Assessing Literatures on the Dependence of Stock Market Development on Upstream Oil Royalty Revenue and Systematic Risk Factors: Highlighting the Relevance of Dutch Disease Theory and Capital Asset Pricing Model

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ABSTRACT

The paper assessed past literatures on the dependence of stock market financial development on upstream oil royalty revenue account and systematic risk factors and evaluating the relevance of Dutch Disease theory and capital asset pricing model. Theoretical approach supports the role of oil royalty revenue vis-à-vis oil price volatility, foreign exchange rate risk, financial liquidity risk and interest rate risk in determining the performance and financial development of stock market. It is well documented in research that stock prices react to information on oil revenue, crude oil production, monetary policy interest rate, foreign exchange rate uncertainty and diaspora cash remittances. Traditional valuation of stock is based on capital asset pricing model but the modern relevance is in doubt due to anomalous performance of investors and behavioural sentiments. Stock markets of emerging economies over the past few decades have witnessed remarkable growth as indicated by the value and volume of trade in the markets along with the level of capital inflows from developed markets, thereby providing numerous opportunities for investments. The development of the stock market is vital as it provides more opportunities for greater mobilization of funds from with and diaspora remittances and better efficiency in resource allocation. Nevertheless, investment returns in the stock market of developing economies continue to be more reactive to changes in economic fundamentals due to their fragile and volatile nature. This makes them even more unpredictable and unstable unlike the stock markets of developed economies, which are known to be more stable. Stock market financial development is not symptomatic of Dutch Diseases based on the fact that Oil-induced Dutch Disease assumes an oil sector which largely contributes to the economy while so many vital systematic risk factors affects stock market development. Optimistically this study along with other previous and future studies will increase the knowledge about Dutch Disease and will contribute to lessen the harmful effects that Dutch Disease causes. In spite of the common perception that oil is extremely important for financial and economic dynamics, there is, unexpectedly, a dearth of research on how oil revenue and prices influence stock market financial development.

Introduction

Stock market development

Stock market development is an integral part of financial development, which is, in turn, associated with economic growth. Stock markets have received a great deal of attention in recent time, both as a source of financial development and eventually economic development, and in the context of large swings in stock market valuation. The depth of a stock market—as captured by the market capitalization—is an important measure of one aspect of financial development, much in the same way as monetization or the amount of private sector credit measure the depth of financial intermediation. In fact, commercial banking and stock markets both contribute in a major way to the transformation of savings into investment, thereby enabling financial and economic development.

There is a general consensus among scholars that stock market plays an important role in the development of an Economy it accelerates economic growth by enhancing mobilization of domestic and foreign resources and facilitating investment provides an avenue for growth oriented companies to raise capital at low cost and reduces reliance on bank finance which is susceptible to interest rate fluctuations as well as providing a channel for foreign capital inflow market based financial development. Measuring composite all share index (ASI) using individual shares on the stock exchange Market capitalization: Percentage change in the market capitalization of the listed companies Traded stocks: Percentage change in the total value of traded stocks.

The stock market is an indicator of an economy's financial health. It indicates the mood of investors in a country. Stock markets have been recognized as a conduit for investments in an economy due to the role they perform in capital formation which is a prerequisite for economic growth and development. The stock market serves as a platform for raising and allocation of funds needed for investment, thereby creating opportunities for investors. Stock market is a mirror and a barometer of economic performance. As such, stock market development is an important ingredient for growth. The interplay between the stock market and the real economy is crucial in the various channels through which financial markets drive economic growth (Qamruzzaman, 2017; Qamruzzaman & Wei, 2018). The first indicator is the stock market size is measured by stock market capitalization impact on market size. And finally, captured by the total value of stock trade in the market. The third indicator is state of liquidity concern, i.e., measured by turnover ratio. The definition of stock market-based financial development the comprehensive financial development index including bank-based financial development and stock-based financial development. The motivation for constructing this comprehensive index is to construct a composite financial development index (Bong & Premaratne, 2019; Qamruzzaman & Wei, 2019; Sobiech, 2019).

Market capitalisation (also known as market value) is the share price times the number of outstanding shares (including their multiple classes) for domestic listed companies. This excludes investment funds, unit trusts and firms whose primary business purpose is to hold shares of other listed companies. Data are values converted at year-end into US dollars using the same foreign exchange year-end. Security market capitalization has been considered to be the value of an entity that is traded on the stock exchange market. Security market capitalization disclose the size of a firm which is vital since firm size is considered to be an essential determinant of various investment characteristics in which investment decision makers are concerned, comprising risk; it is one of the best measures of a firm size (Agu Bertram, 2018). The strength of the quoted firms in the security market in terms of size could determine the strength of the market. To achieve a desire economic improvement, the stock market must be given serious attention. Studies have affirmed close positive link among market capitalization and economic improvement (Najaf & Najaf, 2016; Nazir, Nawaz, & Gilani, 2010; Obubu, Konwe, Nwabenu, Omokri, & Chijioke, 2016).

As at the first quarter of 2022, the NSE is the third largest exchange in Africa. It experienced an increase in Market Capitalization from ₦16.88 trillion ($90.68 billion) in the fourth quarter of 2014 to ₦24.87 trillion ($81.36 billion) and the largest exchange in West Africa (NSE fact sheet, 2022, 2014). There are 171 listed equities, 91 listed bonds and 9 listed ETFs with 166 listed companies from 11 industries. As regards the movement of the NSE ASI index, there was a massive increase from 1998 to 2008 with an upsurge from 5,672.70 points to 55,949 points. However, the financial crisis of 2008 led to a downward trend in the ASI with more than 40% drop from 2008 to 2010. It then recovered and increased in 2014 to 34,657.20 points, and again suffered a drop in 2016 to 26,874.60 points which canbe attributed to recession. It is the interest of this study to then examine the factors responsible for the developments in the NSE development.

Upstream Oil Royalty Revenue

According to Nigerian Upstream Petroleum Regulatory Commission Upstream Oil revenue accounts are specifically tabulated below.

S/No	Oil Revenue	Designated Account
1	(a) Royalty on Oil (US$) (b) Royalty on Condensates (US$) (c) Royalty on Modify Carry Agreement MCA (US$)	Central Bank of Nigeria (CBN) Oil Revenue Account. Accountant General of the Federation FGN
2	(a) Royalty on Gas Sales (US$) (b) Royalty on Gas Sales (NGN ₦) (c) Royalty on Natural Gas Liquids Sales (US$)	Central Bank of Nigeria (CBN) Oil Revenue Account. Accountant General of the Federation FGN
3	(a) Royalty on Production Sharing Contract (US$)	Central Bank of Nigeria (CBN) Oil Revenue Account. Accountant General of the Federation FGN

Source: Department of Petroleum Resources (DRR)/ Nigerian Upstream Petroleum Regulatory Commission (NUPRC)

According to OPEC, global crude oil supply declined sharply by 6.5 mbpd in 2020 due largely driven mainly by non-OPEC production growth in Brazil, the USA, Norway, Guyana and Kazakhstan. In recent years, the price of crude oil has been unstable. It rose from US$25 per barrel in 2002 to US$55 in 2005, achieving a peak of US$138 in mid-2008. From that level, it underwent a precipitous decline, falling to US$30 in January 2016 before beginning to rise somewhat sluggishly to stabilise around US$57 per barrel by the third quarter of 2017 (CBN, 2017). In the case of Nigeria, oil price shocks are reckoned to be among the factors affecting stock market performance in view of the predominance of crude oil both as a source of government revenue and foreign exchange earnings. Nigeria relies heavily on oil export as a major source of foreign exchange earnings required to defend the domestic currency, hence, any adverse development in the international crude oil market and its attendant effect on exchange rate portends adverse implication for the stock market The dynamic relationship among macroeconomic variables has attracted the attention of researchers and policy makers the world over. The empirical literature on oil prices, exchange rate and stock market is wide-ranging, covering studies on both advanced and developing economies, including Nigeria. Findings from these studies are mixed, due largely to differences in methodologies and heterogeneous economic fundamentals of the economies examined.

Systematic Risk Factors

Systematic risk is risk that cannot be diversified away, for it affects all securities in the market. The empirical studies on the following headlines systematic risk factors is highlighted in this study.

Foreign-Exchange Risk

In terms of the exchange rate, economic theories demonstrate a strong association between exchange rate behaviour and stock market performance. They argue currency appreciation (or depreciation) can have a negative (or positive) impact on stock prices (see Dornbusch and Fisher 1980; Jorion 1991). These models argue that currency movements affect international competiveness and balance of trade position of an economy. As a result, the aggregate output is affected, which in turn affects the stock prices. On the other hand, Gavin (1989) indicating the relationship between exchange rate and stock prices can be positive or negative under different condition. On the empirical front, studies also find inconclusive results.

In 2016, the monetary authority implemented foreign exchange policy that further liberalized the foreign exchange rate market to deepen the market and mitigate market fluctuations. This was achieved by closing the retail window of exchange rate transactions, introducing the investors and exporters (I&E) window for foreign exchange (forex) transaction as well as allowing the authorized dealers in the market to sell foreign currency accruing from inward money remittances to licensed BDCs3. Notwithstanding the immediate relative stability in exchange rate due to the policy, the volatility continued as the BDC exchange rate reached N435 per US Dollar in August 2022 in Central Bank of Nigeria (CBN) at adopted the Nigerian Autonomous Foreign Exchange (NAFEX) Import and Export (I&E) window rate. Furthermore, the CBN adopted contractionary rates in the money market. Evidently, the

Central Bank of Nigeria (CBN, 2022) reported that money market rates rose generally in 2021, which reflected the non-expansionary policy stance of the Bank; and foreign exchange intervention was one of the factors that contributed to the rise. Such policies intended to moderate exchange rate and interest rate volatility can be undermined by volatility spillover from any of the rates if the nature of the co-movement and spillover are not properly identified. And expansionary policies alongside symmetric and asymmetric corridors to realign interest

Financial liquidity risk (diaspora cash remittances)

The theoretical approach suggests that remittances might increase the level of investment in human and physical capital in recipient countries. There are two channels through which remittances have significant indirect and direct investment effects. First, remittances are found to reduce volatility in output by smoothing household consumption. By smoothing household consumption, particularly during adverse economic situation, remittance inflows may increase domestic investment through its multiplier effect. Second, there is evidence that remittance inflows improve financial sector in the recipient's country. Developing countries are characterized by underdeveloped financial institutions, credit constraints and high interest rate. Remittance inflows improve financial sector development in the migrant's country, which helps domestic firms to mobilize necessary credit for investment using transaction cost approach developed a theoretical model that explains the potential impact of remittances on financial sector and domestic investment. The theoretical prediction of this study indicates that remittances increase bank deposits, which increase the availability of loanable funds and reduce the interest rate oriented economy, while it adversely affects the stock market in an export-oriented economy.

Study shows that Singapore's currency appreciation against the U.S. dollar and Malaysian ringgit lead to a long-run increase in stock prices, whereas its depreciation against Japanese yen and Indonesian rupiah also lead to a long-run increase in stock prices. On the contrary, empirical studies show that stock prices and exchange rates are positively related. Diaspora, in general term, is referred to a community of people from the same homeland who have scattered or migrated to other lands. The reason is that this community of people might have been forced from or chosen to leave their homeland to settle in other lands. Remittance is money by which a person working in a foreign country send to a loved one, family etc. in his/her home country. According to the International Monetary Fund, remittances are household income from foreign economies arising mainly from the temporary or permanent movement of people to those economies. Remittances include cash and non-cash items that flow through formal channels such as electronic wire, or informal channels, such as money or goods carried across borders.

Remittances inflow to Nigeria increased significantly and is now one of the major sources of external finance overtaking traditional capital inflows such as foreign direct investment (FDI), foreign portfolio investment (FPI) and ODA. Remittances are used not only for consumption purposes but also for investment activities, Depending on their use, remittances are expected to increase expenditure on consumption, education, housing and health and foster financial development. Global remittance inflows increased from mere US$ 37 billion in 1980 to US$ 121 billion in 2000 and further to US$ 580 billion in 2022. The developing countries received over US$ 457 billion, accounting for 75 per cent of total remittances. The CBN has also instituted

measures to boost foreign exchange inflows into the economy, including diaspora remittances. Nigeria's diaspora remittances fell by 27.7% in 2020. Remittances by Nigerians in diaspora fell to $16.8 billion in 2020 from $23.24 billion in 2019.

According to Meyer and Shera (2017) Sometimes, the remittances play more important role than foreign direct investment (FDI) or overseas development aids (ODA) in the form of grants and loans (Kim & Lekhe, 2019). Remittances are the second-largest source of foreign capital flow in the economy. Remittances are transfers of money across national boundaries by migrant workers. The positive impact of remittances on financial development in developing countries fosters long-run growth and reduces poverty. With financial development, remittances are becoming more common across countries and can be a source of economic development. There is a positive and significant link between financial development and remittances. According to Posso (2015), remittances inflow from developed to developing countries provide liquidity for the domestic financial institutions that aid in the financial development process. As such, strengthening financial institutions in developing countries is needed. Remittance inflow in the financial system allows financial institutions to provide liquidity to the economy and permit a higher level of economic activity than would otherwise be possible. Financial institutions offer financial services to remittance recipients' by offering innovative financial products and services.

This study's motivation lies in assessing the future effects of remittance on the financial sector in Nigeria under a nonlinear environment. The effects of positive and negative shocks will be addressed and their possible magnitudes as well. The empirical investigation performed several nonlinear econometric tests for assessing the response link between financial sector development and economic growth. In this regard, all evidence supports the "supply-lending hypothesis" that is a unidirectional causality running from remittance inflows to financial development. The supply-leading hypothesis suggests that causality flows from finance to economic growth with no feedback. In contrast to the "supply-lending view," several relationship between study variables. Our Granger causality empirical studies established a "demand lending hypothesis" that is the country's financial development encourage inflows of remittance in the economy see, for instance (Faheem et al., 2019) (Posso, 2015). Faheem et al. (2019) investigated the effects of financial development on remittance inflows in Pakistan by applying ARDL and nonlinear ARDL of 1976–2018. Study findings unveiled the asymmetry relationship between remittance and financial development and significant effects on remittance inflows from financial development. The second line of thought available regarding the remittance-financial development nexus is a negative association. Neutral effects running from remittance inflows to financial development, that is, inflows of remittance do not influence the financial sector of the country (Abdul Majeed, 2019). The study underlined the importance of remittances, not only to improve living conditions but also as a source of private saving by means of investing in the stock market.

It is a priori not clear whether remittances should be linked to higher or lower levels of financial development. Indeed, to the extent that a fraction of the money received from abroad is saved, remittances may increase the demand for savings and other financial products and services. Moreover, even if higher bank lending to remittances recipients does not materialize, overall credit in the economy might increase if banks' loanable funds surge as a result of deposits linked to remittances flows. Remittances play an important role in the Europe, America, Middle East and Central Asia, where, in some countries, they have become a larger source of external

financing than foreign direct investment flows. Remittances are particularly relevant in countries where a sizeable share of the workforce has been migrating to those countries in the region that dispose of large oil and natural gas reserves. In the literature, many incentives have been identified for sending money home: solidarity, attachment to homeland, desire for portfolio diversification, and exchange rate movements. Regarding the impact of remittances on economic development more generally, they are believed to reduce poverty; promote entrepreneurship; and improve children's level of education and lower infant mortality by alleviating household constraints. The effect of remittances on economic growth, however, is still an open question. Moreover, as mentioned above, there appears to be a consensus in the literature that remittances promote financial development in developing countries as they increase both disposable income and the aggregate level of deposits and credit intermediated by the local banking sector. In fact, a large share of remittance transfers occur through more or less formal money transfer systems. From an institutional perspective, there is evidence that the banks and other agents that operate the money transfer systems grow with the amount transferred and contribute to professionalizing the financial sector in the recipient country. Moreover, recipients do not necessarily consume all of the received transfer, and the residual may remain in an account with the transferring entity (in case it is a deposit-taking bank).For these reasons, we include net amount of workers' remittances as a share of GDP as an explanatory variable of stock market capitalization.

Interest Rate Risk

Interest can be defined as the return or yield on equity or opportunity cost of deferring current consumption into the future interest rate can also be categorized as nominal or real. This categorization credited to Irvin Fisher tries to accommodate the moderating influence of inflation on interest rate. Nominal interest rate is the observed rate of interest incorporating monetary effects while real interest rate is arrived at by considering the implications of inflation on nominal interest rate. The importance of interest rate is hinged on its equilibrating influence on supply and demand in the financial sector. Empirical studies confirmed this by saying that the channeling of savings into financial assets and the willingness of individuals to incur financial liabilities is strongly influenced by interest rates on those financial assets and liabilities. The developmental role of interest rate is possible because of the interlocking linkage existing between the financial and real sectors of economies. It is therefore through this linkage that the effect of interest rate on the financial sector is transmitted to the real sector. For instance, the lending rate which translates into the cost of capital has direct implications for investment. High lending rate discourages investment borrowing and vice versa. Savings rates, on the other hand, when high encourages savings which ultimately translates into increased availability of loanable funds. The snag here is that the high savings rate is also bound to translate into high lending rates with attendant negative consequences on investment.
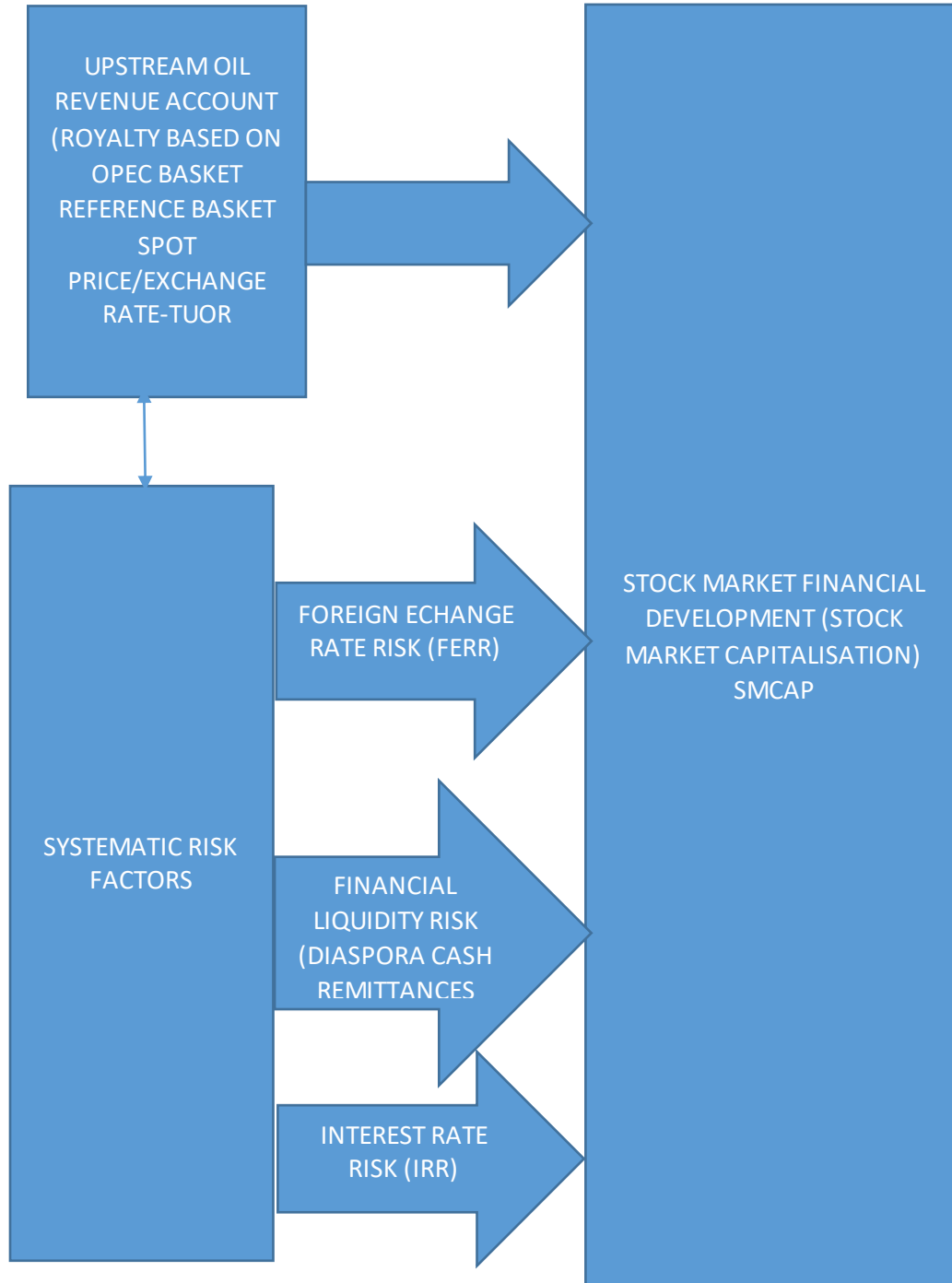
The act of financial regulation and interest rate fixings led to the economy being repressed. According to McKinnon and Shaw, financial repression arises mostly when a country imposes ceiling on deposit and lending nominal interest rates at a low level relative to inflation. The resulting low or negative interest rates discourage savings mobilization and channeling of the mobilized savings through the financial system. This has a negative impact on the quantity and quality of investment and hence economic growth. This therefore necessitates the development of a new policy framework on interest rate. It is this view that must have encouraged the Nigerian authorities to abandon administratively fixed interest rates for

market determined ones. In the words, deregulated interest rate is believed to be critical for both financial stabilization and development. The implication is that the relationship between interest rate and investment. In this case, it has been established that high lending rates discourage borrowing for investment and vice versa. To achieve the desired level of interest rate, the Central Bank of Nigeria (CBN) adopts various monetary policy tools, key among which is the Monetary Policy Rate (MPR). This rate, which until 2006 was known as the Minimum Rediscount rate (MRR), is the rate at which the CBN is willing to rediscount first class bills of exchange before maturity. He further opined that by raising or lowering this rate the CBN is able to influence market cost of funds. If the CBN increases MPR, banks' lending rates are expected to increase with it, showing a positive relationship. In recent past, the need to possess certain class of assets as collateral to assess the CBN's discount window was dispensed with due to global crisis.

A Stock market has been a major preoccupation of the financial sector, due to its key role in the mobilization of capital, and resources into productive sectors. Price fluctuation in stock market can be explained by change in many factors, interest rate is one of these factors, generally, it is considered as the cost of capital; from the lender point of view, it is the fee charged for lending money (lending rate), while from borrower's point of view, it is the cost of borrowing money (borrowing rate). The relationship between interest rates and stock markets, has over the years, gained reasonable academic attention from students, researchers, regulators, stock brokers, to mention but a few, because it provides an important implications for government monitory policy, and investment decisions, th rough financial securities valuation. Tightening of systemic liquidity on the back of the CBN's primary market activities have resulted in an uptick in money market rates thereby halting the equities market rally in May. Rising yields in the fixed income securities market reduced demand by investors. Market capitalisation fell from ₦20.847 trillion in April month to close at ₦20.035 trillion in May 2021. Similarly, the Nigerian Exchange (NGX) All Share Index (ASI) declined by 3.5% in May 2021.

CONCEPTUAL FRAMEWORK OF THE RESEARCH

Source: Author, 2022

UPSTREAM OIL REVENUE ACCOUNT (ROYALTY BASED ON OPEC BASKET REFERENCE BASKET SPOT PRICE/EXCHANGE RATE-TUOR

SYSTEMATIC RISK FACTORS

FOREIGN ECHANGE RATE RISK (FERR)

FINANCIAL LIQUIDITY RISK (DIASPORA CASH REMITTANCES

INTEREST RATE RISK (IRR)

STOCK MARKET FINANCIAL DEVELOPMENT (STOCK MARKET CAPITALISATION) SMCAP

Empirical Review of Related Literature

Nexus between Oil Revenue fluctuation and stock market financial development

Mahmoudi and Ghaneei (2022) analysed the impact of crude oil market on the Toronto Exchange (TSX) based on monthly data from 1970 to 2021 Markov regime-switching (MSI-VAR) vector autoregressive approach. The crude oil market has negative effect on the stock market in regime 1, while it has positive effect on the stock market in regime 2. Alzyoud et al. (2018) also examined the dynamics of Canadian oil price and its impact on exchange rate and stock market performance. The authors adopted the cointegration technique and used stock index, exchange rate, and crude oil price as variables in the study. The findings indicated that oil price, exchange rate, and their variations had a positive and significant impact on the Canadian stock market returns. Sekhar et al. (2019) examined Exchange rate and equity price relationship: empirical evidence from Mexican and Canadian markets. Examined the long-term relationship and causal relationship between exchange rates and stock prices. Johansen cointegration model, vector error correction model, granger causality tests using weekly data from 2013 to 2018. Insignificant existence of long-run relationship between stock prices and exchange rate in Canadian and Mexican markets; the granger causality test confirms the existence of the short-run unidirectional causal relationship from exchange rates to stock prices in the Mexican markets.

Kishar et al. (2021) examined the causal linkages of Japan's stock market (proxied by NIKKEI 225 index) performance and exchange rate. Multivariate granger causality tests using monthly time series data from 1974-2017. No causality is detected between the stock markets and the general price level and exchange rate. Mira (2019) investigated the nature of the interaction between exchange rate sensitivity and stock market stationarity test using the ADF and PP tests, Johansen and Juselius cointegration procedures bivariate as well as multivariate. Sample from 2007-2017 from Kazakhstan stock exchange stationarity in differences of the time series. Absence of long-run relationship between the variables in bivariate model. Granger causality tests demonstrate strong birectional relationship between exchange and stock prices in Kazakhstan. Hussein et al. (2018) analysed the impact of crude oil prices (cop) on the exchange rate and stock market returns in Canada regression analysis, OLS GARCH cop and exchange rate, and their variations have a positive and significant impact on the Canadian stock market returns. Another study was conducted by Mechri et al. (2018) on the impact of exchange rate volatilities on stock markets dynamics in Tunisia and Turkey, using the GARCH estimation method. The variables used were stock market price returns, exchange rates, inflation rates, interest rates, gold prices and petrol prices index. The results indicated that exchange rate volatility has a significant effect on stock market fluctuations.

Delgado et al. (2018) in their paper examined the relationship of oil price, exchange rate and stock market index in the Mexican economy. Monthly data covering the period January 1992 - June 2017 and vector autoregressive (VAR) model were used for analysis with oil price, nominal exchange rate, the Mexican stock market index and the consumer price index as variables. The findings showed that exchange rate had a negative significant effect on stock market index, indicating that an appreciation of the exchange rate is related to an increase in the stock market index; oil price had a significant negative effect on exchange rate, showing that an increase in oil prices creates an appreciation of the exchange rate.

Nexus between foreign exchange rate risk and stock market financial development

The consumer price index was seen to have a positive effect on the exchange rate and a negative effect on the stock market index. Similarly, Bai and Koong (2018) examined the time-varying trilateral relationship among oil prices, exchange rate changes and stock market returns in China and the United States. The study adopted the Diagonal BEKK model for the analysis. The results showed the presence of a significant parallel inverse relationship between the US stock market and the dollar and between the China stock market and exchange rate. Tiwari et al. (2019) examined the relationship between the exchange rate and stock prices a continuous wavelet-based analysis; utilising a relatively novel and non-traditional technique know as continuous wavelet approach-continuous wavelet power spectrum, cross-wavelet transform and cross-wavelet coherency using monthly time series data from 1986-2014. The empirical results strongly support the traditional hypothesis that the exchange rate leads (causes) stock prices compared to the alternative portfolio-based hypothesis.

Koskei (2017) investigated the effect of exchange rate risk on the stock returns in Kenya's listed financial institutions. Purposive sampling technique and concentrated on 14 financial institutions; a causal research design and adopted a panel data regression using the ordinary least squares ols method time series data and cross sectional data; Hausman test; panel estimation exchange rate risk affect stock returns of listed financial institutions in Kenya Saidi et al. (2021) examined the symmetric and asymmetric effects of the IDR/USD exchange rate and its volatility on stock prices using the monthly time series data of the IDR/USD exchange rate and Indonesian composite stock price index from 2006 to 2019 the data were analysed using ARDL and NARDL model the results showed that in the short term, the IDR/USD exchange rate has a symmetry effect on stock prices, while volatility lacks such a symmetric influence; in the long term both the exchange rate and the volatility lack symmetric and asymmetric influence on stock prices. Bagh et al. (2017) studied the effect of exchange rate volatility on the stock index at Pakistan Stock Exchange based on monthly data from 2003 to 2015 simple linear regression; augmented dickey-fuller statistical test a positive and statistically significant relationship between exchange rate and stock index in pakistan; exchange rate volatility had a positive effect on stock prices.

Sikhosana (2018) studied asymmetric volatility transmission between the real exchange rate and stock returns in South Africa EGARCH,GJRGARCH and APARCH as the estimation techniques the impact of exchange rate on stock market is positive; there is a bi directional relationship between exchange rate and stock prices. Jelilov et al. (2020) examined the short-run empirical analyses of the impact of oil price fluctuation on the monetary instrument(exchange rate, inflation rate and interest rate) in Nigeria Toda-Yamamoto model(TY), TY modified WALD(MWALD) test approach to causality; forecast error variance decomposition(FEVD) and impulse response function(IRFS) there is a uni-directional causality of the log of oil price to log of the exchange rate oil price is a strong determining factor of exchange rate, cost of borrowing and directly influences inflationary or deflationary tendencies in Nigeria. Oil price has a direct influence on the exchange rate, interest rate and inflation rate

Ogbulu (2018) examined whether there is any volatility pass through between the dollar price of Nigeria crude oil ARCH-GARCH volatility analysis, Johansen cointegration test, ECM and granger causality GARCH the volatility of dollar price of Nigeria oil(DPO) in the world oil

market is significantly transmitted to the volatility of stock market prices in Nigeria. The pass-through effect of the volatility of exchange rate to the volatility of stock market prices is also positive and significant crude oil price significantly impacted stcok market prices. Fasanya (2022) examined the effect of the exchange rate shocks on ten (10) sectoral stock returns in Nigeria from 2007 to 2018; examined symmetric and asymmetric relationship between exchange rate and sectoral stock returns. The autoregressive distributed lag and nonlinear autoregressive distributed lag only financial service sector moves in an asymmetric fashion in the short and long period without taking account of structural breaks and with structural breaks, non of the sectorial stock returns were asymmetric.

Ajeigbe (2022) examined the dynamic interaction among oil price, exchange rate and the trading performance of quoted industrial sectors at the Nigerian stock exchange from 1980 to 2020 a panel vector error correction mechanism (PVECM) framework long run relationships were established for oil price, exchange rate and the stock market performance of the industrial sectors; a long run negative relationship among oil prices, exchange rate and the stock market performance of industrial sector. Fapetu et al. (2017) examined exchange rate volatility and the performance of stock market in Nigeria GARCH, ARCH, E-GARCH and TARCH exchange rate positively relate with market capitalisation rate in all the four models. Uche (2021) re-examined the dynamic pass-through of international oil prices to exchange rates and stock prices in Nigeria Quantile ARDL model the spill effects of oil price shocks on both the exchange rate and stock prices in Nigeria are heterogeneous and differ significantly across the quantile distributions of the forex and stock markets.

Nexus between Financial liquidity risk (diaspora cash remittances) and stock market financial development

Qamruzzaman and Rajnish (2021) in Bangladesh, India, Pakistan and Sri Lanka studied to gauge the asymmetric effects of remittances, gross capital formation and foreign direct investment on financial development unit root tests, DF-GLS AND ZIVOT-ANDRREW, ARDL bound test, NARDL, Toda-Yamamoto causality test remittances elasticity exposed a positive statistically significant linkage with financial development in the long run and short run. Margaret and Ajibola (2018) investigated the contributions of foreign remittances on Economic growth in nigeria from 1980 to 2016, using the vector error correction Modelling (VECM) technique to analyse the long run and short-run impact of Disaggregated remittances that is migrants 'remittances and workers' remittances to Find out whether they will perform differently in relation to economic growth in Nigeria. The results showed a unidirectional causality from gdp per capita to migrant's Remittances while no causality was found between workers' remittances and gross Domestic product per capita.

Meyer and Shera (2017), using panel data set of six countries for the period 1999-2013, examined the impact of remittances on economic growth in those countries. The result revealed that remittances have a positive impact on economic growth in those Countries. Also, Olusuyi, and Ebun (2017) investigated the dynamic impact of remittance on Economic growth within the Nigerian context using the generalized method of moment (GMM) estimation technique. The result confirmed the positive impact of remittances on Economic growth. Especially, a unit increase in remittance caused the GDP to rise by about 0.7817 units.

Anetor (2019) studied the nexus between remittances and economic growth in Nigeria; and the result of the study confirmed the negative impact of remittances on Economic growth in Nigeria, both in the short-run and long-run. Sutradhar (2020) investigated the impact of workers' remittances on the Economic growth of four South Asian emerging countries by employing balanced panel Data from 1977 to 2016. Pooled OLS, fixed effects, random effects and dummy variable Interaction models are used to estimate the impact of remittances. The empirical Regression analysis confirms a negative effect of remittances on economic growth in Bangladesh, Pakistan and Sri Lanka. Conversely, remittances have a positive impact on economic growth in India. This study also indicates a joint significant and negative Relationship between remittances and economic growth in four countries.

Okharedia and Osagie (2019) examined the influence of foreign remittances on the Economic performance of Nigeria using time series data for the period 1986-2018. The time-series data was sourced from the world bank. Error correction model (ECM) Technique was adopted to determine the impact of foreign remittances on economic Performance in Nigeria and how the exchange rate mediates the relationship. From the Empirical examination, the paper posited that a reduction in the exchange rate is required For foreign remittances to effectively influence the performance of the economy of Nigeria. The study, further, concluded that while the foreign remittances improve the Performance of the economy of Nigeria, the exchange rate is harming it.

Nexus between interest rate risk and stock market financial development

Gong and Dai (2017) studied influence of interest rate and the exchange rate of CNY/USD on china's stock prices non-linear regression model using data from 2005-2016 stock price is influenced by interest rate and exchange rate. Jayashankar and Rath (2017) examined linkage between exchange rate, stock price and interest rate in India using monthly data from 2000 to 2014; maximum overlap discrete wavelet transform (MODWT); granger causality test; this study adopts a more sophisticated MODWT approach for examining the cross-correlation and causality interest rates and stock returns showed a negative relationship; granger causality tests established a lead/lag relationship between stock price, exchange rate and interest rate.

Al-rimawi and Kaddumi (2021) investigated the impact of some selected macroeconomic variables (inflation(INR), interest rate(IR), economic growth rate(EGR), and foreign investment(FI) on Amman Stock Exchange(ASE) fluctuation for period 1999-2018 the study adopted a descriptive-analytical approach-simple and multiple linear regression analysis. The information is based on the annual data published by industrial companies listed on ASE. There is no statistically significant impact of INR, IR, EGR and FI collectively on ASE performance. Individually, the results indicated that there is a statistically significant impact of all variables (INR, IR, EGR, and FI on ASE performance.

Shadi and Nada (2017) studied the influence of interest rate, exchange rate and inflation on common stock returns on Amman Stock Exchange, Jordan multiple regression a negative association amongst share returns and interest rates; weak variation in share returns due to collective influence of currency rate, inflation rates and interest rates. Bouabdallah and Bouguesba (2021) aimed to determine the impact of interest rates on the Amman Stock Market performance ARDL approach on annual time series data from 1990 to 2018 negative impact of the interest rates on the Amman Stock market performance. Al-naif (2017) analysed the

relationship between interest rate and stock market index: empirical evidence from Arabian countries time series data 2014 to 2016; augmented dickey fuller test; vector auto regression; Johansen test of cointegration, granger causality test and variance decomposition. There is a significant negative relationship between interest rate and stock market index in Egypt, while it was insignificant in Qatar and Kuwait. However, a significant positive relationship was found in Jordan and Oman. Cointegration test concluded that the interest rate and the stock market index shows a long-run association only in Qatar

Izunobi et al. (2019) studied the relationship between stock market return volatility and macroeconomic variable (exchange rates, inflation and interest rates) the study employed GARCH techniques to evaluate the existence of high stock market returns volatility, and the impact of the exchange rate, interest rate and inflation on stock market returns in Nigeria, using monthly series data from 1995-2014. interest rate has negative relationship with stock market returns, inflation rate and exchange rate have a positive relationship with stock market returns; there is high and persistent volatility in the Nigeria stock market returns.

Bassey et al. (2018) established the existence of long-run relationship of the monetary policy instruments (open market operations (OMO) and CRR) with the MPR, and argued that the MPR could serve as a veritable instrument for the control of money supply and effective monetary policy management in the economy. Asaleye et al. (2018) in a study spanning 1981 to 2016 explained how shifts in the central bank's monetary policy influence economic growth as well as the level of employment in Nigeria. The study which made use of autoregressive distributed lag and structural vector autoregressive models showed that during the initial periods, changes to monetary policy had a greater impact on GDP than they had on unemployment, but this trend was reversed at later periods when the impact on unemployment became larger. The findings did not give any indication of a long run relationship when output is explained by other variables while a long run association is found when unemployment is explained. The indicator of monetary policy was seen to be very important in explaining unemployment both in the near term and in the long term.

Anwar and Nguyen (2018) examined the transmission mechanism of monetary policy in Vietnam using quarterly data from 1995 to 2010 in a structural vector autoregression (SVAR) method. They reviewed the economy's response to shocks in domestic and foreign monetary policy and found that the credit channel is important. Mordi et al. (2019) documented some robust evidence on interest rate pass-through in Nigeria. Their work confirms, among others, that a long-run relationship exists between the MPR and each of prime lending and savings deposit rates, in spite of significant structural breaks occurring in the co-integrating vectors at different periods. The study further shows that the transmission of changes in MPR to the retail market is not complete and that bank retail rates (except the savings rate) adjust symmetrically to changes in the policy rate. This, they argued, suggests that changes to the savings rate depends on the nature of the shock to the policy rate. Positive shocks in the policy rate get transmitted wholly to the savings rate in two months in contrast to eight months for negative shocks. They further find that it takes about fourteen months for shocks to the policy rate to be passed fully to the prime lending rate, while the full impact on the 6-month deposit rate takes place in about eleven months.

Matousek and Solomon (2018) employed the generalized method of moments (GMM) two-step estimator, to investigate the impact of the Central Bank of Nigeria's (CBN) bank restructuring policies of 2002 - 2008 on bank lending channel of transmission and found that larger and more capitalized banks are less sensitive to changes in monetary policy. Osadume (2018) examined how monetary policy rate and other discount rates affect development in Nigeria. The study documented an indication that discount rates – represented by interest and monetary policy rates – have a significant short-run impact, and positive and significant long-run impact on economic development with substantial speed of adjustments. Ojima and Emerenini (2015) in their study of interest rate and investment in Nigeria applied the ordinary least square method (OLS). Their study revealed that high interest rate affect investment negatively. The study therefore suggested that the monetary authority should evolve policies that will encourage savings and reduce prime lending rate to genuine investors and others. They further recommended that since there is a between income and savings, relevant authorities should consider economic policies that will increase income level of the people in order to mobilize investments.

Etale and Tabowei (2019) ascertain the connection among economic growth and interest rate in Nigeria by measuring inflation rate, GDP, interest rate and exchange rate in Nigeria between 1980 and 2014 with the application of error correction mechanism approach. Insignificant and inverse link was found among the variables measured in the study. Priscilla and Ezeanyeji (2019) researched the existing link in financial growth and economic expansion in Nigeria. The research employed VAR Granger causality and block wald test to measure RGDP, credit to private sector, security market capitalization, liquidity ratio and real interest ratio from 1986 to 2017. The outcome revealed a positive association among market capitalization and interest rate. Adekunle, Adodo, and Akindutire (2018) examined economic growth and interest rate nexus in Nigeria between 1981 and 2016. Interest rate was used as a predictor while GDP was used as predicted variable. The research applied ARDL approach. Inverse association exists among the variables in consideration. Etale and Tabowei (2019) analyzed macroeconomic forces that could have influence on stock market capitalization in Nigeria between 2001 and 2018. Method of regression was utilized to find out the connection between GDP, exchange rate, interest rate, inflation rate and security market capitalization. The study revealed that, GDP had a positive significant influence on security market capitalization; exchange rate had a significant inverse effect on market capitalization while inflation rate and interest rate have insignificant downbeat influence on market capitalization.

Azeez and Obalade (2019) ascertained macroeconomic forces influence on security market development in Nigeria by measuring banking subsector improvement, security market liquidity, FDI and income level between 1981 and 2017. With the aid of autoregressive distributed lag cointegration technique, it was revealed that stock market improvement was not explained by the predictor variables. Demir (2019) investigated macroeconomic influences on stock market fluctuations in Borsa Istanbul in Turkey stock market from 2003 to 2017 with autoregressive distributed lag bound test. The study tests the relationship between domestic currency, portfolio investment, FDI, interest rate, crude oil prices and security market attainment. Domestic currency, portfolio investment and FDI were responsible in raising the stock market achievement while interest rate and crude oil prices were found inversely associated with security market attainment.

Theoretical Review

The Dutch Disease Theory (DDT)

The Dutch Disease theory originated after the Netherlands found large sources of natural gas in the North Sea in the 1960s. As a result of the large capital inflows, which followed from increasing export revenues, the demand for the Dutch florin increased which in turn resulted in an appreciation of the Dutch exchange rate. This further led to greater difficulty for Dutch manufacturing goods to compete on the international markets. The Dutch Disease theory has remained relevant to this day and is still affecting countries all over the world. With today's increasing world market prices for raw materials we are likely to find other affected countries in the future as well. Dutch Disease theory is now also used to explain negative effects from capital inflow caused for example by aid, remittances, beneficial terms-of-trade shocks or sharp productivity increases in export production. The theory of Dutch Disease by Corden & Neary (1982) states that an inflow of capital, caused for example by an oil boom, causes the real exchange rate to appreciate. The reason for this appreciation is that domestic prices in the tradable and non-tradable sector will be affected asymmetrically with the prices of the non-tradable sector rising at a faster rate. This further implies that the competitiveness of the tradable goods deteriorates in international markets as the opportunity cost of producing tradable goods has increased. The small open economy is assumed to consist of three sectors in Corden and Neary's model. Tradable goods are produced by the booming and the lagging sectors while the third sector produces non-tradable goods. The booming sector can for example be the oil, gas or mineral industry and the lagging sector the manufacturing industry. The non-tradable sector is usually defined as services. The three sectors use a common factor of production, labour, and a sector specific factor, capital. The most important mechanism behind Dutch Disease is the real exchange rate. The real exchange rate defined above is the main mechanism behind Dutch Disease. The appreciation of the exchange rate gives rise to two different effects in the economy which is called the spending effect and the resource movement effect by the Dutch Disease theory. Oil-induced Dutch Disease assumes an oil sector which largely contributes to the economy.

DDT assume a small open economy that produces three goods: two which are traded at exogenously given international prices, and a third, which is a non-traded good whose price is determined by domestic supply and demand. The traded goods sector includes a booming good, and a non-booming one. The non-traded good is typically thought to be produced by the service sector (but it can be extended to the construction sector etc). A resource boom affects the rest of the economy in two main ways: the resource movement effect and the spending effect. This factor movement also leads to an increase in the price of non-traded goods since, ex ante, it results it excess demand for non-tradables. Since the price of tradables is exogenously determined in world markets, the rise in the prices of non-tradables is equivalent to an appreciation of the real exchange rate. Since the price of tradables is given by world markets, this extra spending raises the relative price of non-tradables, resulting in a further appreciation of the real exchange rate. In response, mobile factors shift from the tradables sector to the non-tradables sector. Here, results a contraction of the non-booming tradables sector results. That is the spending effect.

The core Dutch Disease model, attributed to Corden and Neary (1983), is modelled within the framework of a three-sector economy, namely a non-tradable sector (N), a manufacturing sector (M) and a resource sector (R). The model assumes that: labour is perfectly mobile among all the three sectors and makes sure that wages equalize across them; all goods are for final consumption; trade is always balanced as national output always equals expenditures; and commodity and factor prices are not distorted. Also, the actual exchange rate exhibits a tendency to appreciate as a result of either one or a combination of the following factors: (i) an upsurge in domestic absorption and permanent income; (ii) an increase in the price of non-tradable goods; (iii) a change in relative prices; and (iv) a boost in foreign capital inflows (remittances). The Dutch Disease theory opined that changes in relative prices between tradables and non-tradables cause changes in the real exchange rate. In other words, sectoral productivity differentials across countries are identified as the fundamental determinant of real exchange rate movements. Economies with a higher level of productivity in tradables will be characterized by higher wages and since international productivity differences are wider in tradables than in non-tradables, also by higher prices of non-tradables. Secondly, changes in the real exchange rate as a consequence of variations in relative prices between exports and imports. In other words, relative price movements within the tradable sector, specifically movements in the relative price of exports, are a major determinant of real exchange rate movements. Thirdly, the importance of fiscal policy changes in determining real exchange movements. A fiscal deficit could produce two sorts of effects. On the one hand, if the fiscal deficit increases (i.e. there is an expansive fiscal policy), interest rates will rise as a consequence of a restrictive monetary policy, and the real exchange rate will appreciate.

Therefore, the foundations for the quantitative approach for investment management are the researches related to the random character of stock market prices. And from that time forward, investors and portfolio managers began to think not only about expected returns, but to take into consideration, for each investment, the risk-return relationship. The risk is expected, and quantified, by means of the volatility of markets and securities, that is, the standard deviation of the successive returns of assets, corresponding to stock market fluctuations. From then on, the normal distribution governed and calibrated the quantitative aspects of the markets, and the hypothesis of random walk became necessary for the construction of these portfolios43. In one hand, the random paradigm of stock market prices created the portfolio theory; but, in the other, this theory reinforced the paradigm, because of its use in the investment management firms. The investment management industry was entered by the paradigm; next it solidified this paradigm.

Capital Asset Pricing Model (CAPM)

The model states that prices of assets are determined in such a way that risk premiums are proportional to the systematic risk. CAPM describes the way prices of individual assets are determined in markets where information is freely available and reflected instantaneously in asset prices. In market equilibrium, it is expected that a security provides a return to compensate for the level of unavoidable risk. In CAPM, there which can be avoided or easily diversified. The Capital Asset Pricing Model (CAPM) in finance literature divided two parts: single factor and multifactor that attempts to explain the relationship between the systematic risk of an asset and its corresponding expected return. The capital asset pricing model based on simplifying assumptions, of which can be expressed as follows: The first assumption is that Investor purpose is the maximizing of expected utility from final wealth. Second, all

investors have homogeneous expects about the risk/reward trade-offs in the market. The third assumption is that information simultaneously and freely available to all investors and investors can't be affected stock prices by buying and selling stock. The fourth assumption is that Taxes, transaction costs, there is no limit to short sell or other market constraints. Investors are considered to maintain diversified portfolios, as the market does not reward investors for bearing diversifiable risk. Consequently, the CAPM implies that if a security's beta is known, it may to calculate the parallel expected return.

The CAPM is used to determine the appropriate price of securities and whether the security is over-priced or underpriced by the market. security market line (SML). The value of beta is which means that the market price is equal to the appraised (intrinsic) value. However, the value of beta is greater than 1 (high risk) if the security is located above the SML, i.e. the market price is more than the appraised value, inferring that the security is overpriced. On the other hand, if the value of beta is less than 1, which means low risk, the security is located below the SML. This means that the market price is less than the security's intrinsic value, and the security is said to be underpriced. In the case of the overvalued security, the security will be unattractive to investors. According to CAPM, the reduced demand for the security will cause the market price to fall. On the other hand, undervalued securities will be attractive to investors and the increased demand will cause the market value of the securities to rise.

CAPM suggests that stock market returns are positively related to interest rate risk (captured by beta) such that assets with high risks are associated with high returns, the FCFE demonstrates that interest rate is negatively related to stock market returns

The relationship is known as the Security

Market Line (SML) equation and the measure of systematic risk in the CAPM is called Beta.

If we include time effects in the model will be:

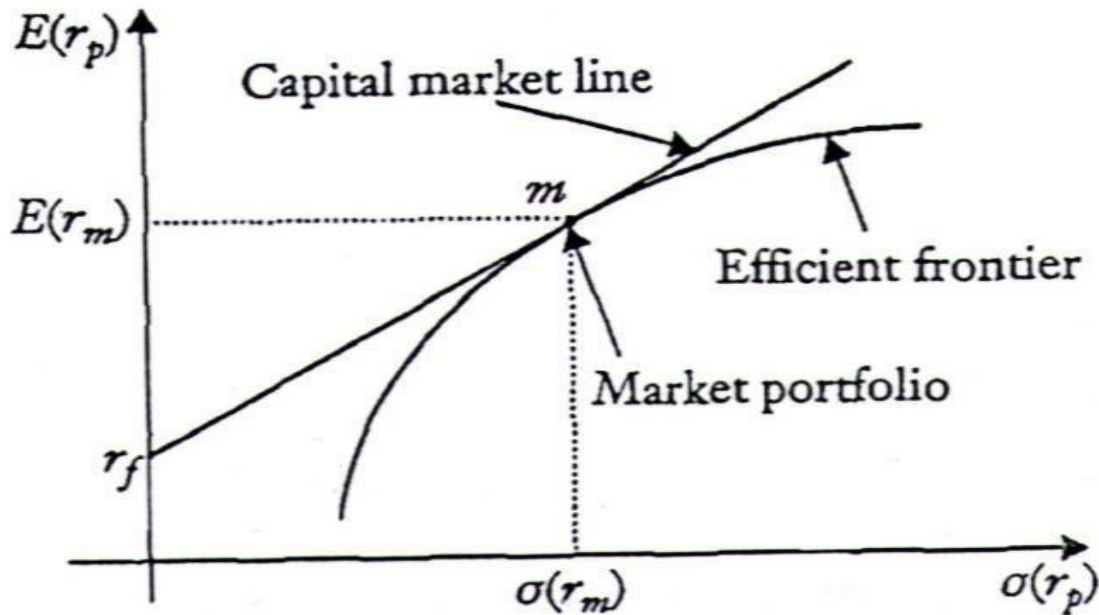$$Rit - Rft = \alpha + \beta j(Rmt\text{-}Rft) + \varepsilon it \;\; ;$$

Rft = risk free rate.

βj = beta(systematic risk).

Rmt = return on the market.

The equation represent the risk premium on asset j to the risk premium on the market:

This relationship is clarified by the parameter beta.

F

Figure 1. Capital market line.

Risk: A simple definition of risk is the possibility of a financial loss. The concept of risk could be examined in relation to an asset or portfolio. In the financial topics, risk can be divided into systematic risk (diversifiable risk) and non-systematic risk (diversifiable or unique risk).

Total risk = systematic risk + unsystematic risk

Systematic risk (market risk); Interest rates, recession and wars all represent sources of systematic risk because they affect the entire market and cannot be avoided through diversification. Whereas this type of risk affects a broad range of securities, unsystematic risk affects a very specific group of securities or an individual security. Systematic risk can be mitigated only by being hedged. Non-systematic risk: Company or industry specific risk that is inherent in each investment. The amount of unsystematic risk can be reduced through appropriate diversification. Also known as "Business Risk", "Liquidity and Marketability Risk", "financial risk", " credit risk" and " political risk".
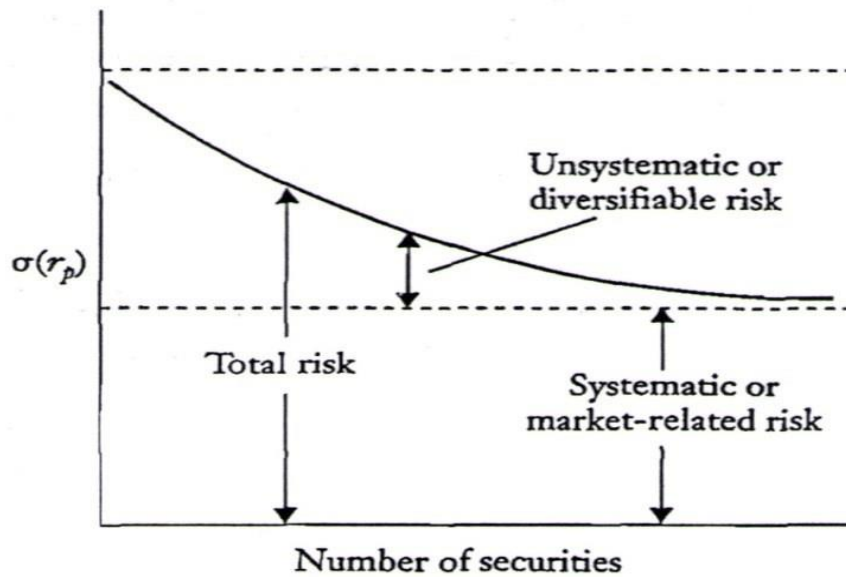
Based on the behavior of the risk-averse investor, there is an equilibrium relationship between risk and expected return for each security. In market equilibrium, security will be expected to provide a return commensurate with its systematic or unavoidable risk. This is simply the risk that cannot be avoided by diversification. The greater the systematic risk of a security, the greater the return that investors will expect from the security. The relationship between expected return and systematic risk, and the valuation of securities that follows, is the essence of Capital asset Pricing Model (CAPM). The model was developed by William F. Sharpe(1990 Nobel Prize winner in Economics) and John Lintner in the 1960s, and it has ahd important implication for stock market financial development. Though other theories also attempt to capture market behavior, CAPM is simple in concept and has real-world applicability. CAPM is an equilibrium model of the trade-off between expected return and systematic risk. Systematic risk is the variability of security's return with that of the overall stock market. Despite challenges of the key assumptions of perfect capital markets existence and homogeneous expectations of investors, the CAPM is practical and widely used in the securities industry and in corporate finance because it is practical equilibrium model.

Qualitative analysis based on Contents from Literature reviews

Stock market is a mirror and a barometer of financial development of nations. Yet, the market has been known to be sensitive to the financial condition of the economy within which it operates. Theoretical approach supports the role of both financial and economic fundamentals in determining the performance, development and growth of stock market. Nigerian stock market over the past 10years have witnessed remarkable decline and meltdown as indicated by the value and volume of trade in the markets along with the level of capital inflows from developed markets, thereby providing limited opportunities for investments. The development of the stock market is vital as it provides more opportunities for greater mobilization of funds and better efficiency in resource allocation. Nevertheless, investment returns in the stock market of Nigerian economy continue to be more reactive to changes in economic and financial fundamentals due to their fragile and volatile nature. This makes

them even more unpredictable and unstable unlike the stock markets of developed economies, which are known to be more stable.

Over the years, the Nigerian stock market has been in a fluctuating state and the performance in the market has not been impressive. Some scholars have attributed this ugly trend to crude oil price fluctuation, political influences and exchange rate (Abraham, 2016; Asaolu & Ilo, 2012; Demir, 2019; Olufisayo, 2014; Utile, Okwori, & Ipkambese, 2018). Despite the efforts made in formulating and implementing programs based on recommendations from previous studies, the Nigerian market capitalization continue to record decline in recent time. Report from Nigerian stock exchange (NSE) in December 2019 indicated that, the Nigerian equities market closed on a negative line, thereby recording the second consecutive yearly decline. The Nigerian stock exchange All-Share Index, which is the benchmark barometer, measuring the performance of the market reduces by 14.5 percent at 26,842.842 from 31,430.500. The decline is lower than the 17.8 percent fall posted in 2018. In 2018, the NSE equities market capitalization fell by 13.8 percent. The objective of improving NSE market capitalization has drawn the attention of scholars to find out the determinants of market capitalization in Nigeria (Eriemo, 2014; Etale & Tabowei, 2019; Tsaurai, 2014). The studies made effort to examine the link between upstream oil royalty revenue and systematic risk factors namely foreign exchange rate risk, interest rate risk, and financial liquidity risk (diaspora cash remittance)

Presently, the situation has been exacerbated by the recent fluctuation and volatility in global oil price due to the oil-dependent nature of the Nigerian economy. Key indicators such increasing interest rate to double digit and pushing the depreciation of the exchange rate to a new height. All these could potentially limit the development of the stock markets as well as impede on its role in contributing to the development of the economy. Nigeria are still yet to fully exploit the potential benefits of the stock market due to some problems which are yet to be fully identified. This study attempts to identify these problems. The current financial crisis and the capital market sensitiveness to external shock resulting from the global financial meltdown.

Record has shown that the country's all share index (ASI), which measures stock market performance has persistently declined from 65,652.38 in February 2008 to less than 30,000 in December, 2012. It however increased from 31,853.19 to 41,210.10 between January 2013 and September, 2014, after which it underwent a steady decline, plunging to less than 30,000 from October 2015 to the end of May, 2017 (CBN, 2017). It is clear from the above picture that stock market performance (as measured by the country's all share index) has tended to exhibit a similar pattern of movement with that of crude oil price, tending to fall when crude oil falls, and to recover when it recovers this study investigated whether and to what extent the developments in the crude oil and foreign exchange markets influence the stock market performance in Nigeria. This is premised on the notion that any development in the international crude oil market, with its attendant effect on the naira exchange rate, has implications for financial variables, including the stock market. Understanding the interaction among these variables in Nigeria is particularly important because of the role of the stock market in accelerating economic growth. The stock market serves as a transmission channel where savings are effectively channeled to various economic sectors in the economy. It provides investors with the needed access to a variety of investment opportunities and the necessary

support and platform that facilitate the effective allocation of capital for long-term productive investments, thus enhancing the prospects of long-term economic growth.

Crude oil price plays a key role in the world economy and the impact of crude oil price fluctuation has always been a matter of concern. Oil price has always been a matter of concern for the world economy. Predicting the oil price is one of the hardest tasks for the financial analysts. Main factors that affect the oil price are oil supply and demand, oil production cost, oil inventory levels and US dollar exchange rate. Some researchers concluded that there is a positive relationship between crude oil price and stock markets whereas some found that there is a negative correlation between crude oil price and stock markets. The correlation between stock price and oil price is ambiguous and the reason behind this can be the underlying reason behind oil price change. The relationship between the stock market performance and financial macroeconomic variables has been a source of serious concern for economic and financial researchers, due to the role, the stock market in achieving economic growth and development of a country through mobilization and effect direction of funds from surplus units to deficit units. The persistence of high volatility in the market tends to trigger financial crashes and crisis. The broad objective of this paper, therefore, is to examine the short- and long-run relationships among crude oil price, foreign exchange rate, foreign remittance, interest rate and stock market performance the Inter-national Energy Agency (IEA) projects that oil will supply 30%of the world's energy mix in 2030 (IEA, 2017). The risk and uncertainties associated with oil price unpredictability also upset investor's portfolios, mainly portfolio managers pursuing to make best portfolio allocations. The theoretical underpinning for the relationship between oil price and stock returns reflects that oil prices can directly affect stock market by impacting future cash flows or indirectly through an impact on the interest rate used to discount future cash flows (Salisu and Ndoko, 2018). The literature widely discussed that a higher oil price causes a dulling effect on the stock market indexes by lowering the likely growth rate of economic activities, increasing input price, reducing the firms' revenue, and increasing the general price level. Moreover, the uncertainty, coupled with the high-risk premium associated with the higher oil price, also causes the stock price to fall.

As the positive relationship between investment and economic development is well established, it therefore becomes expedient for any economy that wishes to grow to pay proper attention to changes in interest rate. Nigeria being a country in dire need of development cannot overlook the important role interest rate could play in this direction. However, the role of remittances in financial development has not been examined extensively, particularly for Nigeria. Researchers tried to explore fresh insight, focusing nexus between remittances-led financial developments. However, any conclusive statement yet to establish due to remittances' impact varies with the state of the economy and the application of econometrical assessment.

The following research questions is meant to be investigated with content analysis of past empirical studies, viz, What is the effect of Upstream Oil Royalty Revenue(UORR) on Stock market Financial Development in Nigeria; What is the effect of Exchange Rate risk and Stock Exchange Performance in the past literatures; What is the effect of financial liquidity risk (diaspora cash Remittances) on Stock market Financial Development in the past literatures; What is the effect of Interest Rate risk on Stock market Financial Development in Nigeria. Research Objectives: To x-ray the effect of Upstream Oil Royalty Revenue(UORR) on Stock market Financial Development in Nigeria; To theoretically investigate the effect of Exchange Rate risk

and Stock Market Financial development in the past literatures; To highlight the effect of financial liquidity risk (diaspora cash Remittances) on Stock market Financial Development in the past literatures; To measure the effect of Interest Rate risk on Stock market Financial Development in the past literatures.

Evidence from the world and evidence from Nigeria shows that the nexus among oil revenue, foreign exchange rate, foreign remittance, interest rate and stock market development is documented and got mixed (positive and negative results) which are confirmed in literatures. However, not many studies have been done on the relationship between upstream oil royalty revenue and stock market in general in Nigeria. Although the relationship between these highlighted variables has been give critical assessment in the literature in the developed economies, this research will give in-depth, holistic and re-examination of this nexus among Stock Exchange Performance with certain innovative contributions. But still there is no result found which determinant is dominating in stock markets. Furthermore, studies conducted in Western and some Asian countries cannot be generalized and may not necessarily have any application in context of emerging countries like Nigeria. The reason for the this research is to fully fill the gap of required research area on the relationship of determinants of stock market development with regards to Nigeria.

The increase in foreign direct investment and portfolio investment resulting from this growing interest constitutes an important contribution to the development of the region's sector and economy as a whole financial international and institutional variables and remittances among the systematic risk factors. The likely effect of oil shocks on real economic activity has stimulated the interest of researchers in theoretically exploring its linkage with stock market performance. Understanding the relationship between crude oil price, exchange rate, diaspora cash remittance, interest rate and the stock market financial development can help investors understand how changes may impact their investments. They can also be better prepared to make better financial decisions.

Conclusion and recommendation

The paper assessed past literatures on the dependence of stock market financial development on upstream oil royalty revenue account and systematic risk factors and evaluating the relevance of Dutch Disease theory and capital asset pricing model. Theoretical approach supports the role of oil royalty revenue vis-à-vis oil price volatility, foreign exchange rate risk, financial liquidity risk and interest rate risk in determining the performance and financial development of stock market. It is well documented in research that stock prices react to information on oil revenue, crude oil production, monetary policy interest rate, foreign exchange rate uncertainty and diaspora cash remittances. Traditional valuation of stock is based on capital asset pricing model but the modern relevance is in doubt due to anomalous performance of investors and behavioural sentiments.

Stock markets of emerging economies over the past few decades have witnessed remarkable growth as indicated by the value and volume of trade in the markets along with the level of capital inflows from developed markets, thereby providing numerous opportunities for investments. The development of the stock market is vital as it provides more opportunities for greater mobilization of funds from with and diaspora remittances and better efficiency in resource allocation.

Nevertheless, investment returns in the stock market of developing economies continue to be more reactive to changes in economic fundamentals due to their fragile and volatile nature. This makes them even more unpredictable and unstable unlike the stock markets of developed economies, which are known to be more stable. Stock market financial development is not symptomatic of Dutch Diseases based on the fact that Oil-induced Dutch Disease assumes an oil sector which largely contributes to the economy while so many vital systematic risk factors affects stock market development. Optimistically this study along with other previous and future studies will increase the knowledge about Dutch Disease and will contribute to lessen the harmful effects that Dutch Disease causes. In spite of the common perception that oil is extremely important for financial and economic dynamics, there is, unexpectedly, a dearth of research on how oil revenue and prices influence stock market financial development.

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