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DETERMINANTS OF ILLICIT FINANCIAL FLOWS IN KENYA

FAITH NZILANI KASIMU

MDF/59175/2019

**A RESEARCH THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS OF THE MASTER OF SCIENCE IN DEVELOPMENT FINANCE
AT STRATHMORE UNIVERSITY**



STRATHMORE BUSINESS SCHOOL

STRATHMORE UNIVERSITY

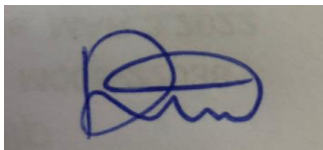
NAIROBI, KENYA

AUGUST, 2022

DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other university. To the best of my knowledge and belief, the dissertation contains no material previously published or written by another person except where due reference is made in the dissertation itself.

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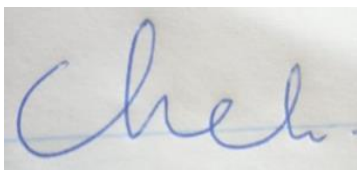
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FAITH NZILANI KASIMU

Date: 29/08/2022

Declaration by the Supervisor:

This dissertation has been submitted for examination with my approval as the university supervisor.



Signature

Date: 29/08/2022

DR. CHARLES WEDA
LECTURER, STRATHMORE BUSINESS SCHOOL

DEDICATION

In memory of my late brother Justin Kasimu who never saw this milestone for his moral support, encouragement and for pushing me to get started.



ACKNOWLEDGEMENT

First, I would like to earnestly thank God for giving me good health and a sound mind to undertake this research.

Secondly, I wish to express my deepest appreciation to my supervisor Dr. Charles Weda for his direction, fortitude and valuable insight without which this work would not have been possible.

Thirdly, I would like to sincerely thank my siblings for their tremendous support during the entire research period.



ABSTRACT

Illicit financial flows remain a key obstacle to Africa's attainment of the 2030 Agenda and Agenda 2063. Given the multidimensional and transnational nature of IFFs, IFFs have attracted attention globally and are now at the forefront of the international development agenda. Agenda 2030 of sustainable development identifies reduction of IFFs as a top priority in building peaceful societies all around the world. As reflected in Target 16.4 of the SDGs, combating illicit financial flows is a critical element in the global effort in promoting peace, justice and strong institutions. The target aims to significantly reduce IFFs and arm flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime by 2030. The ability to attain the SDGs remains fragile when undermined by IFFs. In light of this, the study sought to examine the determinants of illicit financial flows in Kenya. The independent variables were corruption, political risks, external debt and exchange rate. Inflation and interest rate were used as control variables. Illicit financial flows was the dependent variable which was the core focus of the study. Secondary data was collected for 19 years (January 2003 to December 2020) on a quarterly basis. A descriptive correlational design was used in the study. A time series model was used in analyzing the variables. VECM findings established that corruption lagged for quarter one, two and four had a positive and significant effect on illicit financial flows in Kenya. Political risks had no effect on illicit financial flows in Kenya. External debt lagged in the second, third and fourth quarter had negative and significant effect on illicit financial flows. Lagged exchange rate for quarter one, two and four had a positive and significant effect on illicit financial flows. The study recommends that government should enforce management practices that would deter corrupt practices and prudent financial management guidelines that would enhance management of external debt to curtail odds of illicit financial flows.

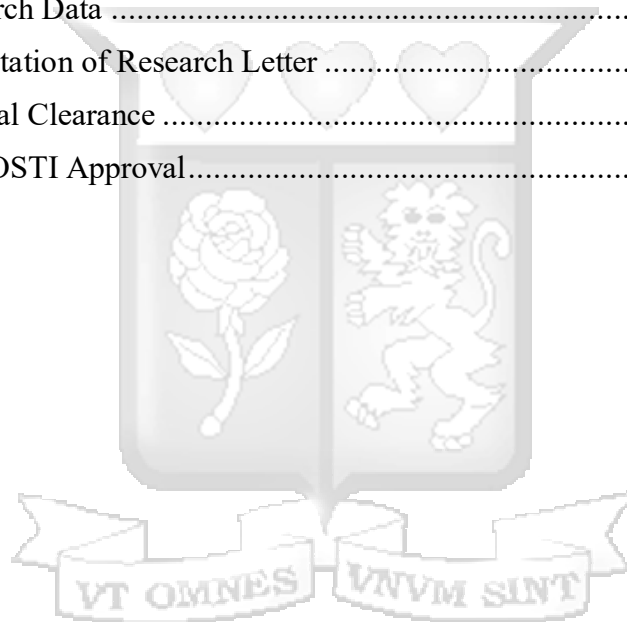
Key words: Illicit Financial Flows, Corruption, Political Risks, External Debt, Exchange Rate

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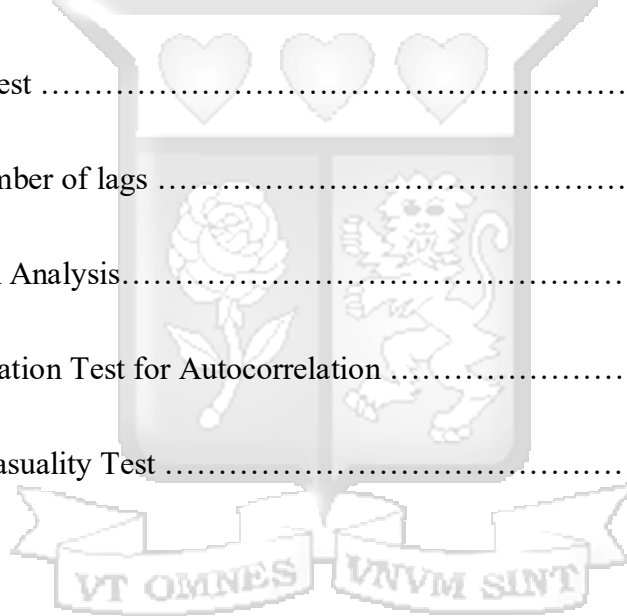
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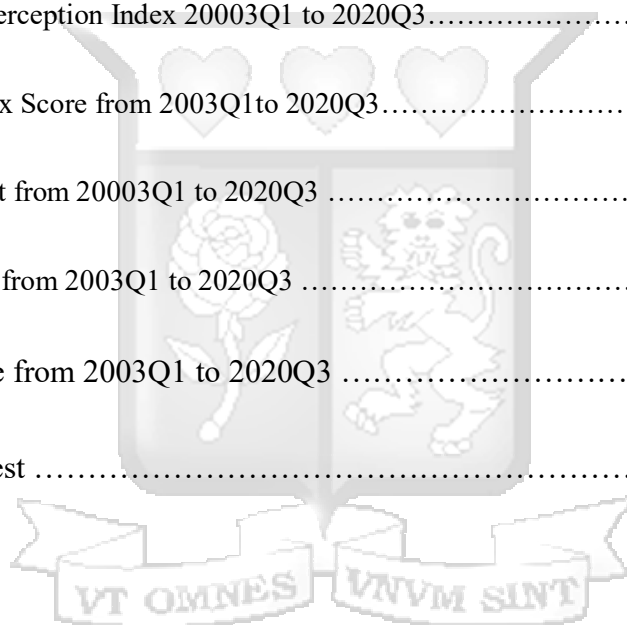
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DEFINITION OF TERMS

Illicit Financial Flows – Refers to money illegally acquired, transferred, or used across borders (Global Financial Integrity, 2013)

Corruption – Is the abuse of entrusted power for private gain (Transparency International, 2020).

Corruption Perception Index score – Is an aggregated perception-based dataset which gives each assessed country a score between 0 being perceived as low levels corruption and 100 being perceived as highly corrupt (Transparency International).

Bribery - Is a form of corruption that generates substantial amounts of proceeds of crime which normally needs to be laundered so as to enter into the financial system (Trace International, 2014)

Governance - Refers to the structures and processes that have been designed to ensure there is accountability, transparency, responsiveness, rule of law, stability, equity, inclusion, empowerment and broad-based participation (UNESCO, 2008).

Political Instability - Refers to the propensity of a government collapse either due to conflicts or rampant competition between various political parties (World Bank, 2014).

External Debt – This refers to a part of the total cumulative debt that a country owes to creditors outside the country (World Bank).

Exchange Rate - refers to the local currency units relative to the U.S dollar and is calculated as an annual average based on monthly averages (World Bank).

LIST OF ABBREVIATIONS AND ACRONYMS

AIC	Akaike information criterion
AML	Anti-Money Laundering
CIAT	Inter-American Center of Tax Administrations
CPI	Corruption Perception Index
CBK	Central Bank of Kenya
DRM	Domestic Resource Mobilization
EACC	Ethics and Anti – Corruption Commission
FATF	Financial Action Task Force
FPE	Final prediction error
GFI	Global Financial Integrity
GDP	Gross Domestic Product
IFFs	Illicit Financial Flows
HQ	Hannan-Quinn information criterion
KNBS	Kenya National Bureau of Statistics
LR	Sequential likelihood-ratio
ODA	Official Development Assistance
SC	Schwarz information criterion
SDGs	Sustainable Development Goals
SSA	Sub-Sahara Africa
UNCTAD	United Nations Conference on Trade Development
VECM	Vector Error Correction Model

CHAPTER ONE: INTRODUCTION

1.1. Background of the study

With the rapid advance of globalization, the growing ease with which individuals and companies can trade and transact across borders, illicit financial flows (IFFs) have drawn attention to national and regional governments and is now at the forefront of the international development agenda (GFI, 2013). Countries have taken stern action and implemented a set of guidelines in line with legal and regulatory requirements to curb IFFs such as strengthening anti-money laundering rules, enforcing greater transparency of beneficial ownership, supporting efforts to track, free and recover stolen assets (GFI, 2019). In addition, countries have also committed to the automatic exchange of information to tackle tax evasion and implemented the Financial Action Task Force guidelines (FATF, 2021).

Billions of dollars of illicit financial flows are generated each year through organized crimes, illegal trade practices, trading in illegal goods and through illegal tax schemes (OECD, 2014). These proceeds are often channeled abroad to safe havens or laundered and reinvested in legal markets (UNODC, 2020). For each dollar that's illegally transferred, approximately 20% would have been realized as tax revenue on imports, exports and or corporate income tax. Jointly, for developing countries, these outflows often represent lost revenue which would otherwise have been collected and used to finance sustainable development (GFI, 2013). This drains public resources and undermines countries efforts to mobilize domestic resources thereby undermining countries capacity to meet and attain the sustainable development goals by 2030 (Tobias, 2020).

Effective domestic resource mobilization (DRM) is a key source of sustainable development finance as it ensures that a country is able to raise and spend its own resources to provide services for its people. However, effective DRM continues to be hampered by a number of challenges key among them being illicit financial flows (African Union, 2019). Illegal transfer of money from developing countries and particularly from Africa countries undermines sustainable development as it reduces the financial resources available for provision of critical public services (UNCTAD, 2020). IFFs undermines a country's capacity to provide basic essential services to its citizens thereby impacting on the ability to build proper infrastructure which directly undermines growth and discourages investors which in turn affects job creation and weakens trust between the state and its citizens (African Union, 2019).

In 2015, the African Union flagged off Agenda 2063 to act as roadmap for transformation of the African continent in the next 50 years. The agenda prominently calls to action a number of issues that require prompt action to be taken for the vision to be realized. Some of the key issues listed include the need to strengthen domestic resource mobilization, building of continental capital markets and financial institutions, and reversal of illicit flows of capital from the continent (African Union, 2015). The ability of the African continent to mobilize financial resources is a strong predictor of its capacity to achieve the goals spelt out in the African Union Agenda 2063 and in the Agenda 2030 (UNODC & UNCTAD, 2020). Agenda 2030 calls for increased mobilization of financial resources as means to implement and enforce the agenda and continually calls for an increase in investment (UN, 2015). Further, the agenda contains a target for strengthened domestic resource mobilization and increased capacity for revenue collection by governments (African Union, 2015).

Illicit financial flows are a key obstacle in the attainment of the Sustainable Development Goals. Goal 16 of the 2030 SDGs addresses corruption and target 16.4 aims at reducing IFFs and arms flows while strengthening the recovery and return of all stolen assets and combating all kinds of organized crimes. Attainment of the SDGs requires a considerable amount of resources that can't be managed through public finance. If governments manage to combat IFFs and recover stolen assets, this will present an opportunity to unlock finances needed to bridge the financial gap that currently exists and will contribute towards the attainment of SDGs. Additionally, combating illicit financial flows is a crucial component of tackling crime, corruption, and violent extremism that hinders economic growth and development. In 2020, Global Financial Integrity estimated that Africa will incur a loss of 88.6 billion dollars annually through illicit financial flows. According to UNCTAD, Africa's SDG financing gap is estimated to be 200 billion dollars annually. Curbing illicit financial flows of 88.6 billion dollars will reduce the financing gap by approximately 44.3%.

IFFs have a negative impact on a country's economic growth. Countries that have experienced massive outflow of capital normally lag behind in terms of economic growth and human capital development. By concentrating wealth to a few elite groups, IFFs hamper the provision of basic necessities, social goods and services that are key for human survival and development by depleting the financial resources that would have been dedicated to delivery of these services (Ndikumana., 2015). IFFs lead to a shortfall in capital accumulation which in turn leads to a reduction in domestic investments. This in turn leads to a decrease in the level of capital build up therefore impacting on economic growth in the long run. Tax revenues decrease by a

significant amount affecting the tax base hence affecting the ability of governments to service debt which may negatively affect the governments creditworthiness (Ndikumana & Boyce 2008). IFFs negatively impacts on the country's ability to implement and achieve the sustainable development goals, and on inclusive growth for eradication and alleviation of poverty (Rahman, Mustafa, & Turpin, Determining illicit financial outflows from sixty developing countries, 2019). If African countries would have been able to retain and invest the money that has been lost through IFFs over the years, the GDP growth rate in nearly all African countries would have been substantially higher (Ndikumana, 2015).

Latin American and Caribbean countries account for a significant share of trade-based illicit financial flows and are estimated to lose US \$43 billion annually to global cross-border tax abuse (CIAT, 2021). 20% of the IFFs generated from the developing countries between the year 2004 to 2013 were shifted to Latin America and the Caribbean. On average, these IFFs made up 3.6% of the regional GDP totaling \$213 billion in the year 2013 or \$ 1.57 trillion accumulated over the period 2004 to 2013. Out of the Latin American countries, Mexico, Brazil and Costa Rica are estimated to have higher capital outflows due to over-invoicing of imports and under invoicing of exports. For Latin America in particular, the total illicit financial outflows exceeded \$97 billion during the period 2004 to 2013 (Podesta, Hanni, & Martner, 2017). The total outflows in Asia are estimated to have grown between 9% and 9.8% annually in the decade to 2014 reaching \$ 388 billion in 2014. Likewise, the inflows of IFFs are estimated to have grown at average annual rate of 10.7% to 12.8% a year over the decade, reaching between \$686 billion and over \$1.2 trillion in 2014 (Global Financial Integrity, 2014). Asian nations' average propensity for trade mis invoicing from 2006 to 2015 estimated to be 25.5% (Global Financial Integrity, 2019).

Africa is estimated to have exported an aggregate of \$1.3 trillion of IFFs over the period ranging from 1980 to 2018. In the 2000's, IFFs saw a notable increment in response to the increase in trade activities from the African region. In spite of a notable dip in IFFs during the financial crisis in 2008, the aggregate IFFs have remained significantly high and reached a peak of \$ 114.5 billion in the year 2012. South Africa, Democratic Republic of Congo, Ethiopia and Nigeria are the top 4 emitters of IFFs in Africa and are estimated to have emitted over 50% of the total IFFs from the African continent. Out of the top ten countries with significantly high levels of IFFs, nine of them attribute a huge amount of total exports to natural resources for instance the mining products in South Africa, the Democratic Republic of the Congo,

Botswana, and Zambia, and oil and gas in Nigeria, the Republic of the Congo, Angola, Sudan, and Cameroon (Signé, Sow, & Madden, 2020). Countries endowed with natural resources are presented with opportunities for expansion of the volume of trade which correlates to the volume of IFFs. According to UNCTAD (2016), extractive industries are especially prone to IFFs.

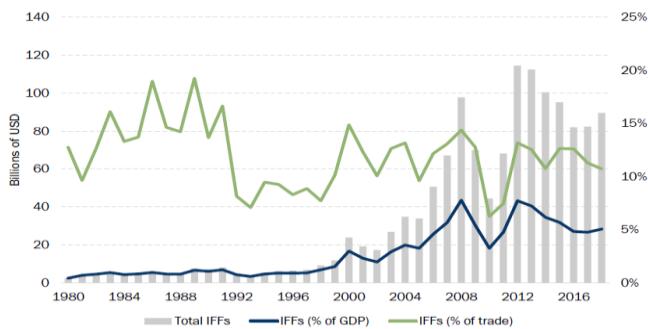


Figure 1:1 Evolution of cumulative IFFs from Africa.

Source: IMF

The cumulative outflow of capital from 33 Sub-Saharan African countries was \$814.2 billion incurred over the period 1970 and 2010. Between the year 2005 and 2010, these 33 countries incurred a loss of \$202.4 billion. Oil exporting countries experienced a rapid capital outflow shooting to a ten-year total of \$325 between 2000 and 2010 making 43% of the aggregate, up from \$64 billion in the 1990s and \$133 billion in the 1980s. Nigeria had the highest cumulative capital outflow amounting to \$311 billion, Angola the second highest with \$84 billion, and Côte d'Ivoire with \$56 billion. The stock of capital flight inclusive of earnings on compound interest was \$1.06 trillion by 2010. This significantly superseded the cumulated GDP of these countries of \$1.05 trillion in 2010. In addition, it surpassed the \$188.6 billion of external debt owed by these countries making them net creditors to other countries in the world. If these countries were able to recover only 18% of the capital they had lost in undocumented outflows, they would be debt free (Boyce & Ndikumana, 2012).

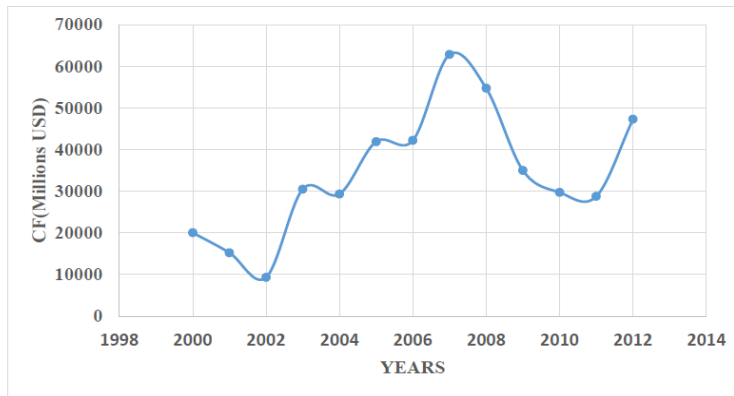


Figure 1:2 Sub-Saharan Africa: Trends in Illicit Flows (2000-2012)

The total capital flight from the East African Community was \$124.6 billion in 2015. In Uganda the total outflow was \$23.3 billion which represented 83.7% of GDP, Kenya lost \$29.4 billion which represented 30% of GDP, Tanzania incurred a loss of \$41.2 billion representing 63% of GDP, Burundi lost \$5.8 billion which was 213.7% of GDP while Rwanda lost approximately \$24.9 billion which was 181.8% of the total GDP (Leonce & Boyce, 2018).

Kenyan has made significant strides in its fight against IFFs over the years. The Central Bank of Kenya has enacted anti-money laundering and counter-terrorist financing (AML/CFT) rules. The Proceeds of Crime and Anti-Money Laundering (Amendment) Act 2017, which establishes sanctions for economic crimes and methods to identify, trace, block, recover, and seize crime proceeds supports these rules. The CBK established the Assets and Recovery Agency, which oversees all cases involving the recovery of criminal proceeds. Further to the legal and administrative frameworks necessary to carry out its mandate, the Kenya Revenue Authority (KRA) is backed by regulatory frameworks dedicated to combating IFFs. KRA's Anti-corruption Policy, the Tax Amnesty of Foreign Income Policy, which provides tax amnesty on voluntary declaration of taxable income received outside Kenya, are part of the policy frameworks that have been enacted to combat IFFs (Mithia & Kosgey, 2022).

Kenya's financial sector remains vulnerable to IFFs in spite of the massive institutional efforts to combat IFFs in Kenya due to the country's strategic location in East Africa attracting investors with all sorts of intentions, weak inter-agency cooperation between financial sector regulators, law enforcement agencies and financial institutions, and the existence of weak law enforcement mechanisms (Barasa, 2018). Kenya is estimated to have lost more than \$10.6 billion in IFFs since 1970. Kenya witnessed an increase in losses incurred as a result of IFFs between the period 2011 and 2018. In the year 2017, Kenya incurred a loss of 240 billion

through illicit financial flows as compared to the 160 billion loss incurred in 2011 (Wanjau & Tobias, 2020). In 2015, Kenya incurred a capital outflow loss equivalent to 30% of the GDP (Leonce & Boyce, 2018). In 2021, Kenya was classified as a major money laundering jurisdiction by the US government (Rudich, 2021). In 2020, Kenya was found to be extremely secretive and was ranked 24 out of 133 countries (Financial Secrecy, 2020). Financial secrecy creates an enabling environment for IFFs and fuels corruption, tax evasion and tax avoidance which leads to economic and financial instability.

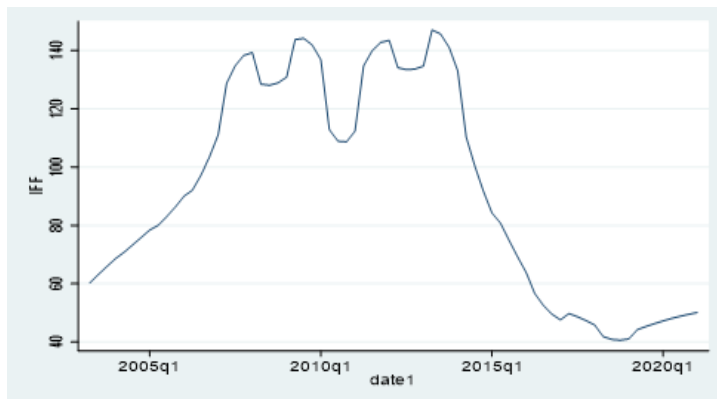


Figure 1:3 Trend of Illicit Financial flows in Kenya 2003 to 2020

Source: Authors Own Computation

Illicit financial flows rose significantly between the year from 2003 to 2007. An examination of electioneering periods indicates that there was a positive and exponential trend that was reversed in 2010. From 2015 the amount of illicit financial flows recorded inverse growth though it experienced a slight growth around 2017. This can be attributed to the massive government efforts through enactment of regulations and institutions to curb IFFs. Since 2020 the growth has been positive and this could be attributed to the funds used in the electioneering periods to fund campaigns whose legitimacy cannot be upheld.

1.2 Statement of the Problem

Each year, Kenya loses billions of monies through corrupt officials, individuals and multinational corporations that transfer illegally earned funds to offshore accounts and tax havens in other jurisdictions. This robs the country of much needed revenue stifling development in Kenya. Kenya is estimated to have lost more than \$10.6 billion in IFFs since 1970. Kenya witnessed a spike in losses incurred as a result of IFFs between the period 2011 and 2018. In the year 2017, Kenya incurred a loss of 240 billion through illicit financial flows as compared to the 160 billion loss incurred in 2011 (Wanjau & Tobias, 2020). In 2015, Kenya incurred a capital outflow loss equivalent to 30% of the GDP (Leonce & Boyce, 2018). In 2020,

approximately 384.3 billion shillings (US\$3.5 billion) was laundered through the Kenyan economy (Global Financial Integrity, 2020). Kenya was found to be extremely secretive and was ranked 24 out of 133 countries (Financial Secrecy, 2020). Financial secrecy creates an enabling environment for IFFs and fuels corruption, tax evasion and tax avoidance which leads to economic and financial instability.

Kenya is faced with key development challenges such a lack of quality healthcare, child mortality rates, poor education, poor wages and remuneration despite the huge sums of money that are lost each year through illegal means. IFFs in Kenya hinders government's efforts in domestic resource mobilization and this forces the government to be rely on high levels of external debt borrowing, loans and foreign aid to finance government development projects which leads to government indebtedness. The total debt service to revenues increased to 57% in 2019 from 17% in 2012 due to increased debt stock (KIPPRA 2021) despite the huge sums of money that are reported to be lost through illicit means.

Most of the present research in Kenya on illicit financial flows has not focused on the determinants or factors that drive illicit financial flows. Letete & Sarr (2017) examined illicit financial flows and political institutions in Kenya. This study investigated the influence of arbitrary executive powers on illicit capital flows from Kenya and did not aim to provide a comprehensive view of the determinants of illicit financial flows from Kenya. Mbogo (2018) examined the role of anti-corruption laws and institutions in curbing illicit financial flows from Kenya. This study focused on the different laws and institutions that have been enacted to curb IFFs in Kenya and did not examine the determinants of illicit financial flows in Kenya. Tobias (2020) investigated the relationship between illicit financial flows and economic growth in Kenya. This study however did not dive into the factors that influence illicit financial flows in Kenya. Abdillahi (2018) examined the nexus between illicit financial flows and economic development in Kenya. The study investigated the effects of illicit financial flows and did not examine the factors that drive illicit financial flows in Kenya. Despite the challenges posed by IFFs, its determinants have not attracted adequate attention of researchers in Kenya. This is attested to by the limited literature on this important subject in Kenya. Thus, there is a glaring gap in literature with respect to the determinants of IFFs in Kenya which this study sought to fill. This study therefore sought to examine the determinants of illicit financial flows in Kenya.

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of this study was to examine the determinants of illicit financial flows in Kenya.

1.3.2 Specific Objectives

The specific objectives of the study were:

1. To examine the influence of corruption on illicit financial flows in Kenya
2. To examine the influence of political risks on illicit financial flows in Kenya
3. To investigate the influence of external debt on illicit financial flows in Kenya
4. To examine the influence of exchange rate on illicit financial flows in Kenya

1.4 Research Questions

The following research questions were to be addressed:

1. Does corruption influence illicit financial flows in Kenya?
2. Do political risks influence illicit financial flows in Kenya?
3. Does external debt influence illicit financial flows in Kenya?
4. Does exchange rate influence illicit financial flows in Kenya?

1.5 Scope of the Study

The study looked at the determinants of illicit financial flows in Kenya. The factors considered were corruption, political risks, external debt and exchange rate. Inflation and interest rate were applied as control variables. In particular, under corruption, the study focused on the yearly corruption perception index and computed on a quarterly figure. For political risks, the study considered the yearly polity index score and computed a quarterly figure. The yearly corruption perception index and polity index score was converted into quarterly data through the data spline common approach. Illicit financial flows was the dependent variable. The study was carried out for the last 19 years (2003-2020) on a quarterly basis.

1.6 Significance of the Study

1.6.1 Government

To government and institutions such as the Central Bank and Ethics and Anti-Corruption Commission, the study will inform policies and regulations that govern operations in curbing

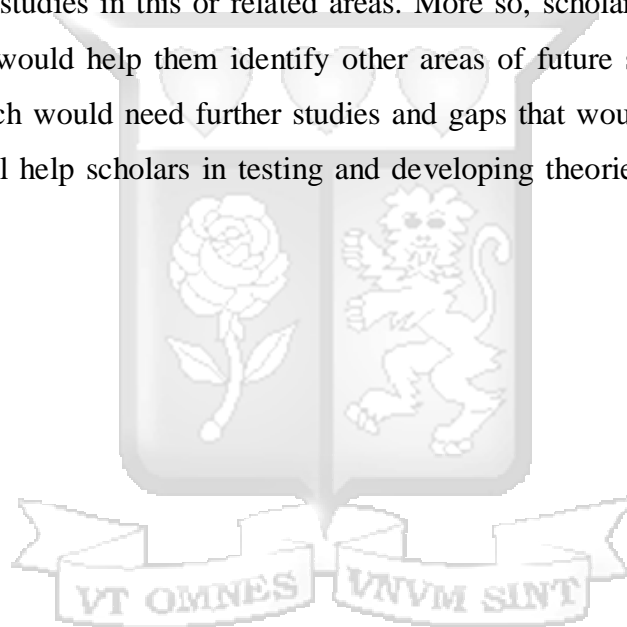
illicit financial flows. The study will provide essential knowledge and be a point of reference for in formulating a regulatory framework for curbing illicit financial flows.

1.6.2 Policy Makers

The study will also guide policymakers in instituting policies and regulations in addressing and curbing illicit financial flows. More specifically, the study will be useful the institutions tasked to curb illicit financial flows in Kenya in designing appropriate response mechanisms for tackling IFFs.

1.6.3 Researchers

The study results will be used as a reference point by academicians, researchers and students who wish to conduct studies in this or related areas. More so, scholars and researchers will benefit as this study would help them identify other areas of future studies through listing associated topics which would need further studies and gaps that would need to be bridged. Further, the study will help scholars in testing and developing theories on fiscal policy and public debt.



CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section shows the theories utilized in the study and a review of previous studies undertaken on illicit financial flows. These include theories reviewed, empirical review, research gaps, a literature summary and the conceptual framework.

2.2 Theoretical review

In this section, a thorough discussion on the work done and the framework for interpreting research findings aimed at overcoming the limitations of prior studies was carried out. The section provides a description of the theories on which the study is anchored-the debt overhang theory and the resource curse theory.

2.2.1 The Debt Overhang Theory

The debt overhang theory was formulated by Myers in the year 1977. Debt overhang occurs when a country's debt level is so huge such that any returns generated by new projects are completely absorbed by the existing debt holders hence investments with a positive NPV do not reduce a country's debt stock (Myers, 1977). The underlying principle of the debt overhang is that there exists a likelihood that in the future, the external debt will be higher than the country's repayment ability and therefore the expected debt servicing expenses will discourage both foreign and local investments.

This theory was first applied in development economics by Krugman (1988) and Sachs (1989) after the occurrence of the Latin America debt crisis in the 1980s. According to Krugman (1988), if a country's external debt is higher than the expected present value of the potential future repayments to its creditors, the country will not be motivated to implement and enforce the necessary macroeconomic changes required to improve its economic growth and to repay its creditors. Krugman (1988) and Sachs (1989) argued that current governments service their external debt by increasing the tax burden for future generations which is a deterrent to investments. Lawanson (2014) used the debt overhang theory in his study on the influence of external debt on capital flight on West African countries. According to Lawanson (2014), debt has a non-linear outcome on growth and there's a threshold beyond which debt contributes negatively to growth. Increased debt burden leads to higher taxes which in turn crowds out public investment and fuels illicit financial flows.

When the level of external debt in a country increases, it diminishes the motivation to save and make investments locally. Domestic investors are concerned that with the huge amounts of external debt, there is a possibility of exchange rate devaluation, fiscal crisis, crowding out of domestic investments and seizure of assets to repay the debt. High levels of external debt incentivize citizens to shift their resources to foreign countries which have lower risks of capital gain loss (Manuel, 1989).

The relevance of this theory in the study is its recognition of the theoretically expected relationship between external debt, exchange rate devaluations and illicit financial flows. The theory relates between external debt, exchange rate and IFFs and therefore provides a basis in testing whether the level of external debt and exchange rate has an influence on illicit financial flows in Kenya.

2.2.2 Resource Curse Theory

The resource curse theory was first formulated in 1993 by Richard M. Auty, a British economist. Often times, countries that are endowed with huge amounts of natural resources are characterized by lagged development and normally encounter high levels of corruption, extreme violence and authoritarian governments. The discovery of natural resources in least developed countries often lead to an outcry by economists. Abundance of natural resources in a country often leads to adverse developmental outcomes such as poor economic outputs, high corruption levels, ineffective governance, political instability and violence. In most of the least developed countries, natural resource endowment is often perceived to be more of a curse than a blessing.

The developmental outputs of countries endowed with natural resources is at the forefront of the international agenda. Diverse views on the underlying principle of the theory have cropped up over the years. Some scholars have argued that the availability of natural resources in a country often creates a Dutch disease where domestic currency appreciates rendering the other sectors less attractive and less competitive. This exerts an inflationary pressure on the economy as natural sectors have the ability to crowd out other industries which negatively affects trade. The negative political outcomes driven by abundance of resources have also gained attention and have been analysed under the rentier-state model. Under the rentier-state model, the underlying principle is that natural resource abundance creates state restricting growth interventions with high levels of rent seeking behaviour coupled by corruption. Rent seeking behaviour and corruption causes negative developmental outcomes and stalls economic growth (John, 2010). The corruption level of a country is positively correlated to the magnitude and

significance of the extractive industry (Hoogstraten, 2015). Ayodeji (2017) used the resource curse theory in his study on the challenges of curbing of illicit financial flows and insecurity in governance in Nigeria.

The theory was relevant in the present study as it highlights how adverse developmental outcomes such as poor economic outputs, high corruption levels, ineffective governance, political instability and violence influence illicit financial flows. This theory relates between political risks, corruption and illicit financial flows and therefore provided a basis for testing whether corruption and political risks have an influence on illicit financial flows in Kenya.

2.3 Empirical review

In the past, studies investigating the determinants of illicit financial flows have been conducted. Some of the studies found out that the prevailing relationship between some selected variables with level of illicit financial flows is positive; others found the relationship to be negative, while others obtained mixed results. This section presents a review of previous studies and their findings.

2.3.1 Corruption and Illicit Financial Flows

Abotsi (2018) explored the influence of governance indicators on illicit financial flows from developing countries. This study used secondary panel data from 139 developing countries and employed multilevel estimation approach. The study findings established that corruption and illicit financial flows had a positive and significant effect. The study called for developing countries to design and implement sound policies, build effective and accountable institutions and control corruption to curb IFFs. A research gap exists as this study focused on governance indicators and did not explore other factors believed to influence illicit financial flows while the present study focuses on corruption, political risks, external debt and exchange rate. Examining more than one independent variable is likely to give as more accurate picture of the drivers of illicit financial flows as opposed to focusing on a single independent variable.

Alemu (2018) examined the effects of corruption control, political stability and tax rate on illicit financial outflows for African countries based on a balanced panel data for 32 countries covering the period 2005 to 2014. The empirical results supported the hypotheses that illicit financial flows reduces with higher corruption control. More specifically, the regression estimate revealed that a unit increase in corruption control reduces illicit financial outflow by US\$ 21 million. The study's main recommendation is for African governments to strengthen

the institutions mandated to fight corruption, tax evasion and to enhance political stability, and good governance structures. A research gap exists as this study did not examine the effects of external debt, exchange rate inflation and interest rates on illicit financial flows.

Anas & Kamal (2013) conducted a study on the determinants of illicit financial flows from MENA region. The study used panel data model covering 16 countries for the period 2000 to 2010. The key variables in the study were GDP, current account balance, corruption and external debt. The study findings established that corruption was a key determinant of illicit financial outflows from MENA region. Although this study is related to the current study MENA countries i.e Algeria, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates and Yemen have macro-economic and political contextual differences from Kenya and therefore the findings cannot be generalized to fit Kenyan context.

In his study, Lin (2018) investigated the relationship between institutional quality and illicit financial flows in developing and developed countries for the period of 2005 to 2014. The study findings established that corruption and IFFs are correlated, confirming the proposition that institutional quality affects illicit financial flows because of poor governance. A research gap exists as this study confined itself to institutional quality and did not explore other factors believed to influence illicit financial flows while the present study focuses on corruption, political risks, external debt and exchange rate. Examining more than one independent variable is likely to give a more accurate picture of the drivers of illicit financial flows in a country as opposed to focusing on a single independent variable.

Orkoh, Claassen & Blaauw (2018) examined the effect of corruption control and political stability on illicit financial outflows in Sub-Saharan Africa. The study used a balanced panel data covering the period 2005 to 2014. The regression estimates revealed that a unit increase in political stability reduces illicit financial outflow due to mis invoicing in merchandise trade by an average of US\$ 44.3 million. This study examined corruption and political stability only and did not explore other factors believed to influence illicit financial flows while the present study focuses on corruption, political risks, external debt and exchange rate. Incorporating more than one independent variable is likely to give a more accurate result as opposed to focusing on a single independent variable.

Ikechi & Onyinyechi (2019) in their study examined the relationship between illicit financial flows and economic growth in Nigeria. The Ordinary Least Square technique was adopted. The

study revealed that illicit that there was a negative relationship between illicit financial flows and corruption in Nigeria. A research gap exists as this study examined illicit financial flows and economic growth while the current study investigated the determinants of illicit financial flows in Kenya.

2.3.2 Political Risks and Illicit Financial Flows

In their study, Macamo & Jalloh (2022) examined illicit financial flows from the natural resource sector in Mozambique with a key focus on the effect of macroeconomic factors. The study used quarterly time series data covering the period 2008 to 2019 and employed the ARDL estimation technique and granger causality test in analyzing the data. The long run results established that political stability reduces the movement of natural resources illicit financial flows from Mozambique. The findings revealed that 1% increase in the political stability index reduces natural resources illicit financial outflows by 3.5%, holding all other factors constant. A gap exists as this study focused on illicit financial flows from the extractives sector only while the current study focuses on the determinants of IFFs from the Kenyan economy as a whole without bias to a particular sector.

In his study, Alemu (2018) examined the effects of corruption control, political stability and tax rate on illicit financial outflows for African countries based on a balanced panel data for 32 countries covering the period 2005 to 2014. The empirical results supported the hypotheses that illicit capital outflow reduces with higher political stability. More specifically, the regression estimate revealed that a unit increase in political stability reduces illicit financial outflow by an average of US\$ 27.5 million. However, a gap exists as the study did not examine the relationship between external debt and exchange rate on illicit financial flows.

Letete & Sarr (2017) examined illicit financial flows and political institutions using unique institutional indices in Kenya. The study findings established that uncontrolled executive power has a positive and statistically significant relationship with capital flight. Weak political institutions are key drivers of illicit financial flows. In Kenya, rent seeking behaviour facilitates corruption and debt fuelled illicit financial flows due to arbitrary executive powers arising from ineffective and weak government institutions. This study investigated the influence of arbitrary executive powers on illicit capital flows from Kenya and did not aim to provide a comprehensive view of the determinants of illicit financial flows from Kenya.

In his study, Lin (2018) conducted an empirical assessment of the direct linkage between institutional quality and illicit financial flows (IFFs) in developing and developed countries for the period of 2005 to 2014. The study findings established that political stability and IFFs are correlated, confirming the proposition that institutional quality affects illicit financial flows because of poor governance. However, a gap exists as the study did not examine the relationship between external debt and exchange rate on illicit financial flows.

Akintonye, Somorin, Ajibade, & Ogunode (2022) examined the relationship between tax havens and illicit financial flow from the African continent using data from 44 African countries covering the period 2005-2014. The results of the study revealed that the absence of political will, weak institutional framework, poor regulatory oversight are the key factors responsible for the continued increase in IFFs from Africa. A research gap exists as this study focused on tax havens while the current study focuses corruption, political risks, external debt and exchange rate.

David & Ampah (2018) in their study examined the effect of macroeconomic volatilities on illicit financial flows for Heavily Indebted Poor Countries using datasets covering the period 1990 to 2012. The study employed Generalized Autoregression Heteroscedasticity model and Panel Autoregressive Distributed Lag model in its estimation. The study findings revealed that a volatile political environment fuels illicit financial outflow. Domestic investors will withdraw their investments and other financial holdings from the domestic economy if they perceived present and future government policies to be volatile. A gap however exists as the study covered the period 1990 to 2012. Since 2012, Kenya has undergone both economic and structural changes and has taken on more debt to finance capital expenditure. Current study covers the period 2003 to 2020 representing a more current and accurate view of Kenya's level of external debt and illicit financial flows.

In his study, Mossadak (2018) examined the determinants of illicit financial flows from Africa covering the period 2004 to 2014 using panel data model. The study findings established that political instability was a key factor contributing to illicit outflows from Africa. Political instability and uncertainty lead to an increase in the level of illicit financial outflows. Although this study was related to the current study, African countries have contextual differences in terms of economic performance, political stability and other macro-economic and structural differences and therefore the findings cannot be generalized to Kenya's current context.

In their study, Orkoh et al (2018) examined the effect of corruption control and political stability on illicit financial outflows in Sub-Saharan Africa. The study used a balanced panel data from the World Bank, United Nations Conference on Trade and Development and Global Financial Integrity on Sub-Saharan African countries covering the period 2005-2014. The regression estimates revealed that a unit increase in corruption control reduces illicit financial outflow due to mis invoicing in merchandise trade by an average of US\$ 20.5 million. A research gap exists as this study did not establish the effect of external debt and exchange rate on illicit financial flows.

Rahman, Mustafa & Turpin (2019) explored the effects of globalization, corruption perception, political stability, macroeconomic vulnerability and gross domestic savings on illicit financial outflows of 60 developing countries for the period 2004 to 2013. The study employed Pedroni's heterogeneous panel data analyses for co-integration. The study findings revealed that improvement in domestic political stability reduces illicit financial outflows. A gap exists because since 2012, Kenya has undergone both economic and structural changes and has taken on more debt to finance capital expenditure. Current study covers the period 2003 to 2020 representing a more current and accurate view of Kenya's level of external debt and illicit financial flows.

2.3.3 External Debt and Illicit Financial Flows

Macamo & Jalloh (2022) investigated illicit financial flows from the natural resource sector in Mozambique with a key focus on the effect of macroeconomic factors. The study used quarterly time series data covering the period 2008 to 2019, and employed the ARDL estimation technique and granger causality test in analyzing the data. The study findings revealed that external debt had a positive influence on the movement of IFFs from the natural resource sector in Mozambique. 1% increase in external debt was found to increase the shares of illicit financial outflows from the natural resource sector by 0.75% in the short run. In addition, granger causality results established a bidirectional effect between illicit financial outflows and external debt. A gap exists as this study focused on illicit financial flows from the extractives sector only while the current study focuses on the determinants of IFFs from the Kenyan economy as a whole without bias to a particular sector.

Lahlou & Anas (2013) examined the determinants of illicit financial flows from MENA region covering 16 countries for the period 2000 to 2010. A number of indicators were used to evaluate the level of illicit financial flows using a panel data model. The study findings

established that external debt and illicit financial flows had a positive and significant relationship. The study revealed that in instances of worsening external debt levels, economic agents normally expect an increase in taxes in the future and this would motivate them to transfer their fund to save havens. Although this study is related to the current study, MENA countries i.e Algeria, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates and Yemen have macro-economic and political contextual differences from Kenya and therefore the findings cannot be generalized to fit Kenyan context.

Mmaduabuchukwu & Ndidamaka (2019) investigates the effects of illicit financial outflows on political stability, debt and nutrition outcome in 17 countries in West Africa and the Sahel regions. The study used secondary data obtained from the Global Financial Intelligence and covered the period 2004 to 2013. The study employed descriptive statistics and panel data analysis. The study findings revealed that illicit financial flows and debt had a negative and significant relationship. A gap exists in as the study did not examine the effects of corruption, external debt and exchange rate on illicit financial flows.

Tarawalie & Jalloh (2021) examined the determinants of capital flight in Sierra Leone utilizing quarterly data spanning over the period 2000 to 2019. The study used the autoregressive distributed lag (ARDL) estimation technique and the granger causality framework. The study findings established that external debt determines capital flight in Sierra Leone. More specifically, the study findings indicated that accumulation of external debt causes an increase in capital flight. In addition, the study revealed that lagged capital flight, corruption, external debt and financial deepening as the main drivers of capital flight on the short run. Although this study was related to the current study, Kenya and Sierra Leone have contextual differences in terms of economic performance, political stability and other macro-economic and structural differences and therefore the findings in Sierra Leone cannot be generalized to Kenyan context.

Amadi et al. (2021) examined the effect of capital flight on the economic growth in Nigeria using secondary data collected from the Central Bank of Nigeria Statistical Bulletin. The study employed the Ordinary Least Squares regression model for the analysis and supplemented it with other tests such as Augmented Dickey Fuller (ADF) unit root test, Auto-Regressive Distributed Lag (ARDL) model, C- integration and Bounds (long-run) tests and Granger Causality tests. The study findings revealed external borrowing had a positive and statistically significant relationship with capital flight. The study established the effect of capital flight on

economic growth while the current study examined the determinants of illicit financial flows in Kenya.

Al-basheer, Al-Fawwaz, & Alawneh (2016) studied the economic determinants of capital flight in Jordan using the multiple linear regression technique over the period 2000 to 2013. According to the study findings, there is a positive significant relationship between external public debt, economic openness, earlier capital flight, taxes and capital flight from Jordan. The study implies that a reduction in external debt level and collaboration at the international front will help in curbing capital flight in Jordan. A research gap exists as the study did not examine the influence of corruption and political risks on illicit financial flows.

Forson, Obeng, & Brafu-Insaidoo (2017) examined the short run and long run determinants of capital flight in Ghana for the period 1986 to 2015. The Autoregressive Distributed Lag (ARDL) estimation technique was used. The findings of the study established that increase in external debt to GDP leads to an increase in capital flight in Ghana, both in the short and long run. The study also revealed that lagged external debt to GDP had negative effects in the short run. A research gap exists as the study focused on capital flight and not all capital flight equates to illicit financial flows.

Anetor (2019) examined the macroeconomic determinants of capital flight from Sub Saharan African countries over the period 1981 to 2015. The study employed the autoregressive distributed lag model technique and used secondary data obtained from the World Bank Development Indicators. The study findings established that external debt had a significant positive relationship with capital flight. A research gap exists as the study did not address the influence of corruption and political risks on illicit financial flows.

2.3.4 Exchange Rate and Illicit Financial Flows

Macamo & Jalloh (2022) in their study examined illicit financial flows emanating from the natural resource sector in Mozambique with a key focus on the influence of macroeconomic factors. The study used quarterly time series data for the period 2008 to 2019. The ARDL estimation technique and granger causality test was used to analyze data. The results of the study established that exchange rate and illicit financial flows have a positive and significant effect. A gap exists as this study focused on illicit financial flows from the extractives sector only while the current study focused on the determinants of IFFs from the Kenyan economy as a whole without bias to a particular sector.

Orkoh, Claassen, & Blaauw (2018) examined the effect of corruption control and political stability on illicit financial outflows in Sub-Saharan Africa. The study used a balanced panel data covering the period 2005-2014. The regression model revealed that a unit increase in political stability and corruption control reduce illicit financial flows. The study also revealed that high exchange rates reduce illicit financial outflows. A research gap exists as the study did not examine the effect on external debt and exchange rate on illicit financial flows.

Otieno, Mose, & Thomi (2022) investigated the influence of exchange rate differential on capital flight in East African economies. The study used panel secondary data covering the period 1988 to 2018. The investment creation theorem was the guiding theory for the study. Ordinary least squares estimation technique was used to analyze the relationship between the study variables. The study findings revealed that exchange rate positively influences capital outflow in the East African economies. This positive effect of currency change on capital outflows implies that capital outflows are sensitive to currency depreciation. A research gap exists as this study focused only on exchange rate differential and did not address the influence of corruption, political risks and external debt on capital flight.

Brown, Elvis, & Chioma (2022) investigated the effects of capital flight on economic development in Nigeria for the period 1980 to 2020. Time series data for the period 1980 to 2022 was collected from the Central Bank of Nigeria and Statistical Bulletin 2020 for each of the variable in the model. The ARDL estimation technique was used to examine both the short and long run relationship between the variables. ADF tests were used to test for stationery of the time series data while posttest analysis was carried out using serial autocorrelation, heteroskedasticity and CUSUM tests. A research gap exists as the study examined the effects of capital flight on economic growth while the current study focused on the determinants of illicit financial flows.

In his study, Eshete (2018) investigated the political economy of capital flight in the East African Community using the static panel data model of fixed effects and random effects. The study findings established that foreign exchange rate and capital flight have a positive and statistically significant relationship. An increase in exchange rates influence capital flight positively because domestic currency will be undervalued and this incentivizes domestic investors to look for foreign assets. Domestic capital owners transfer their assets from the domestic markets to foreign asset claims when domestic currency is devalued therefore leading

to capital flight. A research gap exists as this study focused on the political economy on capital flight while the current study examined the determinants of illicit financial flows.

Auzairy, Fun, Ching, Li, & Fung (2016) examined the relationship between macroeconomic fundamentals and capital flight in Malaysia. The study used the co-integration and vector auto-regression models covering a sample period between 1992 to 2012. The macroeconomic fundamentals in study were exchange rates, GDP, consumer price index and interest rates. The study established that in the long run, macroeconomic fundamentals and capital are associated. Exchange rate variations significantly determine capital flight movement. A research gap exists as the study did not examine the effects of corruption and political risks.

Salandy & Henry (2018) investigated the determinants of capital flight from Trinidad and Tobago for the period 1971 to 2011. The Ordinary Least Squares and Generalized Method of Moments techniques of estimation were used. The study findings established that the key sources of capital flight are lagged external debt, GDP growth, interest rate differentials and excess liquidity. A research gap exists as Trinidad and Tobago, is a small but high-income country with a population of 1.3 million people and rich in natural resources and has one of the highest GNI per capita in Latin America and the Caribbean and therefore the findings cannot be generalized to fit Kenyan context whose context is totally different from Trinidad and Tobago.

2.3.5 Interest Rate and Illicit Financial Flows

Oluwaseyi (2017) investigated the determinants of capital flight in Nigeria. The study used vector error correction mechanism (VECM) and granger causality test on capital flight, political instability, interest rates differential, and economic growth for the period 1980 to 2014. The study finds revealed that capital flight is mainly caused by interest rate disparity. A research gap exists as the study focused on determinants of capital flight. Not all capital flight is illicit. The current study focused on determinants of illicit financial flows.

Forson, Obeng, and Brafu-Insaidoo (2017) examined the determinant of capital flight in Ghana for the period 1986-2015 using ARDL model. The study established that the high ratio of national real interest rate as it relates to overseas interest rate, high-quality governance, growth rate of GDP reduces capital flight substantially. Geda & Yimer (2016) examined determinants of capital flight from Ethiopia focusing on economic, institutional, and political determinants. The study findings revealed that interest rate differentials is an important determinants of

capital flight from Ethiopia. A research gap exists as the study focused on determinants of capital flight. Not all capital flight is illicit. The current study focused on determinants of illicit financial flows

Forson & Brafu-Insaidoo (2017) in their study investigated the short-run and long-run determinants of capital flight in Ghana using the autoregressive distributed lag (ARDL) estimation technique. The long-run and short-run results show that higher domestic real interest rate over foreign interest rate reduce capital flight. A research gap exists as the study focused on determinants of capital flight. Not all capital flight is illicit. The current study focused on determinants of illicit financial flows

2.3.6 Inflation and Illicit Financial Flows

In their study Signé, Sow, & Madden (2020) assessed the drivers and destinations of illicit financial flows from Africa covering the 1980 to 2018. The study used trade misinvoicing and balance-of-payments discrepancies to calculate the level of illicit financial flows. The study revealed that higher inflation lead to higher illicit financial outflows and calls for countries to maintain relatively more stable or favorable fiscal environments.

The study investigated illicit financial flows from the natural resource sector in Mozambique with a key focus on the effect of macroeconomic factors. The study used quarterly time series data covering the period 2008 to 2019, and employed the ARDL estimation technique and granger causality test in analyzing the data. The study findings revealed that in the short run, inflation had a positive effect on IFFs from the natural resource sector in Mozambique. A gap exists as this study focused on illicit financial flows from the extractives sector only while the current study focuses on the determinants of IFFs from the Kenyan economy as a whole without bias to a particular sector.

Orkoh, Claassen, & Blaauw (2018) conducted a study the effect of corruption control and political stability on illicit financial outflows in Sub-Saharan Africa. The study used a balanced panel data from the World Bank, UNCTAD and GFI covering the period covering the period 2005-2014. The regression model revealed that a unit increase in political stability and corruption control reduce illicit financial flows. The study also revealed that an increase in inflation increases illicit financial outflow. A research gap exists as the study did not examine the effects of external debt and exchange rate on illicit financial flows.

Anetor (2019) examined the macroeconomic determinants of capital flight from the Sub-Saharan African (SSA) countries between the period 1981-2015. The study used secondary data obtained from the World Bank Development Indicators (WDI) and applied the autoregressive distributed lag (ARDL) model technique. The results of the study revealed that inflation had no significant influence on capital flight in the SSA region. A research gap exists as the study did not examine influence of corruption and political risks on illicit financial flows.

Osaretin & Efe (2020) investigated on the determinant of capital flight in Nigeria. The study employed the autoregressive distributed lag (ARDL) model technique. the study revealed that, inflation, constituted one of the determinants of Nigeria’s capital flight. Ahmad & Sahto (2016) explored the association amidst capital flight in Pakistan and its determinants for the period 1971 to 2011. The study demonstrated that there existed a positive relationship between capital flight and inflation in the long run whereas no relationship was found in the short run. A research gap exists as the study focused on determinants of capital flight. Not all capital flight is illicit. The current study focused on determinants of illicit financial flows.

2.3 Summary of Literature Review and Research Gaps

Author	Focus on previous research	Research gap
Mbogo (2018)	The role of anti-corruption laws and institutions in curbing illicit financial flows from Kenya.	A gap exists as this study focused on the different laws and institutions that have been enacted to curb IFFs in Kenya and did not examine the determinants of illicit financial flows in Kenya
Letete & Sarr (2017)	Political institutions and IFFs in Kenya	The study investigated the influence of arbitrary executive powers on IFFs from Kenya and did not aim to examine the determinants of IFFs from Kenya.
Abdillahi (2018)	The nexus between illicit financial flows and economic development in Kenya.	A gap exists as this study focused on the effects of illicit financial flows and did not examine the determinants of illicit financial flows in Kenya.
Macamo & Jalloh (2022)	Illicit financial flows from the extractives sector in Mozambique	A gap exists as this study focused on illicit financial flows from the extractives sector only while the current study focuses on the determinants of IFFs from the Kenyan economy as a whole without bias to a particular sector.
Akintonye, Somorin, Ajibade & Ogunode (2022)	Relationship between tax havens and illicit financial from developing countries	A research gap exists as this study focused on tax havens while the current study focuses corruption, political risks, external debt and exchange rate.

Anas& Kamal (2018)	Determinants of illicit financial flows from MENA region.	Although this study is related to the current study, MENA countries i.e Algeria, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates and Yemen have macro-economic and political contextual differences from Kenya and therefore the findings cannot be generalized to fit Kenyan context.
Abotsi (2018)	Influence of governance indicators on illicit financial flows from developing countries	The study investigated the influence of corruption on illicit financial flows. The current study focuses on more than one independent variable; political risks, external debt and exchange rate. Examining more than one independent variable is likely to give as more accurate result as opposed to focusing on a single independent variable
Mossadak (2018)	Determinants of illicit financial flows from Africa	African countries have contextual differences in terms of economic performance, political stability and other macro-economic and structural differences and therefore the finding cannot be generalized to the Kenyan context. Current study examines the determinants of IFFs in Kenya
Otieno, Mose & Thomi (2022)	Influence of exchange rate differential on capital flight in East African economies	A research gap exists as this study focused only on exchange rate differential and did not address the influence of corruption, political risks and external debt on capital flight
Salandy & Henry (2018)	The determinants of capital flight from Trinidad and Tobago	A research gap exists as Trinidad and Tobago, is a small but high-income country with a population of 1.3 million people and rich in natural resources and has one of the highest GNI per capita in Latin America and the Caribbean and therefore the findings cannot be generalized to fit Kenyan context whose context is totally different from Trinidad and Tobago.

2.4 Conceptual Framework

The diagrammatic representation below demonstrates the hypothesized interconnection between the dependent variable and the independent variables. The study hypothesizes that the variables on the left impact the variation of the dependent variable. The study embraces inflation and interest rate differentials as control variables.

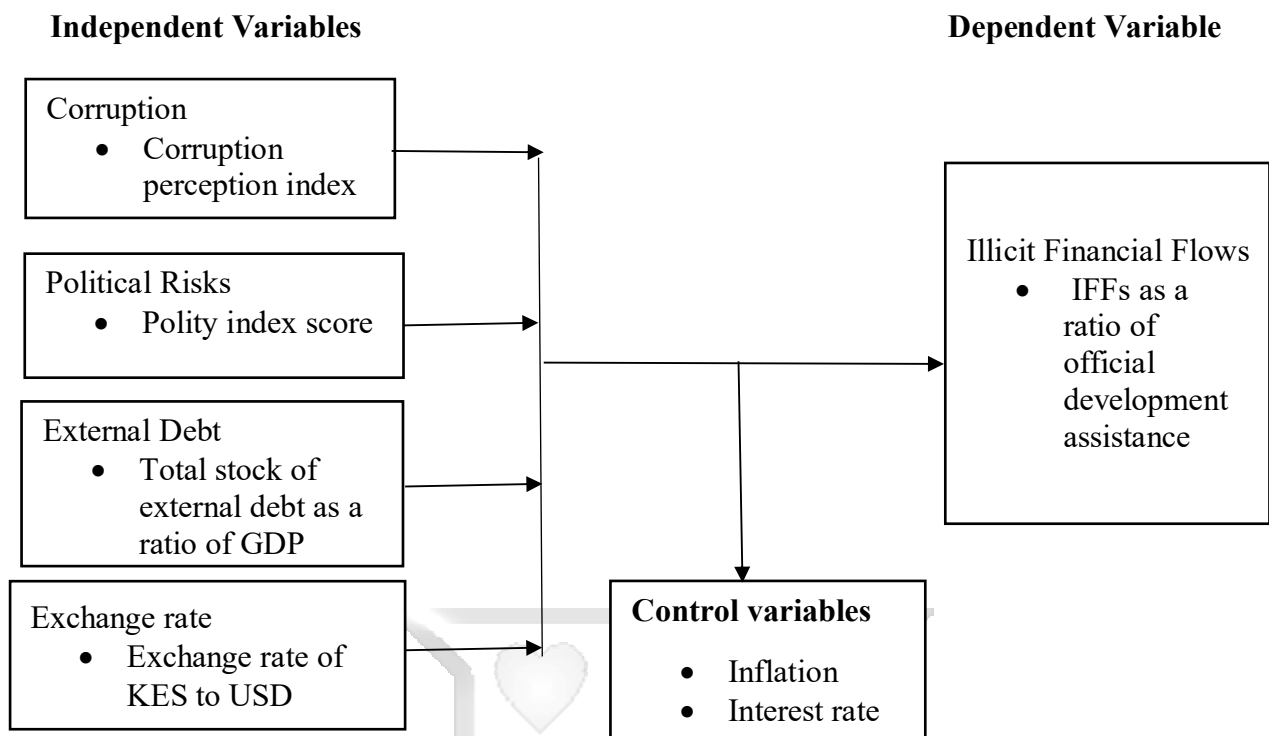


Figure 2.5.1: Conceptual Framework

Operationalization of the Study Variables

This part discusses how variables will be operationalized. The response variable will be illicit financial flows. The predictor variables are; governance, macroeconomic environment, and risk and return to investment as illustrated in Table 2.1.

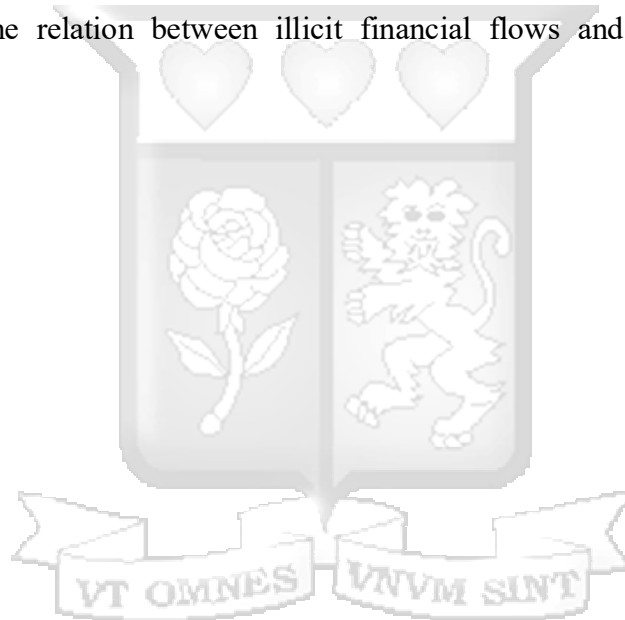
Variable	Type	Measurement	Source
Illicit Financial Flows	Dependent variable	Measured as a ratio of total IFFs to official development assistance	World Bank
Corruption	Independent variable	Measured using the corruption perception index	Transparency international
Political Risks	Independent Variable	Measured by the Polity index score	World Bank
External Debt	Independent variable	Measured as a ratio of total external debt to GDP	CBK
Exchange Rate	Independent variable	Measured as exchange rate of KES to USD	CBK

Inflation	Control Variable	Measured as the annual change in inflation rate	CBK
Interest rate	Control variable	Measured as the annual change in interest rate	CBK

Figure 2.1: Variable’s Operationalization

2.7 Chapter Summary

This section highlights a theoretical and empirical review of the subject matter, that is, illicit financial flows and its determinants. It provides an analysis of the topics’ key concepts and highlights the nature of relationships amongst the variables. Research gaps have also been addressed, the basis for their research work and how this study will add value to the existing research studies carried out relevant to the subject matter. This is followed by a framework, which shows how the relation between illicit financial flows and the determinants are correlated.



CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This section focuses on the research methodology that was used in carrying out the study. It covers the research design, data collection methods, data analysis approaches, research quality and ethical issues considered.

3.2 Research philosophy

According to Kothari (2017), the research philosophy delineates the belief about how data about a given phenomenon ought to be gathered, analyzed, and utilized. The author further notes that four main philosophies exist: positivism, pragmatism, realism, and interpretivism. The author highlights that despite the paradigms being important in knowledge building, they, however, differ in their ontology, epistemology, and axiology. As such, a positivist philosophy was adopted since the study sought to investigate relationships between components in the phenomena using a scientific approach (Kothari & Garg, 2014). Additionally, the philosophy is adopted since the study aims to investigate world phenomena without interfering with it (Cooper & Schindler, 2014).

3.3 Research design

The research design is a specific plan or blueprint created to answer the research question and provision of variance control. A descriptive correlational research design was adopted in this study. According to Atmowardoyo (2018), a descriptive correlational research design is a research method that is used to describe the existing phenomena as accurately as possible. The only work that the researcher has is collecting the necessary available data through instruments such as questionnaires, observation, and interviews. It enables the researcher to define subjects through the creation of a group of problems, events, or people (Cooper & Schindler, 2014).

3.4 Target Population and Sampling

3.4.1 Target Population

Population is defined by Cooper and Schindler (2014) as the total collection of elements that the researcher wishes to make an inference from. The unit of analysis for the study was Kenya hence the target population was Kenya.

3.4.2 Sampling

According to Cooper and Schindler (2014), a list of features through which the sample is obtained is called the sample frame. This was a case study of Kenya hence sampling was not applicable.

3.5 Data collection methods

Quarterly quantitative time series data was collected from secondary sources for 19 years (January 2003 to December 2020). The study focused on 19 years as it was deemed to provide sufficient data to answer the research objectives. Data for the independent variables; external debt, exchange rate was obtained from CBK website, corruption perception index was obtained from the Transparency International website while polity index score was obtained from World Bank. Data for the control variables; inflation and interest rate were obtained from the CBK website. Data for the dependent variable, illicit financial flows on a quarterly basis was obtained from World Bank.

3.6 Data analysis

Analysis of data was made using time series analysis. The study employed regression model in explaining the relation between the dependent and the independent variables. Further, the mediating effect of the control variables was examined. The independent variables were corruption, political risks, external debt and exchange rate. The control variables were inflation and interest rate. The dependent variable was illicit financial flows. Due to the presence of cointegration, vector error correction model (VECM) was fitted.

3.6.1 Model Specification

A linear relationship was assumed to exist between the variables. The model was as follows:

$$Y = \beta_0 + \beta_1 \text{COR}_t + \beta_2 \text{EXT}_t + \beta_3 \text{POL}_t + \beta_4 \text{EXC}_t$$

Where;

Y = Level of illicit financial flows measured as a proportion of total IFFs to official development assistance

β_0 = Constant Term

β_i = Beta Coefficient of variable i which measures the change Y to change in i

COR_t = as measured by corruption perception index

EXT_t = External debt measured as stock of external debt as a ration of GDP.

POL_t = Political risks as measure by the Polity index score

EXC_t = Exchange rate refers to exchange rate of KES to USD

ε = Error term

3.7 Diagnostic Test

In order to ensure there was no violation of the regression model assumptions before proceeding to estimation of the equations, diagnostic tests were performed. The violation of regression model's assumptions leads to arriving at biased and inefficient parameter estimates. Diagnostic tests were therefore performed so as to ensure that regression analysis assumptions were not violated. The study carried out diagnostic tests as explained below.

3.7.1 Heteroscedasticity

The Classical Linear Regression Model (CLRM)/ Ordinary Least Squares (OLS) assumes that the error term has constant variance. If the error variance is not constant, then there is heteroscedasticity in the data. Running a regression model without accounting for heteroscedasticity would lead to biased parameter estimates. The study tested this property using Breusch-Pagan-Godfrey test.

3.7.2 Autocorrelation

This exists where the error term has a relation to its precursory value. Its presence does not however influence the unbiasedness of estimates but makes invalidates hypothesis testing. This property only occurs in time series data. This is because this type of data assumes that a specific trend occurs with the passage of time. This has no effect on the unbiasedness, linearity and asymptotic nature of parameters. The critical issue with this property is that it contravenes the Best property of OLS which concludes that hypothesis testing is wrong. The Breusch-Godfrey test was used to test for this property (Gujarati, 2004).

3.7.3 Multicollinearity

Multicollinearity is also found in time series data because variables may follow a specific trend. It is a situation in which a number of the explanatory variables may be related. Such variables may be on the increase or decrease over time. This property causes the regression coefficient to be indeterminate. Because of its commonality among variables, its magnitude is of major concern (Gujarati, 2004). This property in the study was tested using the variance inflation factors (VIF) test (Cooper & Schindler, 2008).

3.7.4 Stationarity

Stationarity is said to occur where the mean of the data does not depend on time factor. Unit root tests are used to test for the absence of this property among the variables. This property causes spurious estimates. Successful differencing is applied on nonstationary variables to eliminate the bias. The null hypothesis is that the variable being considered is non-stationary. Augmented Dickey Fuller test was used to ascertain this property

3.7.5 Normality Test

A crucial assumption of the linear regression model is a normal distribution of the error term with zero mean and a constant variance denoted as $\mu (0, \sigma^2)$. It is used denote all factors influencing the response variable outside the model. However, an assumption is made that the omitted factors may have a minute impact at best random. For OLS to be utilized, error term must be normal (Gujarati, 2004). In confirming normality of the error term, the Jarque-Bera was used.

3.8 Research Quality

Research quality deals with the reliability and validity of research instruments. Reliability deals with the accuracy and dependability of a measurement (Cooper and Schindler, 2014). Reliability of the research procedures will be enhanced by using standardized method for analyzing the variables. Validity refers to the appropriateness of measures used, accuracy of results and generalizability of findings (Cooper and Schindler, 2014). Internal validity was enhanced by using experts to give feedback on the study. External validity is concerned with the generalizability of findings (Saunders et al. 2016). External validity was enhanced by the use of real data on the macroeconomic variables.

3.9 Ethical considerations

Data collected was from published information that was publicly available. This approach thereby eliminated chances of breaching participants' confidentiality and anonymity. The research study was also submitted to the Strathmore University Institutional Review Board (IRB) for research ethics approval. Subsequently, the study was submitted to National Commission for Science, Technology and Innovation (NACOSTI) for approval.

CHAPTER FOUR: FINDINGS AND DISCUSSIONS

4.1 Introduction

In this chapter the data collected is analyzed and presented. The study objective was to examine the determinants of illicit financial flows in Kenya. The specific objectives of the study guided the data analysis. The trends were examined through both time series analysis and descriptive analysis. Thereafter interpretation was done and conclusion derived from the analysis made.

4.2 Descriptive Statistics

The outcomes on the measures of dispersion and central tendency of the different variables are presented in Table 4.1 below.

Table 4.1 Descriptive Statistics

	IFF	Corruption	Political Risk	External Debt	Exchange Rate	Inflation Rate	Interest Rate
Mean	9.23	75.89	-1.24	34.45	86.45	1.09	1.08
Median	8.81	76.03	-1.23	34.40	85.36	1.08	1.08
Maximum	14.70	82.19	-0.96	59.03	107.84	1.27	1.22
Minimum	4.06	68.75	-1.68	24.56	66.93	1.03	1.01
Std. Dev.	3.72	3.35	0.15	7.32	12.63	0.05	0.04
Skewness	0.06	-0.32	-0.91	0.76	0.16	1.89	1.31
Kurtosis	1.46	2.00	4.19	3.57	1.66	6.87	7.50
Jarque-Bera	2.17	4.22	14.15	3.83	5.71	88.03	81.33
Probability	0.43	0.12	0.00	0.32	0.06	0.00	0.00
Sum	664.60	5464.00	-89.28	2480.35	6224.26	78.70	77.52
Sum Sq. Dev.	984.94	794.70	1.52	3803.90	11328.58	0.19	0.09
Observations	72	72	72	72	72	72	72

As indicated by the results the mean of illicit financial flows in Kenya accounted for 9.23% of official development assistance, with a minimum of 4.06% and maximum of 14.70%. There was a wide variation of illicit financial flows as accounted by standard deviation of 3.72%. Further, illicit financial flows were normally distributed since Jarque Berra coefficient had a p value greater than 0.05. Data is considered to be normally distributed if the p value is greater than 0.05.

The mean corruption perception index in Kenya was 75.89% with a minimum of 68.75% and maximum of 82.19%. There was minimal variation in corruption perception index in Kenya

since the standard deviation was 3.35. Further, corruption perception index was normally distributed since the p value for Jarque Berra was greater than 0.05.

The average polity index score in Kenya was -1.24 with a minimum of -1.68 and maximum of -0.96. This indicates that political stability was weaker since polity index ranges from -2.5 (weakest) and 2.5 (strongest). There was minimal variation as accounted by standard deviation of 0.15. Political risk was not normally distributed since the p value for Jarque Berra was less than 0.05.

The mean external debt was 34.45%, with a minimum of 24.56% and a maximum of 59%. There was wider variation as accounted by standard deviation of 7.32. External debt was normally distributed since the Jarque Berra has a p value greater than 0.05.

The mean exchange rate against US dollar was 86.44, with a minimum of 66.93 and maximum of 107.84. There was a wider variation of exchange rate since the standard deviation was 12.63. Exchange rate was normally distributed since the p value for Jarque Berra was greater than 0.05.

The mean inflation rate was 9% with a minimum of 3% and maximum of 27%. There was a minimal variation of inflation since the standard deviation was 0.03. Inflation rate was not normally distributed since the p value for Jarque Berra was less than 0.05.

The mean interest rate was 8% with a minimum of 5% and maximum of 22%. Interest rate was not normally distributed since the p value for Jarque Berra was less than 0.05.

4.2 Trend Analysis

Trend analysis was done for illicit financial flows, corruption, external debt, political risks, exchange rate, inflation and interest rate. In the following section the various trend lines are presented.

4.2.1 Trend Analysis on Illicit Financial Flows

The study examined the trend of illicit financial flows from the first quarter in 2003 to the last quarter in 2020. The findings are shown in figure 4.1 below

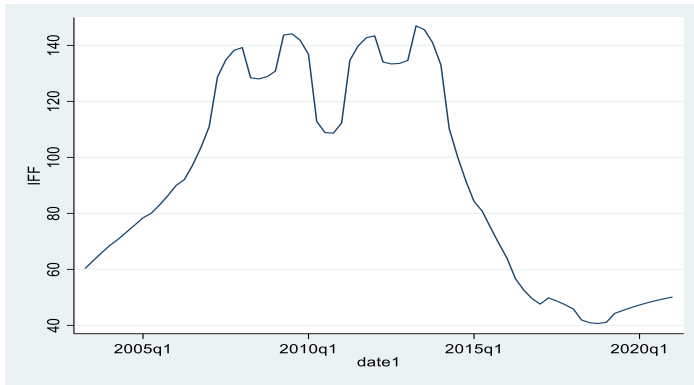


Figure 4.1 Illicit Financial Flows from 2003 to 2020

Based on the findings in Figure 4.1 there seems to be fluctuations of illicit financial flows from 2003 to 2020. This portrays presence of non-stationarity. An examination of electioneering periods indicates that there was a positive and exponential trend that was reversed in 2010. From 2015 the amount of illicit financial flows recorded inverse growth though it experienced a slight growth around 2017 and since 2020 the growth is positive.

4.2.2 Trend Analysis on Corruption

The study aimed to determine the trend in the movement of corruption perception index in Kenya over the study period. The findings are as shown in the Figure 4.2

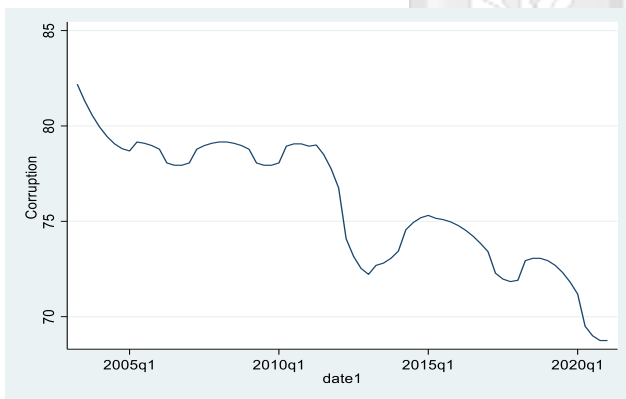


Figure 4.2 Corruption from 2003 to 2020

Based on the findings in Figure 4.2 there appears to be a sporadic trend of corruption from 2003 to 2007. Hence, there are higher odds of the data been non-stationary. Corruption was the highest in 2003 and it recorded a decline though the trend has recorded mixed growth. For instance, corruption recorded a new peak in 2010 and declined till 2013 when it experienced positive change and new peak in 2015. Although corruption score declined from 2015 its rate of change is slow thus measures taken to curb corrupt practices may not be achieving desired changes.

4.2.3 Trend Analysis on Political Risk

The study aimed to determine the trend in the movement of political risk index in Kenya over the study period. The findings are as shown in the Figure 4.3 below

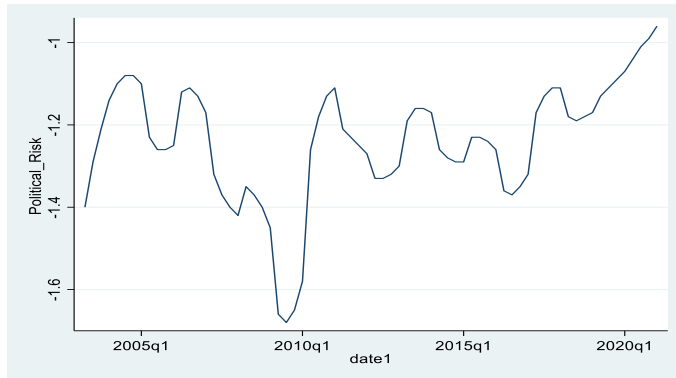


Figure 4.3 Political Risk from 2003 to 2020

Based on Figure 4.3 there seems fluctuations of political risk from 2003 to 2020. This portrays presence of non-stationarity. Political instability in Kenya is very dynamic since it recorded positive change from 2003 to 2005 and this could be attributed to the referendum vote. The trend was reversed between 2007 and 2010 which could be attributed to the promulgation of the new constitution. It is notable that periods preceding national election activities deteriorates the state of political stability as evidenced in the period from 2017 to 2020.

4.2.4 Trend Analysis on External Debt

The study aimed to determine the trend in the movement of external debt in Kenya over the study period. The findings are as shown in the Figure 4.4 below

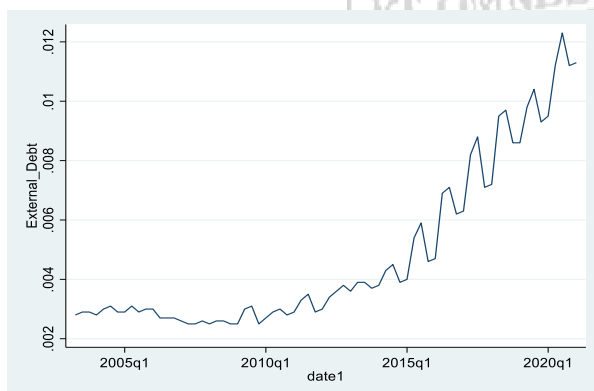


Figure 4.4 External Debt from 2003 to 2020

Based on the findings in figure 4.4 there seems to a trend of external debt from 2003 to 2020. This suggests presence of non-stationarity. Figure 4.4 indicates that external debt has been growing on an upward trend from the year 2000Q1 to 2019Q4. From the year 2003 to 2011

external debt was increasing gradually but has been drastically increasing from 2014 to 2020. Total debt was highest in 2020 and lowest in 2003. This means that the level of external debt in Kenya has been on the rise.

4.2.5 Trend Analysis on Exchange Rate

The study aimed to determine the trend in the movement of exchange rate in Kenya over the study period. The findings are as shown in the Figure 4.5

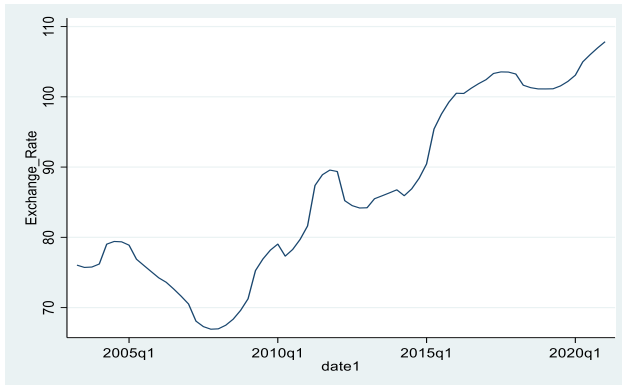


Figure 4.5 Exchange Rate from 2003 to 2020

Trend analysis on exchange rate in Figure 4.5 depicts, there was a trend on exchange rate from 2003 to 2006. This shows presence of non-stationarity. The graphical presentation indicates that Kenyan shilling is weakening against dollar recently despite of it strengthening between 2005 and 2007. Since 2015 the Kenyan Shilling has recorded significant depreciation when compared with USD. Currency depreciation may escalate cases of illicit financial flows as its perpetrators aims at maximizing in bid ask spread.

4.2.6 Trend Analysis on Inflation Rate

The study aimed to determine the trend in the movement of inflation rate in Kenya over the study period. The findings are as shown in the Figure 4.6

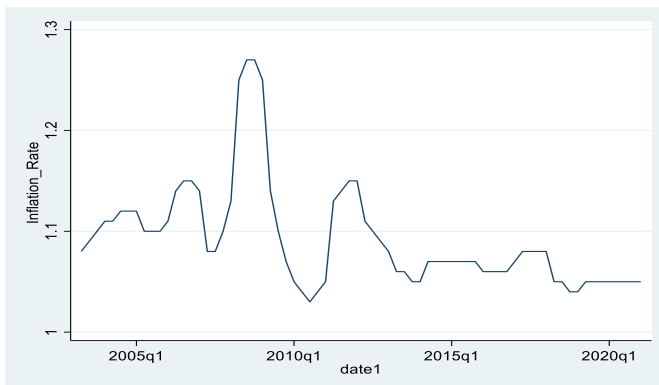


Figure 4.6 Inflation Rate from 2003 to 2020

Based on the findings in Figure 4.6 there seems to be fluctuations in inflation rate from 2003 to 2020. This portrays presence of non-stationarity. Inflation was highest in Kenya in 2008 and this can be attributed to reduced output as a result of the 2007 post-election violence. There was a gradual decrease in inflation rate between 2009 and 2010. Inflation rate rose between 2010 and 2010 and thereafter declined on a gradual basis and thereafter plateaued.

4.2.7 Trend Analysis on Interest Rate

The study aimed to determine the trend in the movement of interest rate in Kenya over the study period. The findings are as shown in the Figure 4.7

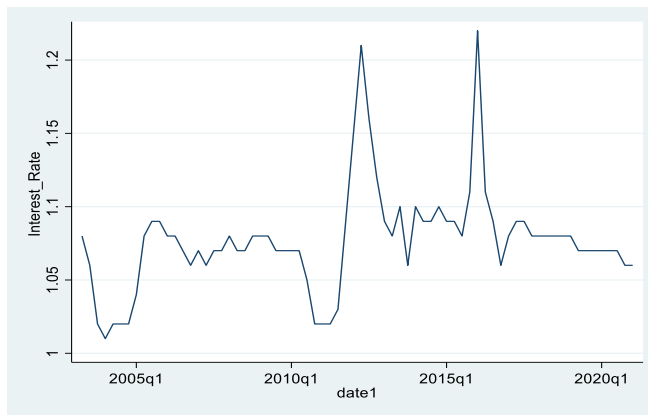


Figure 4.7 Interest Rate from 2003 to 2020

Trend analysis in Figure 4.7 depicts fluctuations of interest rate from 2003 to 2020. This portrays presence of non-stationarity. Interest rate was lowest in 2005 and highest in 2018.

4.3 Diagnostic Tests

In order to ensure there was no violation of the regression model assumptions before proceeding to estimation of the equations, diagnostic tests were carried out. The violation of regression model's assumptions leads to arriving at biased and inefficient parameter estimates. Diagnostic tests were therefore performed so as to ensure that regression analysis assumptions were not violated. The tests conducted in this case were Heteroscedasticity test, Autocorrelation test, multicollinearity test and the Stationarity test.

4.3.1 Heteroskedasticity

Heteroskedasticity was examined through Breusch-Pagan/Cook-Weisberg test. The error terms derived from the regression model should portray constant variance called homoscedastic. Its null hypothesis was that there is constant variance of the error term against an alternative that it is not. There is constant variance if p value is >0.05 .

Table 4.3 Heteroskedasticity

Test Statistics	Value	P value
Chi square	0.27	0.604

Results in Table 4.3 has a p value of 0.604 that is greater than 0.05. Hence, the research failed to reject the null hypothesis at a critical p value of 0.05 because value attained was 0.604. Therefore, the data was not affected by heteroskedasticity as exhibited in Table 4.3.

4.3.2 Autocorrelation

Autocorrelation was carried to examine the correlation of error terms between current and past periods using the likelihood ratio technique. The null hypothesis stated that there is no first order serial correlation.

Table 4.4 Autocorrelation

Test Statistics	Value	df	P value
Chi square	52.148	4	0.0000

Results in Table 4.4 Shows that the P value was 0.00 and therefore indicates that there was enough evidence to warrant rejection of the null hypothesis and conclusion that there was a first order serial correlation. Thus, we fitted regression with robust standard errors.

4.3.3 Multicollinearity

Multicollinearity is a condition in which independent variables are highly correlated. It is an unwanted situation where the independent variables are correlated strongly. VIF value and Tolerance of the variable were utilized to examine the presence of multicollinearity. When VIF is higher than 10 or tolerance is lower than 0.1, there is significant multicollinearity that needs to be corrected.

Table 4.5 Multicollinearity

Variable	Collinearity Statistics	
	VIF	Tolerance
Corruption	5.13	0.195
Political risks	1.55	0.646
External debt	6.14	0.163
Exchange rate	5.99	0.167
Inflation rate	1.54	0.649
Interest rate	1.66	0.602

Results in Table in 4.5, indicates that there is no multicollinearity since none of variables had VIF greater than 10 or tolerance limits less than 0.1.

4.3.4 Correlation Analysis

Product moment correlation coefficient was applied to examine the strong effect of corruption, political risks, external debt, exchange rate, inflation rate and interest rate on illicit financial flows as shown in Table 4.6.

Table 4.6 Correlation Analysis

	IFF	Corruption	Political Risk	External Debt	Exchange Rate	Inflation Rate	Interest Rate
IFF	1						
Corruption	0.42	1					
	0.00	-----					
	72	72					
Political Risk	-0.53	-0.41	1				
	0.00	0.00	-----				
	72	72	72				
External Debt	-0.46	-0.71	0.30	1			
	0.00	0.00	0.01	-----			
	72	72	72	72			
Exchange Rate	-0.67	-0.43	0.44	0.25	1		
	0.00	0.00	0.00	0.00	-----		
	72	72	72	72	72		
Inflation Rate	0.41	0.49	-0.28	-0.54	-0.58	1	
	0.00	0.00	0.02	0.00	0.00	-----	
	72	72	72	72	72	72	
Interest Rate	0.11	-0.34	-0.26	0.32	0.22	-0.04	1
	0.37	0.00	0.03	0.01	0.06	0.77	-----
	72	72	72	72	72	72	72

From the findings there was a positive and significant effect of corruption on illicit financial flows ($\rho = 0.42$, p value < 0.05). Political risks have inverse and significant effect of illicit financial flows ($\rho = -0.53$, p value < 0.05). There was an inverse and significant effect of external debt on illicit financial flows ($\rho = -0.46$, p value < 0.05). Further, there was an inverse effect of exchange rate on illicit financial flows ($\rho = -0.67$, p value < 0.05).

4.3.5 Stationarity Test

In nature, most economic variables before undertaking regression analysis are mainly non-stationary. Unit root test was therefore carried out using Augmented Dickey-Fuller (ADF) in

testing whether the variables were non-stationary or stationary. The reason for undertaking this was preventing false regression outcomes from being found through use of stationary series.

Table 4.7 Stationarity Test

	At levels			At first difference		
	T statistic	Critical value	P value	T statistic	Critical value	P value
IFF	-0.596	-2.913	0.8718	-4.7	-2.914	0.000
Corruption	-0.336	-2.913	0.9202	-4.713	-2.914	0.000
Political risk	-1.747	-2.913	0.4071	-5.442	-2.914	0.000
External debt	0.16	-2.913	0.9699	-8.115	-2.914	0.000
Exchange rate	0.627	-2.913	0.9883	-4.478	-2.914	0.000
Inflation Rate	-2.072	-2.913	0.2561	-5.41	-2.914	0.000
Interest Rate	-3.415	-2.913	0.0105	-8.109	-2.914	0.000

Results in Table 4.7 indicates that IFF, corruption, political risks, external debt, exchange rate and inflation rate were not stationary at level since their p values were greater than 0.05. Interest rate was stationary at level as the p value was 0.0105. All variables were stationary at first difference with p value less than 0.05.

4.3.6 Johansen Test for Cointegration

Johansen cointegration test was adopted to evaluate the effect of corruption, political risk, external debt and exchange rate on illicit financial flows in Kenya. The null hypothesis for the test is that there is no cointegration.

Table 4.8 Johansen Test for Cointegration Test

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.604	203.460	125.615	0.000
At most 1 *	0.543	139.498	95.754	0.000
At most 2 *	0.364	85.405	69.819	0.002
At most 3 *	0.316	54.147	47.856	0.011
At most 4	0.230	27.939	29.797	0.081
At most 5	0.084	9.935	15.495	0.286
At most 6 *	0.055	3.874	3.841	0.049

Trace test indicates 4 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Findings in Table 4.8 indicates that there are at most four cointegrating equations. Therefore, Vector Error Corrected Model has to be fitted.

4.3.7 Determination of the Optimal Number of Lags

Optimal number of lags was determined to establish the number of lags that ought to be applied when running the VECM model. The results are shown in the table below;

Table 4.9 Determination of the Optimal Number of Lags

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-24.471	NA	5.95E-09	0.925618	1.154097	1.016148
1	470.1405	872.8438	1.22E-14	-12.1806	-10.35277*	-11.4564
2	553.1288	129.3641	4.69E-15	-13.1803	-9.75308	-11.8223
3	649.7372	130.7055	1.30E-15	-14.5805	-9.55397	-12.58884*
4	708.4684	67.36818*	1.24e-15*	-14.86672*	-8.24084	-12.2413

* indicates lag order selected by the criterion

LR: sequential Likelihood Ratio (each test at 5% level)

FPE: Final prediction error

AIC: Akaike information criterion

SC: Schwarz information criterion

HQ: Hannan-Quinn information criterion

An examination on the optimal number of lags indicates that the optimal number of lags are four as indicated by LR, FPE, AIC while SC indicates one lag and HQ indicates three. The most optimal lags adopted in the study were four as indicated by the “*” in the output.

4.4 Regression Analysis

After conducting the diagnostic tests, regression model was run. Results are presented in table 4.10 below.

Table 4.10 Regression Analysis

Dependent	Illicit financial flows	
Independent and control variables	Model 1	Model 2
Constant	71.57 (15.21)**	60.03 (21.61)**
Corruption	0.62 (.16)**	-0.58 (.17)**
Political risks	-8.15 (2.15)**	-7.39 (2.43)**
External debt	0.05 (-0.06)	0.04 (.07)
Exchange rate	-0.32 (.05)**	-0.31 (-0.05)**
Inflation rate		1.8(6.87)
Interest rate		6.58(9.86)
R Squared	0.618	0.623
Adjusted R Square	0.597	0.588
F-value	27.29**	17.9**

The standard errors are in brackets. The p-values are in ** denoting significance 5% level

In model 1 an R squared of 0.618, indicates 61.8% of changes in illicit financial flows is explained by corruption, political risks, external debt and exchange rate. Corruption has positive and significant effect on illicit financial flows ($\beta = 0.62$, p value < 0.05). This indicates that a unit increase in corruption increases illicit financial flows by 0.62 units while holding political risk, external debt and exchange rate constant. Political risks have inverse and significant effect on illicit financial flows ($\beta = -8.15$, p value < 0.05). This indicates that positive change in political risk reduces illicit financial flows by 8.15 units while holding corruption, exchange rate and external debt constant. Further, external debt has positive and insignificant effect on illicit financial flows ($\beta = 0.05$, p value < 0.05). This indicates that unit increase in external debt increases illicit financial flows by 0.05 units while holding corruption, political risk and exchange rate constant. In addition, exchange rate has negative and significant effect on illicit financial flows ($\beta = -0.32$, p value < 0.05). This indicates that unit increase in exchange rate decreases illicit financial flows by 0.32 units.

Model 2 acts as a control model for the variables under study. The model was run so as to provide an indicator as to the most significant variables affecting the study. The model shows that all the variables included are highly significant at 5% level with an exception of external debt which is not significant.

Therefore, according to the above outcomes the estimated model was as below;

$$Y = 71.57 + 0.62 \text{ COR}_t - 8.15 \text{ POL}_t + 0.05 \text{ EXT}_t - 0.32 \text{ EXC}_t + \varepsilon_t$$

Where

Y= Level of illicit financial flows measured as a proportion of IFFs to official development assistance.

COR_t = Corruption as measured by the corruption perception index (ranges from 0-100%)

POL_t= Political risk as measured by the polity Index Score (ranges from -2.5 to + 2.5)

EXT_t = External debt measured as a proportion of total external debt to GDP

EXC_t= Exchange rate as measured by nominal exchange rate

4.5 Vector Error Corrected Model

Due to the presence of cointegration VECM was fitted. When interpreting the findings, coefficients signs are reversed and are significant if p values are less than 0.05. From the results

in Appendix 1 corruption lagged for quarter one, two and four had a positive and significant effect on illicit financial flows in Kenya. Secondly, there was positive and not significant effect of political risks on illicit financial flows in Kenya. Further, there was positive and not significant effect of external debt lagged for quarter one. In contrast, external debt lagged in second and third quarter had inverse effect on illicit financial flows. External debt lagged for the fourth quarter had negative and significant effect. Lagged exchange rate for quarter one, two and four had a positive and significant effect on illicit financial flows.

4.6 Post Estimation Analysis

Post estimation diagnostic analysis was carried out to examine the robustness of VECM model. The tests conducted include autocorrelation, stability and granger causality.

4.6.1 Post Estimation Test for Autocorrelation

Autocorrelation was examined using Q-stat and Adj Q stat whose null hypothesis states that there is no serial correlation. Results are as below;

Table 4.12 Post Estimation Test for Autocorrelation

Lags	Q-Stat	Prob.	Adj Q-Stat	Prob.	df
1	52.45402	0.3416	53.24878	0.3141	49
2	99.13669	0.4489	101.3678	0.3877	98
3	153.449	0.3411	158.226	0.2491	147
4	256.687	0.3425	268.0188	0.2596	196

Results in Table 4.12, indicates that the respective p values were greater than 0.05, thus we could not reject the null hypothesis. Consequently, we conclude that there is no first order serial correlation.

4.6.2 Stability Test

The stability of the VECM model was examined using roots eigenvalues. VECM is stable if all the eigenvalues are strictly less than one. The results are shown as below;

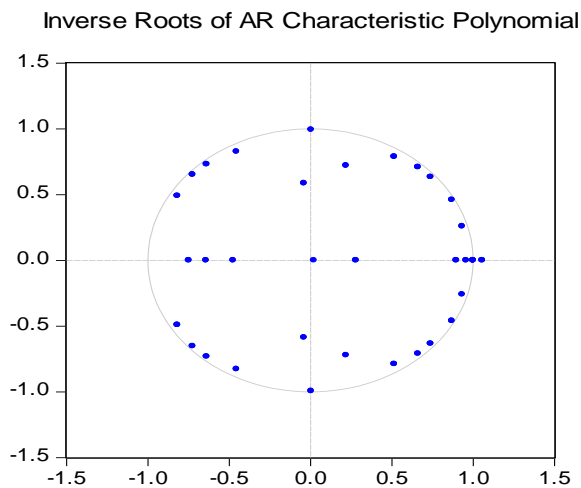


Figure 4.7 Stability Test

Figure 4.7 indicates that none of the eigen values exceeded 1 and therefore the model was stable.

4.6.3 Granger Causality Test

The pairwise granger causality test shows the direction of cause between the variables. The null hypothesis is rejected if the prob-value of the F-statistics is ≤ 0.05 . The results of the test are shown in the table below;

Table 4.13 Granger Causality Test

Null Hypothesis:	F-Statistic	Prob.
Corruption does not Granger Cause IFF	1.42	0.24
IFF does not Granger Cause corruption	0.28	0.89
Political risk does not Granger Cause IFF	0.59	0.67
IFF does not Granger Cause political risk	1.54	0.20
External debt does not Granger Cause IFF	1.63	0.18
IFF does not Granger Cause External debt	1.67	0.17
Exchange rate does not Granger Cause IFF	2.36	0.06
IFF does not Granger Cause exchange rate	2.58	0.05
Inflation rate does not Granger Cause IFF	1.28	0.29
IFF does not Granger Cause inflation rate	1.76	0.15
Interest rate does not Granger Cause IFF	0.68	0.61
IFF does not Granger Cause interest rate	0.56	0.69

Results in Table 4.13 indicates that there was no causality between illicit financial flows and corruption, political risk, external debt, exchange rate, inflation rate and interest rate differentials as the prob-value of the F-statistic was ≥ 0.05 .

4.7 Chapter Summary

This chapter included the descriptive statistics showing the means, standard deviation, skewness and kurtosis for each of the study variables. A trend analysis was also performed on all the study variables. Before model specification, diagnostic tests were done to ensure there is no violation of the regression analysis assumptions. The results of the analysis are presented. The next chapter of the study presents the discussion, conclusions and recommendations.



CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

In this chapter, the previous section results, conclusions, limitations encountered during study are presented. The chapter also presents areas of further study

5.2 Discussion of Findings

In this section the key findings of the study are discussed. The study sought to examine the determinants of the illicit financial flows in Kenya. The specific objectives were to examine the influence of corruption on illicit financial flows, to examine the influence of political risks on illicit financial flows, to examine the influence on external debt on illicit financial flows in Kenya and to examine the influence of exchange rate on illicit financial flows in Kenya. Further, the controlling effects of inflation and interest rate was examined. The study was based on the debt overhang theory and the resource curse theory. Descriptive correlational research design was applied. To achieve the objectives of this study, annual time series data from the year 2003Q1 to the year ending 2020Q4 was used which translated to 72 observations. The data was obtained from CBK, World Bank and Transparency International. The study used descriptive and inferential statistics in its analysis. Diagnostic tests were conducted before regression analysis was done. Due to the presence of co-integration VECM was fitted.

5.2.1 Corruption and Illicit Financial Flows

The first objective of the study sought to examine the influence of corruption on illicit financial flows in Kenya. VECM findings established that corruption has a positive and significant influence on illicit financial flows in Kenya. Holding other factors constant, a unit change in corruption would positively change the level of illicit financial flows. The findings support the Resource Curse theory which indicates that countries with high levels of corruption experience illicit financial flows.

The study is consistent with Abotsi (2018) who explored the influence of governance indicators on illicit financial flows from developing countries and found that corruption and illicit financial flows had a positive and significant effect. The study also mirrored Yelinde (2021) who investigated corruption and illicit financial flows in SSA countries using the Generalized Method of Moments and panel data set and found that increase in corruption level significantly increases illicit financial flows. Moreover, the study supported Alemu (2018) who examined the effects of corruption control, political stability and tax rate on illicit financial outflows for

African countries based on a balanced panel data for 32 countries and found that a unit increase in corruption control reduces illicit financial outflow by US\$ 21 million. The study findings contradicts Ikechi & Onyinyechi (2019) who examined the relationship between illicit financial flows and economic growth in Nigeria and found a negative relationship between illicit financial flows and corruption in Nigeria.

5.2.2 Political Risks and Illicit Financial Flows

The study sought to examine the influence of political risks on illicit financial flows. VECM findings established a positive and not significant influence of political risks on illicit financial flows in Kenya. Holding other factors constant, a unit change in political stability would positively change the level of illicit financial flows. The findings are in line with the Resource Curse theory which indicates that countries with high levels of political instability experience illicit financial flows.

The study findings are in line with Mossadak (2018) who examined the determinants of illicit financial flows from Africa covering the period 2004 to 2014 using panel data model revealing that political instability was a key factor contributing to illicit outflows from Africa. Moreover, the study findings aligns with Alemu (2018) who examined the effects of corruption control, political stability and tax rate on illicit financial outflows for African countries based on a balanced panel data for 32 revealing that a unit increase in political stability reduces illicit financial outflow by an average of US\$ 27.5 million. The study findings also supports Rahman, Mustafa & Turpin (2019) who explored the effects of globalization, corruption perception, political stability, macroeconomic vulnerability and gross domestic savings on illicit financial outflows of 60 developing countries for the period 2004 to 2013 and found that improvement in political stability reduces illicit financial outflows.

5.2.3 External Debt and Illicit Financial Flows

The third objective of the study was to examine the influence of external debt on illicit financial flows in Kenya. VECM findings established that external debt external debt lagged for the second, third and fourth quarter had an inverse influence on illicit financial flows in Kenya. This means that a unit decrease in external debt leads to a subsequent increase in the level of illicit financial flows.

The study findings aligns with Mmaduabuchukwu & Ndidamaka (2019) who investigates the effects of illicit financial outflows on political stability, debt and nutrition outcome in 17

countries in West Africa and the Sahel regions and established that illicit financial flows and debt had a negative relationship. The study findings contradicts results by Lahlou & Anas (2013) who examined the determinants of illicit financial flows from MENA region covering 16 countries for the period 2000 to 2010 and established that external debt and illicit financial flows had a positive and significant relationship. Further, the study results contradicts Macamo & Jalloh (2022) who investigated illicit financial flows from the natural resource sector in Mozambique with a key focus on the effect of macroeconomic factors and established that external debt had a positive influence on the movement of IFFs.

5.2.4 Exchange Rate and Illicit Financial Flows

The fourth objective examined the influence of exchange rate on illicit financial flows in Kenya. VECM results indicated that lagged exchange rate for quarter one, two and four has positive and significant influence on illicit financial flows in Kenya. The findings support the Neoclassical theory of illicit financial flows that hypothesizes a positive relationship between high exchange rate and illicit financial flows.

The study findings are in line with Macamo & Jalloh (2022) who examined illicit financial flows emanating from the natural resource sector in Mozambique with a key focus on the influence of macroeconomic factors and found that exchange rate and illicit financial flows had a positive and significant effect. Further, the study findings mirrored Orkoh, Claassen, & Blaauw (2018) who examined the effect of corruption control and political stability on illicit financial outflows in Sub-Saharan Africa and established that high exchange rates reduce illicit financial outflows.

5.3 Conclusion

From the findings, the study established that corruption and levels of illicit financial flows are positively and significantly related. The study therefore concludes that increased corruption cases affects the level of illicit financial flows in Kenya. Thus, there is need for adoption of management practices that would deter corrupt practices to minimize illicit financial flows.

Secondly, there was a positive effect of political risks on illicit financial flows. Hence, it can be concluded that an increase in political stability decreases odds of illicit financial flows. There is need for adoption of political conflict management strategies that would ultimately deter illicit financial practices.

Thirdly, there was an inverse effect of external debt on illicit financial flows lagged for the second, third and fourth quarter. Thus, it can be concluded that an increase in illicit financial flows is associated with a decrease in external debt. Hence, there is need for adoption of prudent financial management guidelines that would enhance management of external debt and curtail odds of illicit financial flows.

Exchange rate had a positive and significant influence on illicit financial flows in Kenya. This indicates that illicit financial decreases as Kenyan shilling weakness. Thus, it is appropriate to develop measures aimed at strengthening the currency and increase exchange rate costs.

5.4 Recommendations

Positive co-movement between corruption and illicit financial flows calls for prudent public sector finance management. Further, public sensitization forums ought to be carried out so as to minimize corrupt practices that are perceived to be avenues for corrupt proceeds.

Secondly, there is need for development of measures and strategies that would increase political stability in Kenya especially during seasons geared towards the electioneering period. Achievement of political stability would minimize odds of illicit financial flows and stimulate economic growth and development.

Thirdly, there is need for deployment of prudent financial management of external debt. This would manage the likelihood of spillage of financial resources from desired project goals and objectives hence minimizing illicit financial flows.

The government ought to develop exchange rate management practices that would deter illicit financial practices. The government should regulate supply and demand of foreign currencies to deter illicit financial practices.

5.5 Limitations of the study

The data used was secondary in nature and the researcher is not aware of its authenticity and reliability based on its collection and storage and alterations that might have been done on it. The study adopted the analytical approach which is highly scientific. The research also disregarded qualitative information which could explain other factors that influence the association between the different determinants and level of illicit financial flows. The study

should have considered utilizing focus group discussions, open ended questionnaires or interviews so as to come up with more concrete results.

The research concentrated on 19 years (2003 to 2020). It is not certain whether the findings would hold for a longer time frame. It is also unclear as to whether similar outcomes would be obtained beyond 2020. The study should have been executed over a longer time frame in order to incorporate major forces such as effect of Covid 19, booms and recession.

This study focused on some factors that are hypothesized to influence illicit financial flows in Kenya. Specifically, the study focused on corruption, political risks, external debt, exchange rate, inflation and interest rate. In reality however, there are other variables that are likely to influence illicit financial flows such as foreign direct investment, economic growth and financial development among others.

5.6 Suggestions for further study

Future studies could examine the impact of the Covid-19 pandemic on illicit financial flows to provide insights on the effects of Covid-19 on illicit financial flows in Kenya.

The study did not exhaust all the independent variables influencing illicit financial flows in Kenya and a recommendation is given that more studies be carried out to constitute other variables such as financial development, financial deeping, economic growth and development, FDI among others. Determining the impact of each variable on level of public debt shall enable the policy makers to understand the tools that can be used to manage illicit financial flows.

A suggestion is given that more research ought to include a qualitative analysis on how different factors influence illicit financial flows in Kenya. That study would deal with interviewing of vital respondents and this would reveal concealed insights into the fine detailed of how illicit financial flows are perpetrated in Kenya.

REFERENCES

- Abotsi, A. K. (2018). Influence of Governance Indicators on Illicit Financial Outflow from Developing Countries. *Contemporary Economics*(Vol. 12, Issue 2).
- AfricanUnion. (2015). *Agenda 2063: The Africa we want*. Addis Ababa: AUC.
- Ajayi, L. B. (2012). Capital Flight and Nigeria Economic Growth. *Asian Journal of Finance & Accounting*, ISSN 1946-052X, 279.
- Akintonye, I. R., Somorin, O. A., Ajibade, A. T., & Ogunode, O. A. (2022). Nexus Between Tax Havens and Illicit Financial Flow of Funds(IFFs) from Africa: A Theoretical Review . *Research Journal of Finance and Accounting* Vol.13, No.2,.
- Al-basheer, A. B., Al-Fawwaz, T. M., & Alawneh, A. M. (2016: 12(4)). Economic Determinants of Capital Flight in Jordan: An Empirical Study. *European Scientific Journal*, 322-334.
- Alemu, A. M. (2018). The Effects of Corruption Control, Political Stability and Tax Level on Illicit Financial Flows from African Countries. *International Journal of Global Business*, 11(2), 1-8.
- Alemu., A. M. (2018). The Effects of Corruption Control, Political Stability and Tax Level on Illicit Financial Flows from African Countries. *International Journal of Global Business*, 1-8.
- Alvi, M. H. (2016). *A Manual for Selecting Sampling Techniques in Research*. <https://mpr.ub.uni-muenchen.de/70218/>.
- Ampah, I. K., Kiss, G. D., & Kotosz, B. (2018). Capital flight and external debt in Heavily Indebted Poor Countries in Sub-Saharan Africa: An Empirical Examination. *Challenges in National and International Economic*, 135 - 159.
- Anas, M., & Kamal, L. (2013). Empirical Investigation on the Illicit Financial Flows From MENA Region.
- Anetor, F. O. (2019). Macroeconomic Determinants of Capital Flight: Evidence from the Sub-Saharan African Countries. *International Journal of Management, Economics and Social Sciences*. Vol. 8(1), 40 – 57.
- Anetor, F. O. (2019). Macroeconomic Determinants of Capital Flight: Evidence from the Sub-Saharan African Countries . *International Journal of Management, Economics and Social Sciences (IJMESS)* Vol. 8(1). ISSN 2304 – 1366, 40 – 57.
- Auzairy, N. A., Fun, C. S., Ching, T. L., Li, S. B., & Fung, C. S. (2016). Dynamic relationships of capital flight and macroeconomic fundamentals in Malaysia . *Malaysian Journal of Society and Space* 12 issue 2, 203 - 211.
- Ayodeji, G. I. (2017). Challenges of Curbing Illicit Financial Flows and Insecurity in Governance: Insights from Nigeria . *SSRN*: <https://ssrn.com/abstract=3018189>.

- Bahmani-Oskooee, M., & Ng, R. C. (2002). Long-run demand for money in Hong Kong: An application of the ARDL model. *International journal of business and economics*, 1(2), 147-155.
- Bank, W. (2014). Retrieved from <https://blogs.worldbank.org/endpovertyinsouthasia/can-political-stability-hurt-economic-growth>.
- Barasa, T. (2018). *Illicit Financial Flows in Kenya: Mapping of the Literature and synthesis of the Evidence*. Partnership for African Social and Governance Research (PASGR).
- Bouchet, M. (2012). *Capital Flight in Vietnam 1977-2011: A Country Risk Analysis of the Root Causes of Expatriated Savings*. Paris: SKEMABusiness School: Global Finance Center.
- Boyce, J. K., & Ndikumana, L. (2012). *Capital Flight from Sub-Saharan African Countries: Updated Estimates, 1970 - 2010*. Political Economy Research Institute. University of Massachusetts, Amherst.
- Brada, J. C., Kutan, A. M., & Vukšić, G. (2011). The costs of moving money across borders and the volume of capital flight: the case of Russia and other CIS countries. *Review of world economics*, 147(4), pages717–744.
- Brown, E. D., Elvis, W. O., & Chioma, B. R. (2022). Capital Flight and Economic Development in Nigeria. *Journal of Contemporary Research in Economics and Development Studies (JCREDS)*, Volume-1, Issue-01, 69-80.
- Cerra, V., Rishi, M., & Saxena, S. C. (2008). Robbing the Riches: Capital Flight, Institutions and Debt. *Journal of Development Studies*, Vol. 44, No. 8, 1190–1213, September 2008.
- Cheung, Y.-W., Steinkamp, S., & Westermann, F. (2016). China's capital flight: Pre- and post-crisis experiences. *Journal of International Money and Finance* Volume 66, September 2016, 88-112.
- Collier et al. (2001). Flight Capital as a Portfolio Choice. *World Bank Economic Review*, 15, 55-80. *The World Bank Economic Review*, vol. 15, no. 1 55–80, 59-60.
- Collier, P., Hoeffler, A., & Pattillo, C. (2001). Flight Capital as a Portfolio Choice. *The World Bank Economic Review*, vol. 15, no. 1 55–80.
- Commission, A. U. (2019). *Domestic Resource Mobilization: Fighting Against Corruption and Illicit Financial Flows*. Addis Ababa: AUC Publishing.
- David, K. G., & Ampah, I. K. (2018). Macroeconomic Volatility and Capital Flights in Sub-Saharan Africa: A Dynamic Panel Estimation of some Selected HIPC Countries. *Mediterranean Journal of Social Sciences*.
- Dim, C., & Ezenekwe, U. (2014). Capital Flight to Savings Gap in Nigeria: An Assessment of the Socio-Economic Determinants. *International Journal of Economics and Finance*; Vol. 6, No. 2; .
- Domfeh, K. O. (2017). Corruption, Institutions and Capital Flight: Evidence from Sub-Saharan Africa . *Journal of Economic Studies* 45 (3).

- Eshete, Z. S. (2018). The Political Economy of Capital Flight: Governance Quality and Capital Flight in the East Africa Community. *International Journal of African and Asian Studies* ISSN 2409-6938 An International Peer-reviewed Journal Vol.49.
- Fofack, H., & Ndikumana, L. (2010). Capital Flight Repatriation: Investigation of its Potential Gains for Sub-Saharan African Countries. *African Development Review*, 22 (1), 4-22.
- Forson, R., & Brafu-Insaidoo, K. C. (2017). Determinants of Capital Flight in Ghana. *Journal of Business and Enterprise Development; Vol. 7*, 151-180.
- Forson, R., Obeng, C. K., & Brafu-Insaidoo, W. G. (2017). Determinants of Capital Flight In Ghana. *Journal of Business and Enterprise Development; Vol. 7*, 108 - 130.
- Forson, R., Obeng, C. K., & Insaidoo, W. G. (2017). Determinants of capital flight in Ghana. *Journal of Business and Enterprise Development; Vol. 7,, 151 - 180.*
- Geda, A., & Yimer, A. (2016). Capital Flight and its Determinants: The Case of Ethiopia. *African Development Review*.
- Guba, E. G., & Lincoln, Y. S. (2005). *Paradigms and perspectives in contention. In N. Denzin and Y. Lincoln (eds.), Handbook of Qualitative Research (3rd ed., pp. 183- 190).* . Thousand Oaks, CA Sage: .
- Henry, J. S. (2012). *The Price of Offshore Revisited. London: Tax Justice Network.*
- Hoogstraten, J. v. (2015). *Theoretical Framework for financial flows in the extractive sector.*
- IMF. (2012). *The IMF and the Fight Against Illicit Financial Flows.*
- James, B. K., & Léonce, N. (2000). Is Africa a Net Creditor? New Estimates of Capital Flight from Severely Indebted Sub-Saharan African Countries, 1970-1996, Economics Department Working Paper Series. 81. *Journal of Development Studies.*
- John, J. D. (2010). The 'Resource Curse': Theory and Evidence (ARI). *ARI 172/2010.*
- Khan, M. S., & Haque, N. U. (1985). 'Foreign borrowing and capital flight: a formal analysis', *International Monetary Fund Staff Papers* 32 (4): 606—28.
- Kothari, C. (2009). *"Research Methodology: Methods & Techniques" (Second Revised Edition).* New Delhi: New Age International Publishers.
- Lawanson, A. O. (2014). *Impact of External Debt Accumulation and Capital Flight on Economic Growth of West African Countries, AERC Research Paper 279.* Nairobi: African Economic Research Consortium.
- Lawrence, N. W. (2003). *Social Research Methods: Qualitative and Quantitative Approaches (5th ed.).* Boston: Allyn and Bacon.
- Le, Q. V., & Zak, P. J. (2006). Political risk and capital flight. *Journal of International Money and Finance* 25 (2006) 308-329.
- Lensink, R., Hermes, N., & Murinde, V. (1988). Capital Flight and Political Risk.
- Leonce, L., & Boyce, J. K. (2018). Capital Flight from Africa: Updated Methodology and New Estimates PERI/UMass, Working Paper.

- Letete, E., & Sarr, M. (2017). *Illicit Financial Flows and Political Institutions in Kenya, Working Paper Series N° 275, African Development Bank, Abidjan, Côte d'Ivoire. African Development Bank.*
- Liew, S.-L., Mansor, S. A., & Puah, C.-H. (2016). Macroeconomic Determinants of Capital Flight: An Empirical Study in Malaysia. *International Business Management, 10(13), 2526-2534.*
- Lin, Z. K. (2018). Institutional Quality and Illicit Financial Flows in Developing and Developed Countries: An Empirical Assessment. *CUNY Academic Works Spring 5-5.*
- Manuel, P. (1989). *Capital flight and the Latin American debt crisis.* Washington D.C: Economic Policy Institute.
- Marczyk, G., DeMatteo, D., & Festinger, D. (2005). *Essentials of Research Design and Methodology.* New Jersey: John Wiley & Sons, Inc.
- Mithia, C., & Kosgey, M. (2022). Governance Practices and Illicit Financial Flows in Kenya's Oil and Mining Sectors. *American Journal of Public Policy and Administration, ISSN 2520-4696 Vol.7, Issue 1, 1-13.*
- Mnif, A. T., Kharrat, O., & Feki, R. (2018). The Root Causes of Capital Flight in Tunisia: An Empirical Investigation. *International Journal of Social Science and Economic Research, ISSN: 2455-8834, Volume:03, .*
- Mossadak, A. (2018). Illicit financial outflows from Africa: measurement and determinants. *International Journal of Economics, Commerce and Management 12.IV, 265-276.*
- Muchai, D. N., & Muchai, J. (2016). Fiscal Policy and Capital Flight in Kenya. *African Development Review, Vol. 28, No. S1,, 8-21.*
- Muchai, D. N., & Muchai, J. (2018). Fiscal Policy and Capital Flight in Kenya. *African Development Review, Vol. 28, No. S1,, 8 - 21.*
- Mwangi, M. W., Njuguna, A. G., & Achoki, G. O. (2019). Relationship between corruption and capital flight in Kenya: 1998-2018. *International Journal of Research in Business and Social Science 8(5)(2019) 237-250.*
- Mwangia, M. W., Njuguna, A. G., & Achoki, G. O. (2019). Relationship Between Foreign Direct Investments and Capital Flight in Kenya: 1998-2018. *IJBE: Integrated Journal of Business and Economics, e-ISSN: 2549-3280, 251-267.*
- Myers, S. C. (1977). Determinants of corporate borrowing. *Journal of Financial Economics, Volume 5, Issue 2,, 147-175.*
- Ndiaye, A. S. (2011). Capital Flight and its Determinants in the Franc Zone.
- Ndikumana et al. (2014). Capital Flight: Measurement and Drivers.
- Ndikumana, & Boyce. (2002). Public Debts and Private Assets: Explaining Capital Flight from Sub-Saharan African Countries Economics Department Working Paper Series. 91. Retrieved from https://scholarworks.umass.edu/econ_workingpaper/91.

- Ndikumana, L. (2015). *"Capital Flight from Africa and Development Inequality: Domestic and Global Dimensions"*. Amherst: Department of Economics and Political Economy Research Institute.
- Ndikumana, L., & Boyce, J. K. (2008). New Estimates of Capital Flight from Sub-Saharan African Countries: Linkages with External Borrowing and Policy Options.
- Ndikumana, L., & James, B. K. (2012). *Capital Flight from North African Countries: Political Economy Research Institute (PERI) Research Report*; . University of Massachusetts-Amherst.
- Ndikumana, L., & Sarr, M. (2016). Capital Flight and Foreign Direct Investment in Africa: An Investigation of the Role of Natural Resource Endowment.
- Ndikumana, L., Boyce, J. K., & Ndiaye, A. S. (2014). Capital Flight: Measurement and Drivers.
- Ndikumana., L. (2015). Capital Flight from Africa and Development Inequality: Domestic and Global Dimensions.
- NGUGI, W. N. (2019). Effect of Public Debt On Economic Growth in Kenya. *International Journal of Business Education and Management Studies*, 1-7.
- OECD. (2014). *Illicit Financial Flows: Measuring OECD Responses*.
- Orkoh, E., Claassen, C., & Blaauw, P. F. (2018). Corruption, Political Stability and Illicit Financial Outflows in Sub-Saharan Africa. *SSRN*.
- Osaretin, E. N., & Efe, O. M. (2020). Dynamic Empirical Analysis of the Determinants of Capital Flight in Nigeria. *ACTA UNIVERSITATIS DANUBIUS Vol 16, no 1, ISSN: 2065-0175*, 216-227.
- Osei-Assibey, E., Domfeh, K. O., & Danquah, M. (2018). Corruption, institutions and capital flight: evidence from Sub-Saharan Africa. *Emerald Group Publishing Vol. 45(1)*, 59-76.
- Osei-Assibey, E., Domfeh, K. O., & Danquah, M. (2018). Corruption, institutions and capital flight: evidence from Sub-Saharan Africa. *Journal of Economic Studies Vol. 45 No. 1,* 59-76.
- Otieno, S., Mose, N., & Matundura, E. (2022). External Debt and Capital Flight in East Africa. *Journal of Economics and Sustainable Development, ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online) Vol.13, No.6.*
- Otieno, S., Mose, N., & Thomi, J. (2022). Exchange Rate and Capital Flight: An Empirical Analysis. *South Asian Journal of Social Studies and Economics, ISSN: 2581-821X*, 1-10.
- Podesta, Hanni, & Martner, &. (2017). *Illicit financial flows in the Latin America and the Carribean*. Economic Development Division of the Economic Commission for Latin America and the Caribbean (ECLAC) Affairs.

- Rahman, M., Mustafa, M., & Turpin, L. (2019). Determining illicit financial outflows from sixty developing countries. *Journal of Financial Economic Policy Vol. 11 No. 1*, 62-81.
- Rahman, M., Mustafa, M., & Turpin, L. (2019). Determining Illicit Financial Outflows from Sixty Developing Countries. *Journal of Financial Economic Policy*, 62-81.
- Rudich, D. (2021). *Kenya Illicit Finance Risks and Assessment*. Washington: The Sentry.
- Salandy, M., & Henry, L. (2018). Determinants Of Capital Flight From Beautiful Places: The Case Of Small Open Economy Of Trinidad And Tobago. *The Journal of Developing Areas Volume 52, Number 4*, 85-97.
- Saxena, S. P., & Shanker, I. (2016). Dynamics of external debt and capital flight in India. *Scholedge International Journal of Management & Development (2394-3378), Vol.03, Issue 02*, 49 - 62.
- Signé, L., Sow, M., & Madden, a. P. (2020). *Illicit financial flows in Africa: Drivers, destinations, and policy options*. Brookings: Africa Growth Initiative.
- Taherdoost, H. (2016). Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research. *International Journal of Academic Research in Management (IJARM) Vol. 5, No. 2, ISSN: 2296-1747*, 18-27.
- Tarawalie, A. B., & Jalloh, T. (2021). Determinants of Capital Flight in Post War Sierra Leone: An Empirical Analysis. *International Journal of Economics and Financial Issues, ISSN: 2146-4138*, 108-116.
- Tobias, M. S. (2020). Illicit Financial Flows and Economic Growth in Kenya. *Int Journal of Social Sciences Management and Entrepreneurship 4(1):*, 173-189.
- Uddin, M. J., Yousuf, M., & Islam, R. (2017). Capital flight affecting determinants in Bangladesh: An econometric estimation. *International Journal of Economics, Commerce and Management Vol. V, Issue 8 ISSN 2348 0386*, 223 - 248.
- Ulin, P. R., Robinson, E. T., & Tolley, E. E. (2005). *Qualitative Methods in Public Health*. San Francisco: Jossey-Bass.
- UN. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. United Nations.
- UNDP. (2013). *The 2013 Human Development Report – The Rise of the South: Human Progress in a Diverse World. (Forthcoming)*. . New York: United Nations.
- African Union (2015). *Illicit Financial Flows: Report of the High Level Panel on Illicit Financial*. Addis Ababa: UNECA.
- UNODC (2020). *Conceptual Framework for the Statistical Measurement of Illicit Financial Flows*. Vienna.
- Wanjau, M. S., & Tobias, O. (2020). Illicit Financial Flows and Economic Growth in Kenya. *Int Journal of Social Sciences Management and Entrepreneurship ISSN 2411-7323*, 173 - 189.

APPENDICES

Appendix I: VECM

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0.11	0.02	6.37	0.00
C(2)	2.81	0.46	6.16	0.00
C(3)	9.53	6.18	1.54	0.12
C(4)	3058.65	488.89	6.26	0.00
C(5)	0.19	0.09	2.13	0.03
C(6)	0.03	0.09	0.37	0.71
C(7)	0.03	0.09	0.29	0.77
C(8)	-0.67	0.08	-8.01	0.00
C(9)	-2.20	0.76	-2.88	0.00
C(10)	-1.64	0.84	-1.95	0.05
C(11)	-0.78	0.83	-0.94	0.35
C(12)	-3.02	0.87	-3.49	0.00
C(13)	2.12	7.40	0.29	0.77
C(14)	-3.14	6.41	-0.49	0.63
C(15)	2.76	7.31	0.38	0.71
C(16)	12.20	6.35	1.92	0.06
C(17)	-435.97	1561.56	-0.28	0.78
C(18)	1894.69	1545.31	1.23	0.22
C(19)	915.91	1554.29	0.59	0.56
C(20)	3396.16	1526.56	2.22	0.03
C(21)	-1.26	0.36	-3.48	0.00
C(22)	-0.85	0.42	-2.03	0.04
C(23)	-0.11	0.43	-0.25	0.80
C(24)	-0.85	0.43	-2.00	0.05
C(25)	13.82	21.65	0.64	0.52
C(26)	2.96	22.52	0.13	0.90
C(27)	-11.08	22.55	-0.49	0.62
C(28)	67.03	24.44	2.74	0.01
C(29)	-8.91	16.70	-0.53	0.59
C(30)	-16.67	17.22	-0.97	0.33
C(31)	-22.48	16.38	-1.37	0.17
C(32)	3.42	16.26	0.21	0.83
C(33)	-0.97	0.66	-1.47	0.14
C(34)	-0.01	0.00	-4.95	0.00
C(35)	-0.33	0.06	-5.77	0.00
C(36)	0.69	0.77	0.89	0.37
C(37)	-256.50	61.00	-4.21	0.00
C(38)	0.01	0.01	0.79	0.43

C(39)	0.00	0.01	0.43	0.66
C(40)	0.01	0.01	0.56	0.57
C(41)	-0.01	0.01	-0.96	0.34
C(42)	0.35	0.10	3.72	0.00
C(43)	0.31	0.10	3.00	0.00
C(44)	0.30	0.10	2.86	0.00
C(45)	0.03	0.11	0.32	0.75
C(46)	0.30	0.92	0.33	0.74
C(47)	0.04	0.80	0.06	0.96
C(48)	-0.14	0.91	-0.15	0.88
C(49)	3.69	0.79	4.66	0.00
C(50)	197.51	194.83	1.01	0.31
C(51)	338.82	192.81	1.76	0.08
C(52)	47.21	193.93	0.24	0.81
C(53)	204.84	190.47	1.08	0.28
C(54)	0.00	0.05	0.05	0.96
C(55)	0.00	0.05	-0.02	0.99
C(56)	0.01	0.05	0.11	0.91
C(57)	0.09	0.05	1.68	0.09
C(58)	-6.44	2.70	-2.39	0.02
C(59)	-5.92	2.81	-2.11	0.04
C(60)	-6.11	2.81	-2.17	0.03
C(61)	-19.14	3.05	-6.28	0.00
C(62)	1.51	2.08	0.72	0.47
C(63)	2.21	2.15	1.03	0.30
C(64)	2.20	2.04	1.08	0.28
C(65)	3.16	2.03	1.56	0.12
C(66)	-0.17	0.08	-2.03	0.04
C(67)	0.00	0.00	3.58	0.00
C(68)	0.02	0.01	3.75	0.00
C(69)	0.11	0.08	1.43	0.15
C(70)	16.40	6.18	2.65	0.01
C(71)	0.00	0.00	-1.88	0.06
C(72)	0.00	0.00	-0.60	0.55
C(73)	0.00	0.00	-0.84	0.40
C(74)	0.00	0.00	-0.41	0.68
C(75)	-0.02	0.01	-2.13	0.03
C(76)	-0.02	0.01	-1.64	0.10
C(77)	-0.02	0.01	-1.44	0.15
C(78)	-0.02	0.01	-2.12	0.03
C(79)	-0.04	0.09	-0.47	0.64
C(80)	-0.01	0.08	-0.06	0.95
C(81)	-0.09	0.09	-1.01	0.31
C(82)	-0.61	0.08	-7.59	0.00
C(83)	-22.11	19.75	-1.12	0.26
C(84)	-21.98	19.54	-1.12	0.26

C(85)	-11.66	19.66	-0.59	0.55
C(86)	-15.46	19.31	-0.80	0.42
C(87)	0.00	0.00	0.66	0.51
C(88)	0.00	0.01	-0.21	0.83
C(89)	0.00	0.01	-0.18	0.86
C(90)	-0.01	0.01	-1.45	0.15
C(91)	-0.30	0.27	-1.10	0.27
C(92)	-0.18	0.28	-0.64	0.53
C(93)	0.01	0.29	0.02	0.98
C(94)	-1.32	0.31	-4.26	0.00
C(95)	-0.46	0.21	-2.20	0.03
C(96)	-0.28	0.22	-1.30	0.19
C(97)	-0.35	0.21	-1.68	0.09
C(98)	-0.49	0.21	-2.39	0.02
C(99)	0.00	0.01	0.32	0.75
C(100)	0.00	0.00	0.70	0.48
C(101)	0.00	0.00	-0.45	0.65
C(102)	0.00	0.00	-0.92	0.36
C(103)	0.08	0.06	1.29	0.20
C(104)	0.00	0.00	-0.58	0.57
C(105)	0.00	0.00	-0.55	0.58
C(106)	0.00	0.00	0.23	0.82
C(107)	0.00	0.00	-1.69	0.09
C(108)	0.00	0.00	-1.26	0.21
C(109)	0.00	0.00	0.00	1.00
C(110)	0.00	0.00	-0.08	0.94
C(111)	0.00	0.00	-1.03	0.31
C(112)	0.00	0.00	0.04	0.97
C(113)	0.00	0.00	-1.11	0.27
C(114)	0.00	0.00	0.63	0.53
C(115)	0.00	0.00	0.20	0.85
C(116)	-0.25	0.19	-1.28	0.20
C(117)	-0.84	0.19	-4.43	0.00
C(118)	-0.23	0.19	-1.23	0.22
C(119)	0.18	0.19	0.96	0.34
C(120)	0.00	0.00	1.04	0.30
C(121)	0.00	0.00	-1.50	0.13
C(122)	0.00	0.00	0.58	0.56
C(123)	0.00	0.00	0.40	0.69
C(124)	0.00	0.00	1.19	0.23
C(125)	0.00	0.00	0.30	0.76
C(126)	0.00	0.00	0.31	0.75
C(127)	0.00	0.00	0.90	0.37
C(128)	0.00	0.00	1.19	0.24
C(129)	0.00	0.00	-0.30	0.76
C(130)	0.00	0.00	0.13	0.89

C(131)	0.00	0.00	0.17	0.86
C(132)	0.00	0.00	2.89	0.00
C(133)	0.01	0.00	3.19	0.00
C(134)	0.07	0.10	0.72	0.47
C(135)	-6.47	1.36	-4.77	0.00
C(136)	655.65	107.38	6.11	0.00
C(137)	-0.04	0.02	-2.19	0.03
C(138)	-0.02	0.02	-0.81	0.42
C(139)	-0.02	0.02	-0.95	0.34
C(140)	-0.13	0.02	-6.84	0.00
C(141)	-0.25	0.17	-1.51	0.13
C(142)	-0.25	0.18	-1.36	0.17
C(143)	-0.43	0.18	-2.36	0.02
C(144)	0.13	0.19	0.67	0.50
C(145)	0.43	1.63	0.26	0.79
C(146)	1.58	1.41	1.12	0.26
C(147)	1.64	1.60	1.02	0.31
C(148)	2.46	1.39	1.77	0.08
C(149)	-320.48	342.99	-0.93	0.35
C(150)	-825.09	339.42	-2.43	0.02
C(151)	76.95	341.39	0.23	0.82
C(152)	-554.84	335.31	-1.65	0.10
C(153)	0.26	0.08	3.32	0.00
C(154)	0.20	0.09	2.19	0.03
C(155)	0.15	0.09	1.60	0.11
C(156)	-0.31	0.09	-3.34	0.00
C(157)	14.68	4.75	3.09	0.00
C(158)	13.69	4.95	2.77	0.01
C(159)	15.46	4.95	3.12	0.00
C(160)	16.11	5.37	3.00	0.00
C(161)	2.42	3.67	0.66	0.51
C(162)	1.61	3.78	0.43	0.67
C(163)	2.88	3.60	0.80	0.42
C(164)	-3.59	3.57	-1.00	0.32
C(165)	0.30	0.14	2.11	0.04
C(166)	0.00	0.00	-0.70	0.49
C(167)	0.00	0.00	1.14	0.26
C(168)	-0.07	0.04	-1.93	0.05
C(169)	-2.87	2.81	-1.02	0.31
C(170)	0.00	0.00	0.16	0.87
C(171)	0.00	0.00	-0.02	0.99
C(172)	0.00	0.00	0.05	0.96
C(173)	0.00	0.00	3.48	0.00
C(174)	0.00	0.00	-1.03	0.30
C(175)	-0.01	0.00	-1.11	0.27
C(176)	-0.01	0.00	-1.76	0.08

C(177)	0.02	0.00	4.04	0.00
C(178)	0.00	0.04	0.05	0.96
C(179)	-0.01	0.04	-0.24	0.81
C(180)	0.03	0.04	0.80	0.42
C(181)	0.09	0.04	2.54	0.01
C(182)	19.70	8.97	2.20	0.03
C(183)	15.01	8.87	1.69	0.09
C(184)	20.39	8.93	2.28	0.02
C(185)	11.13	8.77	1.27	0.21
C(186)	0.00	0.00	0.21	0.83
C(187)	0.00	0.00	0.02	0.98
C(188)	0.00	0.00	0.65	0.52
C(189)	-0.01	0.00	-4.83	0.00
C(190)	0.40	0.12	3.20	0.00
C(191)	0.32	0.13	2.51	0.01
C(192)	0.26	0.13	2.04	0.04
C(193)	-0.33	0.14	-2.32	0.02
C(194)	0.09	0.10	0.97	0.33
C(195)	0.05	0.10	0.50	0.62
C(196)	-0.01	0.09	-0.10	0.92
C(197)	-0.04	0.09	-0.47	0.64
C(198)	0.00	0.00	-1.29	0.20
C(199)	0.00	0.00	0.49	0.63
C(200)	0.01	0.00	1.06	0.29
C(201)	0.10	0.06	1.59	0.11
C(202)	-2.40	5.13	-0.47	0.64
C(203)	0.00	0.00	0.15	0.88
C(204)	0.00	0.00	-0.31	0.76
C(205)	0.00	0.00	0.11	0.91
C(206)	0.00	0.00	1.40	0.16
C(207)	0.00	0.01	-0.04	0.97
C(208)	0.00	0.01	-0.06	0.95
C(209)	0.01	0.01	0.60	0.55
C(210)	0.01	0.01	0.81	0.42
C(211)	-0.02	0.08	-0.31	0.76
C(212)	-0.15	0.07	-2.17	0.03
C(213)	0.04	0.08	0.52	0.60
C(214)	-0.09	0.07	-1.40	0.16
C(215)	-6.55	16.40	-0.40	0.69
C(216)	-6.68	16.23	-0.41	0.68
C(217)	-2.38	16.32	-0.15	0.88
C(218)	-9.23	16.03	-0.58	0.57
C(219)	0.00	0.00	-0.82	0.41
C(220)	0.00	0.00	0.28	0.78
C(221)	0.01	0.00	1.79	0.08
C(222)	0.00	0.00	-0.67	0.50

C(223)	-0.19	0.23	-0.84	0.40
C(224)	0.05	0.24	0.20	0.84
C(225)	-0.31	0.24	-1.32	0.19
C(226)	0.14	0.26	0.55	0.58
C(227)	-0.41	0.18	-2.31	0.02
C(228)	-0.31	0.18	-1.74	0.08
C(229)	-0.35	0.17	-2.05	0.04
C(230)	-0.09	0.17	-0.56	0.58
C(231)	0.01	0.01	0.82	0.41

$D(IFF)=C(1)*(IFF(-1)+37.9775742337*Exchange_Rate(-1)-1520.60954346*Inflation_Rate(-1)-807.56378989*Interest_Rate(-1)-855.53503229)+C(2)*(Corruption(-1)-0.381998197377*Exchange_Rate(-1)-14.0318493217*Inflation_Rate(-1)+28.4782922326*Interest_Rate(-1)-57.9300266951)+C(3)*(Political_Risk(-1)-0.0114824847324*Exchange_rate(-1)+5.64835600394*Inflation_Rate(-1)-0.448040701818*Interest_Rate(-1)-3.45338293369)+C(4)*(External_Debt(-1)-0.000949824314157*Exchange_Rate(-1)+0.0470456883374*Inflation_Rate(-1)+0.00866885736167*Interest_Rate(-1)+0.016753894626)+C(5)*D(IFF(-1))+C(6)*D(IFF(-2))+C(7)*D(IFF(-3))+C(8)*D(IFF(-4))+C(9)*D(Corruption(-1))+C(10)*D(Corruption(-2))+C(11)*D(Corruption(-3))+C(12)*D(Corruption(-4))+C(13)*D(Political_Risk(-1))+C(14)*D(Political_Risk(-2))+C(15)*D(Political_RISK(-3))+C(16)*D(Political_Risk(-4))+C(17)*D(External_Debt(-1))+C(18)*D(External_Debt(-2))+C(19)*D(External_Debt(-3))+C(20)*D(External_Debt(-4))+C(21)*D(Exchange_Rate(-1))+C(22)*D(Exchange_Rate(-2))+C(23)*D(Exchange_Rate(-3))+C(24)*D(Exchange_Rate(-4))+C(25)*D(Inflation_Rate(-1))+C(26)*D(Inflation_Rate(-2))+C(27)*D(Inflation_Rate(-3))+C(28)*D(Inflation_Rate(-4))+C(29)*D(Interest_Rate(-1))+C(30)*D(Interest_Rate(-2))+C(31)*D(Interest_Rate(-3))+C(32)*D(Interest_Rate(-4))+C(33)$

R-squared	0.94	Mean dependent var	-0.31
Adjusted R-squared	0.89	S.D. dependent var	7.07
S.E. of regression	2.34	Sum squared resid	186.76
Durbin-Watson stat	2.10		

$D(CORRUPTION)=C(34)*(IFF(-1)+37.9775742337*Exchange_Rate(-1)-1520.60954346*Inflation_Rate(-1)-807.56378989*Interest_Rate(-1)-855.53503229)+C(35)*(Corruption(-1)-0.381998197377*Exchange_Rate(-1)-14.0318493217*Inflation_Rate(-1)+28.4782922326*Interest_Rate(-1)-57.9300266951)+C(36)*(Political_Risk(-1)-0.0114824847324*Exchange_Rate(-1)+5.64835600394*Inflation_Rate(-1)-0.448040701818*Interest_Rate(-1)-3.45338293369)+C(37)*(External_Debt(-1)-0.000949824314157*Exchange_Rate(-1)+0.0470456883374*Inflation_Rate(-1)+0.00866885736167*Interest_Rate(-1)+0.016753894626)+C(38)*D(IFF(-1))+C(39)*D(IFF(-2))+C(40)*D(IFF(-3))+C(41)*D(IFF(-4))+C(42)*D(Corruption(-1))+C(43)*D(Corruption(-2))+C(44)*D(Corruption(-3))+C(45)*D(Corruption(-4))+C(46)*D(Political_Risk(-1))+C(47)*D(Political_Risk(-2))+C(48)*D(Political_Risk(-3))+C(49)*D(Political_Risk(-4))+C(50)*D(External_Debt(-1))+C(51)*D(External_Debt(-2))+C(52)*D(External_Debt(-3))+C(53)*D(External_Debt(-4))+C(54)*D(Exchange_Rate(-1))+C(55)*D(Exchange_Rate(-2))+C(56)*D(Exchange_Rate(-3))+C(57)*D(Exchange_Rate(-4))+C(58)*D(Inflation_Rate(-1))+C(59)*D(Inflation_Rate(-2))+C(60)*D(Inflation_Rate(-3))+C(61)*D(Inflation_Rate(-4))+C(62)*D(Interest_Rate(-1))+C(63)*D(Interest_Rate(-2))+C(64)*D(Interest_Rate(-3))+C(65)*D(Interest_Rate(-4))+C(66)$

R-squared	0.86	Mean dependent var	-0.16
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Adjusted R-squared	0.72	S.D. dependent var		0.56
S.E. of regression	0.29	Sum squared resid		2.91
Durbin-Watson stat	1.84			

$D(\text{POLITICAL_RISK}) = C(67) * (\text{IFF}(-1) + 37.9775742337 * \text{Exchange_Rate}(-1) - 1520.60954346 * \text{Inflation_Rate}(-1) - 807.56378989 * \text{Interest_Rate}(-1) - 855.53503229) + C(68) * (\text{Corruption}(-1) - 0.381998197377 * \text{Exchange_Rate}(-1) - 14.0318493217 * \text{Inflation_Rate}(-1) + 28.4782922326 * \text{Interest_Rate}(-1) - 57.9300266951) + C(69) * (\text{Political_Risk}(-1) - 0.0114824847324 * \text{Exchange_Rate}(-1) + 5.64835600394 * \text{Inflation_Rate}(-1) - 0.448040701818 * \text{Interest_Rate}(-1) - 3.45338293369) + C(70) * (\text{External_Debt}(-1) - 0.000949824314157 * \text{Exchange_Rate}(-1) + 0.0470456883374 * \text{Inflation_Rate}(-1) + 0.00866885736167 * \text{Interest_Rate}(-1) + 0.016753894626) + C(71) * D(\text{IFF}(-1)) + C(72) * D(\text{IFF}(-2)) + C(73) * D(\text{IFF}(-3)) + C(74) * D(\text{IFF}(-4)) + C(75) * D(\text{Corruption}(-1)) + C(76) * D(\text{Corruption}(-2)) + C(77) * D(\text{Corruption}(-3)) + C(78) * D(\text{Corruption}(-4)) + C(79) * D(\text{Political_Risk}(-1)) + C(80) * D(\text{Political_Risk}(-2)) + C(81) * D(\text{Political_Risk}(-3)) + C(82) * D(\text{Political_Risk}(-4)) + C(83) * D(\text{External_Debt}(-1)) + C(84) * D(\text{External_Debt}(-2)) + C(85) * D(\text{External_Debt}(-3)) + C(86) * D(\text{External_Debt}(-4)) + C(87) * D(\text{Exchange_Rate}(-1)) + C(88) * D(\text{Exchange_Rate}(-2)) + C(89) * D(\text{Exchange_Rate}(-3)) + C(90) * D(\text{Exchange_Rate}(-4)) + C(91) * D(\text{Inflation_Rate}(-1)) + C(92) * D(\text{Inflation_Rate}(-2)) + C(93) * D(\text{Inflation_Rate}(-3)) + C(94) * D(\text{Inflation_Rate}(-4)) + C(95) * D(\text{Interest_Rate}(-1)) + C(96) * D(\text{Interest_Rate}(-2)) + C(97) * D(\text{Interest_Rate}(-3)) + C(98) * D(\text{Interest_Rate}(-4)) + C(99)$

R-squared	0.908	Mean dependent var		0.002
Adjusted R-squared	0.822	S.D. dependent var		0.070
S.E. of regression	0.030	Sum squared resid		0.030
Durbin-Watson stat	1.507			

$D(\text{EXTERNAL_DEBT}) = C(100) * (\text{IFF}(-1) + 37.9775742337 * \text{Exchange_Rate}(-1) - 1520.60954346 * \text{Inflation_Rate}(-1) - 807.56378989 * \text{Interest_Rate}(-1) - 855.53503229) + C(101) * (\text{Corruption}(-1) - 0.381998197377 * \text{Exchange_Rate}(-1) - 14.0318493217 * \text{Inflation_Rate}(-1) + 28.4782922326 * \text{Interest_Rate}(-1) - 57.9300266951) + C(102) * (\text{Political_Risk}(-1) - 0.0114824847324 * \text{Exchange_Rate}(-1) + 5.64835600394 * \text{Inflation_Rate}(-1) - 0.448040701818 * \text{Interest_Rate}(-1) - 3.45338293369) + C(103) * (\text{External_Debt}(-1) - 0.000949824314157 * \text{Exchange_Rate}(-1) + 0.0470456883374 * \text{Inflation_Rate}(-1) + 0.00866885736167 * \text{Interest_Rate}(-1) + 0.016753894626) + C(104) * D(\text{IFF}(-1)) + C(105) * D(\text{IFF}(-2)) + C(106) * D(\text{IFF}(-3)) + C(107) * D(\text{IFF}(-4)) + C(108) * D(\text{Corruption}(-1)) + C(109) * D(\text{Corruption}(-2)) + C(110) * D(\text{Corruption}(-3)) + C(111) * D(\text{Corruption}(-4)) + C(112) * D(\text{Political_Risk}(-1)) + C(113) * D(\text{Political_Risk}(-2)) + C(114) * D(\text{Political_Risk}(-3)) + C(115) * D(\text{Political_Risk}(-4)) + C(116) * D(\text{External_Debt}(-1)) + C(117) * D(\text{External_Debt}(-2)) + C(118) * D(\text{External_Debt}(-3)) + C(119) * D(\text{External_Debt}(-4)) + C(120) * D(\text{Exchange_Rate}(-1)) + C(121) * D(\text{Exchange_Rate}(-2)) + C(122) * D(\text{Exchange_Rate}(-3)) + C(123) * D(\text{Exchange_Rate}(-4)) + C(124) * D(\text{Inflation_Rate}(-1)) + C(125) * D(\text{Inflation_Rate}(-2)) + C(126) * D(\text{Inflation_Rate}(-3)) + C(127) * D(\text{Inflation_Rate}(-4)) + C(128) * D(\text{Interest_Rate}(-1)) + C(129) * D(\text{Interest_Rate}(-2)) + C(130) * D(\text{Interest_Rate}(-3)) + C(131) * D(\text{Interest_Rate}(-4)) + C(132)$

R-squared	0.913068	Mean dependent var		0.000123
Adjusted R-squared	0.83125	S.D. dependent var		0.000699
S.E. of regression	0.000287	Sum squared resid		2.80E-06
Durbin-Watson stat	1.997567			

$D(\text{EXCHANGE_RATE}) = C(133) * (\text{IFF}(-1) + 37.9775742337 * \text{Exchange_Rate}(-1) - 1520.60954346 * \text{Inflation_Rate}(-1) - 807.56378989 * \text{Interest_Rate}(-1) - 855.53503229) + C(134) * (\text{Corruption}(-1) - 0.381998197377 * \text{Exchange_Rate}(-1) -$

14.0318493217*Inflation_Rate(-1)+28.4782922326*Interest_Rate(-1)-
57.9300266951)+C(135)*(Political_Risk(-1)-0.0114824847324*Exchange_Rate(-1)+
5.64835600394*Inflation_Rate(-1)-0.448040701818*Interest_Rate(-1)-
3.45338293369)+C(136)*(External_Debt(-1)-0.000949824314157*Exchange_Rate(-1)+
0.0470456883374*Inflation_Rate(-1)+0.00866885736167*Interest_Rate(-1)+
0.016753894626) + C(137)*D(IFF(-1)) + C(138)*D(IFF(-2)) + C(139)*D(IFF(-3)) + C(140)
*D(IFF(-4))+C(141)*D(Corruption(-1))+C(142)*D(Corruption(-2))+ C(143)*D(Corruption(-
3))+C(144)*D(Corruption(-4))+C(145)*D(Political_Risk(1))+C(146)*D(Political_Risk(-
2))+C(147)*D(Political_Risk(-3))+C(148)*D(Political_Risk(-4))+C(149)*D(external_Debt(-
1))+C(150)*D(External_Debt(-2))+C(151)*D(External_Debt(-3))+C(152)*D(External_Debt(-
4))+C(153)*D(Exchange_Rate(-1))+C(154)*D(Exchange_Rate(-
2))+C(155)*D(Exchange_Rate(-3))+C(156)*D(Exchange_Rate(
4))+C(157)*D(Inflation_Rate(-1))+C(158)*D(Inflation_Rate(-2))+C(159)*D(Inflation_Rate(-
3))+C(160)*D(Inflation_Rate(-4))+C(161)*D(Interest_Rate(-1))+C(162)*D(Interest_Rate(-
2))+C(163)*D(Interest_Rate(-3))+ C(164)*D(Interest_Rate(-4)) + C(165)

R-squared	0.940	Mean dependent var		0.430
Adjusted R-squared	0.884	S.D. dependent var		1.513
S.E. of regression	0.515	Sum squared resid		9.010
Durbin-Watson stat	1.722			

D(INFLATION_RATE) = C(166)*(IFF(-1) + 37.9775742337*Exchange_Rate(-1) -
1520.60954346*Inflation_Rate(-1) -807.56378989*Interest_Rate(-1) - 855.53503229) +
C(167)*(Corruption(-1)-0.381998197377*Exchange_Rate(-1)-
14.0318493217*Inflation_Rate(-1) + 28.4782922326*Interest_Rate(-1) - 57.9300266951) +
C(168)*(Political_Risk(-1)-0.0114824847324*Exchange_Rate(-1)+
5.64835600394*Inflation_Rate(-1) - 0.448040701818*Interest_Rate(-1) -3.45338293369) +
C(169)*(External_Debt(-1)-0.000949824314157*Exchange_Rate(-1)+
0.0470456883374*Inflation_Rate(-1)+0.00866885736167*Interest_Rate(-1)+
0.016753894626) + C(170)*D(IFF(-1)) + C(171)*D(IFF(-2)) + C(172)*D(IFF(-3)) + C(173)
*D(IFF(-4))+C(174)*D(Corruption(-1))+C(175)*D(Corruption(-2))+ C(176)*D(Corruption(-
3))+C(177)*D(Corruption(-4))+C(178)*D(Political_Risk(-1))+C(179)*D(Political_Risk(-2))+
C(180)*D(Political_Risk(-3))+C(181)*D(Political_Risk(-4))+ C(182)*D(External_Debt(-1)) +
C(183)*D(External_Debt(-2))+C(184)*D(External_Debt(-3))+ C(185)*D(External_Debt(-4))
+C(186)*D(Exchange_Rate(-1))+C(187)*D(Exchange_Rate(-2))+
C(188)*D(Exchange_Rate(-3)) + C(189)*D(Exchange_Rate(-4)) + C(190)*D(Inflation_Rate(-
1))+C(191)*D(Inflation_Rate(-2))+C(192)*D(Inflation_Rate(-3)) + C(193)*D(Inflation_Rate(-
4)) + C(194)*D(Interest_Rate(-1)) + C(195)*D(Interest_Rate(-2)) + C(196)*D(Interest_Rate(-
3)) + C(197)*D(Interest_Rate(-4)) + C(198)

R-squared	0.869	Mean dependent var		-0.001
Adjusted R-squared	0.746	S.D. dependent var		0.027
S.E. of regression	0.013	Sum squared resid		0.006
Durbin-Watson stat	1.797			

D(INTEREST_RATE)=C(199)*(IFF(-1)+37.9775742337*Exchange_Rate(-1)-
1520.60954346*Inflation_Rate(-1)-807.56378989*Interest_Rate(-1)-855.53503229)+
C(200)*(Corruption(-1)-0.381998197377*Exchange_Rate(-1)-
14.0318493217*Inflation_Rate(-1) + 28.4782922326*Interest_Rate(-1) - 57.9300266951) +
C(201)*(Political_Risk(-1)-0.0114824847324*Exchange_Rate(-1)+
5.64835600394*Inflation_Rate(-1) - 0.448040701818*Interest_Rate(-1) -3.45338293369) +
C(202)*(External_Debt(-1)-0.000949824314157*Exchange_Rate(-1)+
0.0470456883374*Inflation_Rate(-1)+0.00866885736167*Interest_Rate(-1)+

$0.016753894626) + C(203)*D(IFF(-1)) + C(204)*D(IFF(-2)) + C(205)*D(IFF(-3)) + C(206)*D(IFF(-4))+C(207)*D(Corruption(-1)) + C(208)*D(Corruption(-2)) + C(209)*D(Corruption(-3)) + C(210)*D(Corruption(-4)) + C(211)*D(Political_Risk(-1)) + C(212)*D(Political_Risk(-2))+C(213)*D(Political_Risk(-3))+C(214)*D(Political_Risk(-4)) + C(215)*D(External_Debt(-1))+C(216)*D(External_Debt(-2))+C(217)*D(External_Debt(-3))+ C(218)*D(External_Debt(-4))+C(219)*D(Exchange_Rate(-1))+C(220)*D(Exchange_Rate(-2))+$
 $C(221)*D(Exchange_Rate(-3)) + C(222)*D(Exchange_Rate(-4)) + C(223)*D(Inflation_Rate(-1))+C(224)*D(Inflation_Rate(-2))+C(225)*D(Inflation_Rate(-3)) + C(226)*D(Inflation_Rate(-4)) + C(227)*D(Interest_Rate(-1)) + C(228)*D(Interest_Rate(-2)) + C(229)*D(Interest_Rate(-3)) + C(230)*D(Interest_Rate(-4)) + C(231)$

R-squared	0.580	Mean dependent var	0.0007
Adjusted R-squared	0.185	S.D. dependent var	0.0273
S.E. of regression	0.025	Sum squared resid	0.0206
Durbin-Watson stat	1.992		



Appendix II: Research Data

Year	Quarter	Corruption perception Index	Political Index Score	Ratio of external debt to GDP	Exchange Rate (KES to USD)	% Change in Inflation_Rate	%Change in Interest Rate	Ratio of IFFs to ODA
2003	1	82.19	-1.40	0.0028	76.04505296	1.08	1.08	60.26
	2	81.31	-1.29	0.0029	75.71990233	1.09	1.06	63.15
	3	80.56	-1.21	0.0029	75.77299413	1.10	1.02	65.92
	4	79.94	-1.14	0.0028	76.20432836	1.11	1.01	68.57
2004	1	79.44	-1.10	0.0030	79.03108502	1.11	1.02	70.75
	2	79.06	-1.08	0.0031	79.4120321	1.12	1.02	73.29
	3	78.81	-1.08	0.0029	79.3643496	1.12	1.02	75.83
	4	78.69	-1.10	0.0029	78.88803753	1.12	1.04	78.39
2005	1	79.16	-1.23	0.0031	76.88550753	1.10	1.08	80.06
	2	79.09	-1.26	0.0029	75.99097164	1.10	1.09	82.99
	3	78.97	-1.26	0.0030	75.10684151	1.10	1.09	86.29
	4	78.78	-1.25	0.0030	74.23311714	1.11	1.08	89.95
2006	1	78.06	-1.12	0.0027	73.60361331	1.14	1.08	92.07
	2	77.94	-1.11	0.0027	72.65717455	1.15	1.07	97.23
	3	77.94	-1.13	0.0027	71.62761564	1.15	1.06	103.54
	4	78.06	-1.17	0.0026	70.51493657	1.14	1.07	110.97
2007	1	78.78	-1.32	0.0025	68.07369968	1.08	1.06	128.70
	2	78.97	-1.37	0.0025	67.29295537	1.08	1.07	134.74
	3	79.09	-1.40	0.0026	66.92726597	1.10	1.07	138.25
	4	79.16	-1.42	0.0025	66.97663148	1.13	1.08	139.22
2008	1	79.16	-1.35	0.0026	67.49134375	1.25	1.07	128.41
	2	79.09	-1.37	0.0026	68.35070234	1.27	1.07	128.03
	3	78.97	-1.40	0.0025	69.60499911	1.27	1.08	128.83
	4	78.78	-1.45	0.0025	71.25423406	1.25	1.08	130.80

2009	1	78.06	-1.66	0.0030	75.26943278	1.14	1.08	143.69
	2	77.94	-1.68	0.0031	76.92013384	1.10	1.07	144.12
	3	77.94	-1.65	0.0025	78.17736282	1.07	1.07	141.82
	4	78.06	-1.58	0.0027	79.04111974	1.05	1.07	136.80
2010	1	78.94	-1.26	0.0029	77.32514961	1.04	1.07	112.80
	2	79.06	-1.18	0.0030	78.27646439	1.03	1.05	108.84
	3	79.06	-1.13	0.0028	79.70880909	1.04	1.02	108.65
	4	78.94	-1.11	0.0029	81.62218373	1.05	1.02	112.25
2011	1	79.00	-1.21	0.0033	87.38459851	1.13	1.02	134.67
	2	78.50	-1.23	0.0035	88.91282892	1.14	1.03	139.82
	3	77.75	-1.25	0.0029	89.57488518	1.15	1.09	142.73
	4	76.75	-1.27	0.0030	89.37076728	1.15	1.15	143.40
2012	1	74.09	-1.33	0.0034	85.21715775	1.11	1.21	134.06
	2	73.16	-1.33	0.0036	84.51401853	1.10	1.16	133.37
	3	72.53	-1.32	0.0038	84.17803215	1.09	1.12	133.56
	4	72.22	-1.30	0.0036	84.2091986	1.08	1.09	134.61
2013	1	72.69	-1.19	0.0039	85.49321126	1.06	1.08	146.97
	2	72.81	-1.16	0.0039	85.90440603	1.06	1.10	145.61
	3	73.06	-1.16	0.0037	86.32847628	1.05	1.06	140.95
	4	73.44	-1.17	0.0038	86.76542203	1.05	1.10	133.00
2014	1	74.56	-1.26	0.0043	85.926025	1.07	1.09	110.32
	2	74.94	-1.28	0.0045	86.90440901	1.07	1.09	100.36
	3	75.19	-1.29	0.0039	88.41135582	1.07	1.10	91.68
	4	75.31	-1.29	0.0040	90.44686541	1.07	1.09	84.28
2015	1	75.16	-1.23	0.0054	95.41521559	1.07	1.09	80.75
	2	75.09	-1.23	0.0059	97.54613964	1.07	1.08	74.88
	3	74.97	-1.24	0.0046	99.24391535	1.07	1.11	69.25

	4	74.78	-1.26	0.0047	100.5085427	1.06	1.22	63.87
2016	1	74.53	-1.36	0.0069	100.4790699	1.06	1.11	56.70
	2	74.22	-1.37	0.0071	101.2217813	1.06	1.09	52.61
	3	73.84	-1.35	0.0062	101.8757252	1.06	1.06	49.58
	4	73.41	-1.32	0.0063	102.4409016	1.07	1.08	47.60
2017	1	72.28	-1.17	0.0082	103.3225891	1.08	1.09	49.80
	2	71.97	-1.13	0.0088	103.5481188	1.08	1.09	48.68
	3	71.84	-1.11	0.0071	103.5227693	1.08	1.08	47.37
	4	71.91	-1.11	0.0072	103.2465408	1.08	1.08	45.87
2018	1	72.94	-1.18	0.0095	101.6550238	1.05	1.08	41.89
	2	73.06	-1.19	0.0097	101.3028008	1.05	1.08	40.91
	3	73.06	-1.18	0.0086	101.1254626	1.04	1.08	40.65
	4	72.94	-1.17	0.0086	101.123009	1.04	1.08	41.10
2019	1	72.69	-1.13	0.0098	101.1436272	1.05	1.07	44.27
	2	72.31	-1.11	0.0104	101.5516681	1.05	1.07	45.35
	3	71.81	-1.09	0.0093	102.1953189	1.05	1.07	46.35
	4	71.19	-1.07	0.0095	103.0745795	1.05	1.07	47.27
2020	1	69.50	-1.04	0.0112	104.977305	1.05	1.07	48.11
	2	69.00	-1.01	0.0123	106.0126433	1.05	1.07	48.86
	3	68.75	-0.99	0.0112	106.9684493	1.05	1.06	49.52
	4	68.75	-0.96	0.0113	107.8447231	1.05	1.06	50.11

Appendix III: Facilitation of Research Letter

Ole Sangale Rd, Madaraka Estate,
P.O. Box 59857 00200, Nairobi, Kenya,
Cell: +254 703 414/6/7, Twitter: @SBSKenya
Email: info@sbs.ac.ke or visit www.sbs.strathmore.edu



Tuesday, 28 June 2022

To Whom It May Concern,

RE: FACILITATION OF RESEARCH - KASIMU, FAITH NZILANI

This is to introduce **Kasimu, Faith Nzilani**, admission number **MDF/59175/2019** who is an MSc. in Development Finance (MDF) student at Strathmore University Business School (SBS). As part of our SBS MDF Master's Program, Faith is expected to do applied research and to undertake a project. This is in partial fulfilment of the requirements of the Master of Development Finance. She would like to request for appropriate data from your organization to help her finalize her research.

Faith is undertaking a research project on "DETERMINANTS OF ILLICIT FINANCIAL FLOWS IN KENYA." The information obtained from your organization shall be treated confidentially and shall be used for academic purposes only.

The MDF programme seeks to establish links with industry, and one of these ways is by directing our research to areas that would be of direct use to the industry. We would be glad to share our findings with you after the research, and we trust that you will find them of great interest and of practical value to your organization.

Any assistance you can provide to her will be greatly appreciated and we shall be willing to provide any further information required.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Njoki Kiagiri".

Njoki Kiagiri,
Manager-Graduate Programmes,
Strathmore University Business School



Appendix IV: Ethical Clearance



22nd July 2022

Ms Kasimu Faith,
faith.nzilani@strathmore.edu

Dear Ms Kasimu,

RE: Determinants of Illicit Financial Flows in Kenya

This is to inform you that SU-ISERC has reviewed and approved your above SU- master's research proposal. Your application reference number is SU-ISERC1427/22. The approval period is 22nd July 2022 to 21st July 2023.

This approval is subject to compliance with the following requirements:

- i. Only approved documents including (informed consents, study instruments, MTA) will be used
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-ISERC.
- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-ISERC within 48 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-ISERC within 48 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days upon completion of the study to SU-ISERC.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology, and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke/> and obtain other clearances needed.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Dr. Ben Ngoye".

for: Dr Ben Ngoye,
Secretary; SU-ISERC

Cc: Prof Fred Were,
Chairperson; SU-ISERC




Appendix V: NACOSTI Approval

REPUBLIC OF KENYA
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 547617

RESEARCH LICENSE




This is to Certify that Miss. Faith Nailani Kasimu of Strathmore University, has been licensed to conduct research in Nairobi on the topic: Determinants of Illicit Financial Flows in Kenya for the period ending : 18/July/2023.

License No: NACOSTLP/22/18774

Applicant Identification Number: 547617

Director General
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

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