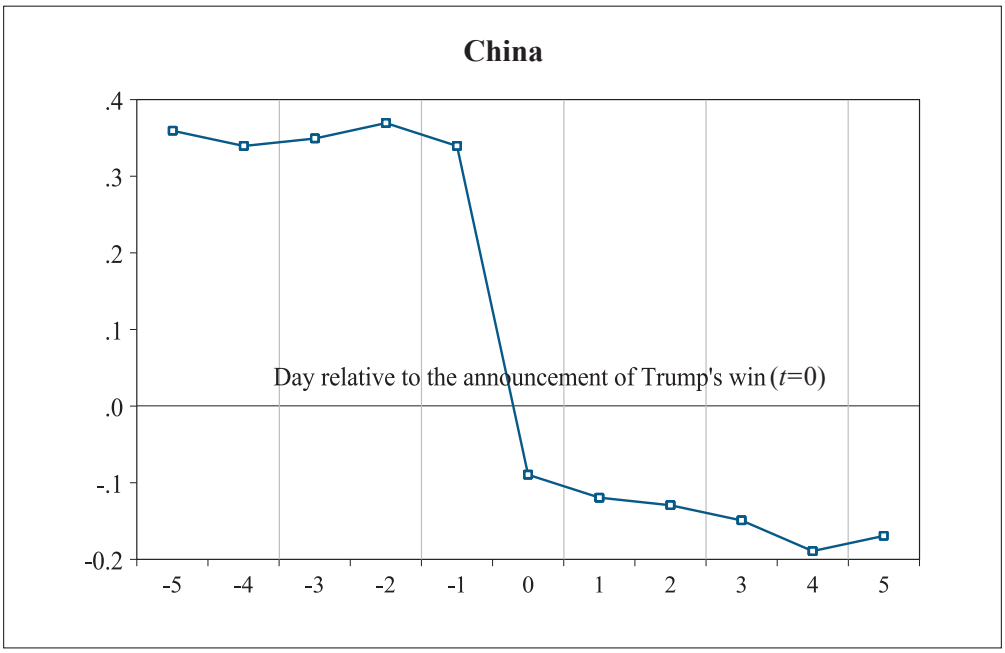
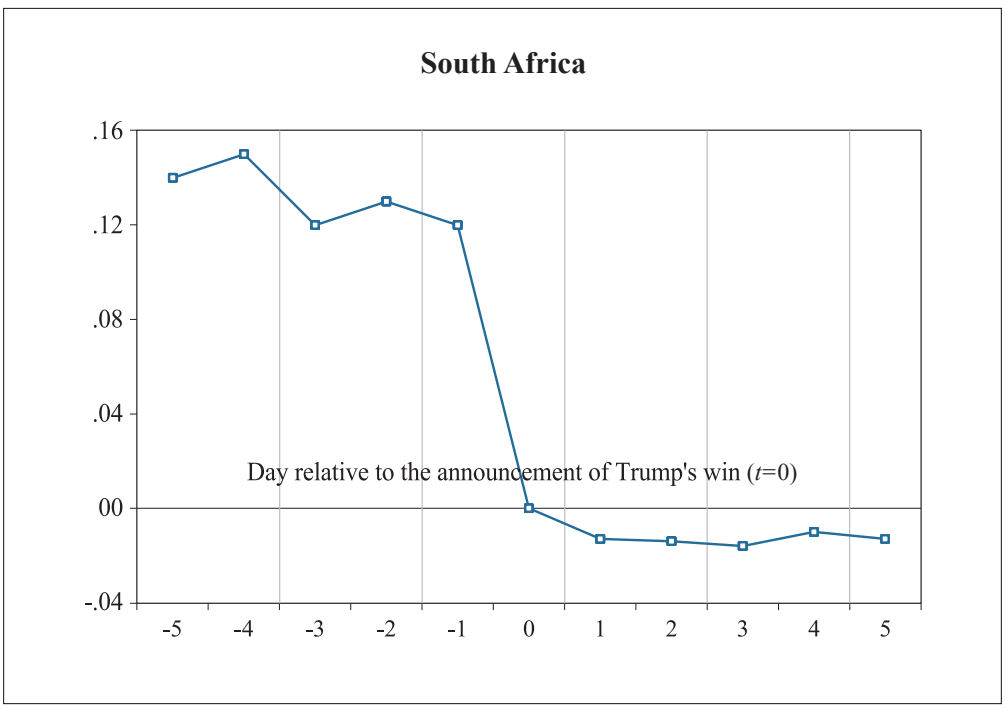

Russia
.20
.16
.12
.08
.04
00
Day relative to the announcement of Trump's win (t=0)
-5
-4
-3
-2
-1
0
1
2
3
4
5


India
.16
.12
.08
.04
00
-.04
Day relative to the announcement of Trump's win (t=0)
-5
-4
-3
-2
-1
0
1
2
3
4
5

(continued)


China
.4
.3
.2
.1
.0
-.1
-0.2
Day relative to the announcement of Trump's win (t=0)
-5
-4
-3
-2
-1
0
1
2
3
4
5


South Africa
.16
.12
.08
.04
00
-.04
Day relative to the announcement of Trump's win (t=0)
-5
-4
-3
-2
-1
0
1
2
3
4
5

The results of the stock event study without considering potential control variables (i.e., unconditional analysis) are displayed in Table 1. It was revealed that the announcement of Trump's win (the event day [0 ; 0]) resulted in statistically significant negative CARs for all the BRICS countries with the exception of Russia where positive response was noted. The negative response was somewhat stronger for China and Brazil than for India and South Africa. The BRICS-market reactions did not change from being negative to positive during the [+1 ; +5] event window, but the strength of the responses appeared more pronounced during the post-election period. The Russian share market, by contrast, increased markedly due to this unexpected election outcome for both the [0 ; 0] event day and during the [+1 ; +5] event widow.

Table 1. Unconditional OLS results

Dependent variable: abnormal returns					
	Brazil	Russia	India	China	South Africa
Event day [0 ; 0]					
Constant	2.678432**	3.11678**	1.61345**	2.13498*	1.89742*
	(0.0039)	(0.0081)	(0.0072)	(0.0352)	(0.0658)
Event	-0.09762***	0.02567***	-0.02211**	-0.11435**	-0.00871***
	(0.0004)	(0.0004)	(0.0014)	(0.0081)	(0.0001)
Adjusted R^2	0.69	0.64	0.66	0.71	0.73
Event window [+1; +5]					
Constant	-4.612583*	2.96105**	3.13492**	1.765329	2.15934**
	(0.0355)	(0.0046)	(0.0035)	(0.1084)	(0.0023)
Event	-0.13567***	0.099567*	-0.06238**	-0.15673***	-0.01026***
	(0.0000)	(0.03481)	(0.0326)	(0.0002)	(0.0007)
Adjusted R^2	0.72	0.77	0.74	0.70	0.75

(Note) This table depicts the Trump's impacts on BRICS abnormal returns. All regressions are controlled for heteroskedasticity and the *p*-values are given in parentheses.
*, **, *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

By accounting for *WTI, Gold, Silver, and Bitcoin* (Conditional analysis, Table 2), some changes with respect to the strength of the Trump's victory effect. Precisely, the *Event*'s coefficient became stronger by moving from the unconditional (Table 1) to conditional analysis (Table 2); this was true during the [0; 0] event day and [+1; +5] event window. However, the announcement of the Trump triumph in the 2016 United States election had varying effects across the BRICS area. This event classified the BRICS equities as losers, in the order, China, Brazil, India and South Africa, and winners, namely, Russia. The *WTI* affected the BRICS abnormal share returns variously depending on whether the country is an oil importer or oil exporter. While it exerted a positive effect on the Russian market (exporter), its effect on the rest of BRICS (importers) stock returns appeared to be negative. The gold and silver prices had a negative influence on the abnormal cumulative returns for all the countries under study. Thus, these metals had not lost their usefulness as a safe haven to protect the uncertainties connected with Trump's presidential victory. The implication of the negative influence of Bitcoin on BRICS share returns was that the investors in the considered countries turned to the digital currency as a refuge from weaker fiat currencies.

Table 2. Conditional OLS results

Dependent variable: abnormal returns					
	Brazil	Russia	India	China	South Africa
Event day [0 ; 0]					
Constant	1.32445***	-0.026138	-0.018209	0.015787	0.050083
	(0.0009)	(0.1171)	(0.2281)	(0.1891)	(0.1549)
Event	-0.1339 70*	0.121378**	-0.07356*	-0.193872**	-0.044113*
	(0.0620)	(0.0043)	(0.0339)	(0.0029)	(0.0546)
WTI	-0.031881*	0.10128***	-0.01578**	-0.068994*	-0.049743**
	(0.0202)	(0.0003)	(0.0083)	(0.0304)	(0.0056)
GOLD	-0.023951*	-0.013544**	-0.074435*	-0.062891*	-0.04439*
	(0.0256)	(0.0073)	(0.0486)	(0.0380)	(0.0967)
Silver	-0.02269**	-0.063511*	-0.064773*	-0.074992*	-0.062508**
	(0.0035)	(0.0405)	(0.0968)	(0.0924)	(0.0043)
Bitcoin	-0.13417**	-0.1146*	-0.128721*	-0.19142*	-0.106724**
	(0.0015)	(0.0456)	(0.0462)	(0.0215)	(0.0095)
Adjusted R^2	0.89	0.88	0.93	0.92	0.91

(continued)

Dependent variable: abnormal returns					
	Brazil	Russia	India	China	South Africa
Event window [+1; +5]					
Constant	1.668467*	1.581424*	1.26723**	1.14096*	1.32945 *
	(0.0077)	(0.0218)	(0.0015)	(0.0456)	(0.0871)
Event	-0.169456*	0.141723**	-0.0687***	-0.18282*	-0.069619*
	(0.0391)	(0.0020)	(0.0007)	(0.0367)	(0.0707)
WTI	-0.059222**	0.100776*	-0.08012**	-0.037125*	-0.02473**
	(0.0067)	(0.0638)	(0.0023)	(0.0282)	(0.0043)
GOLD	-0.059454*	-0.075213*	-0.0684***	-0.110881*	-0.12243**
	(0.0279)	(0.0955)	(0.0001)	(0.0782)	(0.0079)
Silver	-0.03145*	-0.236306*	-0.064791*	-0.05489**	-0.020562*
	(0.0139)	(0.0140)	(0.0577)	(0.0096)	(0.0351)
Bitcoin	-0.119422	-0.098422**	-0.143359*	-0.14763**	-0.066735*
	(0.3617)	(0.0014)	(0.0140)	(0.0064)	(0.0875)
Adjusted R^2	0.91	0.94	0.90	0.91	0.89

(Note) This table depicts the Trump's impacts on BRICS abnormal returns. All regressions are controlled for heteroskedasticity and the *p*-values are given in parentheses.
*, **, *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

B. Intention votes results

A consideration of the intention votes through social media, search engine queries and public opinion polls as indicators of markets' beliefs regarding the United States election (Table 3) revealed that the results *were robust*. In particular, *Google Trends* statistically and negatively affected Brazilian, Indian, Chinese, and South African shares, while it exerted a positive impact on the Russian stocks. With the exception of Brazil, similar results were found when using *Twitter* hashtags and polling data.

Table 3. Unconditional OLS results: stock returns

Dependent variable: stock returns					
	Brazil	Russia	India	China	South Africa
Stock Market Returns and Google trends					
Constant	0.763241**	0.662156**	0.853594*	0.271307	0.00345***
	(0.0065)	(0.0059)	(0.0739)	(0.1680)	(0.0007)
Google Trends	-0.13456	0.176446**	-0.108786*	-0.180459	-0.01234*
	(0.2451)	(0.0052)	(0.0400)	(0.2558)	(0.0156)
Adjusted R^2	0.83	0.81	0.82	0.85	0.83
Stock Market Returns and Twitter					
Constant	1.116414*	1.347377*	1.19710*	1.565629**	1.491338*
	(0.0425)	(0.0905)	(0.0819)	(0.0096)	(0.0315)
Twitter	-0.168191*	0.153365**	-0.077745*	-0.14438***	-0.085861*

(continued)

Dependent variable: stock returns					
	Brazil	Russia	India	China	South Africa
Stock Market Returns and Twitter					
	(0.0556)	(0.0091)	(0.0806)	(0.0001)	(0.0527)
Adjusted R^2	0.89	0.86	0.85	0.79	0.85
Stock Market Returns and polls					
Constant	0.141563*	0.175537**	0.110998	0.033970	0.021178
	(0.0749)	(0.0091)	(0.8754)	(0.1620)	(0.2743)
polls	0.119329	0.127439*	-0.07988**	-0.16188*	-0.09128***
	(0.2670)	(0.0425)	(0.0082)	(0.0202)	(0.003)
Adjusted R^2	0.85	0.82	0.84	0.88	0.86

(Note) This table depicts the impacts of the intention votes on BRICS stock returns. All regressions are controlled for heteroskedasticity and the *p*-values are given in parentheses.
*, **, *** denote statistical significance at the 10%, 5% and 1% levels, respectively.

The results of the effect of intention votes on the stock returns while considering the control variables are illustrated in Table 4. Whatever public opinions proxies were employed, that is, *Google Trends*, *Twitter* or *polls*, it was found that the BRICS markets were not equally vulnerable to Trump's victory. Only Russia appeared to gain from the outcome of the United States election. The additional explanatory variables also exerted similar effects. *WTI* had a positive impact on the oil exporting country, namely, Russia while its effect on the oil importing countries appeared to be negative, which was highly expected. *Gold* and *Silver* affected the BRICS stock returns negatively, thus, highlighting their feasibility to serve as a safe haven during a period of upheaval. Bitcoin was shown to be negatively correlated with stock returns, thus, indicating its safe haven and hedging capabilities. The employment of polls was less useful than social media and search engine queries. In particular, the results revealed that market sentiment reflected in search engine queries and individual text messages played a significant role in assessing the responses of BRICS stock markets to the United States election. In light of the ubiquity of social media data and the ability to deal with a large volume of data, the use of this kind of data appears to be an interesting field for future studies on the effects of economic and political events. On the contrary, some polls' coefficients appeared to be insignificant; in particular, Brazil in the unconditional analysis and South Africa in the conditional investigation

Table 4. Conditional OLS results: stock returns

Dependent variable: stock returns					
	Brazil	Russia	India	China	South Africa
Stock Market Returns and Google trends					
Constant	1.19873*	1.166422*	1.531872	1.133039*	1.896641**
	(0.0200)	(0.0111)	(0.2447)	(0.0309)	(0.0030)
Google Trends	-0.163564*	0.135711**	-0.10499*	-0.158649**	-0.098390*
	(0.0621)	(0.0058)	(0.0330)	(0.0025)	(0.0835)
WTI	-0.168227*	0.101875**	-0.050940*	-0.102084**	-0.054893*
	(0.0599)	(0.0086)	(0.0465)	(0.0014)	(0.0216)
GOLD	-0.092015**	-0.083335*	-0.1162***	-0.142460*	-0.199722*
	(0.0091)	(0.0116)	(0.0008)	(0.0497)	(0.0343)
Silver	-0.04321***	-0.03214**	-0.054678*	-0.072341**	-0.034521**
	(0.0009)	(0.0054)	(-0.0311)	(0.0064)	(0.0055)
Bitcoin	-0.10543*	-0.09653**	-0.132452*	-0.142456*	-0.097632*
	(-0.0674)	(0.0081)	(-0.0510)	(0.0431)	(0.0389)
Adjusted R^2	0.88	0.90	0.87	0.86	0.89

(continued)

Dependent variable: stock returns					
	Brazil	Russia	India	China	South Africa
Stock Market Returns and Twitter					
Constant	1.25881**	1.49428*	1.53943**	1.626058**	1.702818*
	(0.0097)	(0.0187)	(0.0081)	(0.0017)	(0.0185)
Twitter	-0.160209*	0.121423*	-0.086845*	-0.174548*	-0.09235*
	(0.0616)	(0.0138)	(0.0527)	(0.0019)	(0.0886)
WTI	-0.150977*	0.101423*	-0.027995*	-0.079679**	-0.05778***
	(0.0142)	(0.0356)	(0.6996)	(0.0011)	(0.0009)
GOLD	-0.128905*	-0.063101**	-0.11304**	-0.101694*	-0.181309*
	(0.0474)	(0.0079)	(0.0012)	(0.0428)	(0.0556)
Silver	-0.06432**	-0.057234*	-0.0467***	-0.07625**	-0.04693**
	(0.0038)	(0.0679)	(0.0000)	(0.0049)	(0.0062)
Bitcoin	-0.089972*	-0.069432	-0.11789**	-0.14698***	-0.08721***
	(0.0164)	(0.1520)	(0.0013)	(0.0004)	(0.0009)
Adjusted R^2	0.87	0.84	0.88	0.90	0.92

(continued)

Dependent variable: stock returns					
	Brazil	Russia	India	China	South Africa
Stock Market Returns and polls					
Constant	1.622108**	1.60247*	0.895260	1.324009	-1.026138
	(0.0075)	(0.0861)	(0.4508)	(0.2109)	(0.1171)
polls	-0.162108*	0.157355**	-0.109503*	-0.183970*	0.021178
	(0.0163)	(0.0046)	(0.0286)	(0.0620)	(0.2743)
WTI	-0.050096*	0.113582**	-0.075538*	-0.09188*	-0.071289*
	(0.0995)	(0.0029)	(0.0664)	(0.0202)	(0.0313)
GOLD	-0.080407*	-0.00919***	-0.100618*	-0.12395*	-0.013544*
	(0.0586)	(0.0000)	(0.0603)	(0.0056)	(0.0703)
Silver	-0.034585*	-0.031015**	-0.080618*	-0.02266	-0.063511*
	(0.0212)	0.0018)	(0.0993)	(0.2735)	(0.0405)
Bitcoin	-0.134585*	-0.129768*	-0.069454*	-0.13417**	-0.1146*
	(0.0769)	(0.0187)	(0.0531)	(0.0015)	(0.0456)
Adjusted R^2	0.77	0.79	0.75	0.72	0.69

(Note) This table depicts the impacts of the intention votes on BRICS stock returns. All regressions are controlled for heteroskedasticity and the *p*-values are given in parentheses.
*, **, *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

By employing event-study methodology and the regression-based intention votes, the focal linkage for a restricted period that spanned between 31 December 2015 and 31 December 2016 was re-examined. A Two-Stage Least Square (2SLS) technique was also employed to avoid possible endogeneity bias. The results appeared to be fairly robust to changes in the time period and for controlling the endogeneity problem. The same trend is observed among the countries in question. These results are not discussed in this paper because of limited space; however, they are available on request.

C. Interpretations

Even though the emerging markets, in particular, BRICS have as yet not completely dealt with the economic and geopolitical implications of Trump's agenda for world markets, it is evident that the BRICS stock markets are very reactive to the great uncertainty surrounding this event. The results of this study found that the BRICS stock markets were not uniformly exposed to the outcome of the United States presidential election. Trump's win divided BRICS into highly damaged (China and Brazil), moderately threatened (India and South Africa) and benefiting (Russia) markets. *How can we explain these heterogeneous reactions of BRICS markets to Trump's victory in the United States presidential elections?*

The hope for these countries is that the increase in the United States interest rates will be gradual. China may be less concerned because of the decline in the Yuan and the relaxation of credit conditions. Similarly, Russia and Brazil are poised to emerge from recession as a result of the surge in oil and commodity prices. However, Trump's motives related to inflation may force the United States Central Bank to accelerate the move.

China's stock market seems to be the most damaged by Donald Trump's victory. Anxiety was fueled by Trump's provocative words during his campaign when he accused China of being a currency manipulator as well as by his fierce

protectionist stance, much of which was directed toward China. His protectionist approach could undoubtedly harm the capital and trade flows between the United States and China. It must be stressed that the United States is the largest market for Chinese exports, accounting for approximately 20 percent of the global exports. Therefore, by imposing a 45 percent tariff on Chinese imports to the United States as Trump advocated in his campaign would constitute a serious risk for the Chinese economy. This aggressive United States trade policy could result in China's growth substantially slowing down together with a loss of manufacturing jobs. Trump's economic agenda to cut China's huge trade surplus with the United States would damage shares involved in Chinese exports.

Some emerging countries that are often indebted to the United States dollar including Brazil and South Africa are heavily dependent on foreign capital. The strength of the dollar and the rise in the interest rate on the bond market are likely to prompt massive capital outflows to the United States. It is noteworthy that developed countries tend to become more protectionist. The uncertainty is greater as no one knows whether the United States elect-president will transform his protectionist threats into a reality. Trump's anti-trade rhetoric aimed at imposing 35 and 45 percent tariffs on some products imported could be counterproductive because of the risk of factors including the exacerbation of currencies competition, strong appreciation of the dollar and extreme inflation pressures. Furthermore, the United States is one of the South African biggest export destinations: a hike in import costs will threaten South Africa's economy. However, the uncertainty, which resulted from Trump's victory, is good for the gold price; investors tend to favor this metal in periods of upheaval. As one of the world's dominant gold producers, South Africa will benefit from the confidence in gold as a hedge or safe haven. Brazil, as a commodity-dependent country, seems also poised to emerge from recession as a result of the surge in oil and commodity prices.

Trump's victory has also had a detrimental effect on India's stock market. It was expected that high import tariffs would have an adverse effect on its economy,

especially with the resulting extreme volatility of its currency against the dollar. However, India has relatively low external financing needs, is not largely dependent on exports and its macro-economic parameters appear relatively stronger. Thus, it is insulated from the untoward shocks that may have a negative effect on the rest of BRICS markets.

The Russian shares benefited noticeably from the announcement of Trump's victory. The positive market reaction may partly have reflected hopes that the sanctions against Russian companies because of the Crimean crisis would be eased or lifted. With Trump in the White House, Russian investors are betting that the strained United States-Russia relationship may start improving because of the president-elect's affinity toward President Vladimir Putin. Furthermore, Trump has been keen to stimulate the commodity production of the United States such as oil, gas and coal; therefore, some anticipated that the United States presidential elections would place a constraint on a rise in commodity prices and benefit the biggest energy producers such as Russia.

V. Conclusions

Since Trump's victory in the United States presidential election, analysts have asked questions on how and to what extent the uncertainty surrounding this unexpected outcome would affect the world markets, and which markets would suffer and benefit under Trump's administration. The purpose of this study was to offer answers to these questions by examining the BRICS stock markets. By employing event-study methodology and voter intentions in the United States elections-based social media, search engine queries and public opinion polls, it was revealed that the BRICS equities were not equally affected by Trump's victory. Two main groups were classified as a result of regression analyses; various markets, namely, China, Brazil, India, and South Africa were affected negatively while others, in particular, Russia benefited.

To generalize, the worst-performing markets were those who had loaned dollars, expecting the United States dollar to depreciate over time. Furthermore, markets were adversely affected by Donald Trump's neo-mercantilist attitude

and protectionist rhetoric; specifically, his threats to impose a 45 percent duty on Chinese imports to the United States so as to make it easier for United States companies to compete. This, in turn, resulted in fears of a currency war with China and had a detrimental effect on all companies that sent work from the United States overseas. The Russian market, by contrast, benefited from the unexpected outcome of the United States election because of Republican candidate's attitude toward Putin during the campaign and Trump's suggestions to improve United States' relationship with Russia. However, Russia faces enormous challenges that may affect its economy such as a lack of diversification, that is, its heavy dependency on commodities. Under such circumstances, Donald Trump's victory is not expected to solve Russia's serious economic problems.

In brief, Trump's agenda has varying economic and geopolitical implications. For instance, the Trump's negative stance toward China might be used politically by Chinese leaders to stoke nationalism and declare the culpability of United States government rather than Chinese authorities. This is a scenario the Obama administration wanted to circumvent. Brazil, India, and South Africa should also carefully assess what new geopolitical risks may emerge with the more confrontational Trump foreign policy toward countries like China or Russia, with which these countries have strong economic commitments.

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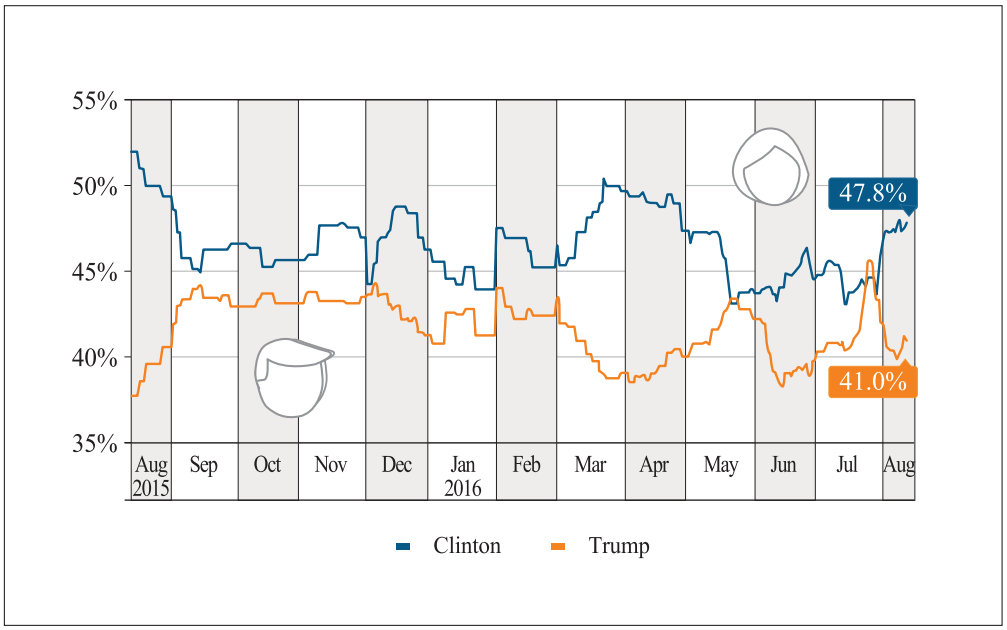
Appendices

Appendix 1 : The US presidential election projections

(A year at the polls)



(Source) Real Clear Politics.

Appendix 2 : A brief overview about the intention votes data

The data related to the indicators of intention votes toward Trump (*Google Trends, Twitter and Polls*) were collected manually from the following sources :

First, we used ***Google Trends*** which is an online tool that enables to observe how the keywords 'Trump' and '2016 US presidential election' have been queried over the period under study.

- For the keyword 'Trump', the data is available at :

  https://trends.google.fr/trends/explore?date=all&q=Trump

- Concerning the keyword '2016 US presidential election', the data was collected from this link :

  https://trends.google.fr/trends/explore?date=today%205-y&q=2016%20US%20presidential%20elections

Second, we referred to ***Twitter*** to capture the attention to 'Trump' by tracking hashtags. More specifically, we see if twitterers mentioned the aforementioned keyword. More precisely, we used the following link to track hashtags #trump:

https://www.hashtags.org/analytics/Trump/

Third and regarding the variable ***polls***, the changes in the winning probabilities (or the presidential poll forecasts) for several months prior to he United States presidential election date is available at this link : https://www.nytimes.com/interactive/2016/upshot/presidential-polls-forecast.html#trend

The data will be made available to all interested researchers upon request.