Determinants of Foreign Exchange Rate of Selected Developing Countries: A Conceptual Review

Ayuba Nenrot
Department of Accounting, Faculty of Management Science, Nigerian Defence Academy
Kaduna, Nigeria

Lateef Olumide Mustapha (Ph.D)
Department of Accounting, Faculty of Management Science, Nigerian Defence Academy
Kaduna, Nigeria

Ibrahim A Mohammad
Department of Accounting, Faculty of Management Science, Nigerian Defence Academy
Kaduna, Nigeria

Citation: Ayuba Nenrot, Lateef Olumide Mustapha and Ibrahim A. Mohammad (2022) Determinants of Foreign Exchange Rate of Selected Developing Countries: A Conceptual Review, European Journal of Accounting, Auditing and Finance Research, Vol.10, No. 8, pp.48-55

ABSTRACT: *Foreign exchange rate is often seen as an important factor that influences country's level of productivity, employment rate as well as international trade. Therefore, constant fluctuation in currencies exchange rate has been a major concern in international business operation across countries of the world. This study focused on reviewing the determinants of foreign exchange rate from studies conducted in some developing countries of the world based on literature mapping approach between 1994 to 2020. The study concludes that* trade, *money supply, trade openness, domestic investment, interest rate differentials, foreign exchange, productivity, inflation, capital inflow, gross domestic production, current account balance, external debt, government spending, oil revenue, nominal exchange rate, price of gold, tariffs, investments, central bank intervention, foreign asset and net export were considered as determinants of foreign exchange rate in some the developing countries of the world.*

KEYWORDS: determinants, developing countries, foreign exchange

INTRODUCTION

Foreign exchange is an important factor in the economic growth and development of every country as it is critical in the economic management of the country to safeguard competitiveness, macroeconomic stability and growth. It is therefore the trading of one currency for another currency. Example is to swap the Nigerian naira for US dollars. Mankiw (1997) define foreign exchange as the price at which exchange takes place between two countries.

Foreign exchange rate can be considered as the rate at which a particular foreign currency is been exchange against the currency of home country. Agu (2002) position that optimal exchange rates are meant to obtain real exchange rate (RER) that maintains internal and external balance. While Dormbush (2004), sees foreign exchange as the rate at which a country exchanges its currency for the currency of another country. (Ekhikioya, 2019; Alagidede & Ibrahim, 2017), views Exchange rate as an important component for the determination of short and long run macroeconomic objectives for growth and development of a country.

Fluctuation is often considered as one of the major problems in foreign exchange among different countries of the world. Meanwhile, it is seen as a subject of debate and concern among policy makers, monetary authorities and academics due the important role that exchange rate plays in achieving sustainable growth. Hassan et al. (2017) views the foreign exchange rate fluctuation to be a factor that increases risk in the financial world. Foreign exchange rate fluctuation can lead to huge influence on the value or profitability of international business operation in a country. The stabilization of exchange rate may therefore enhance production activities and economic growth.

The determinants of exchange rate play a significant role in addressing the fluctuation of foreign exchange rate by assisting countries in deciding on the best combination of technique to manage the fluctuations. It is imperative to note that the determinants of foreign exchange rate vary across different economy. In this regard, this study seeks to review studies conducted on determinants of the foreign exchange rate in some developing countries with the aim of identifying their exchange rate determinants.

REVIEW OF LITERATURES

Concept of Foreign Exchange

Foreign exchange is the simply the conversion of one currency to another at a specific rate called foreign exchange rate. The rate of conversion of most currencies are mostly determine by the forces of demand and supply and are usually floating. Taylor, (1995) in his work on Purchasing power parity theory looks at foreign exchange as the value of foreign currency to another which is mainly the relative purchasing power of the two currencies in their respective countries. The explanation is that exchange rates settles at the level that makes the purchasing power of a given unit of currency same in the country that is spent.

Concept of Foreign Exchange Rate

Foreign exchange rate is simply the rate at which a currency is exchange in terms of another currency. Jihingan,(2005), views exchange rate as the price unit of a currency in relation to another currency, while Agu,(2002), sees exchange rate from the perspective of optimal rate designed to obtained real exchange rate from both internal and external balance. It is the rate at which currencies exchange between countries. Example is a unit of naira that is required to buy a unit of US dollar. An exchange rate therefore has two components, the foreign currency and the domestic currency, which can be quoted directly or indirectly. It is quoted directly when the unit price of a of a foreign currency is expressed in terms of a unit of domestic

Print ISSN: 2053-4086(Print),
Online ISSN: 2053-4094(Online)

currency, while it is quoted indirectly when the unit price of a domestic currency is express in terms of unit price of a foreign currency.

There are two basic types of Foreign Exchange rate; The spot exchange rate and the forward exchange rate. The Spot exchange rate is the instant exchange rate and is the most commonly used, it is the price to be paid on the spot for instant settlement in an exchange of two currencies. It can be viewed in two ways; either as a price unit of a foreign currency in terms of units of local currency or as a price unit of local currency in terms of unts of foreign currency, while the forward exchange rate is the rate agreed at a specified future date. It is the exchange rate for price settlement of a transaction that will take place at predetermine future date. The forward exchange rate is the rate that is negotiated and agreed today between two parties upon entering into forward contract with a binding agreement to buy or sell some amount of foreign currency in a future date.

Determinants of Foreign Exchange Rates

The determinants of exchange rates have been a subject of academic debate for a very long time among various scholars. Example, Obadan (1994) see's the factors that determine exchange rate to include;net capital inflows, monetary policy, terms of trade,exchange rate policy and nominal exchange rate. Aron. Elbadawi and Kahn (2000), in their study titled real and monetary determinants of the real exchange rate in South Africa, identify the factors responsible for determining foreign exchange rate to include; terms of trade,price of gold,tariffs,capital,inflows, official reserves,government share of GDP,domestic credit.technology, trade openness and norminal depreciation. But, Mkenda (2001), in his on study on the determinants of real exchange rate in Zambia, identify the factors that determine exchange rate to be; terms of trade, government expenditure, external reserve, trade openness and investment.

Joyce and Kamas (2003), also carried out a study in Agentina, Colombia and Mexico to examine the determinants of real exchange rate. The study revealed the major factors responsible for determining exchange rate to be Central bank intervention, capital inflows, government share of GDP and terms of trade. Macdonald,and Ricci (2003), carried out a study on the estimation of the equilibrium real exchange rate for South Africa.The study discovered the factors responsible for determining exchange rate to be; real interest rate differencials,productivity.terms of trade.trade openness,fiscal balance and net foreign asset. Daniela (2005) carried out a study on exchange rate risk and its determinants; evidence from international stock markets. The study discovered the determinants of exchange rate risk to be a country's export,import and inflation. The underpinning theory of the study was international capital asset prising model.

Yu (2006) in his research, determination off exchange rate fluctuations for Venezuela; Application of extended Mundell-fleming model. The research found the major determinants of foreign exchange rate to be high inflation rate, political factors and government spendings. Mita and Suthar (2006) in their paper on the determinants of exchange rate in India, discovered the major determinants of exchange rate to be; Short and long-term domestic interest differentials, rate of change in foreign exchange reserves in addition to money supply.

Takaendesa,(2006); did a study on the behaviour and fundamental determinants of real exchange rate in South Africa.The study revealed the factors responsible for determining real exchange rate to include; terms of trade,real interest diffrencial,domestic credit, openness and technology progress.

Amed, Rahmat, Magbool and Falak S(2012),carried out a study on econometric analysis of the determinants of exchange rate in Pakistan and discovered Stock of money, debt, foreign exchange reserve,political instability,interest rate and real GDP as the determinants of exchange rate. Ajao. and Igbekoyi (2013), in their study on the determinants of real exchange rate volatility in Nigeria identify the major determinants of exchange rate to be; Government expenditure, openness of the economy. real interest rate, productivity index and money supply. Antonio and Ajax (2015), Conducted a study on the long-run determinants of the real exchange rate in Brazil from 1947 to 1995. The result of the study revealed the main determinants of foreign exchange rate to be external debts and net export. The study was underpinned by the modified PPP theory. Orji (2015), in his study; an Empirical analysis of the determinates of real exchange rate in Nigeria discovered the main determinants of foreign exchange rate in Nigeria to be Interest rate differential, oil revenue and productivity.

Kilicarslan (2018) in his research titled determinants of exchange rate; used the GARCH model to identify money supply, trade openness and domestic investment as good factors that influences exchange rate, while direct investment and government expenditure were considered as weak factors that affects foreign exchange rate. Mutesi (2018), conducted a study on the determinants of exchange rate in Uganda. The study found out that inflation, export and interest rate affects foreign exchange rate. Finally, Almaw (2020) in his study, determinants of exchange rate in Ethopia discovered the determinants of exchange rate to include; Government expenditure money supply, current account balance, Inflation and economic growth.

METHODOLOGY

The table below shows the number of literatures used to carry out the review of determinants and the type of determinants extracted from the individual literature. Technique used was extensive content analysis and thematic analysis.

Table 1: Summary of the Determinants of Exchange Rate

1	Author	Year	Determinants
2	Obadan	1994	net capital inflows, monetary policy,terms of trade, exchange rate policy and norminal exchange rate
3	Aron et el	2000	terms of trade,price of gold,tariffs, capital inflows,official reserve,gdp,technology openness and norminal depreciation
4	Mkenda	2001	terms of trade,government expenditure,external reserve,opennes and investment
5	Joyce and Kamas	2003	central bank intervention,capital inflows,gdp and terms of trade
6	Macdonald and Ricci	2003	real interest rate differencials,productivity, terms of trade, opennes, fiscal balance and net foreign asset
7	Daniela	2005	export,import and inflation
8	Hsing	2006	inflation,political factors and government spendings
9	Mita and Suthar	2006	interest differentials,foreign reserve and money supply
10	Amed et el	2012	stock of money,debt foreign exchange reserve,political instability,interest rate and GDP
11	Ajao and Igbekovi	2013	government expenditure,opennes,reat interest rate,productivity and money supply
12	Antonio and Ajax	2015	external debt and net export
13	Orji	2015	interest differentials,oil revenue and productivity
14	Kilicarslan	2018	money supply, trade opennes, domestic investment,exchange rate,direct investment and government expenditure
15	Almaw	2020	government expenditure, current account balance,inflation,economic growth and money supply

Discussion of the Reviewed Studies

The paper reviewed several studies on the determinants of foreign exchange conducted in Some developing countries specifically around Nigeria, South Africa, Zambia, Columbia, Mexico,Venezuala, Pakistan, Brazil, Uganda and Ethopia, between 1994 to 2020. From the summary of the studies, it can be noted that there are several factors that determines the foreign exchange rate of developing countries of the world; for instance, terms of trade is considered as determining factor of foreign exchange rate by (Obadan, 1994; Aron et el., 2000; Mkeda, 2001; Joyce & Kamas, 2003; Macdonald & Ricci, 2003), while interest rate was seen as foreign exchange rate determinants by (Macdonald & Ricci, 2003; Mitax & Sultar, 2006; Amed et el, 2012; Ajao & Igbekovi, 2013; Orji, 2015). Another set of Authors (Aron et el, 2000; Mkenda, 2001; Ajao & Igbekovi, 2013; Kilicarslan), considered Trade openness as a determinant of foreign exchange and studies conducted by (Mita & Suthar, 2006; Kilicarslan, 2018; Almaw,2020) revealed money supply as determinant of exchange rate.

Similarly, productivity was revealed as a determinants of exchange rate in studies carried out by (Maldonald & Ricci, 2003; Ajao & Igbekovi; Orji 2015), while (Daniela, 2005; Hsing, 2006; Almaw. 2020), discovered Inflation as a determinant of exchange rate. Capital inflow was also considered as a determinant of exchange rate by (Obadan, 1994; Aron et el, 2005; Joyce & Kamas; 2003). In the same vein studies conducted by (Aron, 2000; Joyce & Kamas. 2003; Amed et el, 2012), consider gross domestic product as determinant of foreign exchange while (Mkeda, 2001; Kilicarsban, (2018), see domestic investment as determinant.

Finally there are twelve additional determinants that were discovered by twelve different individual authors as follows; Almaw, (2020); Current account balance, Anthonia & Ajax(2015); External debt; Obadan,(1994); government policies; Orji,(2015); oil revenue Obadan,(1994); norminal exchange rate, Aron et el, (2000); tariffs, Kilicarsban, (2018); investments, Joyce and Kamas, (2003); Central bank intervention, Maldonald & Ricci, (2003); foreign asset, Anthonia(2015); Net export and Kilicarsban, (2018); domestic investment.

CONCLUSION AND RECOMMENDATION

The study therefore concludes that the following are the determinants of foreign exchange rate in some of the developing countries of the world- Terms of trade, money supply. trade openness, domestic, investment, interest rate differentials, foreign exchange, productivity, inflation, capital inflow, gross domestic product, current account balance, external debt, government spending, oil revenue, nominal exchange rate, price of gold, tariffs, investments, Central bank intervention, foreign asset, net export and domestic investment. The study therefore recommends that developing countries of the world should work around these determinants in formulating policies that will minimise fluctuation in foreign exchange rate and stimulate growth and development,

Suggestion for Further studies.

Similar study can be carried out on developed countries of the world.

References

Africa. (2002). Available:www.csae.ox.ac.uk/resprogs/ smmsae/pdfs/smmsae-13.pdf.

Agu, C. (2002). Real exchange rate distortions and external balance position of Nigeria: Issues & policy options. *Journal of African Finance and Economic Development*,5(2).

Ai Janabi, M. A. M. (2007). On the use of value at risk for managing foreign-exchange exposure in large portfolios. *The Journal of Risk Finance, 8*(3), 260-287.

Ajao, M. G. & Igbekoyi, E. (2013). The determinants of exchange rate volatility in Nigeria; *Academic Journal of Interdisciplinary Studies Published by MCSER-CEMAS-Sapienza University of Rome 2(1)*

Alagidede, P. & Muazu I. (2017). The Causes and Effects of Exchange Rate Volatility on Economic Growth: Evidence from Ghana International Growth Center Working Paper. London: London School of Economic and Political Science.

Amed S., Rahmat, U. A., Magbool, H. S & Falak, S. (2012). An econometric analysis of the determinants of exchange rate in Pakistan. *International Journal of Business and Social Science, 3*(6)

Anifowoshe, C. A. (1997). Management of foreign Exchange: A peep into the next decade. Nigeria. *Ballion, 21*(4).

Antonio, F & Ajax, R. B. M. (2015). Determinants of exchange rate fluctuations for Venezuela; Application of an extended Mundell-fleming model; *Institute for Applied Economic Research.*

Aron, J. E., lbadawi, I. A. & Kahn, B. (1997): Determinants of the real exchange rate in South

Aron S, J., Elbadawi, I. A. & Kahn B., (2000). Real and monetary ddeterminants of the real exchange rate in South Africa.

Bank for International Settlement (2001).https://www.compareforexbrokers.com/forex-trading/statistics/

Brucaite, V. & Yan, V. (2000). Financial Risk Management- Case Studies with SKF and Elof Hansson. *Unpublished Masters Thesis.*

Carter, D.A, Pantzalis, C & Simkins, B.J (2003). Firmwide Risk Management of Foreign Coricelli, F. & Jazbec B, (2004). Real exchange rate dynamics intransition economies. structural change and economic dynamics

Daniela de Oliveira Andersson, (2005). Exchange rate risk and its determinants; evidence from international stock markets, *Masters thesis, Department of economics Uppsala university.*

Dornbusch, R. (2004) ‘Expectation and exchange rate dynamic; *Journal ofPolitical Economy, reprinted in Dornbusch [1988 ed.] ‘Open EconomyMacroeconomics’ NY: Basic Books Publisher.*

Dufey, G & Giddy I.H (1995). Management of corporate foreign exchange risk.;*International Accounting and Finance Handbook.*

Edwards, S., (1989). Real exchange rates, devaluation and adjustment:exchange rate policy in developing countries. Cambridge: The MIT Press.

Edwards S., & Savastano, M. A., (1999) Exchange rates in emerging economies: what do we know? What do we need to know? [online].Available: http://ideas.repec.org/s/nbr/nberwo.html..

Ehikioya, Benjamin Ighodalo. 2019. The impact of exchange rate volatility on the Nigerian economic growth: An empirical investigation; *Journal of Economics & Management* 37: 45–68.

Elbadawi, I.& Hartzenberg, T. (eds). Development Issues in South Africa.London: Macmillan.Exchange Exposure by U.S. Multinational Corporations; *Version of April 28, 2003.*

Exchange rate in Zambia, (2005). Göteborg University Working Papers in economics no 40.

Fatemi, A & Glaum, M (2000). Risk Management Practices of German Firms. *Internationall Managaement. Volume 26, Number 3.*

Ghura, D. & Grennes, T. J., (1993). The real exchange rate and macroeconomic performance in Sub-Saharan Africa; *Journal of Development Economics. 42: 155-174.*

Glaum, M. (2000). Foreign Exchange Risk Management in German Non-Financial Corporations. An Empirical Analysis*; Bonn: Licher Stabe.*

Glaum, M. (1990). “Strategic management of exchange rate risks”, *Long Range Planning,Vol. 23 No. 4, pp. 65-72.*

Jhingan M. L. (2005). International Economics,5th Edition, *Vrinda Publications (P)Limited Delhi*

Hinkle, L. E. & Montiel, P. J., (1999). Exchange rate misalignment: concepts and measurement for developing countrie; *A World Bank research publication. New York: Oxford University Press*.

Joyse, J. P. & Kamas L,(2003). Real and nominal determinants of real exchange rates in Latin America: short-run and long-run equilibrium; *The Journal of Development Studies. 39, 6: 155-182.*

Macdonald, R. & Ricci , L., (2003). Estimation of the equilibrium real exchange rate for South Africa. *IMF working paper WP/03/44.Washington: International Monetary Fund.*

Mackinnon, J. G., 1991. Critical values for cointegration tests.

Mankiw M.G. (1997) "Macroeconomics" *New York Worth Publisher*

Miyakoshi, T., (2003). Real exchange rate determination: empirical observations from East-Asian countries. *Empirical Economics. 28:173-180*

Mkenda , B. K,(2001). Long-run and short-run determinants of the real exchange in Zambia;

Mutesi Joy (2018), The determinants of exchange rate in Uganda; Bsc research submitted to the department of economics and applied statistics, Kampala International university.

Obadan (1994). see's the factors that determine exchange rate to include;net capital inflows, monetary policy, terms of trade,exchange rate policy and nominal exchange rate.

Orji M.C (2015). An Empirical analysis of the determinates of real exchange rate in Nigeria.*International Journal of Economics, Finance and Management 4(3)*

Saunders, A & Cornett, M. M (2008). Financial Institutions Management A Risk Management Approach (6th Edition) McGraw Hill International Edition 2008.

Simeneh A(2020). Determinants of Exchange Rate in Ethiopia: A Graphical Approach *International Affairs and Global Strategy vol.84*Takaendesa P,(2006).The behaviour and fundamental determinants of real exchange rate in South Africa*;Thesis submitted for the award of masters degree in Commerce University of Rhodes university South Africa*

Taylor, M.P. (1995): The Economics of Exchange Rates. Journal of Economic Literature, Vol. XXXIII, 13-47

Youngblood, C. (2004). Equilibrium Real Exchange Rate Framework, Trade and Investment Reform Program, *Improved Policy Reform and Financial Intermediation USAID Contract No. 641-C-00-98-00229.*

Yu, H(2006). Determinants of exchange rate fluctuations for Venezuela; Application of an extended Mundell-fleming model; *Applied Econometrics and International Development*. Vol 6(1).