# THE EFFECT OF ANNOUNCEMENT OF PRESIDENTIAL RESULTS ON THE FOREIGN EXCHANGE RATES IN KENYA

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## DECLARATION

I, the undersigned hereby affirm that this research project is my original work and has not been previously presented in part or in totality to any other institution of learning for the award of any degree or examination.

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# **DEDICATION**

This project is dedicated to my wife and family who encouraged and supported me throughout my period of study. Their support for this course will always remain entrenched in me.

# **TABLE OF CONTENTS**

DECLARATIONii
ACKNOWLEDGEMENTiii
DEDICATIONiv
TABLE OF CONTENTS v
LIST OF TABLES ix
LIST OF ABBREVIATIONS x
ABSTRACT xi
CHAPTER ONE: INTRODUCTION 1
1.1 Background of the Study1
1.1.1 Announcement of Presidential Results
1.1.2 Exchange Rate
1.1.3 Relationship between Announcement of Election Results and Exchange Rate. 5
1.1.4 Announcement of Presidential Results and Exchange Rates in Kenya7
1.2 Research Problem
1.3 Research Objective
1.4 Value of the Study
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction	
2.2 Theoretical Review	15
2.2.1 Efficient Market Hypothesis	15
2.2.2 International Fischer Effect Theory	17
2.2.3 Purchasing Power Parity	19
2.2.4 Interest Rate Parity	
2.3 Determinants of Exchange Rate	21
2.3.1 Foreign Exchange Rate Regime	21
2.3.2 Balance of Trade	
2.3.3 Interest Rates	
2.3.4 Inflation Rates	
2.3.5 External Debt	24
2.4 Empirical Review	
2.4.1 Global Studies	
2.4.2 Local Studies	
2.5 Conceptual Framework	
2.6 Summary of Literature Review	
CHAPTER THREE: RESEARCH METHODOLOGY	
3.1 Introduction	33
3.2 Research Design	33

3.3 Population	34	
3.4 Sample		
3.5 Data Collection	34	
3.6 Data Analysis	35	
CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION	40	
4.1. Introduction	40	
4.2. Data Presentation	41	
4.3. Discussion of Research Findings	44	
CHAPTER FIVE: SUMMARY, CONCLUSION, AND RECOMMENDATIONS. 46		
5.1 Introduction	46	
5.2 Summary of Findings	46	
5.3 Conclusion	47	
5.4 Recommendations	47	
5.5 Limitations of the Study	48	
5.6 Suggestions for Further Research	49	
REFERENCES	51	
APPENDICES	57	
Appendix I: Key CBK Currencies		
Appendix II: Data Collection Form	58	
Appendix III: USD Currency Calculations	59	

Appendix IV: EURO Currency	Calculations	60
Appendix V: USH Currency Ca	lculations	

# LIST OF TABLES

Table 1: Descriptive Statistics	41
•	
Table 2: t-statistics for 31 days surrounding August 2017 Election	42

# LIST OF ABBREVIATIONS

AAR	Abnormal Average Returns
AR	Abnormal Returns
CAR	Cumulative Abnormal Returns
CAAR	Cumulative Abnormal Average Returns
СВК	Central Bank of Kenya
DP	Democratic Party
GARCH	Generalized Autoregressive Conditional Heteroskedasticity
GDP	Gross Domestic Product
GOK	Government of Kenya
IEBC	Independent Election and Boundaries Commission
IMF	International Monetary Fund
NARC	National Rainbow Coalition
NEER	Nominal Effective Exchange Rate
NSE	Nairobi Stock Exchange
ODM	Orange Democratic Party
PNU	Party of National Unity
SAP	Structural Adjustment Programs
TNA	The National Alliance
US	United States

## ABSTRACT

Kenya's election cycle and the Shilling exchange rate are leading soci-economic variables which drive the evolution of the Kenyan economy. Fluctuations in the exchange rates deeply affect the country's competitiveness in international trade and other economic activities in various sectors. An important item to look at, thus, is the link between these variables: Is there causality between them? are there empirical evidences on the statistical link between them? Consequently, this paper empirically examines the effect of announcement of presidential results on foreign exchange rates in Kenya with a daily time series data of 3 currencies. The main results and conclusions are based on the Event Study methodology. The market model utilized interbank rate to calculate the Abnormal Returns and the Cumulative Abnormal Returns. A test of significance was carried out using a two-tailed student t-test at 5% level of significance. From the collected data it was observed that the announcement of presidential results had a statistically significant effect on the exchange rates under study. The regional currency USH however, did not show such a significant relationship. The study recommends that a similar study can be done on the effect of the announcement of presidential elections for other key forex rates not dealt with in this study. A similar study can also be done on the effect of the announcement of the results of the fresh elections held after nullification of the August 7, 2017 presidential elections. It is advisable that policy makers should come up with ways of mitigating the fluctuation of the exchange rates during and after electioneering periods.

## **CHAPTER ONE: INTRODUCTION**

#### 1.1 Background of the Study

Foreign exchange market volatility depends on information flow that is highly dictated by the level of the financial markets integration and general market perceptions among other factors. Skewed perception on emerging markets induce investors to withdraw during the periods of crises, making the markets extremely volatile. These emerging markets are usually less mature and have less developed institutional framework. In particular, an event in one part of the world will influence the volatility of world currencies differently. Globalization and integration of financial markets implies such unusual events correlate to the information imperfection that creates a diverse market reaction to changes in the global conditions (Kilian, 2008).

There are several economic theories upon which the study is centered. These theories include Efficient Market Hypothesis (EMH), International Fischer Effect (IFE), Purchasing Power Parity (PPP) and Interest Rate Parity Theory (IRP). The EMH postulates that an active market which has many investors, who are well informed, all the securities will end up being appropriately priced, reflecting all available information. As such, the EMH stipulates that the exchange rates would be expected to change or adjust with arrival of new information about the economic outlook of a country and that it would be impossible to continuously outperform the market since the exchange rate market efficiency would cause existing foreign exchange rates to reflect the new information. Any new information such as the

announcement of a new president would be expected to have a bearing in the investment decisions that investors are likely to make.

The foundation of the PPP theory is the law of one price where similar commodities should be priced equally across different markets with absence of taxes and transportation costs. As such, the theory proposes that a unit of one currency should buy the same amount of commodities from all the countries. The IRP is quite similar to the PPP theory as it asserts that the purchase of one asset in two different countries yields the same amount of returns. The exchange rates play a significant role of adjusting any noted differences.

The IFE theory is a relative version of the PPP and it proposes a relationship on the country's exchange rate and the interest rate. In the long run period, a rise in a currency's interest rate will be followed by a decline in value of the same. This hypothesis implies that an investor's returns in the international level will have two components, the nominal interest rate as well as the variations present in the exchange rate. This can be summarized by saying that the investor's return in the long term, should be the same in different countries. In conclusion, the theory asserts that a depreciation of a country's currency will occur to the extent that the interest rate of that country increases.

In Africa, several countries have had challenges with the exchange rate fluctuations on their currency. Nigeria suffered a currency crisis in the early 1980s after the decline in oil revenue that had put Nigerian currency on the success path since the 1970 oil crisis. This crisis forced Nigeria to adopt the Structural Adjustment Programs (SAP) as dictated by the World Bank and the International Monetary Fund (IMF). The crisis reversed what the country had gained in its previous policy of indigenization (Nwosu, 1993). Foreign exchange markets are sensitive to political and economic events, for example, coup attempts, terrorist attacks and hyperinflation, among others. Reactions to unusual events, like election violence are strongly influenced by the most recent information while heavily discounting older information (Ntwiga, 2012).

#### **1.1.1 Announcement of Presidential Results**

The announcement of presidential results marks the culmination of the election cycle and is considered an economic event due to its nature. According to Bialkowski (2006), investors are usually astounded by the distribution of votes regardless of the efforts made to predict the election results. The announcement of election results provide signals as to the direction a country's economy is likely to take. Miya (2007) notes that electioneering periods are associated with a lot of uncertainties for investors.

Economists aligned to the partisan theory stress on the ambiguity that may result from policies that will be enacted by the new government. Additionally, different governments have different levels of influence on the economic policies. This is pegged on the composition of the government that is likely to influence new policies and market prices. Hibbs (1977) categorizes political party policies into two wings. The left wing politicians prioritize on employment while their right-wing counterparts favour a low inflation. Investors therefore expect right-wingers to pursue more pronounced side policies.

#### **1.1.2 Exchange Rate**

Exchange rate is defined as the rate at which a country exchanges its currency for another (Mishkin & Eakins, 2009). In essence, it is the amount of local currency that can be exchanged for a foreign currency. According to O'Sullivan and Sheffrin (2003), the exchange rate is the currency's particular value when compared with another and is obtained when one currency is exchanged or converted to another, hence its value may either decrease or increase.

An exchange rate can either be a direct or an indirect quotation. The amount of home currency spent to buy a unit of foreign currency is known as the direct quotation. According to Howells and Bain (2007), indirect quotation is the foreign currency amount that we can obtain from a proportion of the home currency. The exchange rate number declines on using the direct quotation when the home currency is gaining stability. However, when the foreign currency is getting stable, the exchange rate number is likely to increase while the home currency declines.

The exchange rate regimes exist in three forms. These include the free-floating, fixed and the hybrid exchange regimes. The free-floating exchange rate is based on market forces and it will always change whenever the components of demand and supply change. The value of a currency depends on its demand and supply. For instance, a currency is valuable when the demand for it is greater than its rate of supply. Conversely, a currency loses value when the available supply is greater than its demand. It is significant to note that, less demand does not necessarily mean that the currency is no longer wanted by people. It may mean that people prefer to hold their wealth in other forms of currency or even in form of gold (Stein & Allen, 1997).

The fixed exchange rate regimes are those which have a direct convertibility towards the currency of another country. The hybrid regime comprises of two systems. The crawling pegged and the horizontal pegged systems. The market forces do not favor the use of a fixed exchange rate in absolute measures. At the same time, allowing the flexible free floating system may expose a country's currency to the volatility associated with exchange rates. The hybrid system is therefore necessary for a combination of the two regimes. This allows for the currency fluctuation but it guards against exposing it to the volatile markets (Frenkel, 1992). The exchange rate also takes two forms, that is, nominal exchange or real exchange rates. Nominal exchange comprises of the inflationary effects while the real exchange does not include the inflationary effects (Lothian & Taylor, 1997).

#### **1.1.3 Relationship between Announcement of Election Results and Exchange Rate**

Researchers have for a long time resolved to identify the factors that define the behavior of the investors. Brealey and Myers (2001) suggests that any significant information in the financial market is quickly adopted in the asset prices. However, studies by Shiller (2002), suggest that investors frequently demonstrate irrational behavior with regard to some financial information. Shiller further states that emotions play a crucial role in guiding the decisions of investors which both economists and psychologists agree. According to Kahneman and Tversky (1979), majority of people demonstrate behavior that contradict the utility theory. Moreover, studies conducted by Festinger in 1957 that led to the development of the cognitive dissonance theory shows that people filter the available data

to match their own beliefs. The concept of cognitive dissonance has been instrumental in examining the different economic aspects. Additionally, studies conducted by Prast and Var in 2005 revealed that the asymmetrical reactions of investors to the political and economic news contributed to the depreciation of the dollar against the European currency in 2000.

Many studies conducted in the previous decades have stressed on the relationship between the economic and political news and their impact on the currency market. Some of these studies examined the way in which the elections, political alliances or coalitions have for a long time influenced the exchange rates in the financial markets as well as the volatility of the capital and exchange rate markets. Considering the varying investor behavior on different investment strategies and their capability to approximately evaluate the influence that new information has on the exchange rates, the new information invites higher volatility and modification of exchange rates. The researchers invoked different factors, both economic and political, to explain investor reactions in regard to political and economic variables. Results from these literatures show the significant role played by economic and political news in defining rational or irrational behavior. Additionally, political events influence crucial changes in asset prices in different forms. In certain cases, these changes significantly affect changes in the financial markets whereas in some cases the market may show weak reactions to political changes.

Cosset and De La Rianderie (1985) noted that public announcements have significant impacts on exchange rates. For example, they found that political risk news that might contain information about the investment climate of a country induced exchange rate movements. Studies by Campello (2007) indicated that the general elections can create economic uncertainties that may negatively or positively influence the minds of the investors and guide or misguide the behavior towards economic aspects. It has been noted that political variables are correlated with value of currencies in a country. In such a case, countries with weak governments are more vulnerable, while the ones with strong governments and fragmented opposition tend to be least vulnerable (Drazen, 1999). In addition, the financial crises of emerging markets in the 1990s happened during electoral periods or political transition (Chan, Yue-Cheong &Wei, 1996). Alesina and Rodrik (1994) argued that politics is a significant determinant of the economic outcomes, changes in financial risks and asset prices.

Although an increase in political risk is often viewed as a reason for the exchange rate depreciation, a decline in the political environment of a country may encourage a corresponding rise in demand for its currency because the investors may tend to believe that the government will dollarize its foreign exchange at a significantly higher rate than the current rate and thereby resulting in an appreciation (Lim, 2003). This relationship demonstrates the features of the free-floating exchange rates regimes where the players in the market respond freely to the risks invoked by political risks. These players respond by either buying currencies of stable economies and discard those of risky countries.

## 1.1.4 Announcement of Presidential Results and Exchange Rates in Kenya

The constitution of Kenya provides for presidential elections after every five years. A study conducted by Bandiera, Kumar and Pinto (2008) has shown that Kenya has had an

unhealthy reputation on matters politics, corruption and uncertainties that come with policies changes. According to this study, Kenya has been portrayed to have a risky political atmosphere that influences economic uncertainties. Taking a look at the peaceful presidential elections and transfer of power in December 2002, there was a general improvement in the economy. This is because it was accompanied by significant decline in the political risks (Bandiera et al., 2008). The significant reduction in the political related risks encouraged positive economic outcomes and consequently a stable macroeconomic environment in the country. On the other hand, the December 2007 elections was characterized by extreme political risks such as ethnicity and social conflict. Between the years 2003 to 2006, the country witnessed a growth of 4.9 percent unlike the case between the years 1991 to 2002. During this period, the rate of inflation of 9 percent remained steady and the ratio of the government debt to the gross domestic product significantly declined by 5.8 percent every year. Moreover, the interest rates also fell leading to economic growth (Bandiera et al., 2008). These incredible developments encouraged optimism that the country was taking a different turn away from the political and economic instabilities to sustainable economic growth.

According to Kniss (2010) certain structural related weakness within the national government has frequently led to chaos and ethnic-related conflicts. The extent of the conflicts during the 2007 post-election violence explain the serious grievances deeply rooted and driving the conflicts. The formation of political parties at independence was mainly guided by ethnicity which has for long driven the stiff competition for the executive power and fostered extreme ethnopolitical rivalry. Kniss further noted that violence spread

throughout the country moments after the Electoral Commission of Kenya announced the presidential results.

According to the statistics done by the Kenya National Human Rights Commission, 136 out of the 210 electoral constituency suffered the wrath of the post-election violence. This conflict was not new to Kenyans following the happenings of the 1992, 1997 and 2002. However, the level of conflict between the 2007 to 2008 period was extremely unique due to the number of casualties and internally displaced persons. Additionally, the results further indicated total disruption in the movement of goods and free flow of services in most sectors of the economy. The result was serious damage to the economy which repelled the potential investors (KNHRC, 2008).

The exchange system in Kenya follows the floating exchange rate system. This is where the market forces such as demand and supply are the significant determinants of the currency values. According to Kodongo (2011), the market forces are subject to random changes which influence the exchange rates to also fluctuate randomly. The 2007–08 period in Kenya witnessed a political, humanitarian and economic crisis that arose after the announcement of the results of the elections. After the then Electoral Commission of Kenya had declared former president, Mwai Kibaki as the winner. These results were disputed by the opposition who called for a nullification of the results (IFRA, 2008). The exchange rate of the Kenya Shilling to the US dollar during this period averaged at 63.3 in December 2007 and 68.1 in January 2008 (CBK website). Presidential elections were held in Kenya on March 4, 2013 and the results were announced on March 11, 2013. They were the first elections held under the new constitution, which was passed during the 2010 referendum and also the first presidential elections run by the IEBC (ISS, 2015). The Kenyan Shilling exchanged for US dollar at 86.4 in January 2013 and 84.9 in April of the same year (CBK website). The general elections held on August 8, 2017 in Kenya resulted with the incumbent President Uhuru Kenyatta being declared the winner with 54% of the total valid votes cast. Raila Amollo Odinga, his main opponent, rejected the results and contested them in the Supreme Court. The Court subsequently nullified the results and fresh elections were later held on October 26, 2017. Raila Odinga later announced the decision to pull out from the elections slated for 10th October despite the court verdict. The results from the repeat elections declared president Uhuru Kenyatta as the winner with 98 percent of the votes cast. During the months of August 2017 to October 2017, the Kenyan Shilling exchanged at an average rate of 103.4 to the US dollar.

### **1.2 Research Problem**

Predictability is a puzzling and confusing aspect in financial markets and more so inefficient financial markets. This is because the efficiency of financial markets is pegged on social, economic and political related factors among other factors (Azad, 2009). According to Smith et al (2002), the prices in the market do not exist at equilibrium level because of the unbalanced variations in the pricing of capital and in risk valuation. Furthermore, the existence of a black/parallel market occasioned by exchange rate controls encourage divergence between the official rates and the equilibrium rates (Diamandis, 2007). This suggests that the potential international businesses would experience exchange rate risks if they decided to invest in the country.

Political factors, especially political risk and in particular general elections, are often cited as crucial factors that cause changes in the exchange rates both in popular economic writing as well as academic research. Studies that have focused on the traditional models of exchange to determine market changes have experienced difficulties in finding significant connections between political risks and the nominal exchange rates (Isard, 1995), or tend to be based on anecdotal, rather than quantitative evidence (Cosset & Rianderie, 1985). There does not seem to be any anecdotal reason why the exchange rate should necessarily move in a particular direction in response to political risk.

According to Lim (2003), as much as increased political risk is regarded as a reason for declining exchange rates, the decline in the political climate of any country might encourage other countries to buy its currency. The likelihood of this happening is pegged on investors' belief that political risks may encourage a country to dollarize its foreign exchange at a greater rate than the current rate leading to an appreciation. The foreign exchange in Kenya over the last few decades has been characterized by fluctuations which has created high levels of uncertainties in the investment market. Moreover, there is difficulty in predicting the future rates both in the short and long run due to the recurrent changes that causes uncertainty in the global investment market.

Kenya has for a long time been sighted as politically risky and characterized by high levels of corruption, post-election violence, terrorist attacks, ethnic-related wars and internal conflicts. Recent empirical research indicate that the share prices respond effectively to the political or economic events. According to Richard (2006), the national elections is one of the classes of events that facilitate changes in the share prices. Kenya experienced erratic movements in macroeconomic factors between the years 2000 to 2013. More specifically, the Central Bank of Kenya noted that the inflation rate stood at 20% in 2011 while the Kenyan currency depreciated to about Ksh 110 to the US dollar. The interest rates together with the fuel prices and money supply exceeded the target.

There has been no consensus on the rule of thumb in relation to the macroeconomic factors that play a key role in the analysis of this relationship. Majority of the studies that aim to determine the relationship between elections, political events and the changes in exchange rates have been done in countries outside Africa. Studies conducted by Spulbar and Nitoi (2012) analyzed the impacts of the economic and political news on the exchange rates

between the Roman currency and euro. Nevertheless, the results from empirical studies indicated conflicting association between elections and exchange rate changes. Further observations by Spulbur and Nitoi demonstrate that political news have a strong influence on the exchange rate volatility. On the other hand, studies done by Mier (2011), examined the impacts of election cycles in the emerging markets on the exchange rates. The study further concluded that there was no significant volatility or returns in the currency markets following the election factor.

Several studies have also been conducted in Kenya to establish the influences of the Kenyan political aspects on the volatility in the exchange rates. For instance, a study by Ntwiga (2012), examined the effects of the 2007 elections chaos on the exchange rates in Kenya. The results indicated that the Kenyan foreign exchange market overreacted to the political crisis, the market became volatile and there was an increase in the correlated

perception by the foreign countries. According to Abuogi (2012) from his study on the effects of political risk on the exchange rates in Kenya, from May 2010 to April 2013, the political risks caused significant fluctuations on the exchange rates in the country. Furthermore, the study indicated a positive relationship between political risks and the exchange rate and an increase in political risk caused a corresponding increase in the exchange rates, though the impact was weak. From the analysis of previous studies above, the existing studies produced conflicting results.

This study generally sought to fill this research gap by seeking answers to one research question: "what is the effect of announcement of presidential election results on the foreign exchange rate in Kenya?"

#### **1.3 Research Objective**

To establish the effect of the announcement of presidential results on the exchange rates in Kenya.

## 1.4 Value of the Study

This study is significant to investors as it seeks to enlighten them on the behavior of foreign exchange rates in anticipation of the related five-year cycles following the release of election results in the country. It offers investors a springboard against which to plan their strategies. It will assist them to make decisions whether to buy, hold or sell foreign currencies in order to maximize the returns around the time of this event. More knowledge will be added to the scholars as other interested researchers will refer to this study, build new ideas around it and some could even test its consistency in future in order to expand the body of knowledge. Other stakeholders for example investment advisors may use the findings to advise their clients in making investment decisions. The government through the Treasury could use the findings of this study to guide the formulation of monetary policies governing the exchange rate management in the country.

Academic researchers dedicated to studying exchange rate movements in the country will also benefit from this empirical study. Analysts can use the methodology from this study in forecasting expected exchange rates at given times. They can also use technical analysis to forecast exchange rates from the findings of the study (Levich, 2001)

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter will cover theoretical review of the theories on which the study is centered, the empirical review and examines previous similar studies, a summary of literature review and conception framework with a view to answer the research question.

#### **2.2 Theoretical Review**

Many assumptions have been incorporated in the theories that seek to describe the determination of the exchange rates. The exchange rates play a significant role as economic indicators that invite investors who are interested to invest in a country. It is therefore crucial to understand the theories of exchange rates in local, regional and international trade. These theories include Efficient Market Hypothesis, International Fischer Effect, Purchasing Power Parity and Interest Rate Parity Theory.

### 2.2.1 Efficient Market Hypothesis

Markowitz in 1952 introduced the Efficient Market Hypothesis (EMH) and which was later named in 1970 by Fama. The theory argues that financial markets incorporate all the public information. It further assumes that relevant and valuable information determines the share prices. Accurate information is crucial in forming investors' expectations as it allows them to correctly process all accessible information (Samuelson & Fama, 1965). It implies that the market prices are "right" such that they are set by agents that consider the requirements of the Bayes' Law and "have sensible preferences." The law assumes that there is no free lunch in the market. This implies all the investment strategies involved cannot create average or excess returns than the value warranted for its risks. Additionally, an efficient market is a market that accommodates a large number of rational participates also known as profit maximizers. The participants participate actively and compete effectively while trying to forecast the future market values on individual securities (Fama 1970). The hypothesis also depends on in-depth examination of the public information available in the market. In several literatures, EMH is also described as Informational Efficiency. The market is regarded as efficient when the asset prices fully reflect all the available information. The EMH requires no costs and demands rational expectation from market agents (Giannellis & Papadopoulos, 2009).

The concept of foreign exchange market efficiency is an important aspect for all the participants. Efficient market rates take into consideration all the available information. For instance, this happens when the market efficiency shows zero correlation in the exchange rates. Thus, the efficiency of foreign exchange markets is determined if it fully reflects all available information from the market (Fama, 1984). On the other hand, a weak form of efficient market exists when the marginal cost of gathering information exceeds the marginal benefit of that information (Jensen, 1978). The efficiency or inefficiency of the foreign exchange rate market has been examined extensively in the past. According to Grossman and Stiglitz (1980), it is impossible to have a perfect informationally efficient market. This is because perfect efficient markets exist when there is zero profits from trading on information. At such a situation, the cost of gathering and trading on information would be positive.

#### 2.2.2 International Fischer Effect Theory

The theory of International Fisher Effect was developed by Fisher in 1930 and it assumes that foreign currencies that exhibit high-interest rates depreciate due to relatively high nominal interest rates, which implies inflation (Madura, 2000). This implies that if Kenya has a higher nominal interest rate than Uganda, the Kenyan shilling is expected to depreciate against the Ugandan shilling. The margin is determined by the disparity between the nominal interest rates from both countries.

According to (Eiteman et al, 2010), when this theory holds, investors are expected to be indifferent to buying a bond on one currency or another. This is because the competition between the investors eliminates that difference. The theory suggests that variations in the spot exchange rate between any two countries will also be equal to the differences in their nominal interest rates (Demirag & Goddard, 1994).

Several studies support the Fischer Effect theory while others seem to reject it. These studies discuss the validity of this theory in different economies and the results are conflicting. For instance, examining the International Fisher effect theory over a wide timespan demonstrates high likelihood of having a positive relationship between nominal interest rates and inflation. According to Asemota and Bala (2011) on the study to examine the presence of Fischer effect in Nigeria, they realized no evidence of long-run Fisher effects from year 1961 to 2009. Studies conducted by Koustas and Lamarche (2010) concluded that the nominal interest rates and the inflation rates do not form a normal or positive pattern. This invalidates the Fisher effects. Further studies by Koustas and Serletis

(1999) used the methodology by King and Waston of 1997 to nullify the Fisher effect. The findings of this study disputed the relationship between inflation and nominal interest rates. The 1987-2010 economic data from Turkey by Arisoy in 2013 was also used to demonstrate the failure of Fishers effect. The cointegration test and the time-varying approach gave contradicting results to those of the Fisher effect theory. Finally, Ghazali and Ramlee (2003) studied the interest rates in the G7 countries and used the Autoregressive Fractionally integrated Moving average model to demonstrate that there was no link between the interest rates and the inflation rates in the long run. Additionally, Coppock and Poitras (2000) discovered that interest rates failed to change with changes in inflation rates. This was as a result of the consistent changes in implicit liquidity on assets.

Olekalns (1996) used economic data from Australian markets to reject the Fisher effect. However, the study indicated that the strong form assumption cannot be annulled following the data collected during the period of deregulation of the financial systems (Hawtrey, 1997). The study indicated that the Fisher effect failed to surface during the deregulation period of the early 80s. Hasan (1999), used Adaptive Expectation Approach, diagnostic tests and Wald tests to show nullification of the Fisher effect.

There are certain considerations from the studies nullifying the Fisher effect. Firstly, the parity does not hold over a wide span of data. Several elements affect the validity of this parity. These include monetary policies, inflation and changes made on the financial systems. These elements determine the relationships between nominal interest rates and inflation in the long run. In Australia, the theory did hold after liberation of the financial

system. As much as the theory might not be specific on several occasions the three factors need to be considered while examining these effects.

#### **2.2.3 Purchasing Power Parity**

The Purchasing power parity (PPP) developed in 1918 by Cassel implies that a country's currency must have the same purchasing power in all regions or countries. For instance, when the exchange rate is the same at home and abroad, it is difficult for it to be altered in any way. This theory ensures that the nominal exchange rates between two trading nations must show the variations in price levels in these countries. Thus, it implies that a unit of one currency should buy the same amount of commodities from all the countries. The PPP is also known as Inflation Rate Differential. It is important to acknowledge that the PPP theory is based on the "Law of one price" which requires that a commodity must sell at a constant price in all the regions or location. This law warns against the concept of unexploited profit opportunities (Stonecash, 2005).

According to Kidwell et al. (2008), exchange rates tend to follow the direction taken by the cost of the goods in any country in most cases. If the theory of PPP is true then, under the same currency, all commodities should be priced at the same price in all nations. Thus, there is no amount to save from transacting in one place than in the other. Initially, the theory was set to cater for the price relationship of products valued in different currencies. It therefore lays strong preconditions that must be considered keenly. Additionally, the Absolute PPP generally holds in markets of competitive products where the implied assumption of a risk-neutral world, where goods can be sold or bought freely without tariffs, transportation costs among other significant costs. However, it is rather impractical to assume that transport costs are not significant while we have to incur costs to trade goods or move them from one place to another. In a real world every economy manufactures and distributes tens of thousands of commodities and services, with varied prices, from one country to another. Transport costs and other costs incurred during trade triggers the different prices (Kanamori & Zhao, 2006). The PPP is not a complete theory of exchange since traces of deviations from the requirements of this theory have been sighted throughout the world (Shapiro, 1992).

#### 2.2.4 Interest Rate Parity

The theory of Interest Rate Parity is not very different from the PPP. Interest Rate Parity (IRP) suggest that no arbitrage opportunities exist when two products in two different countries have similar interest rates as long as similar risks are involved (McDermott, 2000). This parity also follows the law of one price where the purchase of one asset in two different countries yields the same amount of returns. The exchange rates play a significant role of adjusting any noted differences.

According to Feenstra and Taylor (2008), the interest rate parity presents the no-arbitrage condition as an equilibrium state where investors are indifferent to the interest rates charged on banks from two different countries. This condition, however, did not always hold for several opportunities especially for riskless opportunities that aimed to earn profits from interest arbitrage. This parity allows two assumptions, that is, the capital mobility and perfect substitutability of domestic and foreign assets. For the case of the foreign exchange market equilibrium, this parity suggests that the returns expected from the domestic assets will correspond equally to the returns (exchange rate adjusted expected return) from

foreign assets. According to (Mishkin, 2006), it is difficult for investors to earn arbitrage profits by borrowing money from a country where interest rates are relatively lower and invest in a country that charges higher interest rates.

### **2.3 Determinants of Exchange Rate**

The exchange rates are determined in a foreign exchange market; a market that is open to buyers and sellers from different regions who trade with different currencies. In such a market, we have the spot exchange rate which is termed as the current exchange rate. Another common term used in these markets is the forward exchange rate which is the rate that is quoted and traded today but for the delivery and payment on set future date (O'Sullivan & Sheffrin, 2003). There are several factors that determine the exchange rates in the foreign exchange markets. These are discussed below.

#### 2.3.1 Foreign Exchange Rate Regime

Every nation has specific mechanisms laid down for managing the country's currency. These mechanisms vary depending on factors such as market forces or the type of trade involved. Therefore, it is critical that a country identifies the exchange rate regime that applies to the value of its currency. For instance, a country's currency may be free-floating, hybrid or fixed. If the currency is free-floating, the exchange is determined by the market forces of demand and supply. For the hybrid exchange rate regime which consists of both the crawling system and the horizontal pegged system, it allows for currency fluctuation but protects against exposure to the volatile markets (Frenkel, 1992). The fixed exchange rate regimes involve direct conversion of one currency to that of the other country. The government of that given country make significant attempts to ensure that that value of its

currency is constant. In this regard the currency worth is measured in terms of basket of other currencies or a constant weight of gold or constant amount of the currency of the other country. According to Evans (2011), the central bank of any given country is committed to manage the buying and selling of its currency at fixed rates.

## 2.3.2 Balance of Trade

The balance of trade is generally understood the difference between the values of a country's exports and imports. A country may have balance of trade surplus or deficit. A trade surplus occurs when the value of exports is higher than those of imports while a trade deficit occurs when the value of its imports are greater than the values of its exports. An increase in the foreign exchange rate can result in trade deficit. This is because the exchange rates have a direct effect in determining the price of commodities used both locally and abroad. High exchange rates translate to expensive imports of products required in industrial production purposes.

A stronger local currency fosters a positive balance of trade between two countries because of the increased and favorable conditions of doing the direct foreign investment (Herberger, 1950). Frenkel (1992) states that a higher exchange rate can be expected to lower a country's balance of trade, while declining exchange rate decreases the purchasing power of income as well as capital gains derived from any returns. According to Zhou (1997), trade balances of any country that has a stable trade plus a surplus on the current account is likely to witness an appreciation on their currencies as money from the exports and investments come in. The demand for the currency responds positively to the currency and bring a significant rise in its value.

### 2.3.3 Interest Rates

This is the rate at which a borrower pays interest to the lender. Interest rates are expressed as a percentage of the principal for one year. Howells (2008) defined the rate of interest as payment from borrowers to lenders which compensates the latter for parting with funds for a period of time and at some risk.

Interest rates vary from one country to another. When a country trades at a higher interest rate than the other countries it is likely that its financial institutions will experience inflow of currency. Therefore, high-interest rate differential implies greater incentives for the funds that flow across the country's borders into economies with equally high-interest rates. The money received by countries offering high-interest rates is known as "hot Money" which flows across the currency markets as it encourages a corresponding level of appreciation on the exchange rates (McKenzie, 1999). According to Juthatip (2009), higher interest rates attract foreign capital inflows and appreciates a country's currency and the reverse is true.

### 2.3.4 Inflation Rates

Shiblee (2009) defines inflation as a consistent increase in the general level of prices for goods, and services. Ariss (2012) defines it as a rise in the general level of prices of goods and services in an economy over time. Thus, inflation is a consistent rise in the overall or average level of prices of all goods and services and arises when prices of goods increase or when it needs more money to purchase the same items (Saleem, Zafar & Rafique, 2013). Inflation reduces the purchasing power of money, over time, hence a gradual loss of the

real value of money, over time. As inflation increases, the value of both money and returns decrease (Ahmad & Naseem, 2011).

It is important to appreciate the importance of inflation rates on foreign exchange rates. High rates of inflation are likely to increase the exchange rates and destabilize the local currency. A study conducted by Mugambi and Okech (2016 concluded that high rates of inflation erode the purchasing power of an economy's currency and a weak local currency causes massive harm on the nation's purchasing power. According to Zhao (1985), the relationship between inflation and forex may be inverse. Such a situation can be triggered by speculations from both the key participants in the market. It is true that the inflation rate affects the rate at which a country exchanges its currency for another. This may happen whether directly or indirectly. For example, the changes in prices of imported goods have a direct effect on the Consumer Price Index (CPI). On the other hand, the changes in the growth of the exports have a crucial influence on the exchange rates.

When the exchange rates are high, a country finds it hard to sell goods outside its borders due to a rise in relative prices. This will slow down the sales of the exports and hence in order to absorb this effect, exporters may opt to reduce prices or any other expenditures. According to Piet and Raman (1995), a country that experiences low levels of inflation rates is characterized by a rise in its currency value.

### 2.3.5 External Debt

World bank (2008) defines external debt as the sum of both public and publicly guaranteed long-term debt, private non-guaranteed long-term debt, use of IMF credit as well as short-

term debt. Odera (2015) in her study argued that external debt to GDP ratio had the negative and significant effect on exchange rate volatility. Checherita & Rother (2010) denote that high government debt ratios suppress growth by the crowding-out effects on investments and inefficient resource use. This increases government interest payments forcing the government to default or impose inflation tax (Miller & Foster, 2012).

According to Piet and Raman (1995), a country's debt ratio has an impact on the exchange rate levels of that country. This is because significantly high debt results in high inflation implying that the debt will be repaid with cheaper real dollars in the future. Mukui (2013) observed that high levels of foreign debt in Kenya posed a challenge to the economy since a large proportion of the export income is used in servicing debts instead of use in domestic investment.

#### **2.4 Empirical Review**

There are numerous studies both locally and internationally to support the associations between exchange rates and stock market returns, but these studies have produced mixed results.

### 2.4.1 Global Studies

Several studies have been conducted to examine the role of exchange rates and political risks in different nations and the results are fascinating. For example, studies conducted by Deseatnicov and Akiba in 2011 examined the significance of the exchange rates and political risks in the activities of the Foreign Direct Investment (Japanese). The study used data from thirty countries, both developed and developing, from 1995 to 2009. The study used econometric methods to assess the findings and provide the pieces of evidence for the
hypothesis. The study used the Generalized Method of Moments (GMM) specification to obtain the conclusions and result. The general equilibrium theoretical models were instrumental in achieving the study objectives. The model included additional variables such as political risk, exchange rate, market forces such that market potential, workforce's endowments among others. The results from the study indicated that models with the exchange rates and political risk factors exhaustively explained the recent Japanese outward FDI flows. The results also indicated a new set of patterns in its behavior depending on the stages of economic development.

Studies on impacts of political news and economic news on exchange rates have revealed promising results in the near past. For example, studies conducted by Spulbar and Nitoi (2012), examined the changes in exchange rates between the Romania currency and the Euro due to the political and economic news. The study used the GARCH model and run for one year from August 2011. The results from this analysis indicate that both economic and political news have an impact on the exchange rates, that is, depreciation of the national currency and volatility growth. Spulbar and Nitoi concluded that the two variables have a positive influence on the euro/Romania exchange rate volatility.

Mier (2011) explored the effect of elections on the equity and foreign exchange markets. The study evaluates the returns and volatility four years before and one year after presidential and parliamentary elections. This was done in 21 emerging countries during the period 1998 to 2004. Data for both equity and foreign exchange was sourced from local national or central banks. Exchange rate data contained daily and monthly series for the corresponding USD to local currency conversion rate. The study used linear regression analysis on the set of election cycles. The analysis consisted of volatility and returns data regressed independently against dummy variables. The study observed that equity markets in emerging economies experienced statistically valid increases in volatility in the time period of one year before or after elections. This was in contrast to the results on the currencies. As such, the study concluded that currencies are not affected during election cycles in the same degree as observed on stocks since foreign exchange markets are larger and more robust. Moreover, they serve purposes beyond investing such as supporting international trade and corporate currency operations.

### 2.4.2 Local Studies

Irungu (2012) studied the informational content of general election results announcement at the Nairobi Securities Exchange. The study adopted an event study methodology and the target population for the study includes companies trading at the Nairobi Security Exchange as at December 31st, 2007. Data were obtained from the NSE covering the period between 31st December 1997 and 31st December 2007. The study collected data on NSE 20 share index and market capitalization for NSE for the two general elections results from announcement. This study established that there was a strong relationship between general election results announcement on the stock market performance of the Nairobi Securities Exchange since the announcement brought about the stability in the market and allowed the forces of demand and supply to drive the operations of the market.

According to a study by Ntwiga (2012), political and economic changes significantly affect the market equilibrium. This study focused on the effects of elections violence in Kenya during the 2007 presidential election on exchange rates. The time series data collected from January 2007 to December 2008 were useful in determining the trends on exchange rates. The study used the GARCH model to test the distribution of volatility as well as estimate the annual volatility. Additionally, the study confirmed the significant difference between the period volatility and countries' volatility using Friedman's nonparametric test. The correlation test was also used to confirm linearity between the countries and each of the three periods under investigation.

Descriptive statistics were also used to summarize the data. The study indicated a strong correlation with the GARCH parameters implying an overreaction in the market (over the reactive period). The results also indicated the negative correlation between emerging and developed market exchange rates while positively correlated amongst themselves. Both scenarios gave similar perceptions. Moreover, violence shocks were noted to have adverse effects on the exchange by increasing the market reaction and encouraging a negative perception of the market and country. Both the emerging and developed markets differed in terms of reaction to violence. The study concluded that crucial economic and political changes shift the market equilibrium.

Abuogi (2012) examined the impact political risks have on exchange rates in Kenya with a daily time series data of 3 currencies for the period May 2010 to April 2013. The results and summary are based on the Event Study methodology. The market model utilized the interbank rate to calculate Abnormal and Cumulative Abnormal Returns. The analysis incorporated the t-test to observe the level of significance using two-tail tests. From the collected data it was observed that politically risky events had a statistically significant effect on exchange rates for USD. The regional currency USH, however, did not show such a significant relationship. The other currency under study which was the EURO did show the very minimal reaction to the political events.

Menge (2013) examined the effects of the general elections on the stock market return of companies listed in the NSE. An event study methodology was used while the population comprised of 56 companies listed in the NSE. The study used secondary data to gather information and the data obtained covered the period before and after 31st December 2002, 27th December 2007 and 4th March 2013 elections. The collected secondary data was coded and entered into the Statistical Package for Social Sciences (SPSS) for analysis. The findings from the study established that the market return was a good predictor of stock returns. Furthermore, the study revealed that the expected returns including the market returns were significantly higher before elections than after the elections. The study however only focused on market returns while ignoring other factors that affect the performance of a company during and after the election period such as cash flows, asset base, gearing ratio, growth opportunities and liquidity which have a significant impact when estimating the returns.

Zainabu (2014) carried out a study on the effect of the general elections on the return of the stock market in Kenya. The study covered the period from 1997 to 2013. The data was obtained from the NSE during this period and was analyzed and the performance of the NSE index during election years compared to none election years. The population

constituted the 61 listed companies at the NSE while the descriptive research design was applied. The study established that the stock market returns tended to be affected by the presence of election trends. A higher level of policy uncertainty increased the risk of holding assets with returns that depended on economic policies.

Sewe (2016) carried out a study to establish the effect of foreign exchange fluctuations on equity market performance at the Nairobi Securities Exchange for the period July 2006 to June 2016. The EGARCH model was applied to assess the monthly impact of foreign exchange fluctuations on stock market performance. The study noted that the foreign exchange fluctuations exhibited a significant negative impact on stock market returns, although of low magnitude. The study was nevertheless biased as it looked at the NSE 20 share index instead of the entire population of the firms listed at the NSE. Furthermore, the other factors which are deemed to influence the NSE such as interest rate and inflation rate were not factored into the model. The author recommended further research on the potential effect of other macroeconomic factors on the NSE.

Kimura (2017) carried out a study on the effect of exchange rate volatility on market returns at the Nairobi Securities Exchange over the period January 2007 to December 2016. The study used secondary data from the NSE and the Central Bank of Kenya. The study applied multiple regression model and correlation analysis. The study established that foreign exchange volatility has a positive but insignificant relationship with the market returns.

The study only used the NSE 20 share index which measures the returns of 20 selected companies and ignored other indices such as the NSE All-Share Index (NASI).

Furthermore, the study only focused on the exchange rate volatility between the Kenyan Shilling and the United States Dollar. The author suggested further research to be carried out on the effects of the exchange rate volatility on market returns at the NSE incorporating other factors such as Foreign Direct Investments, Gross Domestic Product as well as expanding the scope of the exchange rates used to cover other currencies such as between the Kenya Shilling to the Euro and Pound.

### 2.5 Conceptual Framework

A conceptual framework as illustrated below shows the perceived association between dependent variables and the independent variable. As shown in the Framework, there is an independent variable namely the announcement of the presidential results (political variable). The dependent variable represents the return on the exchange rate. The relationship among the variables was estimated using a function:



Independent variable

Dependent variable

### 2.6 Summary of Literature Review

Most of the existing studies have looked at the relationship between foreign exchange rate fluctuations on variables such as foreign direct investment, stock market returns, and balance of trade. Other studies that have been done on the relationship between elections or political events and foreign exchange rate fluctuations have focused on countries outside of Africa. For instance, Spulbar and Nitoi (2012) analyzed the impact of political and economic news on the exchange rate between the Romanian currency and the euro.

Furthermore, the pieces of literature reviewed concluded different results as to the effect of political events on the volatility of exchange rates. Spulbar and Nitoi (2012) observed that political news influence the exchange rate volatility. However, Mier (2011) explored the effect of political risks in emerging markets on the equity and foreign exchange markets and observed that there was no significant volatility or returns in currency markets.

Few empirical studies have been found in Kenya focusing on the significant effects of political events on exchange rate variations. Abuogi (2012) examined the effect of political risk on exchange rates in Kenya and noted that the study's main shortcoming was on the time period of the sample (2010-2013) which was relatively small and recommended future empirical work examine a larger data to reinforce the expected returns or even unique findings. Furthermore, a study was also carried out by Ntwiga in 2012 on the effects of election/ political risks during the post-election violence, on foreign exchange rates between January 2007 to December 2008. Both of these studies produced conflicting results on the impact of the political event on the foreign exchange rate market. As such, further research is needed to determine the effect of presidential elections on the foreign exchange rates in Kenya.

### **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter outlines the various stages and phases used to enable the researcher to achieve the research objectives. It outlines the research design, the target population, and sampling design, the data collection and the data analysis techniques adopted.

### **3.2 Research Design**

Research design provides the general guide of how the study will address the research problem. According to Cooper and Schindler (2010), research design refers to both structure of the research problem, the framework, organization or configuration of the relationships among variables of a study and the plan of investigation used to obtain the empirical evidence on those relationships. According to Cooper and Schindler (2010), the research design incorporates the general structure of the solution to the research problems with both theoretical and practical evidence.

This study employed a descriptive research method, which is one where no information is manipulated, and the information collected does not involve any change of environment. A descriptive case study is a study that is not experimental. Bickman and Rog (1998), proposed that descriptive case studies are studies that can respond to queries of "what is" or "what was." The descriptive summary provides measures of central tendency such as the mean, mode or median. According to Glass and Hopkins (1984), it encompasses the congregation of statistics that define events and then systematizes, tabularizes, portrays, and pronounces the data collection. In most cases it uses graphic aids such as graphs and charts to enhance the understanding of data distribution, with this type of research,

therefore, numerical analysis was possible to enable the researcher to come up with comparative analysis.

### **3.3 Population**

According to Cooper and Schindler (2010), population refers to the total number of units that one wishes to make inferences. The population of this study comprised all foreign exchange rates of key indicative foreign currencies (Appendix 1) in relation to the Kenyan Shilling (KES) in 2017. Indicative foreign currency rates are rates that reflect the average at which participants buy and sell currencies in the foreign exchange market at the open of trade every day.

### 3.4 Sample

The currencies for the study were the United States Dollar (USD), European (EURO) and the Ugandan Shilling (USH). The USD was selected since it dominates the Kenyan market, the EURO is the most commonly used currency in Europe and the USH was selected as it's the local currency of Kenya's neighbor, member of the East Africa Community and also an emerging market currency. Data was available from the Central Bank of Kenya website (CBK). Convenience sampling was used to determine the sample. This is a nonprobability sampling technique that selects subjects based on their proximity or accessibility.

### 3.5 Data Collection

Data collection refers to the process of gathering data about a specific topic using data collection instruments (Sekaran, 2000). There are two types of data, that is the primary and secondary data (Mugenda & Mugenda, 2003). The study used secondary data from the

Central Bank of Kenya website. The data contained daily exchange rates for the three currencies. Data was obtained covering the period between June 8, 2017, to October 12, 2017.

### **3.6 Data Analysis**

Data analysis is the process of converting data into structures or order that can be easily be interpreted, communicated or reported (Marshall & Rossman, 2006). The initial stages of data analysis with regard to this study is data coding, entry and the analysis using the Statistical Package for Social Sciences (SPPS). The study followed the Market Model (MM) as outlined by MacKinlay (1997) as shown below;

Step 1: Identify the event of interest

The event of interest is the announcement of the presidential results in Kenya. In this study, the event date is August 11, 2017.

Step 2: Define the event window

The event window was 15 days before and 15 days after the announcement of the presidential results. The estimation window was 30 days before the event while the post-event window was 30 days after the event.



Where the Est. W: Estimation Window, E.W: Event Window and Po.W: Post Event Window. Our focus will be on the event window.

### Step 3: Select a sample set of currencies to include in the analysis

The study incorporated three currency samples as described in the previous subsections. These included the USD, EURO, and the USH.

Step 4: Predict a "normal" return during the event window in the absence of the event

Actual Return of the currency  $(R_{it})$  was obtained as follows;

$$R_{jt} = \frac{P_{jt} - P_{jt-1}}{P_{jt-1}};$$

 $P_{jt}$  = denotes the price of the currency represented by (j) on date t

 $P_{jt-1}$  = denotes the price of currency (j) on date prior to t

To obtain the expected return of currency, the study used the formula below, which is in linear form. The expression contains the independent and dependent variables  $(E_{rjt})$  and  $Rm_t$ .

The formula is as follows

 $E_{rjt} = a_f + b_f Rm_t$ 

Where

The constant  $(a_f)$  denotes risk-free return (denoted as the prevailing treasury bill rate),  $b_f$  denotes relative riskiness of the forex market prices (denoted as the standard deviation of the currency) and  $Rm_t$  representing the rate of return of interbank rate on date t

### Step 5: Estimate the "abnormal" return within the event window.

The abnormal return is expressed as the difference between the actual return and the predicted returns. The results from the MM analysis was used to estimate the abnormal return on exchange rates. The following formula was used to obtain the abnormal returns.

$$AR_{jt} = R_{jt} - E_{rjt}$$

With

 $AR_{it}$  Representing the Abnormal Return of currency prices j on day t

 $R_{it}$  Representing the Actual Return of currency prices j on day t

 $E_{rit}$  Representing the Expected Return of currency prices j on day t

Step 6: Calculating Average Abnormal Returns and Cumulative Abnormal Returns

The average abnormal returns is calculated by finding an average of the abnormal returns in step 5 across currencies for each day.

$$AAR_i = \frac{\sum_{t=1}^{t=n} AR_i}{n}$$

Where

 $AAR_i$  Representing the Average Abnormal Return of currency prices on day i

 $AR_i$  Representing the Abnormal Return of currency prices 1 to n on day i

*n* Representing the number of currencies

The average abnormal returns (AAR) calculated for each day of the event window. The AAR value for each day is then added to the previous day's AAR to derive the day's Cumulative Abnormal Returns CAR:

$$CAR_t = \sum_{t-k}^{t} AR_i$$

Where

k = Number of event days before day t

Step 7: Testing whether the abnormal return is statistically different from zero.

With the CAR calculated, statistical techniques can then be used to test for significance. MacKinlay (1997) recommends t-test with associated p-value to test whether the abnormal returns can be said to be significant from zero. This study uses Canavos and Miller (1999) to calculate the t-test:

$$\frac{\overline{X\iota} - \mu}{S/\sqrt{n}}$$

Where:

 $\overline{X}$  is the sample mean on day *i* taken to be day *i*'s CAR

 $\mu$  is the population mean (assumed to be zero)

S is the sample standard deviation

n is the number of currencies

In this study, the CAR on day i is used as the sample mean on day i. To find the corresponding p-value, it can be looked up in a statistical table, or calculated using Ms Excel. The latter was used in the study.

A testable hypothesis is set H1: the null hypothesis being tested is that announcement of presidential results does not have an effect on exchange rates. The study considered 5% as the level of significance for the t-test, with 95% confidence level. If the significant values (p-values) recorded below the critical value ( $\alpha$ =0.05) then this implied a significant impact. In other words, there exists significant difference in abnormal returns before and after the announcement of presidential results. Otherwise the event study concludes that the announcement of presidential results has no impact on the foreign exchange rates.

### **CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION**

### 4.1. Introduction

This chapter presents the data findings on the exchange rates following the effect of announcement of presidential election results on the foreign exchange rates in Kenya. The data used was obtained from the Central Bank of Kenya. The relationship was moderated by looking at different currencies to monitor the abnormality in the foreign market returns. The analysis was achieved through SPSS version 22 alongside Microsoft excel. The study looked at the 30-day period before the announcement of the presidential election results and compared the findings with 15 days period on either side of the event as event period. The data on the three currencies used in the calculation of the findings in this section are in Appendix III, IV and V.

#### **4.2. Descriptive Statistics**

Data analysis was based on fifteen days before the announcement day to fifteen days after the announcement day. The first part of the analysis focused on descriptive statistics to the variables under study. The three currencies' Average Abnormal Returns and Cumulative Abnormal Returns, which were the focus of the study, were calculated on each currency. The findings are in table 1.

The mean average abnormal return and the mean cumulative abnormal returns were -0.114 and -0.981. This shows that the overall performance of these variables was negative. The standard deviation for the AAR was 0.008 showing that the AAR was fairly constant through the period. The standard deviation for the CAR was 1.060, which shows that the CAR had a variation of 1.060 as shown in table 1.

Table 1: Descriptive Statistics

	AAR	CAR
Mean	-0.114	-1.981
Median	-0.113	-2.026
Std. Deviation	0.008	1.060
Skewness	-0.399	0.064
Std. Error of Skewness	0.421	0.421
Kurtosis	-0.884	-1.265
Std. Error of Kurtosis	0.821	0.821
Minimum	-0.130	-3.663
Maximum	-0.102	-0.228

Source: Research Findings

Skewness is a measure of the degree and direction of the data asymmetry. From the findings, the positive values show that the data has positive skewness for CAR. On the other hand, average abnormal returns have negative values which show negative skewness, with a standard error of 0.421.

### 4.2. Data Presentation

The findings in this section are provided so as to respond to the hypothesis in chapter three in numerical order where possible. The hypothesis to be tested was that the announcement of presidential results does not have an effect on exchange rates.

The study analyzed AAR and the CAR of the currencies, during the August 2017 presidential elections, using the steps outlined in chapter three. The findings of the calculations and the statistical tests carried out during the 31-day window are presented in table 2.

Day to/after event day		Date	AAR	CAR	t-statistic	p-values
	Day 15	7/20/2017	-0.114	-0.228	-0.807	56.783%
	Day 14	7/21/2017	-0.112	-0.340	-1.205	35.154%
	Day 13	7/24/2017	-0.111	-0.452	-1.598	20.829%
	Day 12	7/25/2017	-0.113	-0.564	-1.997	11.650%
	Day 11	7/26/2017	-0.113	-0.677	-2.397	6.182%
Days to the event	Day 10	7/27/2017	-0.114	-0.791	-2.801	3.113%
day	Day 9	7/28/2017	-0.112	-0.903	-3.198	1.511%
	Day 8	7/31/2017	-0.118	-1.022	-3.616	0.682%
	Day 7	8/1/2017	-0.117	-1.138	-4.029	0.298%
	Day 6	8/2/2017	-0.122	-1.260	-4.461	0.121%
	Day 5	8/3/2017	-0.124	-1.385	-4.901	0.047%
	Day 4	8/4/2017	-0.128	-1.512	-5.353	0.017%
	Day 3	8/7/2017	-0.128	-1.640	-5.805	0.006%
	Day 2	8/9/2017	-0.129	-1.770	-6.263	0.002%
	Day 1	8/10/2017	-0.130	-1.899	-6.723	0.001%
Event	day	8/11/2017	-0.127	-2.026	-7.171	0.000%
	Day 1	8/14/2017	-0.119	-2.145	-7.594	0.000%
	Day 2	8/15/2017	-0.121	-2.266	-8.020	0.000%
	Day 3	8/16/2017	-0.118	-2.384	-8.437	0.000%
	Day 4	8/17/2017	-0.110	-2.494	-8.827	0.000%
	Day 5	8/18/2017	-0.114	-2.608	-9.232	0.000%
Days after the	Day 6	8/21/2017	-0.108	-2.716	-9.614	0.000%
event day	Day 7	8/22/2017	-0.106	-2.822	-9.990	0.000%
	Day 8	8/23/2017	-0.106	-2.928	-10.364	0.000%
	Day 9	8/24/2017	-0.106	-3.034	-10.740	0.000%
	Day 10	8/25/2017	-0.105	-3.140	-11.113	0.000%
	Day 11	8/28/2017	-0.106	-3.246	-11.489	0.000%
	Day 12	8/29/2017	-0.102	-3.348	-11.850	0.000%
	Day 13	8/30/2017	-0.102	-3.449	-12.210	0.000%
	Day 14	8/31/2017	-0.106	-3.555	-12.583	0.000%
	Day 15	9/1/2017	-0.108	-3.663	-12.967	0.000%

Table 2: t-statistics for 31 days surrounding August 2017 Election

Source: Research Findings

From table 2 above, it is notable that the AAR and CAR had negative values throughout the event window. The absolute t-statistic values were also increasing throughout the event window, while the p-values were decreasing. The p-value was relatively high, at the beginning of the event window (56.783%) and dropped rapidly through the next four days (6.182%). Since the significance values were above 5% during this period, the null

hypothesis is not rejected and we conclude that the announcement of the presidential results does not have an effect on exchange rates during these days.

From the tenth day to the end of the event window, the p-value continued to decrease from 3.113% to below 0.001%, which was attained on the day before the event day. Figure 2 below shows a plot of the p-values and the days to and after the event day. A curve joining the values shows a small asymptotic impression of the p-values.





The p-values from the tenth day and the rest of the event window are less than 5%. These guide us to reject the null hypothesis and we conclude that the announcement of the presidential results has an effect on exchange rates from the tenth day to the announcement of presidential elections to the fifteenth day after the event day.

### **4.3. Discussion of Research Findings**

The findings clearly indicated that political event (announcement of the presidential election results) caused the returns on foreign exchange rates to change significantly and hence differ from the normal returns. The overall negative abnormal returns during the event window act as a caution to traders not to expect positive returns during the event window.

The results of the t-test show that currencies respond significantly to the announcement of the presidential results. Out of the thirty days in the event window, CAR was not affected by the announcement of the presidential results on five days. On the other hand, CAR was affected by the announcement of the presidential results on 83% of the days in the event window (25 out of 30 days). This shows that exchange rates in Kenya are significantly affected by the announcement of the presidential results.

The results support the semi strong form market hypothesis since foreign exchange prices adjust rapidly to public information that no investor can earn an abnormal return by trading on the event date and after. On nearing the event dates, the forex market was very sensitive to the events which could be attributed to speculation by the traders and investors. The progressively negative CAR indicates an increase in the volatility whose change in direction was not determined in this study.

The findings in the study are similar to other findings by Spulbar and Nitoi (2012) and Mier (2011) who found that national elections in emerging economies led to a rise in the volatility of foreign currencies in the local market. These findings are also similar to the findings by Irungu (2012) who found a strong relationship between general elections and the exchange market.

# CHAPTER FIVE: SUMMARY, CONCLUSION, AND RECOMMENDATIONS

### **5.1 Introduction**

This chapter discusses the summary of the findings of the study and the main conclusions drawn from the analysis of the data in Chapter Four. The chapter is organized as follows: Section 5.2 presents the summary of the findings of the study while section 5.3 is the conclusion. Section 5.4 discusses the policy implications arising from the results of this study. Lastly, section 5.5 presents the recommendations for further research.

### **5.2 Summary of Findings**

The general objective of the study was to assess the effect of the announcement of presidential results on the foreign exchange rates in Kenya. The analysis adopted event study methodology and calculated the values of the Abnormal Returns, Cumulative Abnormal Returns and Expected Returns to determine the returns of the sampled currencies to the market returns. The outcomes from the analysis strongly suggested that the political event under study (announcement of presidential results) had a significant effect on the foreign exchange rate which results in the appreciation or depreciation of the Kenyan Shilling.

The impact of the study to an investor is that they must be wary when undertaking investments at a period that don't have political certainty. Investors who are risk averse ought to avoid making investments days close to the elections to avoid risks that would come with the election events. The negative returns continue for significant period, in this case, fifteen days, after the event date.

The study further establishes that in determining the foreign exchange strategies, organizations must put a lot of attention on political events likely to increase the political risks such as the announcement of results of a presidential election.

### **5.3 Conclusion**

An analysis of the abnormal returns of the three currencies under study established that the impact of the negative correlation between the Kenyan Shilling and the USHS and between the Kenyan shilling and the USD and EURO was different because of the significance of these currencies to the Kenyan economy. Investors from countries within the same economic level as that of Kenya are likely to be more informed of the market changes than other foreign investors. This difference triggered specific investor behavior during, before and after political or any events.

Furthermore, the study established that in the period subsequent to the announcement the presidential election results, the average abnormal returns of the foreign exchange rates exhibited negative returns pointing to market absorption of the information in the long run period after the announcement of the presidential results.

### **5.4 Recommendations**

The findings of this study recommend that policymakers should focus on creating models that would enhance the predictability of changes in exchange rates due to political events such as the announcement of the presidential results and other factors such as static growth and development. Such models would enable the responsible institution to create and maintain a stable business atmosphere before, during and even after political events. The policy makers with other stakeholders should work together to build models that will not only predict but also present near strategies for balancing the exchange rates movements. The study also recommends that the existing theories be reviewed and designed to accommodate the political risks or factors related to politics. This would enhance our understanding and allow the policymakers to review and come up with crucial market policies.

The study also demonstrates that investors are not very well informed of the changes that occur during election periods. As such, it is highly recommended that measures be put in place to inform all investors of these changes and the solution models. Moreover, political stability helps generate crucial strategies for ensuring exchange rates stability. This motivates and allows the government to set standards of maintaining political stability. It is rather a huge task to the government and policymakers to create a model that can minimize the influence of political events on foreign exchange rates without establishing proper standards of exchange in the currency market. This will minimize the risk of political events spreading into the economy and destroying the exchange rates.

### 5.5 Limitations of the Study

There were several challenges encountered during the study. The greatest challenge, however, was with regard to the sample. The sample used in the survey was relatively small to provide enough details on the effect of announcement of presidential results on exchange

rates. This disparity can only be corrected by using a larger data set and a bigger sample of currencies. Therefore, future studies on the same areas should cover a larger sample size and data set for analysis.

Secondly, the study leaned more towards the secondary sources to build the background of the research. Sometimes secondary data may not present more reliable or realistic information since they are intended for specific objectives and may not depict the real situation.

In addition to the above, the study assumed that no other factors or events affected the foreign exchange returns during the event window. It should be noted that other factors may have played a vital role in the kind of returns observed during the event window. For example, prevailing interest rates, performance of equity markets as well as inflation may have contributed to the exchange rate volatility. The study assumes that their resultant effect is negligible.

The study's context was the Kenyan foreign exchange market. Although uncertainty is involved in all political events in the world, the uniqueness of the Kenyan politics may limit the generalization of the study to other parts of the world.

### **5.6 Suggestions for Further Research**

Whereas the objective of the study was achieved, no study is exclusive by itself. As such, further studies can be conducted by incorporating other factors that have the significant influence on the exchange rates in Kenya. These factors may include terms of trade, government debt, country's current account and many more. This would enhance our understanding of exchange rate crises and allow policymakers to create suitable solution

models. Follow up studies on the same area should be conducted to make the necessary adjustments to the solution models.

After the announcement of the results of the presidential election held on August 8, 2017, Raila Amollo Odinga, a candidate in the election, rejected the results and contested them in the Supreme Court. The Court subsequently nullified the results and fresh elections were later held on October 26, 2017. This study therefore recommends that a similar study could be done on the effect of the announcement of the repeat election held on October 26, 2017. The study could analyze whether the announcement of the results of the fresh elections had similar characteristics as the announcement of the results of the election held on August 8, 2017.

This study was limited to three currencies namely the United States Dollar, The Euro and the Uganda Shilling. Additionally, the study on an event window that was 15 days before and 15 days after the announcement of the presidential results. Thus, the study recommends an additional study to be conducted focusing on other key currencies and widening the event window to ninety days before and after announcement of the results of the presidential elections.

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### APPENDICES

## Appendix I: Key CBK Currencies

Currency
British Sterling Pound
Canadian Dollar
Chinese Yuan
Danish Kroner
Ethiopia Birr
Euro
Hong Kong Dollar
Indian Rupee
Japanese Yen
Norwegian Kroner
Rwandese Franc
Saudi Riyal
Singapore Dollar
South African Rand
Swedish Kroner
Swiss Franc
Tanzanian Shilling
Ugandan Shilling
United Arab Emirates Dirham
United States Dollar

		2017			
Event windo	EURO	USH	USD		
	Day 1				
	Day 2				
	Day 3				
	•				
	•				
Daily rates	•				
for 15 days before and after the announcing date	Day 16 (Announcement Day)				
	· ·				
	Day 29				
	Day 30				
	Day 31				

## **Appendix II: Data Collection Form**

					Interbank	Average Risk	Expected
Days					Rate	Free Rate	Return
to/after	<b>F</b> .	-	Pjt-Pjt-	-	-		-
event	Date	Pjt	1	Rjt	Rmt	af	Ejt
Day -15	7/20/2017	103.9469	0.0213	0.0002050	0.073839	0.08205	0.108127
Day -14	7/21/2017	103.8417	-0.1052	-0.0010121	0.070771	0.08205	0.107043
Day -13	7/24/2017	103.8661	0.0244	0.0002350	0.073231	0.08205	0.107912
Day -12	7/25/2017	103.8828	0.0167	0.0001608	0.071819	0.08205	0.107413
Day -11	7/26/2017	103.9072	0.0244	0.0002349	0.072153	0.08205	0.107531
Day -10	7/27/2017	103.9033	-0.0039	-0.0000375	0.072808	0.08205	0.107763
Day -9	7/28/2017	103.9094	0.0061	0.0000587	0.07288	0.08205	0.107788
Day -8	7/31/2017	103.9111	0.0017	0.0000164	0.085404	0.08205	0.112211
Day -7	8/1/2017	103.9194	0.0083	0.0000799	0.086724	0.08205	0.112677
Day -6	8/2/2017	103.8739	-0.0455	-0.0004378	0.092191	0.08205	0.114608
Day -5	8/3/2017	103.8572	-0.0167	-0.0001608	0.099321	0.08205	0.117126
Day -4	8/4/2017	103.8672	0.01	0.0000963	0.105132	0.08205	0.119178
Day -3	8/7/2017	103.8881	0.0209	0.0002012	0.105783	0.08205	0.119408
Day -2	8/9/2017	103.9039	0.0158	0.0001521	0.107646	0.08205	0.120066
Day -1	8/10/2017	103.9028	-0.0011	-0.0000106	0.10814	0.08205	0.120241
Event							
day	8/11/2017	103.8972	-0.0056	-0.0000539	0.104044	0.08205	0.118794
Day 1	8/14/2017	103.87	-0.0272	-0.0002618	0.089366	0.08205	0.11361
Day 2	8/15/2017	103.7611	-0.1089	-0.0010484	0.088582	0.08205	0.113333
Day 3	8/16/2017	103.7456	-0.0155	-0.0001494	0.077317	0.08205	0.109355
Day 4	8/17/2017	103.6978	-0.0478	-0.0004607	0.065924	0.08205	0.105332
Day 5	8/18/2017	103.3878	-0.31	-0.0029895	0.066355	0.08205	0.105484
Day 6	8/21/2017	103.225	-0.1628	-0.0015747	0.058179	0.08205	0.102596
Day 7	8/22/2017	103.1028	-0.1222	-0.0011838	0.056693	0.08205	0.102072
Day 8	8/23/2017	103.1778	0.075	0.0007274	0.056168	0.08205	0.101886
Day 9	8/24/2017	103.2378	0.06	0.0005815	0.058268	0.08205	0.102628
Day 10	8/25/2017	103.2528	0.015	0.0001453	0.055534	0.08205	0.101662
Day 11	8/28/2017	103.1583	-0.0945	-0.0009152	0.054972	0.08205	0.101464
Day 12	8/29/2017	103.1728	0.0145	0.0001406	0.05428	0.08205	0.101219
Day 13	8/30/2017	103.1828	0.01	0.0000969	0.05101	0.08205	0.100065
Day 14	8/31/2017	103.1433	-0.0395	-0.0003828	0.048272	0.08205	0.099098
Day 15	9/1/2017	102.8111	-0.3322	-0.0032208	0.048822	0.08205	0.099292

## **Appendix III: USD Currency Calculations**

					Interbank	Average Risk Free	Expected
Days					Rate	Rate	Return
to/after			Pjt-Pjt-			_	
event	Date	Pjt	1	Rjt	Rmt	af	Ejt
Day -15	7/20/2017	119.8653	-0.0819	-0.0006828	0.073839	0.08205	0.151351
Day -14	7/21/2017	120.1456	0.2803	0.0023385	0.070771	0.08205	0.148472
Day -13	7/24/2017	120.9575	0.8119	0.0067576	0.073231	0.08205	0.150781
Day -12	7/25/2017	121.0142	0.0567	0.0004688	0.071819	0.08205	0.149456
Day -11	7/26/2017	120.9697	-0.0445	-0.0003677	0.072153	0.08205	0.149769
Day -10	7/27/2017	120.9447	-0.025	-0.0002067	0.072808	0.08205	0.150384
Day -9	7/28/2017	121.5508	0.6061	0.0050114	0.07288	0.08205	0.150451
Day -8	7/31/2017	121.7972	0.2464	0.0020271	0.085404	0.08205	0.162206
Day -7	8/1/2017	122.885	1.0878	0.0089312	0.086724	0.08205	0.163445
Day -6	8/2/2017	122.7869	-0.0981	-0.0007983	0.092191	0.08205	0.168576
Day -5	8/3/2017	123.0406	0.2537	0.0020662	0.099321	0.08205	0.175268
Day -4	8/4/2017	123.0122	-0.0284	-0.0002308	0.105132	0.08205	0.180721
Day -3	8/7/2017	122.9392	-0.073	-0.0005934	0.105783	0.08205	0.181332
Day -2	8/9/2017	122.4683	-0.4709	-0.0038303	0.107646	0.08205	0.183081
Day -1	8/10/2017	121.8986	-0.5697	-0.0046518	0.10814	0.08205	0.183545
Event day	8/11/2017	121.9967	0.0981	0.0008048	0.104044	0.08205	0.1797
Day 1	8/14/2017	122.2794	0.2827	0.0023173	0.089366	0.08205	0.165924
Day 2	8/15/2017	122.3853	0.1059	0.0008660	0.088582	0.08205	0.165188
Day 3	8/16/2017	121.5644	-0.8209	-0.0067075	0.077317	0.08205	0.154616
Day 4	8/17/2017	121.315	-0.2494	-0.0020516	0.065924	0.08205	0.143923
Day 5	8/18/2017	121.1369	-0.1781	-0.0014681	0.066355	0.08205	0.144327
Day 6	8/21/2017	121.2058	0.0689	0.0005688	0.058179	0.08205	0.136654
Day 7	8/22/2017	121.4436	0.2378	0.0019620	0.056693	0.08205	0.135259
Day 8	8/23/2017	121.3661	-0.0775	-0.0006382	0.056168	0.08205	0.134766
Day 9	8/24/2017	121.765	0.3989	0.0032867	0.058268	0.08205	0.136737
Day 10	8/25/2017	121.8128	0.0478	0.0003926	0.055534	0.08205	0.134171
Day 11	8/28/2017	121.8192	0.0064	0.0000525	0.054972	0.08205	0.133644
Day 12	8/29/2017	123.1031	1.2839	0.0105394	0.05428	0.08205	0.132994
Day 13	8/30/2017	124.0936	0.9905	0.0080461	0.05101	0.08205	0.129925
Day 14	8/31/2017	123.0122	-1.0814	-0.0087144	0.048272	0.08205	0.127356
Day 15	9/1/2017	121.8286	-1.1836	-0.0096218	0.048822	0.08205	0.127872

## **Appendix IV: EURO Currency Calculations**

						Average	
Dama					Intorbonk	KISK Eroo	Exported
Days to/oftor					Rate	Rate	Return
event	Date	Pit	Pit-Pit-1	Rit	Rmt	af	Eit
Day -15	7/20/2017	0.028874	0.000060	0.0002079	0.073839	0.08205	0.082056
Day -13	7/21/2017	0.0288/15	-0.0000000	-0.0010125	0.073035	0.08205	0.082056
Day -14	7/24/2017	0.028852	0.0000272	0.0002337	0.070771	0.08205	0.082056
Day -12	7/25/2017	0.028856	0.0000007	0.0002537	0.073231	0.08205	0.082056
Day -12	7/26/2017	0.028850	0.0000047	0.0001010	0.071819	0.08205	0.082056
Day -11	7/20/2017	0.028803	0.0000007	0.0002338	0.072133	0.08203	0.082056
Day -10	7/28/2017	0.020022	-0.0000411	-0.0014236	0.072808	0.08203	0.082030
Day -9	7/20/2017	0.020704	-0.0000382	-0.0013209	0.07288	0.08203	0.082030
Day -8	2/1/2017	0.028784	0.0000003	0.0000173	0.083404	0.08203	0.082037
Day -/	8/1/2017	0.028771	-0.0000137	-0.0004/4/	0.080724	0.08205	0.082057
Day -6	8/2/2017	0.028774	0.0000033	0.0001151	0.092191	0.08205	0.082058
Day -5	8/3/2017	0.028753	-0.0000205	-0.000/131	0.099321	0.08205	0.082059
Day -4	8/4/2017	0.028732	-0.0000211	-0.000/32/	0.105132	0.08205	0.082059
Day -3	8/7/2017	0.02873	-0.0000022	-0.0000776	0.105783	0.08205	0.082059
Day -2	8/9/2017	0.028742	0.0000124	0.0004311	0.107646	0.08205	0.082059
Day -1	8/10/2017	0.028782	0.0000395	0.0013729	0.10814	0.08205	0.082059
Event day	8/11/2017	0.02878	-0.0000016	-5.4682605	0.104044	0.08205	0.082059
Day 1	8/14/2017	0.028813	0.0000324	0.0011266	0.089366	0.08205	0.082058
Day 2	8/15/2017	0.028783	-0.0000302	-0.0010477	0.088582	0.08205	0.082058
Day 3	8/16/2017	0.028778	-0.0000044	-0.0001525	0.077317	0.08205	0.082057
Day 4	8/17/2017	0.028861	0.0000829	0.0028803	0.065924	0.08205	0.082056
Day 5	8/18/2017	0.028679	-0.0001821	-0.0063094	0.066355	0.08205	0.082056
Day 6	8/21/2017	0.028634	-0.0000452	-0.0015749	0.058179	0.08205	0.082055
Day 7	8/22/2017	0.02864	0.0000058	0.000203341	0.056693	0.08205	0.082055
Day 8	8/23/2017	0.028684	0.0000448	0.001563298	0.056168	0.08205	0.082055
Day 9	8/24/2017	0.028637	-0.0000471	-0.00164091	0.058268	0.08205	0.082055
Day 10	8/25/2017	0.028665	0.0000281	0.000980356	0.055534	0.08205	0.082055
Day 11	8/28/2017	0.028655	-0.0000103	-0.00036105	0.054972	0.08205	0.082055
Day 12	8/29/2017	0.028659	0.0000040	0.000140429	0.05428	0.08205	0.082055
Day 13	8/30/2017	0.028622	-0.0000370	-0.00129085	0.05101	0.08205	0.082054
Day 14	8/31/2017	0.028651	0.0000288	0.001005644	0.048272	0.08205	0.082054
Day 15	9/1/2017	0.028559	-0.0000922	-0.00321855	0.048822	0.08205	0.082054

## **Appendix V: USH Currency Calculations**