

Relationship between Selected Foreign Exchange Rates Trading in Kenya.

*Johnmark Obura Ouma

Department of Management Science, Maseno University, Kenya

*Corresponding Author: *Johnmark Obura Ouma*

Abstract: *In Kenya, exchange rates market is active due to globalization. For instance, between 2007 and 2008, value of total exports and imports increased by 25.6% and 27.4% respectively. Moreover, reviewed literatures have given conflicting perspective on the relationship between the various foreign exchanges and more so the movement of their fluctuation with regard to economic performances. The purpose of the study was therefore to establish relationship between the three major foreign exchange rates trading in Kenya. The study adopted correlation design. Secondary data between January, 2006 and December, 2010 was utilized. Correlation analysis revealed that the Dollar had a moderate negative relationship with the Pound ($r=-.568$, $p<0.01$), the Dollar had a moderate relationship with the Euro ($r=.564$, $p<0.01$), while the pound had a moderate negative relationship with the Euro ($r=-.530$, $p<0.01$). The study concluded that there exist a varied relationship between the selected exchange rates. The study recommends the adoption of US dollar and the Euro as key currencies as they were considered stronger currencies during the study period.*

Keywords: *Trends, Foreign, Relationship, Market*

Date of Submission: 17-07-2017

Date of acceptance: 31-07-2017

I. INTRODUCTION

Exchange rate is the price of one country's currency expressed in another country's currency. In other words, it is the rate at which one currency can be exchanged for another. Exchange rate is a national and international political, social and economic indicator. In developed countries, it reacts quickly to events like war, terrorism, and also to the changes in the political situation as well as to main economic indicators like unemployment, interest rate. From a macro perspective, foreign exchange rate has an effect on the country's economy whereas from a micro perspective it affects the firms. Since the markets are becoming much more integrated, performance of NSE market is not only affected by the national economic, social and political environment but also by developments at the international markets, (Mumcu, 2005).

Prior to the monetary-approach emphasis of the 1970s, it was common to emphasize international trade flows as primary determinants of exchange rates. This was due, in part, to the fact that governments maintained tight restrictions on international flows of financial capital. The role of exchange rate fluctuation in eliminating international trade imbalances suggests that we should expect countries with current trade surpluses to have an appreciating currency, whereas countries with trade deficits should have depreciating currencies. Such exchange rate fluctuation would lead to changes in international relative prices that would work to eliminate the trade imbalance. With financial liberalization we have seen that the volume of international trade in financial assets now dwarfs trade in goods and services. Moreover, we have seen some instances where countries with trade surpluses have depreciating currencies, whereas countries with trade deficits have appreciating currencies. Economists have responded to such real-world events by devising several alternative views of exchange rate determination. These theories place a much greater emphasis on the role of the exchange rate as one of many prices in the worldwide market for financial assets. Some of the recent advances in exchange rate theory include the asset approach (Taylor, 1995).

Modern exchange rate models emphasize financial-security markets. Rather than the traditional view of exchange rates adjusting to equilibrate international trade in goods, the exchange rate is viewed as adjusting to equilibrate international trade in financial securities. Because goods' prices adjust slowly relative to financial security prices and financial securities are traded continuously each business day, the shift in emphasis from goods markets to security markets has important implications. Exchange rates will change every day or even every minute as supplies of and demands for financial securities of different nations change. An implication of this approach is that exchange rates should be much more variable than goods prices. Exchange rates respond to changing conditions in financial-asset markets and are not simply reacting to changes in international goods trade. The exchange rate models emphasizing financial-asset markets typically assume perfect capital mobility, a

situation in which there are no barriers to international capital flows. In other words, capital flows freely between nations as there are no significant transactions costs or capital controls to serve as barriers to investment, (*ibid*).

Within the family of asset-approach models, there are two basic groups: the monetary approach and the portfolio-balance approach. In the monetary approach, the exchange rate for any two currencies is determined by relative money demand and money supply between the two countries. Relative supplies of domestic and foreign bonds are unimportant. The portfolio-balance approach allows relative bond supplies and demands as well as relative money-market conditions to determine the exchange rate. The essential difference is that monetary-approach (MA) models assume domestic and foreign bonds to be perfect substitutes, whereas portfolio-balance (PB) models assume imperfect substitutability. If domestic and foreign bonds are perfect substitutes, then demanders are indifferent toward the currency of denomination of the bond as long as the expected return is the same. In this case, bond holders do not require a premium to hold foreign bonds they would just as soon hold foreign bonds as domestic ones so there is no risk premium, and uncovered interest rate parity holds in MA models, (*ibid*).

Foreign exchange is the process of trading the currency of one country for the currency of another. This process is necessary for international trade to take place in a world of different currencies. The foreign exchange market is the largest and oldest financial market in the world. Unlike the futures and security markets, trading of currencies is not centralized on any one exchange, but traded all over the world through banks and brokers, (Leader Investment Kenya, 2007).

The market for foreign exchange involves the purchase and sale of national currencies. A foreign exchange market exists because economies employ national currencies. If the world economy used a single currency there would be no need for foreign exchange markets. In Europe for example, more than eleven economies have chosen to trade their individual currencies for a common currency. But the euro will still trade against other world currencies. For now, the foreign exchange market is a fact of life (Benita, 2004).

The value of one currency versus another is determined by the international exchange rate and, in most cases, is subject to fluctuation based on open trading of currency in foreign exchange markets, (Leader Investment Kenya, 2007).

II: LITERATURE REVIEW

The exchange rate regimes have evolved along general macroeconomic policies that have been put in place since Kenya gained its independence in 1964. According to Ndung'u (2000), since independence to 1974, the exchange rate for the Kenya shilling was pegged to the US dollar, but after discrete devaluations, the peg was changed to the special drawing rate (SDR). However, during the period of 1974 and 1981 the movement of the nominal exchange rate relative to the dollar was very volatile. This resulted in the shilling depreciating even further when the shilling was devalued again in 1982. However according to Pollin and Heintz (2007), the exchange rate regime was in place until 1990 when a dual exchange rate system was implemented. This lasted until late 1993, when, after further devaluations. The official exchange rate was merged with the market rate and the shilling was allowed to float. After the liberalization of the shilling, the real exchange rate has gone through several phases, most of which have been depreciations due to a number of factors. During the period between January 1995 to October 1999 the shilling real exchange rate depreciated by 21.0 percentage. The shilling declined even further due to the major drought in 1999 to 2000 coupled by increases in cost of fuel products. There was also an increased demand for foreign currency to cover the rising import bill, brought about by the increased oil price and food imports to mitigate the supply shortage caused by drought. According to CBK Annual Report (2000) the NEER declined by 16.1 percent in 1999 and 3.5 percent in 2000. The depreciation was moderated due to inflows associated with the IMF Poverty Reduction and Growth Facility (PRGF).

In 2002, the Shilling began to depreciate and this was mainly due to speculative pressures associated with the general election that was to take place in December 2002. This obliged the CBK to intervene periodically to smooth out the fluctuation. Speculation on the Kenyan shilling eased from September 2004 following a positive assessment of the economy by the IMF. In 2005 according to the CBK Annual Report (2009), the shilling appreciated by 3 per cent against the US dollar as a result of strong export receipts and capital inflows in response to the relatively high domestic interest rates. The key exports areas being horticulture, tea, coffee and tourism.

From December 2004 to December 2007, the shilling real exchange rate depreciated by 30 percent representing a major deviation from its past levels. According to Kiptui and Kipyegon (2008) this appreciation of the shilling real exchange rate has attracted public attention especially from exporters who have argued that the strengthening shilling is eroding their competitiveness. Due to the global financial crisis the NEER began to decline by 1.1 percent between June 2007 and June 2008, by 16.6 percent between June 2008 and June 2009 (CBK Annual Report, 2009). The depreciation of the shilling against the US dollar, which mainly occurred during the first half of the fiscal year 2008/2009, initially triggered sale of shares allocated to foreign investors after the shares commenced trading at the Nairobi Securities Exchange market. The foreign investors were

mostly speculating and this led to huge outflows of foreign exchange. The depreciation of the local unit was further amplified by the international financial crisis (CBK Annual Report, 2009).

The policy of a market determined shilling and the relaxation of exchange controls has exposed the currency to domestic and external shocks consequently increasing its fluctuation level (CBK Annual Report, 2009). However, Kenya maintains a flexible exchange rate system to compliment its trade reforms and to ensure appropriate economic incentives for producers. Although the fluctuation level of shilling has increased considerably since the Central Bank allowed the exchange rate to freely float, the general trend of the NEER has been depreciating apart from the short period of appreciation from 2005 to 2007. The implication of the foreign exchange rate fluctuation for ERPT are that the greater the fluctuation the more importers become wary of changing prices and the more willing they become to adjust profit margins accordingly to either an appreciation or depreciation.

2.1 Empirical Literature

The study of Odongo and Kalu (2013) analyzed the intertemporal causal relationships between the real exchange rate and trade balance and cross-border capital flows in Africa. They used annual data of nine major African countries for the period 1993–2009. Through panel VAR techniques, they documented some causality from real exchange rates to cross-border flows of African countries. Results however differed amongst the three kinds of flows examined and are not uniform across different country clusters. Their findings lend support to the classical balance of trade theoretical view in which the net effect of a depreciation of the domestic currency is an improvement in the domestic country's balance of payments position in the short-run.

Even though this study was conducted among nine African countries, gauging the relationship between real exchange rate to the trade balance and cross border capital flows, the current study concentrated on Kenya and the relationship between exchange rate, interest rates and performance of Nairobi Securities exchange market which is one of the leading securities market in Africa. Moreover, their study used annual data and panel Vector Autoregressive model techniques while the current study utilized monthly data and multiple regression analysis techniques.

Gabriele, *et al.*, (2003) in their study, "[Macroeconomic News and the Euro/Dollar Exchange Rate](#)," investigated to what extent daily movements in the euro/dollar rate were driven by news about the macroeconomic situation in the USA and the euro area during the first two years of EMU. They examined whether market participants reacted to news in different ways depending on whether the news came from the USA or from the euro area, and whether the news was good or bad. Furthermore, they investigated whether traders' reaction to news has changed over time. They found that macroeconomic news had a statistically significant correlation with daily movements of the euro against the dollar. However, this relationship exhibited considerable time variation. There were indications of asymmetric response, but to different extents at different times. Their results also provide evidence that the market seemed to ignore good news and remain fixated on bad news from the euro area, as often claimed in market commentaries, but only for some time. Finally, they found evidence that the impact of macroeconomic news on the euro/dollar rate was stronger when news switches from good to bad or vice versa.

The study by Granger *et al* (2000) on bivariate causality between stock prices and exchange rates: Evidence from recent Asian flu applied recently developed unit root and cointegration models to determine the appropriate granger relations between stock prices and exchange rates using Asian flu data. Via impulse response functions, it is found that data from South Korea are in agreement with the traditional approach. That is, exchange rates lead stock prices. On the other hand, data on the Phillipines suggest the result expected under portfolio approach. Stock prices lead exchange rates with negative correlation. Data from Hong Kong, Malaysia, Singapore, Thailand and Taiwan indicate strong feedback relations, whereas that of Indonesia and Japan fails to reveal any recognizable pattern.

The study by Cottani *et al.*, (1990) evaluated the growth effects of real exchange rate (RER) misalignments and their volatility. They calculated RER misalignments as deviations of actual RERs from their equilibrium for 60 countries over 1965-2003 using panel and time series cointegration methods. Using dynamic panel data techniques they found out that RER misalignments hinder growth but the effect is non-linear: growth declines were larger, the larger the size of the misalignments. Although large undervaluations hurt growth, small to moderate undervaluations enhanced growth. These results are robust when controlling for movements in the equilibrium real exchange rate. However, they established that it was difficult to follow a pro-growth RER policy. Finally, growth was found to be hampered by highly volatile RER misalignments.

III. METHODOLOGY

The study adopted correlational case study design. The research attempted to determine and explain the relationship between the exchange rates of Kenya's main trading partners based on systematic comparison aimed at discovering inferences or causal relationships.

3-1 DATA COLLECTION

Secondary data was utilized in the study. The data on foreign exchange rates for the period covering January, 2006 and December, 2010 were obtained mainly through document reviews. This comprised of monthly data on the following foreign exchange rates:

EURO/KShs: 1 Euro /Kenya Shillings

POUND/ KShs: 1 British Pound / Kenya Shillings

DOLLAR/ KShs: 1 US Dollar / Kenya Shillings

IV. RESULTS AND DISCUSSIONS

Descriptive Results

Table 1: Descriptive Statistics of the Study Variables

	US dollar	Pound	Euro
Mean	73.03500	127.8122	99.34883
Median	72.87000	127.3650	99.74500
Maximum	81.43000	143.5700	112.2000
Minimum	61.90000	113.9800	85.84000
Std. Dev.	5.497666	7.439127	7.477953
Skewness	-0.208068	-0.110416	-0.021577
Kurtosis	1.945138	2.057415	1.737775
Jarque-Bera	3.214759	2.343083	3.987686
Probability	0.200412	0.309889	0.136171
Sum	4382.100	7668.730	5960.930
Sum Sq. Dev.	1783.236	3265.096	3299.267
Observations	60	60	60

Source: Research data, 2013

The study sought to establish the relationship between the three exchange rates of the Kenya's main trading partners over the five year period. These currencies were the US dollar, the British pound and the Euro.

II-1 Correlation between the the exchange rates

Table 1: Results of Correlation between Variables

	US Dollar	Pound	Euro
US Dollar	1		
Pound	-.568**	1	
Euro	.564**	-.530**	1

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Research data, 2013

From the correlation statistics presented in Table 1. It is clear that the Dollar had a moderate negative relationship with the Pound ($r=-.568$, $p<0.01$), the Dollar had a moderate relationship with the Euro ($r=.564$, $p<0.01$), while the pound had a moderate negative relationship with the Euro ($r=-.530$, $p<0.01$) The inverse relationship between the Us dollar exchange rate and the Euro exchange rate could be attributed to the depreciation of the Kenya shilling against the US dollar, which according to the CBK Annual Report (2009), mainly occurred during the first half of the fiscal year 2008/2009, and initially triggered sale of shares allocated to foreign investors after the shares commenced trading at the Nairobi Securities Exchange market. The observed decline in actual time series values in the US dollar exchange rates and the Euro exchange rates in the first 24 months from January 2006 are consistent with the finding by Kiptui and Kipyegon (2008). According to these authors, in this period, the Kenya shilling appreciated leading to a decline in the exchange rates, and attracting public attention particularly from exporters who argued that the strengthening Kenya shilling was eroding their competitiveness. Besides, the sharp drop observed in the Euro exchange rates between the 23rd and 24th months could be explained by the observed appreciation in the shilling in the short period from 2005 to 2006, Kiptui and Kipyegon (2008) that led to a decline in the exchange rates. However, the findings that the British Pound declined during the same period contradicts the study by Kiptui and Kipyegon (2008) since it revealed that on the contrary, the shilling continued to decline against the British Pound.

The findings that the trends in the US dollar exchange rates and the Euro exchange rates were increasing support the findings by the CBK annual report (2009). This report indicated that the shilling depreciated mainly during the first half of the fiscal year 2008/2009 triggering sale of shares allocated to foreign investors and consequently leading to huge outflows of foreign exchange and subsequently to the increase in exchange rates. Besides, as noted in the CBK annual report (2009), that the policy of a market determines shilling and the relaxation of exchange controls exposes the currency to domestic and external shocks

consequently increasing its fluctuation level. Furthermore the decreasing trend in the British pound exchange rates contradicts the CBK annual report (2009).

The findings that between the 24th month, December, 2007 and 30th month, May, 2008, there was general decline in exchange rates of the three currencies hence weakening Kenya shilling could be attributed to the political status of Kenya during the same period as most investors were uncertain about the political outcome and thereafter the end of the post-election violence that affected the country. These findings concur with the findings by Gabriele, *et al.*, (2003) in their study, "[Macroeconomic News and the Euro/Dollar Exchange Rate](#)," where they investigated to what extent daily movements in the euro/dollar rate were driven by news about the macroeconomic situation in the USA and the euro area during the first two years of EMU. They examined whether market participants reacted to news in different ways depending on whether the news came from the USA or from the euro area, and whether the news was good or bad. They found that macroeconomic news had a statistically significant correlation with daily movements of the euro against the dollar. Moreover, the findings that there was consistent rise after the 30th month in the US Dollar exchange rate, the Euro exchange rate and the British Pound could be attributed to the news on the end of the post election violence in Kenya and investors were optimistic in investing in the country.

The findings indicated that the Kenya shilling was weakening against the dollar and the Euro and that it was gaining strength against the pound could be attributed to high demand for the dollar and Euro and low demand for the pound by the local market. This placed the dollar and Euro investors in an advantage position compared to the pound investors while investing in the local market.

V. SUMMARY AND CONCLUSION

The study sought to establish the relationship between major foreign exchange rates fluctuation in Kenya. By analyzing the relationship of the three major currencies of Kenya's main trading partners, the study revealed the trend in the three major currencies as: that the Dollar had a moderate negative relationship with the Pound, the Dollar had a moderate relationship with the Euro, while the pound had a moderate negative relationship with the Euro.

From the study findings, it can be concluded that during the period under study, the dollar exchange rate and the Euro exchange rate were stronger against the Kenya shilling while the British Pound was weaker currency versus Kenya shilling and the study therefore recommends that during the period under study, investors should opt for using the US Dollar and the Euro as they are seen to be stronger currencies versus Kenya shillings as opposed to the British Pound which was a weaker currency compared to Kenya shillings during the same period. Moreover, since trend analysis is considered a good tool for prediction, market players like corporate and individual investors and investment managers should closely monitor and consider the right currencies to adopt before making investment commitment.

REFERENCES

- [1]. Benita, G., & Lauterbach, B. (2004). Policy factors and exchange rate volatility: Panel data verses a specific country analysis, research unit.Foreign Exchange Activity Department, Bank of Israel, Jerusalem.
- [2]. Central Bank of Kenya Annual Report, (2000). The annual report of the Central Bank of Kenya fiscal year 2000. The Central Bank of Kenya (Online) or www.centralbank.go.ke/publications/default.aspx.
- [3]. Central Bank of Kenya Annual Report, (2009). The annual report of the Central Bank of Kenya fiscal year 2009/10.The Central Bank of Kenya (Online) or www.centralbank.go.ke/publications/default.aspx.
- [4]. Cottani, J. A., Cavallo, F. D., & Khan, M. S. (1990). Real exchange rate behaviour and economic performance in LDCs. *Economic Development and Cultural Change*, 39, 61-76.
- [5]. Gabriele, G.,& Corrinne, H. (2003). Macroeconomic news and the Euro/Dollar exchange rate,*Economic Notes*, Banca Monte dei Paschi di Siena SpA, vol. 32(3), 371-398.
- [7]. Granger, C.W., Huang, B., & Yang, C. C. (2000). A bivariate causality between stock prices and exchange rates: Evidence from recent Asian flu, *Quarterly Review of Economics and finance*40 (3),337 – 354.
- [8]. Kiptui, M.,& Kipyegon, L. (2008). External shocks and real exchange rate movements inKenya. Central Bank of Kenya (online) on www.africametrics.org/documents/conference08/day2/session4/kiptuikipyegon.pdf
- [9]. Leader Investment Kenya, 2007.
- [10]. Mumcu, F. (2005).The effects of changes in foreign exchange rates on ISE-100 index. www.aebrjournal.org/uploads/6/6/2/2/6622240/3_anlas.pdf
- [11]. Ndung'u, N.(2000). Monetary and exchange rate policy in Kenya, African Economic Research Consortium, AERC.
- [12]. Odongo, K., & Kalu, O. (2013). Real exchange rates, trade balance and capital flows in Africa. *Journal of Economics and Business*.
- [13]. Pollin, R.,& Heintz, J. (2007). The role of monetary policy, inflation control and exchange rates. International poverty centre. Country study. No. 6.
- [14]. Taylor, M. (1995). The economics of exchange rates.*Journal of Economic Literature*.

*Johnmark Obura Ouma " Relationship between Selected Foreign Exchange Rates Trading in Kenya." *International Journal of Business and Management Invention(IJBMI)* 6.7 (2017): 38-42.