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The influence of IMF bailouts on a country's economic development and growth

Konoto Queen Tsoai

WITS Business School

Thesis presented in partial fulfilment for the degree of Master of Business Administration to the Faculty of Commerce, Law, and Management, University of the Witwatersrand

April 2021

DECLARATION

I, **Konoto Queen Tsoai**, declare that this research report entitled **'**The influence of IMF bailouts on a country's economic development and growth' is my own unaided work. I have acknowledged, attributed, and referenced all ideas sourced elsewhere. I am hereby submitting it in partial fulfilment of the requirements of the degree of Master of Business Administration at the University of the Witwatersrand, Johannesburg. I have not submitted this report before for any other degree or examination to any other institution.

Queen Tsoai

Signed at Johannesburg on 30 April 2021

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ABSTRACT

This study investigates the influence of the IMF bailout on the country's economic growth by evaluating the relationship the IMF bailout has with the country's GDP, inflation, and currency exchange rate. The study reviewed the IMF operations to understand the nature of the bailout (facilities), its funding structure, and the associated conditions. The study undertook a quantitative research methodology, using panel data with cross-sectional data from five countries in the sub-Saharan region, with a time series of 20 years. Ordinary Leased Square and the Feasible Generalised Least Square were used in regressions and found that the model was a good fit for both the exchange rates and inflation but was not a good fit to model real GDP.

The study found that the IMF bailout had a statistically insignificant negative relationship with real GDP, a statistically insignificant positive but weak correlation with the inflation, and a statistically significant negative relationship with the currency exchange rate. We conclude that IMF involvement in a country does not guarantee economic growth, improve the exchange rate, or help with managing inflation as promised in their purpose and objective. We recommend South Africa not to resort to the IMF bailout option and choose sovereignty over plausible atrocious IMF bailout. Instead, it must put all efforts to resolve its balance of payments issues. Should the South African government choose to opt for an IMF bailout, we recommend that they carefully consider suitable credit facilities and their conditionalities, specifically, Flexible Credit Line (FCL) and Stand-By Arrangement (SBA).

Key words: IMF, Bailout, Sub-Sahara, Quantitative research, Panel data, OLS, Conditionalities

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DEFINITION OF KEY TERMS AND CONCEPTS

IMF	International Monetary fund
Non-concessional	Loans offered by an international organisation at the market rate (IMF operations, 2018).
Concessional loans	Loans offered by an international organisation on generous terms, typically with longer repayment periods and very low interest rates, compared to the market rates and terms (OECD, 2003).
Panel data	A collection of data points across multiple variables over a period. It is also known as longitudinal data **(Erica, 2021)**.
GDP	Gross domestic price is a measure of the country's economy (**StatsSA, 2013)**
BoP	Balance of payments
GRA	General Resource Account – is an IMF non-concession financial support (IMF,2020)
PRGT	Poverty Reduction and Growth Trust - is an IMF non-concession financial support (IMF,2020)
Great depression	the financial and industrial slump of 1929 and subsequent years.

1 INTRODUCTION TO THE RESEARCH

More generally, this research investigates the influence of the International Monetary Fund (IMF) bailout on the economic development of sub-Saharan countries. Section 1.1 introduces the terms and concepts used in the research conceptualisation (Section 1.2), while Chapter 2 will provide more a specific and detailed discussion on the research context. The research conceptualisation section provides for the research problem statement (Section 1.2.1), the purpose of the research (Section 1.2.2), as well as the research objectives (Section 1.2.3). Section 1.3 provides the delimitations and assumptions of the study, and the significance of the study is discussed in Section 1.4. Lastly, the preface of the research report is provided in Section 1.5.

1.1 Context of and background to the study

Economic stability is critical for the prosperity of any country as it helps ensure that the country's living standards are maintained and continuously improved (OECD, 2015). A country with weak economic growth, high inflation, and a high debt ratio suffers challenges that have an adverse impact on its people and their daily lives. South Africa is the second largest economy in Africa and holds some of the world's most demanded minerals (Trade Portal, 2020). The country is the world's largest producer and exporter of platinum, gold, manganese, and chrome - where platinum and coal are significant contributors to the mining output, suggesting a positive contribution to the country's export market (Trade Portal, 2020). It holds 60% of the world's coal reserves (Trade Portal, 2020), making the industry critical to the employment market. The country is also the globe's second-largest producer of palladium, and the fourth-largest producer of diamonds amongst other resources (Trade Portal, 2020). This suggests that with all this mineral wealth, South Africa has the potential to grow its economy and be self-sustainable.

Bogeti and Fedderke (2005) found that there is a direct link between investment in infrastructure, and economic growth. In their study, they reviewed the four sectors of infrastructure: electricity, water and sanitation, information communication technology (ICT), and transport - benchmarking South Africa to its peers. They found that South Africa's utilities, overall, provide acceptable services at a realistic quality and, in some cases, at very competitive prices compared to the benchmark. The World Bank (2019) reported that South Africa's transport infrastructure is one of the most advanced in the sub-Saharan region. This further suggests that the country can grow its economy and maintain sovereignty.

Despite its mineral wealth, South Africa finds itself in an economic predicament after 26 years of democracy, where the economy continues a declining trajectory, almost reaching unemployment rates of 29% - similar to the 30% in 2003. 56% of the country's youth was unemployed, the highest world inequality levels were recorded with a Gini coefficient of 0.63, and people living below the upper-bound poverty line were found to be 49.2% of the population (Statistics, 2019). Although South Africa has been a member of the IMF since 1947 and has borrowed from IMF during apartheid years, the country managed to stay away from the IMF's assistance. However, with the current trajectory of economic decline, it is becoming evident that the country may resort to the IMF for financial bailout (IMF Staff, 2020). It is therefore necessary to understand how a financial institution like the IMF could potentially influence, negatively or positively, the state of the country if South Africa ends up seeking structural adjustment from the IMF. The study is therefore focused on understanding the attributes of the IMF bailouts, seeking to understand the relationship with economic growth variables.

According to Trading Economics (Trading Economy, 2020), South Africa is rated number 60 on the global competitiveness report, a significant drop from number 54 in 2011. South Africa also dropped to position 30 in the auditing standards, from holding the number one position for seven consecutive years. This can be attributed to weak leadership on the front of both government and business. The country is also confronted by persistent subdued growth performances, junk status ratings, high unemployment, high poverty and high inequalities, amongst other challenges that were exacerbated by the corona virus global pandemic. The political situation in the country is also taking a strain, which could mean that the country may be forced to look to IMF for a bailout for economic restoration. As such, the study sought to investigate the influence of the IMF bailout on the country's prosperity by evaluating the relationship it has with the gross domestic product, inflation and currency exchange. The purpose of the study was to provide analytical insights on these relationships and make inferences to a plausible South Africa bailout situation.

Five countries within the sub-Saharan region are reviewed for their relationship with the IMF, and observations on their economic growth during that funding period are made.

1.2 Research conceptualisation

Sequeira (2014) defines conceptualisation as a process of breaking and adapting research ideas into common senses to develop an agreement among the users. This practice leads to the framing of meaningful concepts, which ultimately lead to the creation of theories. This

section is divided into three sub-sections: the problem statement, current situations, and the consequences of not attending to this problem.

1.3 The research problem statement

Although South Africa's economic outlook has improved, the country remains constrained by its slow growth (World Bank, 2018). World Bank, 2018 report argues that for South Africa to improve its economic potential, it will require breaking away from the equilibrium of slow growth and high inequalities, which the country has been trapped in for decades. They suggest it would require bold actions and intentional leadership to break away. This problem has attributes of a wicked problem because of its interconnectedness and its significant economic burden. The problem is that slow growth and inequality, poverty, and unemployment reinforce each other; hence, decisive leadership actions to resolve. "Inequality fuels the contestation of resources (through taxation, expropriation, corruption and crime), which discourages the investment needed to accelerate job creation and reduce inequality" (World Bank, 2018, P. viii). The authors further argue that the high inequality is driven mainly by the development in the labour market, which demands the skills that the country's poor people lack, further demonstrating the interconnectedness of the economic situation in the context of South Africa. This articulation of the South African problems is also corroborated by (Malinga, 2019), who says that the country will need to improve its skills base, as it has insufficient skills for the labour market. He says that spatial inequality is a detractor to the country's growth.

Ultimately, the problem with the shrinking economy is that it leads to high unemployment, rising poverty levels, a deteriorating currency exchange rate, a high debt ratio, and credit downgrades, limiting the government's access to finance, thereby further hindering the country's growth (SARB, 2021). This situation further presents a negative economic outlook, a deteriorating state of government finance and reduced investor confidence (SARB, 2021).

The problem with this economic trajectory is that South Africa may eventually turn to the IMF for a financial bailout, with consequential conditions that may lead to the loss of the country's sovereignty. The first consideration to uncover is whether the IMF bailout positively influences the country's economic performance. The second consideration would be to uncover how the intervention from the IMF in other sub-Saharan nations fared. Lastly, consider how the IMF conditions attached to the financial bailout would improve the current economic distress experienced in the country.

1.4 The research purpose statement

The purpose of this study is to provide analytical insights into the IMF bailout programs and the key economic growth measures, by evaluating the relationship between the IMF bailout and the Gross Domestic Product (GDP), inflation, and the exchange rate.

1.5 The research objectives

a) To determine the influence of the IMF bailout on African developing countries' GDP.
b) To determine the influence of the IMF bailout on African developing countries' inflation rate.
c) To determine the influence of the IMF bailout on African developing countries' exchange rates.

1.6 Delimitations and assumptions of the study

This study focuses on the IMF's financial bailout on Sub-Saharan countries, focusing on the five countries in Sub-Sahara; Ghana, Kenya, Zambia, Rwanda, and Mozambique, representing a sample of less than 3% of the IMF member population. Except for Rwanda, all the selected countries are mineral-rich (refer to appendix 2), but have high poverty, inequality and unemployment (World Bank, 2018). All these countries are still struggling with basic human needs such as access to clean water as well as inadequate education system. Most of these countries' population is situated in rural areas limiting access to economic activity which simply means most of its citizens are excluded from the economic activities. Although South Africa is considered a middle-income economy, it also has a persistent high level of poverty, inequality and unemployment levels like the studied countries (World Bank, 2018). Like the countries of study, South Africa is also facing serious challenges in the education and primary health sector where only few of its citizens can access the best education and health system. Except for Rwanda, these countries now have a democratic political system after gaining independence. All the selected countries scored less than 50 out of a scale of 100 on corruption perception index, including South Africa with Rwanda scoring marginally higher than 50 (TransparencyOrg, 2020). As such, we consider these countries to have similar dynamics as South Africa.

1.7 Significance of the research study

The problem with low economic growth is that it has a ripple effect on the country's development. It is inevitable that South Africa will also resort to the IMF for financial assistance now that the country's credit status has been downgraded, making it pertinent for

decision makers and governance to have a clear understanding of the implications of such an undertaking. With more and more Sub-Saharan countries seeking bailout from the IMF, it is important to understand the implication the bailout have to the economic growth in the context of Sub-Saharan countries. Moreover, the COVID19 pandemic increases the potential of countries looking to IMF for a bailout loan. As such, the study will contribute to the Sub-Saharan governments in their decision making and help them be better prepared for an IMF bailout.

The study will also contribute to formulation of monetary and fiscal policy makers about the IMF's operations, its lending framework, the history of lending arrangements, and conditions attached to the bailout programme for the government to make informed decision on the option of going to IMF for the bailout. It will also inform governments of how well the IMF bailout contributed to the Sub-Saharan countries. Additionally, this study will contribute to academia by expanding on the current literature on the IMF and its operations, drawing from the successes and failures of the IMF bailout largely in sub-Saharan countries. Finally, the study will also contribute to the gap identified in South Africa, where the IMF bailout is imminent, but the country holds very little research on the implications of the bailout thereof.

1.8 Preface to the research report

To this end, the report has six chapters. Following this introductory chapter, Chapter 2 provides a literature review covering the problem, past studies, the explanatory framework and the conceptual framework of the study undertaken. Chapter 3 discusses the research strategy, design, procedures, reliability and validity measures, as well as the limitations of the study. Chapter 4 and 5 respectively present and discusses the findings, to interrogate the research questions, while Chapter 6 summarises and concludes the research study.

2 LITERATURE REVIEW

This chapter has six broad objectives, namely: to understand the research problem, identify the knowledge gap, investigate applicable management theories, and to develop a framework for interpreting the research findings. Specifically, in Section 2.1, the overview of the functioning and objectives of the International Monetary Fund is presented, while Section 2.2 explores the management theories to gain perspective. Section 2.3, 2.4 and 2.5 presents a review on studies that attempted similar research, research problem and knowledge gap analysis and hypothesis development respectively. Section 2.6 provides the conclusion arrived at from the literature review presented.

2.1 Overview of the functions of the IMF

The IMF is an international financial institution established in Bretton Woods, New Hampshire, in 1945 with the intention of avoiding destructive policies that may start another conflict (IMF, 2019). It is headquartered in Washington D.C., with a member state complement of 190 countries, leaving only six countries in the globe not participating in the fund (IMF, Factsheet, 2021). IMF's lending capacity is in the region of $1 trillion in loans (IMF, 2019). Its objective is to "*encourage global monetary cooperation, secure financial stability, facilitate international trade, promote high employment and sustainable economic growth, and reduce poverty around the world*" (IMF Financial Operations, 2018, p.2). The organisation aimed to stabilise the international monetary system that allows countries to transact with each other (IMF, 2019). IMF does this by keeping track of the global economies and extending loans to countries experiencing balance of payments difficulties and giving hands-on help to its member countries. Its activities include economic surveillance, lending, and capacity development. IMF lending instruments are designed to fulfil its members' different balance of payment needs, and the specific situations of its diverse membership (IMF, 2019).

Countries look to the IMF when they experience a balance of payment (BoP) crisis. BoP difficulties arise when a government is incapable of paying for its imports, services, or international debt (IMF, 2019), owing to various reasons, ranging from domestic factors to external factors. According to the (IMF, 2019), domestic factors may include unsuitable fiscal and monetary policies, weaknesses in managing the country's exchange rate levels, and political instability, amongst other reasons. External factors include natural disasters and

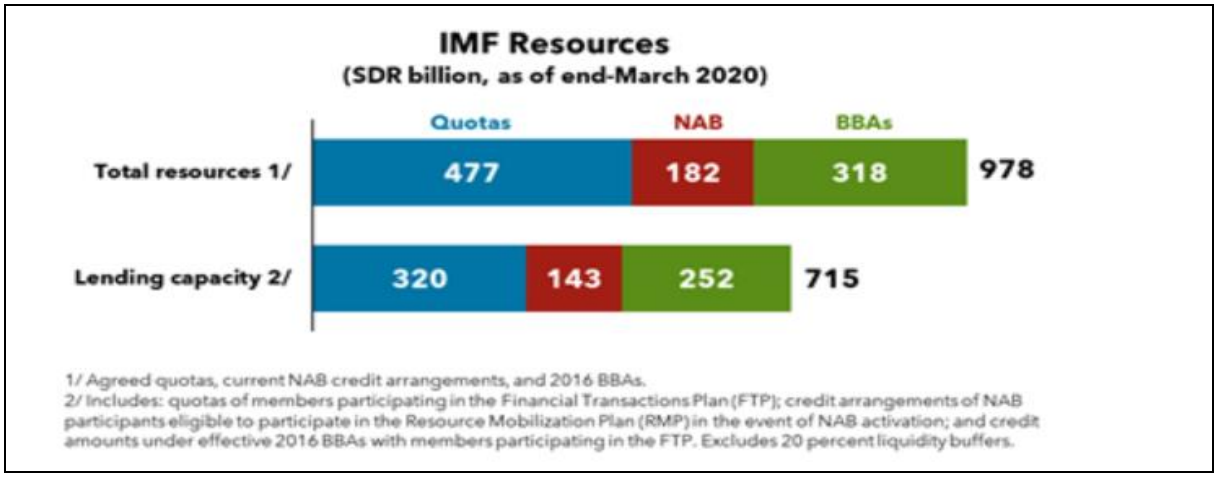
large swings in the price of commodities, which was the case in Zambia with the copper price (Colclough, 1988), often affecting low-income countries because of their inability to better prepare for these factors (IMF, 2019).

Li, Sy, and McMurray (2015) argue that the IMF creates a continuous dependency for its member countries, and the authors even proceed to questioning the organisation's ethical compass. Countries look to the IMF often because if affected, their credit rating reduces the ability to lend from other institutions that may offer credit without being directly involved in the country's policymaking (IMF, 2019). Consequently — resorting to the IMF results in the countries compromising their sovereignty because the IMF bailout comes with conditionalities that may lead to austerity measures (Elliott, Inman, & Smith, 2013). The IMF requires countries to implement the economic reforms and implement policies that the organisation considers appropriate for the lending country, often leading to the compromise or loss of authority of a state to govern itself (Elliott, Inman, & Smith, 2013).

2.2 Sources of funding

The IMF has capacity of USD1 trillion to respond to its member's needs, generated from two sources: quotas and multilateral (IMF Financial Operations, 2018). Quotas serve as the first line of defence generated from members' contributions according to their relative position in the world economy; these generate a total of US$ 651 billion (SDR 477 billion) (IMF, 2019). Whereas, multilateral borrowings consist of two funding resources: New Arrangements to Borrow (NAB), and the Bilateral Borrowing Arrangements (BBA) (IMF, 2020). NAB serve as a second line of defence from 40 participating member countries and institutions ready to lend, generating a total resource capacity of US$249 billion (SDR 182 billion) (IMF, 2020). In contrast, the BBA serves as the third line of defence, generating a total resource capacity of US$434 billion (SDR 318 billion) from the 40 participating member countries (IMF, 2020).

Table 1: IMF resources summary



Source: IMF Lending, (2020)

2.3 Lending framework

Li et al. (2015, p.893) defined the bailout as "*a financial program that contains three inseparable elements, namely: financing packages, structural reforms, and macroeconomic policies forming a single offer of assistance, known as an IMF-supported program*". The authors continued to note that, "*while the effects of an IMF bailout are mostly documented, the empirical evidence is varied and inconsistent*", which further supports the need for further research investigations (Li et al., 2015, p.893). Figure 1 explains how the IMF lending framework is designed. The framework summarises the three inseparable components.

The IMF issues loans in Special Drawing Rights (SDRs). The SDR was created in 1969 as an interest-bearing international reserve asset to supplement the official reserves of its member countries. The reserve utilises both gold and the USD to finance the growth of international trade and finance, with an intent to improve the fixed exchange rate system under the Bretton Woods regime, which did not support the growth. SDR formulation consists of five freely usable currencies: the USD, Euro, Chinese Renminbi, Japanese Yen, and the Pound Sterling (IMF Financial Operations, 2018). The SDR is therefore not a currency, nor is it a claim on the IMF. Instead, it is regarded as a "*potential claim on freely usable currencies of IMF members*" (IMF Financial Operations, 2018, p.92). The SDR cannot be used to buy goods and services, it can only be used to buy other currencies.

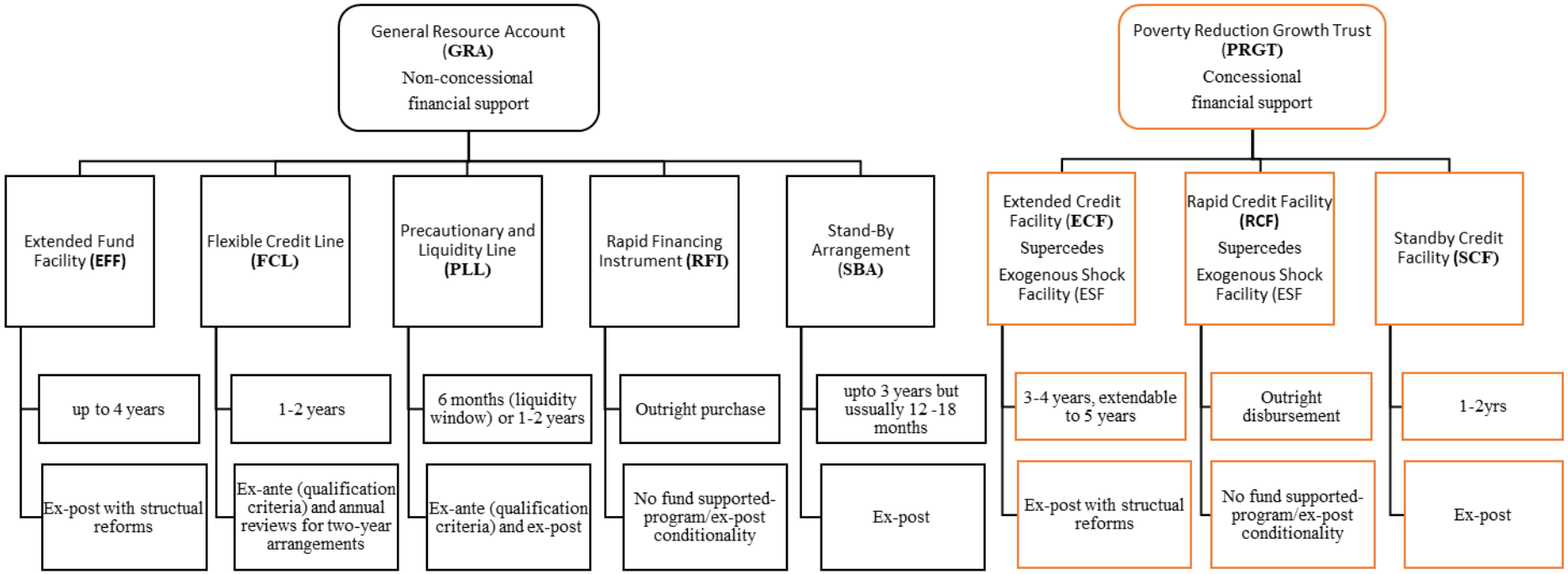


Figure 1: Lending Framework
Source: Author's summary adapted from IMF Lending (2020)

The IMF utilises different credit facility lines specifically designed to General Resource Account and Poverty Reduction Growth Trust objectives. The credit facilities have different purposes and are designed for different size economies and market conditions. The credit facilities as are defined below.

2.3.1 Facilities granted under General Resource Arrangement (GRA)

The Extended Fund Facility (EFF) is defined as a GRA facility, with strong focus on structural adjustments - designed for countries that are experiencing serious BoP needs as a result of slow growth and inherent weak BoP over medium- and longer-terms (IMF, 2020). Its main objective is to solve structural barriers through fundamental economic reform (IMF, 2020).

The Flexible Credit Line (FCL) is as a facility designed with the intention of preventing and mitigating crises for countries that have strong policies and adequately take record of their economic performances. The differentiating attribute of this facility is that it offers members flexibility and insurance, thereby increasing market confidence in their economy. Its key objective is to reduce the perceived stigma regarding IMF funding, thereby encouraging members to borrow before a full blown crisis hit them (IMF, 2016). The criteria used to assess the eligibility includes: an assessment of the country's capital account, sound public finances, low and stable inflation and the absence of solvency problems amongst other variables (IMF, 2016).

The Precautionary and Liquidity Line (PLL) facility is one that is accessed by member countries with sound policies, and it is intended to serve as an insurance measure. Those countries that are experiencing structural policy adjustments, an inability to access the international market, widespread insolvency and deposition of public debt during the approval process, cannot access the PLL facility (IMF, 2020).

The Rapid Financing Instrument (RFI) credit facility is available to all members, irrespective of the size of the country, that are facing urgent BoP needs (IMF, 2020). It is designed as part of a broader reform with the intention of making financial support more flexible. Members do not have to have a fully-fledged program in place to qualify for this facility (IMF, 2020).

The Stand-By Arrangement (SBA) is a GRA facility, dubbed a workhorse, because of the flexibility it offers, making it attractive to members (IMF, 2020). The conditionalities attached to this facility are ex-post with fewer conditions. The borrowing country agrees to implement specific policies after receiving the loan granted (IMF, 2020).

2.3.2 Facilities granted under Poverty Reduction and Growth Trust (PRGT)

The Extended Credit Facility (ECF) is a highly concessional PRGT credit facility, designed to offer financial assistance to member countries facing BoP problems (IMF, 2020b). The fund carries a zero percent interest rate but has a pay availability fee on the undrawn portion, every six months. Member countries are expected to implement specific structural reforms, contained in their letter of intent, ex-post (IMF, 2020b).

The Exogenous Shock Facility (ESF) was established in 2008 with the purpose of providing loans on a concessional basis, intended to help low-income member countries experiencing BoP needs caused by sudden and exogenous shocks (IMF, 2020b). This fund was envisioned to provide concessional financial assistance to low-income countries with no PRGT lending arrangement in place (IMF, 2020).

The Standby Credit Facility (SCF) is a PRGT credit facility, offered to members projecting BoP needs in the short to medium term (IMF, 2020b). The fund only pays when the need arises and carries zero percent interest rates (IMF, 2020b). Members pay an availability fee levied at 0.15% per annum of the undrawn balance every six months (IMF, 2020b). The fund has a grace period of four years and also carries ex-post conditionality.

The Structural Adjustment Facility (SAF) is offered to poor countries from the mid-1970s to December 1987. Eligible countries could borrow a maximum of 140% of its quota, with the flexibility of increasing the borrowings to 185% of the quota under special circumstances (IMF, 2020).

The Rapid Credit Facility (RCF) was created under the PRGT and was tailored to resolve diverse BoP needs for Low Income Countries (LIC) (IMF, 2020). Countries accessing this credit line must demonstrate their policy emphasis on poverty reduction and growth objectives. Circumstances in which this credit facility is provided includes natural disasters, emergencies resulting from fragility and shocks, and it is provided as an absolute loan (IMF, 2020). Members are allowed repeat use of this fund, however, it may trigger a transition to Extended Credit Facility (ECF) (IMF, 2020e).

2.3.3 Financing packages

The IMF grants loans to support members with BoP needs, mainly through two financing streams: General Resource Account (GRA)[1] and Poverty Reduction and Growth Trust (PRGT)[2] (IMF, 2020b). GRA provides loans with a minimum duration of six months to a maximum of four years. Loans granted under this program are non-concessional[3], the loans are also at the market rate with an intention of solving its member's BoP problems within the program duration (IMF, 2020). In contrast, the PRGT offers concessional[4] loans at low interest rates, currently at zero interest until June 2021, designed for low-income countries (IMF, 2020b). PRGT-support programs provide for a minimum of one year up to a maximum of four years, depending on the lending instruments. The objective is to resolve the member's BoP problems over a longer period (IMF, 2020b).

There are various lending instruments available to member countries, tailored to different IMF financial programs. For example, low-income countries can access IMF programs such as Poverty Reduction and Growth Trust (PRGT), which has three concessional lending windows (IMF, 2020b). Emerging and advanced economies are offered different credit facilities from the low-income countries, likewise for the strong policies members.

2.3.4 Structural reforms (conditionalities)

Dreher (2008) defines conditionality as a practice in which financial assistance[5] (bailout) is granted on implementation of specific policies, stated in the country's letter of intent to the IMF board. The IMF argues that conditionalities attached to the bailout are justified but says ownership of these structural adjustments is even more critical to the program success. Khan and Sharma (2001) define ownership as a firm commitment from the borrowing country's government and its stakeholders to the program conditionalities. The authors posit that ownership aligns the incentives of both the lender and the borrower, resulting in the objective being achieved. IMF (2020) argues that it is the government's responsibility to select, design and implement policies for a successful IMF supported program. Dreher (2008, p.235) contributed to the ownership discussion, stating that, "*one of the most important insights regarding the concept (as well as the content) of conditionality is that*

[1] General Resource Account (GRA – is an IMF non-concession financial support (IMF,2020)
[2] Poverty Reduction and Growth Trust (PRGT) - is an IMF non-concession financial support (IMF,2020)
[3] Non-concessional – loans offered by an international organisation on market rate
[4] Concessional loans – loans offered by an international organisation on generous terms, typically with longer repayment periods at a very low interest compared market rates and terms (OECD, 2003)
[5] Financial assistance – loan granted to IMF member countries

conditions cannot substitute for creditor ownership". However, the author found that ownership is not increased substantially by the conditionalities.

The IMF says the conditions are a critical part of the lending agreement because repayments would be at risk without it, thereby posing a risk to IMF resources (IMF, 2019). The organisation posits that conditionalities intend to strengthen the lending country's BoP, to permit it to repay the loan granted, which thereby safeguards the IMF resources (IMF, 2019). Khan and Sharma (2001) oppose the view shared by Killick (1997), who presents that conditionality should be the exception, and not the rule. The authors present that instead, conditionality should be a rule rather than an exception, suggesting that having no conditions attached to the bailout is reckless lending (usually termed moral hazard) – which is not in line with the IMF's objective of assisting countries to strengthen their BoP position. The authors also oppose the view shared by Diaz-Alejandro (1984), who allude that conditionality stems from "*patron-beneficiary*". This is significant as it further justifies the cruciality of conditionalities attached to an IMF bailout, suggesting it to be a financial lending institution, and not a welfare organisation.

Conditions are tailored according to different lending instruments (credit facilities), and are intended for different BoP needs. Different credit arrangements offer different benefits and different conditionalities. For example, the loans offered to low-income countries are offered at zero interest rates but may require more IMF involvement in terms of policy implementation and economic reform programs. With emerging and advanced economies, members may be eligible to credit arrangements that have limited oversight from the IMF, while members with stronger policies may be eligible for crisis prevention.

Broad categories of conditionalities

Conditionalities takes various forms: prior actions to be met before the IMF board approves the funding, quantitative performance criteria (QPC), indicative targets, and structural benchmark (IMF, 2020b). The QPC and indicative targets are measurable based on macroeconomic policy variables such as monetary aggregates, international reserves, fiscal balances, or external borrowing, which reflects the country's program objectives (IMF, 2020). Structural benchmark remains subjective, therefore unquantifiable (IMF staff, 2014).

The overarching principle of IMF conditionalities is ex-post and ex-ante with variations specific to country needs delivered through credit facilities (IMF, 2019). In principle, ex-post conditionalities requires the borrowing country to implement the agreed policies after

the loan bailout payment by the IMF (IMF, 2019). This conditionality is attached in both the GRA (SBA facility) and PRGT (SCF facility), with the purpose of assisting countries with present, prospective, or potential BoP needs (IMF, 2020). Another form of ex-post requires countries to implement structural reforms, financed through GRA and PRGT with the credit facilities EFF and ECF respectively. This form of financing is offered to countries that are experiencing protracted BoP needs, as a medium-term assistance.

In contrast, ex-ante conditions refer to the conditionalities that require borrowing countries to meet certain conditions and most importantly, prove their ability to maintain those conditions before they can receive a bailout from the IMF. Ex-ante takes two forms: ex-ante with qualification criteria and annual reviews for two years, and through a blended approach that requires qualification criteria and ex-post conditionality. Ex-ante conditionality is financed only through GRA financing, through the FCL and PPL credit facilities.

2.4 Theoretical Analysis

A theory is a principle that is well established and fit to explain some aspect of the world (Cherry, 2020). It usually comes from recurrent testing of observation of facts, predictions, hypotheses, laws, and widely accepted behaviours (Cherry, 2020). A theory envisages events in a comprehensive general context and has been broadly tested and recognised among scholars (Cherry, 2020). Theories relate perspectives in which people make sense of past experiences of the world, providing an opportunity to test the assumptions included and applying it to the current conditions (Bacharach, 1989). Theories provide a focus for understanding what was experienced in the past to solve the current problems, it essentially a system constructs and its relationships (Bacharach, 1989).

2.4.1 Theory of economic growth

John Maynard Keynes developed Keynesian economics in 1930, done to understand the great depression[6] that took place in 1929 (Chappelow, 2020). His theory supports expansionary fiscal policy as an intervention that says the government must increase the supply of money through tax reduction and increasing government spending, or through a combination the two that will result in a fiscal deficit defined as fiscal stimulus (Chappelow, 2020). The expansionary fiscal policy uses the three main tools: government spending on infrastructure, unemployment benefits, and education (Amadeo, 2019a). Major doctrines in

[6] Great depression - the financial and industrial slump of 1929 and subsequent years.

Keynesian economics' explanation of the economy are firstly concerned with various decisions, public and private, where influence is aggregated (Jahan, Mahmud, & Papageorgiou, 2014). As such, the Keynesian theory is in support of a mixed economy, which is led mainly by the private sector and supported by the government (Jahan et al., 2014). Secondly, the author posits that "*prices, and especially wages, respond slowly to changes in supply and demand, resulting in periodic shortages and surpluses, especially of labour*" (Jahan et al., 2014, p.4). Thirdly, the Keynesian theory is concerned with the changes in aggregate demand, regardless of whether the changes were anticipated or not (Jahan et al., 2014). The authors posit that because prices are to some extent rigid, fluctuations lead to change in output (Jahan et al., 2014).

The Keynesian theory promotes counter-cyclical fiscal policies; advocating deficit spending on labour intensive project to curb unemployment and soothe wages during the economic downturn (Jahan, 2014). Keynes further argues that government spending is imperative to maintaining full employment. The theory also promotes the use of monetary policies such as reduction of interest rate to stimulate investment (Jahan, 2014). He argues that inflation could be damaging, and a low inflationary environment is not conducive to strong economic growth (Jahan, 2014). However, in a liquidity trap, inflation is not a problem. The theory further advocates governments to solve market problems instead of waiting for market forces to self-correct, this proactive approach will avoid further damage to the economy (Jahan, 2014). Lastly, Keynes promotes deficit spending when the economy is in a contractionary phase of the business cycle (Jahan, 2014).

Amadeo (2019) contrasts the flaws of the Keynesian theory, saying that the Keynesian policies increase inflation when overused, and that deficit spending is not appropriate during the expansionary phase (Amadeo, 2019). The theory advocates government deficits even during the recession. Milton Friedman (1997) criticises Keynes theory, arguing that this theory potentially causes stagflation (higher inflation and higher unemployment), as evidenced by the period in the seventies (Reisman, 2018). This study derives relevance of the Keynesian theory when developing a framework for the evaluation of the relationship between IMF funding and the member country's growth measured by GDP, as well as the relationship it has with inflation. The theory provides theorical assumptions that permit critical evaluation of the relationship between the country's GDP, inflation and unemployment rates.

Though Keynes theory of economic growth postulates that government employ expansionary theory of reducing taxes, the applicability of this theory maybe limited in the context of South Africa due to its low tax base. For the government to spend money in infrastructure, education and unemployment benefits, the logical action would be for the government to increase taxes. Because of the reinforcement problem that exists between the country's growth and unemployment, inequality and poverty, the implementation of Keynes theory may be difficult to implement suggesting the reason why the country may find itself seeking for bailout. Keynes further says that government spending is imperative to maintain full employment which can lead to South African government having to seek external financial assistance to stimulate the economy, stimulus Keynes theory of economic growth.

2.4.2 The classical theory of economic growth

The fundamental principle of the classical theory is that the economy is self-regulating. The classical economists uphold that when the economy's resources are fully employed, the economy reaches equilibrium without the government's intervention (Sadeghi and Alavi, 2013). They say the only benefit to the economy with expansionary policies is the increase in prices, but the overall output does not change. Although new classical economists, like classical economists, believe that prices and wages are flexible, the new classical economists believe that only if people cannot predict the policy otherwise leads to inflation (Sadeghi and Alavi, 2013). South African policy development process includes consultation with the citizen, making it difficult for the policies not to be predictable. According to Say's law, the economy produces a certain level of real GDP commensurate to the income needed to purchase at that level (Sadeghi and Alavi, 2013). This view was criticised by other economists, saying it is not always the case. The main difference with Keynes theory is that classical theorists believe that the economy is self-regulating while Keynes believe that the government needs to intervene. It would be challenging for South Africa to implement the classical theory in the South African context due to South Africa's political history and landscape. Secondly, it would also be difficult to expect the economy to self-regulate when the country struggles with skills shortages and inadequacies and considers the country's past of economic exclusion.

2.4.3 The theory of unemployment

Okun's law of unemployment offers a statistical relationship derived from the regressions between unemployment and economic growth. The theory states that when unemployment

falls, GDP rises (Noor et al., 2017), suggesting that the economy must continuously expand. They say high employment means the country is not utilising labour resources efficiently, suggesting that full employment must be every government's economic goal to maximise output. In summary, Okun's law states that a negative relationship exists between the unemployment rate and real GDP (Noor et al., 2017). Noor et al., 2017 found that Malaysia's GDP needs to grow by 8% to reduce unemployment. This theory applies to South Africa because the country has seen an unprecedented unemployment rate, with the country struggling to improve its GDP for several years. This theory further explains why the South African unemployment rate continues to rise at the back of weak economic growth.

2.4.4 Phillip curve theory, relationship between unemployment and inflation

After tracking Great Britain's unemployment and wage changes from 1861 to 1957, Phillips found a negative relationship between unemployment and changes to wages (inflation), known as Phillip's curve theory. Inflation measures the annual rate of general prices changes in the economy manifested in a continued increase in the average price level (Vogt, 2007). Essentially, consumer purchasing power reduces when the general price level increases. Typically, inflation is caused by strong economic growth, when demand is greater than supply (Vogt, 2007).

2.4.5 The BoP and the theory of exchange

The Balance of Payments theory pronounces that the country's current account is affected by changes in a country's national income (Chipman, 1984). Consequently, the exchange rate is adjusting in a new level in order to achieve a new balance of payments equilibrium (Chipman, 1984). The BoP is defined as a general account that records all payments and receipts resulting in either deficit or surplus, where payments more than receipts equals to a deficit; and if receipts exceed the payments, a surplus is recognised (Segal, 2019). These transactions vary from traded products and services, foreign investments income, new investments, inflow/outflow of capital between treasuries and central banks (Segal, 2019). The principle of the theory emphasises that the exchange rates relate to the position of the BoP of the concerned country, where an unfavourable balance results in depreciation in the external value of currency (Chand, 2001). Consequently, a favourable balance leads to an appreciation of the external value of the currency. It further says that free forces of demand and supply determines the price of foreign money, determined by free forces of demand and supply (Chand, 2001). Deficit balance is when demand for foreign exchange exceeds its supply which results in the price of domestic currency rising (Chand, 2001).

2.5 Background of the countries in the study

The study undertook to investigate five countries in the sub-Saharan region, over twenty years, to make inferences to South Africa's plausible IMF bailout effects. It was thought-provoking to see that these countries, most of which are mineral-rich with some of the world's high demand minerals/resources, still report high levels of poverty and inequality with not much growth, if any. All these countries are still faced with primary human needs challenges such as access to clean water and good education. The results show that growth was unstable in four of these countries. Ghana and Kenya both have a history of more than 40 years with IMF. Ghana is the second-largest cocoa and gold producer globally, and its natural resources include iron ore, gold and gemstones, amongst other resources. Zambia boasts of vast natural resources including silver, coal, cobalt, copper, lead, silver, uranium, emeralds and Zinc and also (Thomas, 2012). Mozambique boasts of important deposits such as high-quality coal, iron ore and gold and its mineral is largely untapped (Embassies, 2018). Moreover, Rwanda is the only country in this study projected to be in the top five fastest-growing economies. It is important to note that Rwanda, unlike other countries in the study, does not have a long-standing IMF bailout relationship compared to Kenya and Ghana. However, it is the country that is forecasted to grow faster than Ghana and Kenya, which questions the whole purpose of the IMF.

2.6 Empirical review

Many scholars have written about the IMF and the role it plays in the global economy, assessing the positive and the adverse effects of its involvement. Assessing if the IMF is achieving its objectives of encouraging global monetary cooperation, securing financial stability, facilitating international trade, promoting high employment - most scholars found that the studies are mostly inconclusive. Li et al. (2015, p.893) assessed the usefulness of the IMF bailout, arguing that "*for decades, the IMF assumed the role of a rescuer of financially distressed countries*", but it has not been able to bring convincing evidence of its impact in those countries. Conditionalities is one of the three inseparable components of the bailout and often leads to austerity measures, where countries suffer a significant financial crisis, for example, Greece IMF catastrophe. They say, IMF does not consider the country's unique economic environment. According to IMF, Kenya is considered one of the IMF success stories (IMF, 2019). However, this success is due for questioning if Kenya is still not able to sustain itself many years after IMF bailout. Kenya consistently goes back to the IMF for bailout, reporting 19 agreements from 1975 to 2016, suggesting that Kenya is unable to independently manage its financial circumstances since 1975.

Killick (1993) found that not much impact or difference is derived from the IMF program, and instead, the program imposes large social costs such as urban labour force which is inconsistent with the expansionary theory. The author further says that ownership of the countries is critical to the success of the programs, a view corroborated by the World Bank's adjustments programs, which found that there is a strong correlation between indicators of such governments that take ownership and the program success. This suggests that it is not really the actual program that produces positive results for economic indicators such as inflation, growth and foreign currency; but more the political will of the governments of those countries which may be interpreted to be a leadership issue.

Cheelo and Mungomba (2019) recommended a possible pathway towards an IMF financial and technical support program, suggesting that the IMF still has a part to play in Zambia's economic reform, but strongly recommended governments to take ownership of the reform and implement certain activities before inviting the IMF to rescue. They concluded that there is an increased need for IMF support after their observation of the Zambian macroeconomic instability and downturn of 2015, with growth projected to slow down to 2%, inflation to reach 8.9%, suggesting a relationship between the country's growth and the IMF support. In their investigation of their the effectiveness of the IMF programs, Atoyan and Conway (2005) find that in the short term, there is no evidence of growth.

Heckman, Przeworski and Vreeland (2000) investigated the effect of the IMF programs on economic growth and found that participation in the IMF program lowers a country's growth. However, they found that economic growth is evident in countries that do not enter IMF programs, demonstrating a faster growth rate than those with participation. Furthermore, they found that various scholars arrived at different conclusions in assessing the relationship between the IMF program and the country's growth. For example, Killick (1995) found that adverse effects diminish as the program progresses, reversing the adverse impact it may have in the first year of programme implementation. Connors (1979), Gylfason (1987), Reichmann and Stillson (1978), and Pastor (1987) found little or no evidence of the effect of the IMF program on the country growth. They say that it is essential to consider other factors that may influence the program's success to yield growth, such as political will and ownership of the implementation. Lee and Barro (2003) 's findings inclined more to those of Przeworski and Vreeland (2000), concluding that a country would be better off without an IMF bailout programme; in fact, they say a country never to find itself in an IMF bailout commitment. The authors posit that the magnitude of the negative

effect increases after controlling for common effects such as interest rate and the endogeneity in IMF lending. What significant in their finding is that they found a strong inverse relationship between the country's economic growth and the contemporaneous IMF loan-GDP ratio.

Using panel data for 130 countries over five-year periods from 1975 to 1999, Lee and Barro (2003) found a significant adverse effect on economic growth by participation in an IMF program. The authors posit that countries are better off without the IMF program, suggesting that countries should strive to solve their BoP problems without seeking assistance from the IMF. This further suggests that there are alternatives to resolving arising BoP challenges. Zulu and Nsouli (1985) investigated the before and after measures of the program in 22 African countries, in a study that contained 35 IMF programs - and found that growth decreased with participation in IMF programs. Jarro (2012) also found that growth was not significant in the 57 countries that he assessed in his study; however, he did find that there was an improvement in the country's BoP position.

The Malaysian government opted out of IMF program during the Asian crisis that began in 1997 (Buckley and Fitzgerald, 2004). This decision was taken regardless of the country being one of the more severely by the Asian economic meltdown (Buckley and Fitzgerald, 2004). Buckley and Fitzgerald (2004) assessed this decision by the government, comparing the impact against those Asian countries that opted for the IMF bailout. The authors found that Malaysia recovered at the same rate as the participating countries that implemented the IMF policies, reporting economic growth much higher than those who opted for the IMF bailout. What is significant in this case is that Malaysia was able to protect the country's social policies such as affirmative action strategies for its Bumiputra population, which the IMF program was unlikely to accommodate. The IMF is usually very aggressive on social policies and force participating countries to reduce the spending, as can be seen in South Korea. However, South Korea "never simply accepted the IMF demands as originally dictated" (Dohyung, 1999, p. 509). The government implemented its own reforms, dubbed 4 (IMF reforms) plus 1 (trade, investment and capital liberalization). These findings are supported by Przeworski and Vreeland (2000), who also found that economic growth is faster for countries that opted not to request assistance from IMF, than those that did.

Gyebi and Boafo (2013) contrasts the inflation episodes that took place between 1957–1972 (first episode), and 1973-1982 (second episode). The first episode was driven mainly by the active involvement of the government in economic activities of the country, while the

second episode was driven by pursuance of expansionary theory by military interventions. This second episode is consistent with the Keynesian theory of economics, which supports the expansionary policy by government – however, the theory warns that over-using this policy may result in hyperinflation. Killick and Mwega (1990) observed that inflation was manageable during those periods, suggesting a positive relationship with the IMF – a view contradictory to that of Killick (1993), who posited very little effect, positive or negative, on inflation. Zulu and Nsouli (1985) also found that inflation worsens with IMF participation in over half of the countries with IMF programs in a pool of 22 countries. However, contrary to Zulu and Nsouli (1985), Edwards and Santaella (1993), Connors (1979), Bird (1996) and Gylfason (1987) found the program to not have any effects on a country's inflation.

Tsikata et al. (2017), in their IMF country report, "Assessing Zambia's Fiscal Sustainability" contrast weak forex as the contributing factor to the Zambian 2015 economic crisis. Dreher and Walter (2008), in their assessment of whether IMF hurt or helped the countries, posit that contrary to other IMF critics, they found that the program indeed fulfils its function of promoting exchange rates and that it also reduces currency crises. The coffee export market dropped significantly during the period of 1987-88, a fact attributable to the effect of currency on the coffee prices (Killick & Mwega, 1990). This suggests a negative relationship between the IMF program and the country's currency. Local currency being attached to another basket of currencies tends to improve stability and vice versa (King'ola, 2018). King'ola (2018) also found that there is a significant relationship between the exchange rate and the country's GDP, implying that a decline in the rate of exchange results in an decrease in GDP - which supports the findings by Killick and Mwega (1990). These authors presented that the drop in Kenyan Shillings drove a decrease in the Kenyan coffee export market. This conclusion is consistent with the theory of exchange rates. The IMF staff complete review meeting held in 2017 reported that the Rwandan economy continues to perform well, which was attributed to the strong implementation of the IMF support programs (IMF, 2017). However, studying the monthly currency average of Rwanda from 2003 to 2012, Zeleke (2015) found that the Rwandan exchange currency value showed a consistent decrease against the US dollar during that time, suggesting that the IMF interventions negatively influenced the value of Rwandan Francs. The author attributes this decrease to the decrease in exports, which was in conflict with one of the IMF objectives as the IMF claims that their programs help with broadening a country's export market. Baloch, Khaliq, Bhatti, and Faqeer (2014) found that conditional standby arrangements imposed by

the IMF in Pakistan further deteriorated the country's economic conditions, resulting in greater income inequality and higher inflation, which supports the view of Zeleke (2015).

Cheelo (2018) contrasts some of the factors that led Zambia to resort to the IMF, citing copper prices, growing debt, overall balance of payment deficit, weak fiscal management, and exogenous shocks, amongst other factors. These factors consist of a combination of domestic and macroeconomic challenges. The author does note that there are benefits that Zambia could derive from the IMF PRGT support program, such as affordable interest rates, sizable financing, and an increase in foreign investment.

Vreeland (2003, p.8) argues "…*that governments enter IMF programs for economic and political reasons and find that the effects are negative on economic growth and income distribution*" which they to be leading to the question of whether IMF hurts the growth of the economy. The author posits that countries accumulate extensive debt while their economies remain stagnant. This view is supported by Killick and Mwega (1990), who noted that in the case of Kenya, BoP remained a challenge with Kenya having to manage it with rapidly-increasing external debt – an action that threatens the self-sustainability of Kenya. However, the authors present that these loans were obtained on concessional debt, and the servicing burden has remained manageable (Killick & Mwega, 1990).

Ose (2000) concluded that external debt represents a major constraint on the Ghanaian economy. The author insists that Ghana must rather take steps to attract foreign direct investments (FDI) and reduce its dependence on the IMF for financial assistance. Al-Sadiq (2015, p.7), using the treatment effect model, found that "*the member country under an IMF-supported program attracts four times more FDI as a percentage of GDP than a country not under such program*". In comparison, they used the Fixed Effects (FE) model and system Generalised Method of Moments (GMM) and still found that IMF-supported programs have a positive effect on attracting or encouraging FDI inflows into participating countries. This finding is supported by Killick and Mwega (1990), who found that Kenya has been able to attract a large amount of foreign direct investment, during the same period in which they participated in an IMF program, suggesting a positive relationship with the bailout.

Breen and Egan (2019) contrasted the findings by Killick and Mwega (1990) and Al-Sadiq (2015). Breen and Egan (2019) present that the IMF has a substantial and negative effect on a country's attraction of inflow FDI. The authors further present that investors are more

likely to use IMF lending as an escape hatch in countries where FDI is dependent on external capital and has low sunk costs. Jensen (2004) investigated more specifically, the impact of SBA and EFF facilities, and found that the presence of IMF agreements resulted in a lower FDI inflow. The author found that countries that sign IMF agreements attract 25% less FDI inflows than countries not under IMF agreements, suggesting a stigma attached to the countries that receive an IMF bailout.

In summary, the literature review presents several gaps in various research studies, with the gaps ranging from the nature or mismatch of conditionalities to borrowing countries, political willingness or the so the so-called ownership over reforms. Overall, most researchers agree that IMF programs have very little or no effect on the country's growth, inflation and currency or FDI - with some concluding that the results are inconclusive. Other researchers present evidence of growth in those countries that opted not to approach the IMF for bailout. Various findings and more specifically, the Malaysian case study (Buckley and Fitzgerald, 2004), demonstrate that the IMF bailout is not the only option for survival and that in most cases, it does not guarantee economic reform. Most importantly, those countries that do recover with an IMF bailout, do so at a cost that may be austere in nature. Furthermore, these findings signal a requirement of strong leadership in governance, indicating that the decisions should be more coherent with the people of the country and direction of the country.

2.7 Research problem and Research knowledge gap analysis

Many researchers looked at the impact of the IMF on the country's economic prosperity. The studies vary from evaluating the relationship between the IMF and the country's economic growth; to some evaluating the factors that determine a successful IMF bailout; to other researchers questioning the program's ethical compass; while other researchers simply assess whether IMF operations are consistent with the organisation's objectives of encouraging cooperation of global monetary systems, enabling international trade, reducing unemployment and improving sustainable economic growth, and reducing poverty around the world (IMF, 2019). However, there has not been a lot of attention on Sub-Saharan countries, which is significant because of the region's position in the IMF quota membership, its political state and its economic development. There are also limited research studies evaluating whether the IMF bailout programs resulted in economic prosperity for the sub-Saharan region countries.

2.8 Hypotheses development

Based on the theoretical and empirical review sections of the study, the conceptual model of the study present Inflation (IF); Gross Domestic Product (GDP); and the Exchange Rate (ER) as some of the critical measures of the state of the economy in a country. It is thus prudent to use them to understand the influence of the financial bailout on the country's economic development. It is worth noting, however, that these economic measurements also have relationships with each other. For example, King'ola (2018) found that there is a strong correlation between the exchange rate and the country's GDP, positing that a decrease in the exchange rate results in a decrease in GDP.

Li et al. (2015) vouch for the effectiveness of the IMF bailout, arguing that for decades, the IMF assumed the role of a saviour for financially distressed countries, but the organisation has not been able to bring convincing evidence of its impact on those countries. Bird and Rowlands (2016) found that IMF programs in LICs are generally associated with significant increases in economic growth, subsequent to program implementation – this suggests a positive relationship. Cheelo and Mungomba (2019) indicated that economic growth has a relationship with IMF bailout or support. As a result, Hypothesis 1 has been derived as follows:

H1: IMF bailout positively influences a country's GDP growth

Khan (1990) found that the empirical analysis indicates that an IMF bailout leads to an improvement in the current account and the BoP, lowering of inflation, and a decline in growth in the short run. Haque and Khan (1998) concluded that although it is becoming increasingly accepted that the IMF programs lead to an improvement on the overall BoP; the authors present that the results are inconclusive regarding inflation. Killick and Mwega (1990) observed that inflation in Kenya was manageable during the 1970s, suggesting a positive relationship with IMF funding as this was the period in which the country took up assistance from the organisation. Despite this, Baloch et al. (2014) found that conditional standby arrangements imposed by IMF in Pakistan further deteriorated the economic conditions, resulting in greater income inequality and higher inflation. As such, Hypothesis 2 is derived as follows:

H_2: IMF financial bailout negatively influences a country's inflation rate

In answering a question of whether the IMF help or hurt a country's exchange currency, Dreher and Walter (2008) found that the existence of IMF programs significantly decreased

the risk of foreign currency crises. However, the authors posit that the positive effect is realised only if the financial support is provided to reform-minded governments, suggesting that financial bail alone has little effect on its own. The authors further present that compliance on the conditionalities of the program does not have a statistically significant effect on the currency crisis risk, suggesting that the IMF program requires good intention and commitment from the borrowing governments to yield positive results (Dreher & Walter, 2008).

This view is consistent with Zeleke (2015), who found that the Rwandan exchange currency value showed a consistent decrease against the US Dollar during the time when the Rwandan government received an IMF bailout, suggesting that IMF interventions did not positively influence the value of Rwandan Francs, which highlights a misalignment between the government and the IMF. As such, Hypothesis 3 is derived as follows:

H_3: IMF financial bailout negatively influences a country's exchange rate

2.9 Summary and conclusion

This section reviewed literature from a combination of low-income countries (Rwanda and Mozambique) and Middle-Income Countries (Kenya, Ghana and Zambia). With the exception of Rwanda, these countries are all mineral rich. However, they all have high inequality levels, high poverty levels and unsustainable debt levels – which lead to BoP challenges amongst other economic issues. There was no direct link between the positive performance of the economic metrics under investigation in this study and the IMF funding. However, Muhumed and Gas (2016) directly noted that participation in the program lowers the economy's growth. Some of these countries gained their sovereignty or independence over 40 years ago; Kenya gained their independence in 1957, Rwanda in 1962, Ghana in 1963 and lastly Mozambique in 1957 (CIA, 2018). These facts beg to ask if these countries gained independence or if the IMF became the new coloniser.

Some of the conditionalities imposed by the IMF, including the public wage cut, are inconsistent with the Keynesian economic theory. Cutting salary wages is a contractionary theory as opposed to expansionary theory. It can be argued that the IMF practices are also inconsistent with the BoP currency theory. The relationship of these five countries with IMF spans between 20 years and 50 years. However, there is no evidence attributing economic reforms in the context of the IMF objectives of encouraging "global monetary cooperation,

secure financial stability, sustainable economic growth and promoting high employment, reduce poverty facilitate international trade, around the world" (IMF, 2019).

The literature suggests that these countries have instead become dependent on the IMF fund, as evidenced by numerous credit arrangements over a period of 20 years between Kenya and the organisation. This questions the lasting impact of the IMF bailout program, as countries tend to become more dependent instead of independent. Stals (1993) concluded that the BoP begins typically at home, suggesting that countries can resolve BoP without reaching out to the IMF. This then also highlights the importance of the effectiveness of the country's microeconomic policies.

In summary, the literature review concludes that there is no significant improvement or deterioration of variables in the five countries reviewed; thus, the economies of these countries remained the same with minimal economic change.

3 RESEARCH STRATEGY, DESIGN, PROCEDURE AND METHODS

Section 1.2.3 details the three objectives that this research report intends to achieve were stated. Literature was reviewed and a conceptual framework was developed to guide the choices of techniques to be used. This chapter identifies and describes the research approach, design as well as procedure and methods employed in this study to collect, process, and analyse empirical evidence. Broadly, it has three objectives: to identify and describe the research strategy (Section 3.1), outline the research design (Section 3.2), as well as present the procedure and methods (Section 3.3) used in this study. The chapter also describes the reliability, weaknesses and validity measures that this research applies to make it credible, as well as the technical and administrative limitations of the choices made (Section 3.4).

3.1 Research strategy

The research strategy is critical as it provides the direction the research will take (Johannesson & Perjons, 2014). The selection of the strategy is guided by the adoption of the problem under investigation, articulated by the objectives of the study and/or the hypothesis that is being tested in the study.

Zikmund, Babin, Carr and Griffith (2012) explain the three common types of research strategies, which Creswell and Creswell (2018) refer to as research approaches. These strategies are: qualitative, quantitative, and mixed research strategies. They differ based on focus, the qualitative research strategy is text-based and generally investigates the in-depth view of the research question, generally done through semi-structured interviews. The quantitative research strategy focuses on numeric analyses, where the investigation is typically done through statistical methods to understand the relationship that exists between a number of variables. The approach is based on the paradigm of positivism, where knowledge is developed objectively (Scotland, 2012).

In line with the objectives of the study, a quantitative strategy was adopted. This approach is common when investigating existing relationships between the independent and dependent variables. Tariq, Sun, Haris, Javaid, Yushen (2018) investigated the relationship between economic growth and energy consumption in four countries in Asia by employing a quantitative research strategy, where instrumental variables were used in a regression analysis. This study aims to take a similar approach to achieve the research objectives.

3.2 Research design

The research design generally explains the format of the research being conducted (Bryman, 2012). There are five research designs that can be chosen, namely: experimental, comparative, case study, longitudinal and cross-sectional design (Bryman, 2012). The cross-sectional, comparative and longitudinal research designs are generally descriptive (Leedy & Ormirod, 2010). As such, the study adopts the longitudinal research design. Sarantakos (1998) explains that a longitudinal study allows for the investigation of a sample to be conducted on more than one occasion for the researcher to understand the dynamics and the trends that are associated with the data over a period of time. This is thus a useful design in social science studies within a context of macro levels or industry or household studies. A longitudinal research design utilises panel data models. Dreher (2008) used panel data of 98 countries with a time series 50 years (1975 to 1999) to investigate the relationship IMF program has with compliance to conditionality. Similarly, Lee and Barro (2003) employed panel data for 30 countries from 1975 to 1999 investigating the relationship between IMF bailout and economic growth.

3.3 Research procedure and methods

This section accounts for the actual procedure and the methods employed in this research to collect, collate, process, and analyse empirical evidence. Broadly, it details the data and information collection instruments (Section 3.3.1), the research target population and selection of respondents (Section 3.3.2), and the research data and information collection process (Section 3.3.3).

3.3.1 Data collection instruments

This study conducts a desktop research of existing sources from the IMF, World Bank and OECD databases. This approach is selected for the study as it is a low costs method of collecting data. The study analyses secondary data on the IMF bailout and the country's economic performance metrics: Gross Domestic Product (GDP); Exchange Rates and Inflation data over a 20-year period beginning in 2001.

The IMF carries out an extensive collection and analysis of global and regional trends using various data collected through country surveys, financial surveys, and research conferences (IMF, 2019). The IMF has an Independent Evaluation Office (IEO) overseeing various IMF processes, including the assessment of data integrity on member countries and the office has

powers to request information directly from country authorities as part of their evaluation process (IMF, 2019).

3.3.2 Research target Population

The IMF is a member state-based organisation that consists of 189-member countries; however, the population of this research is drawn from countries in sub-Saharan Africa with various IMF bailout arrangements.

Sample selection

The sample covers five countries in the sub-Saharan region, countries with various IMF bailout arrangements. These are Ghana, Zambia, Kenya, Rwanda, and Mozambique. Historical Gross Domestic Product (GDP); Inflation (IF); and Exchange Rates (ER) data is collected for the period of 20 years.

3.3.3 Data collection process

This section outlines the research data to be used in this study from the selected countries, as well as the variable descriptions which are the independent and dependent variables that are used to investigate the existing relationships.

Research data

The data to be used in the study is collected from the repositories of the International Monetary Fund, Organisational Economic Cooperation Development, World Bank, as well as the Central Banks of the countries under investigation. The study utilises panel data that comprises of the IMF bailout, GDP percentages, inflation rates, and exchange rates across the five select countries in the sub-Saharan region. These countries are generally in low- and middle-income clusters, and they show similar characteristics to other low- and medium-income countries like South Africa. As explained in the problem statement in Section 1.2.1, South Africa finds themselves with high levels of debt ratio to GDP with economists predicting that the country might have to approach the IMF for financial assistance. However, South Africa cannot be analysed because the last time they had a credit arrangement with the IMF was in 1982 (IMF, 2019).

This data is collected on an annual basis from 1999 to 2018, which is equivalent to a 20-year period. The data for this period is recent and the collection instruments have improved during the same period, making the collected data reliable and trustworthy.

3.4 Research data and information processing and analysis

Initially, the collected data was evaluated for outliers, using Cook's D (Di >1), in line with the proposals of Cook (1997). These outliers were then be removed from the data as they create a bias in the data and estimation model. The data is used initially for descriptive statistics, which evaluates the frequency and percentage frequencies. This is followed by the descriptive statistics for central tendency and spread, which are the mean, median and standard deviation (Diamantopoulos et al, 2010). The correlation matrix follows, using the Pearson correlation, which determines the relationship between the independent and dependent variables. The correlation determines the significance of the relationship, the direction, as well as the strength. The strength is based on the guidelines of Pallant (2010), where:

r= 0.09-0.29 (weak), r=0.30-0.49(Medium) and ≥5 (strong)

For the estimation, the first model that is be employed is the Ordinary Least Square (OLS). The acceptance of the results of the model is dependent on the key assumptions of normality of the residual, whether the error variances are homoscedastic and whether there is no autocorrelation. The normality of the residual is conducted using Skewness and Kurtosis, with values of ±2, indicating that residuals are normally distributed (Hair et al, 2010). For the homoscedasticity, Durbin Watson is used with values between 1.5 and 2.5 indicating no serial correlation. This also be confirmed using the Breush-Pagan test.

The study utilises the Fixed and Random Effects models that consider the differences among the countries as well as time effects (Williams, 2018). The Hausman test is used to decide between the fixed and random effects model. The significance of the relationship and the differences is determined at 95% confidence level ($p<.05$) and higher levels for the model**.**

3.5 Estimation model for the study

The estimation model is defined as the method of drawing statistical inference on data; thus, the testing of hypotheses and the inference are the most important factors involved in the estimation process. The model looks out for errors and infers the results.

Ordinary Least Square Model (OLS)

For the estimation, the first model that is to be employed is the Ordinary Least Square (OLS). This is the base model and was estimated as follows:

$$DV_{it} = \beta_o + \beta_1 BO_{it} + \beta_2 FD_{it} + \beta_3 DG_{it} + \beta_4 IR_{it} + \beta_5 UN_{it} + \varepsilon_i \quad (1)$$

The variables are discussed below:

Dependent variables

In this study, DV_{it} represents real the GDP, exchange rates, and inflation rate as the dependent variables, with *i* being the countries and *t* being the period.

Gross domestic product (GDP) is a scorecard measuring the total market value of all finished goods and services produced in a country at the specific period, measured by overall local production (IMF, 2019).

Inflation (IF) is a depreciation of purchasing power of domestic currency over items, ultimately, it refers to the fall of the purchasing power (Investopedia, 2020).

Exchange rate (ER) is the worth of one country's currency in another country (IMF, 2018).

Independent variables

Bailout (BO) is the variable of interest, representing the bailout facilities issued by the IMF. Bailout means support programs in a conditional credit facility and programs provided to member countries that are financially distressed. The credit facilities mainly include the following: Extended Credit Facility (ECF); Flexible Credit Line (FCL); Precautionary and Liquidity Line (PLL); Rapid Financing Instrument (RFI); Stand-By Arrangements (SBAs); Extended Credit Facility (ECF); Rapid Credit Facility (RCF); and the Standby Credit Facility (SCF) (IMF, 2019a).

Control variables

The study considered the following control variables: FD (foreign direct investment inflows), DG (debt to GDP), IR (interest rates), and UN (unemployment

- Foreign Direct Investment (FD) is an investment by a foreign country which reflects a long-term relationship between the two economies. It involves both the initial investment and the initial transaction. A relationship is established between the

investor and the enterprise and all subsequent capital transactions between them and among the affiliated enterprises.

- Debt Ratio (DR) is a financial ratio which measures the extent of the country's leverage, expressed as a percentage and interpreted as a proportion of the country's assets that are financed by debt (Ross, 2019).

- Interest rate is the rate a bank or other lender charges to borrow its money, or the rate a bank pays its savers for keeping money in an account. In other words, the interest rate is the cost of borrowing money from a financial institution or organisation (OECD, 2019.

- Unemployment rate is a rate used to measure the number of unemployed people, and it is expressed as a percentage of the labour force (OECD, 2019).

Generalised Least Square Model (GLS)

The study employed a panel data set which is commonly known as longitudinal data which comprises of both the cross-sectional and time series dimension.

$$X_{it} = i = 1 \ldots\ldots\ldots\ldots N, t = 1\ldots..\ldots..T \quad (2)$$

Musau, Waititu and Wanjoya (2015) argue that the Generalised Least Square (GLS) can be used to model the panel data because of its capability of estimating the model when assumptions of OLS are violated.

Feasible generalised least square (FGLS)

Feasible generalised least square (FGLS) is used as a different estimator option that produces consistent and more efficient point estimates. It is useful for estimators of linear regression models with heteroskedastic errors or when there is serial correlation (Shrivastav & Kalsie, 2016; Liu, Okui & Yoshimura, 2016). The GLS i.i.d. assumption fails when: 1) the variance of the errors changes over the observations that are not identically distributed, 2) when the errors are not independently distributed, meaning they are correlated with each other but not with the regressors (Shrivastav & Kalsie, 2016; Liu, Okui & Yoshimura, 2016). The FGLS model is generated after the OLS estimation using the following equation:

$$Y_{it} = \beta_o + x'_{it}\beta + \varepsilon_{it} \quad (3)$$

Y and x' denotes a vector of dependent and explanatory variables respectively, with β_o the intercept, while *i* and *t* represent the country and period respectively. The β is a K x 1 vector of the slopes. The ε_{it} is the error term, and it varies over *i* and *t*.

3.6 Research weaknesses—technical and administrative limitations

The study uses secondary data gathered from existing databases. This data was initially collected for other purposes other than the purpose of this study, therefore data may not be entirely suited for such a purpose. This will therefore require the manipulation of data, which can disorientate the original form or structure of the data.

The study further relies on the assumption of the authenticity and reputation of the institutions such as the IMF, World Bank and the OECD and their databases. However, the study cannot guarantee the reliability of the data.

Lastly, the study assumes that the assumptions made about the authenticity and reliability of the data and databases will allow for acceptable estimates that can be used to make credible conclusions about the findings of the research. However, it must be highlighted that the data for certain metrics, particularly the bailout, might not be consistently available for all the years of the selected period for countries under investigation and this might be a weakness for this study.

3.7 Ethical consideration

A desktop study involves no interaction with human subjects due to the absence of interviews and surveys. Despite these considerations, there is still an ethical expectation that the research should adhere to. For this cause, the research ensures that the data for use in the analysis is collected from authentic databases. It has been stated that the study assumes authenticity of the IMF, World Bank, and OECD databases, as they belong to reputable organisations.

The researcher further assures the highest standard of data protection and that the raw data used will be stored in password protected folders and is only accessible to the research officer. In addition, the researcher applied for permission to undertake the research and the Wits Business School Ethics Committee issued an ethical clearance to conduct the research study.

4 PRESENTATION OF RESEARCH RESULTS

The purpose of the study is to provide analytical insights into the IMF Bailout key metrics, measuring the relationship between the bailout and economic indicators. A longitudinal study using the quantitative research approach was adopted for this study. This chapter presents the descriptive statistics, the correlation matrix analysis, multiple regressions and the estimate models to analyse the uncovered relationships of the economic indicators and the IMF bailout program.

4.1 Descriptive statistics

Descriptive statistics are used to visualise and present raw data in a more concise and meaningful way (Trochim, 2020). The data for five countries is used to evaluate the descriptive statistics for central tendency and spread: the mean, median and standard deviation (Diamantopoulos et al, 2010).

Table 1: Descriptive statistics of all variables

Variable		Mean	Std. Dev.	Min	Max
Country	overall	3	1.421338	1	5
	between		1.581139	1	5
	within		0	3	3
Year	overall	2009	5.795331	1999	2018
	between		0	2008.5	2008.5
	within		5.795331	1999	2018
Bailout~ ’000 (SDR)	overall	178608	194359.4	0	709259
	between		150846.5	9611	350185
	within		139240.8	-136448	572811
Loan Duration	overall	2.26	1.521695	0	4
	between		.6513448	1.45	3.2
	within		1.404538	-.24	4.81
Inflation	overall	10.251	6.463737	-2.4	32.9
	between		4.056129	5.685	14.865
	within		5.337153	2.086	28.286
Exchange rates per US Dollar	overall	146.0704	241.5151	.353514	879.1009
	between		260.1733	1.868803	607.8828
	within		60.25315	-112.2822	417.2885
Real GDP growth	overall	6.221	2.716478	.2	17.4
	between		1.149399	4.485	7.56
	within		2.512306	.861	17.436
Debt to GDP	overall	-3.451515	3.395927	-10.3	16.9
	between		1.404512	-5.205	-1.375
	within		3.150261	-9.962041	16.43796
FDI inflows	overall	1075.924	1338.024	1.5	6175.125
	between		750.8665	159.2804	1939.889
	within		1155.297	-756.1123	5311.159
Interest rate	overall	18.36328	7.478191	0	46.23333
	between		3.576753	15.375	23.92902
	within		6.751698	2.988281	40.6676
Unemployment	overall	5.0042	4.026264	.71	15.9
	between		4.224257	.99	11.7105
	within		1.338331	1.1437	9.1937

Table 1 presents the results of the descriptive statistics of all variables, with 100 observations in over five countries of the study: Ghana, Zambia, Kenya, Rwanda, and Mozambique - over a twenty-year period (T=20) from 1999 to 2018. Overall facility duration is 2.26, with a standard deviation of 1.5years. The standard deviation between countries is 0.65 years and standard deviation within the country is 1.04years.

The results show that the average facility amounts to 178608, a standard deviation of 194359.4, and with a maximum value of 709259 for special drawing rights (SDR). The minimum facility value is zero for the years in which there was no withdrawal. Mozambique reported zero value for the years 2012 to 2018; Rwanda between 2011 and 2018, and Zambia for the years 2012 to 2018.

Real GDP results show an overall mean value of 6.221% and an overall standard deviation of 2.171%. Real GDP reported a minimum of 0.86% and a maximum of 17.4% within the countries. The highest real GDP growth was observed in Rwanda in 2002 and Mozambique in 2001. The lowest real GDP growth was observed in Ghana in 2015, Kenya (2000, 2002 and 2008), Mozambique in 2000, and Rwanda in 2003. The inflation rate ranged from a deflation of -2.4 to 32.9 overall. The inflation within countries ranged from 2.086 to 28.286; and between countries it ranged from 5.685 to 14.865. Ghana, Mozambique and Zambia show the highest inflation rate while Kenya shows the lowest inflation rate.

The FDI inflows ranged from $1.5m to $6 175m. Mozambique shows the highest FDI inflows in the year 2013, while Rwanda shows the lowest FDI inflows that seem to be constant for all the years. The interest rate ranged from 0 to 46.23% overall, 2.988281 to 40.6676 within the countries and 15.38% to 23.92% between the countries. Ghana shows an increase in interest rate in 2002 and in 2015 while Zambia shows a decrease in interest rate. Rwanda shows some form of constant with the increase in years. The unemployment rate ranged from 0.71% to 15.9%, while the in between ranged from 0.99% to 11.71% and within countries, 1.14% to 9.19%. Ghana and Zambia showed the highest unemployment rate over the periods, with Rwanda, Kenya and Mozambique having lower levels of unemployment.

4.2 Multivariate outliers to identify influencing cases

The mutivariate outliers to identify extreme variables that could influence the intepretation of results was conducted using Cook's D (Cook & Weisberg, 1982).

Table 2: Cook's D for outliers

Observations	Mean	Std. Dev.	Min	Max
99	.00781	.0166	$2.91x10^{-7}$	.1478

Cook's D results show the maximum Cook's difference ($D_i < 1$), implying that there are no outliying variables that would affect the accuracy of the regression results.

4.3 Correlation matrix

A correlation matrix is used to summarise data to be used as an input into a more advanced analysis and as a diagnostic for advance analysis. The Pearson correlation results were evaluated, using the 95% confidence ($p < 0.05$) to determine the statistical significance, whether the correlation is positive or negative and the strength of the correlation using Pallant guidelines, where r = 0,09 - 0,29 is a weak correlation, r = 0,30 – 0.49 (medium) and ≥0.50 shows strong correlation.

Table 3: Pearson correlation of the economic indicators

	Real GDP	Exchange Rate	Inflation rate	Bailout	Debt to GDP	FDI inflows	Interest rate	Unemployment
Real GDP	1.0000							
Exchange Rate	0.2017*	1.0000						
Inflation rate	-0.1821	-0.3942*	1.0000					
Bailout	-0.0813	-0.4044*	0.2387*	1.0000				
Debt to GDP	0.1258	0.2791*	0.0035	-0.3062*	1.0000			
FDI inflows	0.0734	-0.3299*	-0.1070	0.2406*	-0.4180*	1.0000		
Interest rate	-0.0475	-0.1341	0.3875*	0.1068	0.1433	-0.0696	1.0000	
Unemployment	-0.1186	-0.5461	0.5746*	0.1888	-0.0646	0.0176	0.3681*	1.0000

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The inflation rate has a positive though statistically weak correlation with bailout amount, where r = 0.2387, p<0.05. The exchange rate has a statistically moderate significant negative correlation with the bailout, r=-0.404, p< 05. Real GDP, and Debt to GDP have a negative relationship with the bailout; with the exchange rate significant at -0.05, Debt to GDP significant at 0.3062 and real GDP insignificant.

The results for unemployment reported an unprecedented positive relationship with inflation, which is inconsistent with the expectation as per the Phillips curve theory, which states that there is a negative correlation between unemployment and inflation.

Real GDP growth results shows that statistically significant correlation was found with the exchange currency, where $r = 0.202$, which is a positive weak correlation. The inflation has a moderate but positive correlation with the interest rate, where $r = 0.388$, $p<0.05$ and a strong positive correlation with unemployment, where $r= 0.575$, $p<0.05$. The exchange rate also has a weak statistically significant positive correlation with debt to GDP, where $r = 0.2791$, $p<0.05$. The exchange rate has a negative medium statistically significant correlation with inflation rate, where $r = -0.394$, $p<.001$. A significant negative correlation between the Debt to GDP and FDI inflows is also reported.

In summary, these correlation results show that some of these variables have a relationship with each other, even though the correlations were not strong with $p<0.05$, while some did not have any relationship at all, with $p>0.05$.

4.4 Multiple linear regressions

The regression was performed to understand the influence of the credit facility with the dependent variables: real GDP, the exchange rate and the inflation rate, in the presence of the control variables: debt to GDP, FDI inflows, interest rate and unemployment.

Table 4: Ordinary leased square model

	Real GDP	**Exchange rate**	**Inflation rate**
Bailout	-6,40 (-0,42)	-0,0003 (-2,88) **	5,38e-06 (1,88)
Unemployment	-0,0622 (-0,83)	-30,855 (-6,18) ***	0.754 (5,38) ***
Interest rate	-0,0056 (-0,13)	1,6055 (0,58)	0,135 (1,72)
FDI inflows	0,0003 (1,38)	-0,0414 (2,71) **	0,001 (1,50)
Debt to GDP percent of GDP	0,1388 (1,48)	5,085 (0,81)	0,011 (0,06)
Constant	6,894(8,07)	385,198(6,76) ***	3,708 (2,32) *
R^2	0,0466	0,4624	0,3679
Adjusted R^2	-0,0047	0,4335	0,334
F-Statistics	0,91	16,00***	10,83***
Skewness/Kurtosis tests for Normality	12.82*	6.86*	21.52*
Heteroskedasticity	0,74	35,30***	1,37
VIF	1,21	1,21	1,21

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The results show that the bailout has a negative relationship with the real GDP and exchange rate, but reports a significant relationship with the exchange rate, with ß=-0.0003 and the t-statistics being t=-2.88, p<0.05. However, the bailout has a positive relationship with the inflation, though it is not significant. Likewise, unemployment has an insignificant and significant negative relationship with real GDP and exchange, respectively, while inflation is insignificantly positive. The FDI has an insignificant negative relationship with the real GDP and inflation; but a positive, less significant relationship with exchange rates. Interest rates and debt to GDP have an insignificant relationship with all the dependent variables.

The results for the relationship between the bailout amount and exchange rates show that the model fits well, with F=16.00, p<.001 with the predictor and control variable explaining 46.24% (R^2 = 0.4624) of the influence in the exchange rate. However, the model for GDP

did not fit well, showing an F-statistics, F= 0.91, explaining only 4% (R^2 = 0.0466) of the variability of the data.

To confirm the accuracy and validity of the estimate, the model specification was conducted to test the key assumptions of the multiple linear regression, which are variance inflation factor (VIF) in the presence of multiple independent and / or control variables, for multicollinearity, the serial correlation and heteroskedasticity and normality of the residuals of the regression. The models indicate that there is no multicollinearity with VIF less than 5.0 (O'Brien, 2007).

These results show that not all the assumptions are met, and thus the OLS is not the optimum model to test the relationship between the IMF bailout and the country's economic indicators: real GDP, domestic currency and inflation rate.

Feasible Generalised Least Square (FGLS)

Miller and Startz (2018) explain that when there are issues with heteroskedastic errors, it renders Ordinary Least Squares (OLS) estimators inefficient. Thus, the Feasible Generalised Least Square (FGLS) was used to determine a significant relationship between the variables. The FGLS is asymptotically efficient but requires $T \geq N$, which is the case in the study with T = 20 and N = 5. Three models of FGLS were used to analyse the relationships of this study; these were the i.i.d. error structure - panels(iid), use heteroskedastic but uncorrelated error structure - panels(heteroskedastic) and heteroskedastic with common AR (1) coefficient for all panels (GLS corr(ar1)).

The results on Table 6 show that the bailout has an insignificant negative relationship with the real GDP in GLS iid and hetero model, but a positive relationship in GLS corr (ar1). The relationship with exchange rates is negative in all models but significant in GLS iid model with $p < 0.001$, while showing an insignificant positive relationship for inflation in all models. Debt to GDP shows an insignificant relationship for all dependant variables, with real GDP and inflation showing a positive relationship. In contrast, exchange rates show a negative relationship only in the GLS corr model. Similarly, FDI shows an insignificant relationship in all models for all variables except for GLS iid, which shows a moderately significant relationship at $p < 0.01$. Likewise, the interest rate shows an insignificant relationship. Inflation shows a moderate relationship in two models, hetero $p < 0.01$ and Corr (ar1) $p < 0.05$. Unemployment, however, reported a strong relationship between the

exchange rates and inflation at a significance level of $p < 0.001$ for both the iid and hetero model. It also shows a strong relationship with inflation in the corr (ar1) model.

The results for real GDP model indicate that the model did not fit well. Though this model was still greater than 5%, it was the best fit compared to GLS hetero, and GLS correlated. The corr (ar1) model results indicate that the exchange rate did not fit well with all the variables, with all the variables showing a non-significant relationship in all models. The three models were fitted well on inflation and exchange rate. Based on the regressors, there was an agreement between GLS hetero and GLS corr (ar1) models that the interest rate had a significant relationship, with the unemployment rate showing a significant influence on this relationship.

Table 5: Feasible Generalised Least Square (FGLS)

	GLS iid			GLS hetero			GLS corr(ar1)		
Variables	**Real GDP**	**Exchange rates**	**Inflation**	**Real GDP**	**Exchange rates**	**Inflation**	**Real GDP**	**Exchange rates**	**Inflation**
Bailout	-6.40e-07 (-0.43)	-,0002939 (-2,97)***	5.38e-06 (1.94)*	-7.93e-08 (-0.05)	-,0001362 (-1,85)	3.54e-06 (1.38)	9.33e-08 (0.05)	-6,27 (-0,03)	3.686e-06 (1.18)
Debt to GDP	0.139 (1.53)	5,085204 (0,84)	0.011 (0.07)	0.169 (2.38)	1,253235 (0,41)	0.025 (0.17)	0.106 (1.57)	-,0940458 (-0,12)	0.065 (0.43)
FDI Inflows	0.00031 (1.42)	-,0414228 (-2,80)**	-0.001 (-1.55)	0.00026 (1.22)	-,0208898 (-1,74)	-0.0004 (-0.91)	0.00033 (1.22)	-,0032644 (-0,72)	-0.001 (-0.91)
Interest rate	-0.005 (-0.14)	1,605455 (0,60)	0.135 (1.78)	0.004 (0.11)	2,095745 (1,41)	0.236 (3.08)**	-0.003 (-0.07)	0,1998407 (0,34)	0.217 (2.32)*
Unemployment rate	-0.062 (-0.86)	-30,8549 (-6,37)***	0.754 (5.55)***	-0.060 (-0.98)	-16,36811 (-4,99)***	0.622 (4.85)***	-0.032 (-0.41)	-4,044719 (-1,61)	0.668 (4.03)***
__constant	6.894 (8.33)***	385,1979 (6,97)***	3.708 (2.39)*	0.860 (9.29)***	186,5929 (4,92)***	1.898 (1.28)	6.340 (7.00)***	71,45748 (3,08)***	2.022 (1.12)
N	99	99	99	99	99	99	99	99	99
Wald chi2(6)	4.84	85.16	57.63	7.35	10.25	64.88	3.55	3.10	40.99
Prob > chi2	0.4359	0.0000	0.0000	0.1958	0.0000	0.0000	0.6157	0.6843	0.0000

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

5 DISCUSSION OF RESEARCH FINDINGS

The IMF prides itself as having contributed positively in reducing global poverty levels and the unemployment rates of its member countries, promoting sustainable economic growth and securing financial stability (IMF Financial Operations, 2018). This study assessed five countries in sub-Saharan Africa, low- and medium-income economies to evaluate how their financial situation changed after acquiring IMF loan. These countries had an overall loan duration mean of 2.6years over 20 years. The average bailout duration is consistent with the PRGT concessional financial support term, which generally carries a loan period of between one and four years, with ex-post structural reforms attached to the loan agreement. Rwanda, Mozambique and Zambia were able to pay off their facilities and have not borrowed from the IMF since 2011 until 2019. Ghana and Kenya continued to borrow within the period being assessed, notwithstanding their 20 years of borrowing history from the institution. It is important to note that Cook's D found no outliers, with Cook's D of between 2.91X10-7 – 0.1478; therefore, the regressions are accepted.

This study assessed the relationship the IMF loan has with the country's economic growth, inflation and currency exchange aligned to IMF's objectives.

5.1 Objective 1: The influence of the IMF bailout on the gross domestic product

The study hypothesised that the IMF bailout positively influences a country's GDP growth post acquisition. However, the results of this study show a non-significant negative relationship between the bailout and real GDP in all OLS and GLS models. Therefore, these findings imply that there is no evidence of a relationship between the bailout and a country's real GDP. This is consistent with the works of Gylfason (1987), Reichmann and Stillson (1978), and Pastor (1987), who all found little or no evidence of the effect of an IMF program on real GDP. Jorra (2012) also analysed data from 57 countries and found that although these countries experience improvements in their BoP, real GDP growth was insignificant. Also, consistent with these conclusions, are the findings by Atoyan and Conway (2005), who assessed the effectiveness of IMF programs. However, other studies arrived at different conclusions. Przeworski and Vreeland (2000) assessed the effect of participation in IMF programs on economic growth and found a negative relationship between the IMF bailout and growth, suggesting that participation lowers economic growth. They further found that the countries without the IMF support program reported a faster

growth than the IMF supported countries, which is in line with Zulu and Nsouli's (1985) findings of decreased economic growth in the 22 countries with the IMF program.

Similarly, Lee and Barro (2003) found a significant relationship between IMF support and the country's economic growth. They used panel data for 130 countries and found a significant adverse effect on economic growth with the presence of participation in IMF. They found a strong inverse relationship between economic growth and the contemporaneous IMF loan-GDP ratio. The authors outlined a growth decrease of 0.32 point per year when IMF lending increases 1% on the GDP. Furthermore, they found that the magnitude of the negative effect increases after controlling for common effects such as interest rate and the endogeneity of IMF lending. Therefore, the hypothesis test concludes that the findings are inconclusive.

These results are also consistent with Keynes theory of economic growth which state that there is reinforcement problem that exists between the country's growth and unemployment as well as with other economic metrics such as poverty levels and inequality. Our results also show the negative relationship real GDP has with unemployment. These regression results are also consistent with Okun's law of unemployment which states that when unemployment falls then GDP rises (Noor et al, 2017) suggesting a negative relationship unemployment has with GDP.

5.2 Objective 2: The influence of the IMF bailout on inflation rate

High inflation is bad for the country's economy as it erodes the value of money, negatively affects the BoP, causes uncertainty, may result in job losses and may create money illusion, amongst other effects. It is critical to evaluate if IMF funding can help member countries manage inflation after acquiring the IMF bailout. The study hypothesised that the IMF financial bailout negatively influences a country's inflation rate.

The study's results show that the inflation rate has a statistically less significant positive but weak correlation with the bailout. The GLS model results also show an insignificant relationship. The regression results found that the overall inflation has a weak, insignificant result for the hetero and correlation model, though less significant at $p < 0.05$. These results are consistent with those found by Killick (1993), who also found a minimal effect, positive or negative, on inflation. The results are also consistent with findings by Lee and Barro (2003), who found no significant effects on inflation associated with IMF participation.

Edwards and Santaella (1993), Connors (1979), Bird (1996) and Gylfason (1987) also did not find the IMF program to have an impact on the inflation rate.

Zulu and Nsouli (1985) found that inflation worsens with program participation in over half of the countries with IMF programs of the countries of their study consisting of 22 countries. Killick and Mwega (1990) contradict these views and say that in their observation of inflation, they found that inflation has been manageable during those periods, suggesting a positive relationship with the IMF bailout. Kahn (1990) found that the IMF program has both short and long-term positive effects on inflation, suggesting a positive relationship. Phillip's curve pronounces that higher inflation is caused by strong economic growth, which suggest that IMF's objective of managing both inflation economic growth no feasible. The results are however consistent with Phillips curve of unemployment which state that there is a negative relationship between unemployment and inflation. We conclude that the IMF bailout has no significant influence on inflation, an inference supported by most scholars. Therefore, the hypothesis test concludes that IMF financial bailout does not influence a country's inflation rate negatively or positively, as the findings are insignificant and supported by other scholars.

5.3 Objective 3: The innfluence of the IMF bailout on exchange rates

Countries with stronger currencies tend to have economic growth and stability, which lead to a strong economy in the long run, because they have the ability to reduce export competition and drive cheaper imports (Segal, 2021). King'ola (2018) supported this definition, saying that attaching a local currency to another basket of currencies, i.e. fixed exchange rates, improves stability. The country imports goods and services at lower prices from other nations, making these affordable in their local market, amongst other reasons. This practice also helps with limiting credit exposure. Most first-world countries such as the United States, United Kingdom and Euro countries have stronger currencies. They have proven to have reduced exposure to the changes in market conditions in many instances. On the contrary, many African countries continue to experience weak currencies, making them susceptible to the volatile nature the global market. Thus find themselves locked into huge liabilities. With the hope of improving their local exchange rate situation, they resort to the IMF bailout to improve the value of their currency.

Contrary to the IMF's objective of strengthening the member country's currency exchange, this study found an overall negative relationship between the IMF bailout and the currency

consistent with Keynesian theory that inflation could be damaging, and a low inflationary environment is not conducive to strong economic growth (Jahan, 2014). The results are less significant in correlation matrix, moderately significant for GLS, and strongly significant relationship at $p < 0.05$, $p < 0.01$, $P < 0.001$ respectively. Exchange rates for all countries in our study remained flat for all countries except for Rwanda during the period. The results are consistent with the theory of balance of payment principles. The theory emphasises that the exchange rates relate to the position of BoP for the concerned country, where unfavourable balances result in depreciation in the external value of currency (Chand, 2001).

The results of this are inconsistent with those found by Dreher and Walter (2008), who discovered a positive relationship between the two variables in their study of 68 countries using panel data. Their study showed a reduction of currency crisis risk by 0.2 percentage points, which is statistically significant at five per cent. Moreover, they found the IMF to be fulfilling its function of promoting exchange rates. Contrary to this, Zeleke (2015), King'ola (2018), and Killick and Mwega (1990) all found a significant negative relationship between the IMF bailout and exchange rates. Zeleke (2015) found that the Rwandan exchange currency consistently decreased against the US Dollar during their bailout period, suggesting that IMF interventions negatively influenced the value of the Rwandan Francs. King'ola (2018) also found a significant negative relationship between the exchange rate and GDP, implying that a decline in the rate of exchange results in a decrease in GDP. This study, therefore, concludes that the IMF bailout has a significant influence on the exchange rates, which in this case, discovered to be negative. This finding is in line with those of other scholars even though Dreher and Walter (2008) had a different view; thus, the null hypothesis accepted.

6 SUMMARY, CONCLUSIONS, LIMITATIONS, AND RECOMMENDATIONS

6.1 Summary

The IMF was established in 1945, post-world-war II, with the intention of avoiding destructive policies that may start another conflict (IMF, 2019). The organisation boasts of a membership of 189 countries, leaving only seven countries of the world not being part of the IMF body of members. With that scale of membership, the IMF could significantly make a difference in the global economy. The IMF is synonymous with the global economy as it significantly influences the world's economy. The world poverty level (people living below $1.90 a day) reduced from 36% in 1990 to 10% in 2015 (UN, 2020), with the remaining 10% accounted mainly in Sub-Sahara and Southern Asia. It is thought-provoking to see that these countries, most of which are mineral-rich with some of the world's high demanded minerals/resources, still report high levels of poverty and inequality with not much growth, if any.

The IMF's operating framework includes a quota system, and it generates capital resources from member contributions according to their relative position in the world economy. The organisation's decision-making pattern follows this quota, which explains why the poverty picture looks the way it does. African countries are not represented in the IMF's decision-making, which explains why the remaining 10% is mainly in the African region. Majority of the country of interest are mineral-rich and can still grow their economies, with the advantage of having the world's youngest population. However, the continent accounts for a high percentage of globe's poverty. It is therefore imperative for African countries to evaluate their place in the IMF.

The effect of the IMF has indeed interested many scholars globally. The studies are dating back to the early sixties and increasing interest with time. These studies vary from evaluating the relationship the IMF financial bailout has with the country's prosperity, evaluating the factors that determine successful IMF bailouts, with some questioning its ethical compass, and others simply assessing whether IMF operations are consistent with the organisation's objectives. Accordingly, this study investigated the influence of the IMF bailout on the country's economic development and growth.

The study found that some countries still chose sovereignty over quick and atrocious bailouts; and were still able to recover without resorting to the IMF, suggesting that it is

possible to recover from economic collapses. This then raises the question of adequate and effective leadership. Leaders must acknowledge that whether they choose to recover with or without IMF bailout, the journey is painful, but retaining sovereignty may lead to recovering well instead of recovering at a severe cost. Malaysia opted for sovereignty because they did not want to risk the affirmative action policies of their Bumiputra population, while Greece is still struggling to recover after ten years of the IMF bailout (Buckley and Fitzgerald, 2004). Therefore, South Africa must also consider the impact the IMF bailout will have on its transformation policies, such as Broad-Based Black Empowerment (BBBEE) and Affirmative Action (AA).

This paper began by providing the framework of IMF operations, providing more insight into how IMF generates its capital to borrow to the countries in need and how countries can access this funding, who can access these resources and provide information of their terms and type of agreements. The study proposed that the presence of IMF bailout, not necessarily the size of the bailout, should validate the outcome in support of their reason and purpose for their existence.

The study presented a literature review that sought to uncover findings from other scholars investigating similar, but not absolute, relationships with the stated variables. Various scholars also undertook to assess the impact of IMF and arrived at different conclusions. Some scholars found that it is the willingness of the rescued countries that made a positive impact, further saying rescued countries must take ownership of the program. Others found little or no significance between the variables, while others found significant negative relationships. This study ran a correlation matrix and multiple regressions, ordinal leased square and feasible generalised leased square, to assess the relationship IMF bailout have with the dependent variables and the control variables. Using Cooks'D, the research ran multivariate outliers to assess the influencing cases.

6.2 Conclusions

This study investigated the impact of the IMF bailout on the country's economic growth by evaluating the relationship between the bailout and the country's GDP, inflation and currency exchange rate.

South Africa is currently experiencing slow growth, high unemployment, deteriorating state of government finances and currency exchange rate, reduced investor confidence, high debt ratio, limited government access to finance, and credit downgrade. This negative economic

trajectory may result in balance of payments problems. The problem with this trajectory is that the government may potentially turn to the IMF for a financial bailout with consequential conditions that may lead to the loss of its sovereignty. Resorting to the IMF may lead the government to implement IMF policies such as the reduction of government spending, leading to higher unemployment and exposure to weakening government transformation policies. Due to the plausibility of an IMF bailout, this study investigated whether IMF bailout positively influences a country's growth, improves inflation, and foreign exchange rates.

The study results show that the IMF bailout program has no significant influence on the GDP and inflation but has a statistically significant negative influence on the exchange rates in line with the hypothesis. The results further presented no significant relationship with other variables, except for unemployment. We conclude that IMF involvement does not guarantee economic growth, improve the exchange rate, or help with managing inflation as promised in their purpose and objective. The literature review outlined that it is possible to recover from an economic meltdown without resorting to the IMF bailout; a case in point is Malaysia (Buckley and Fitzgerald, 2004). Therefore, South Africa is better off choosing sovereignty over uncertainty.

6.3 Limitations

There were potential limitations to the study. Firstly, the study only sampled five countries in the sub-Saharan region, consisting of 49 countries, representing 10.2% of the entire population. Although there has been a vast amount of research about the IMF and its operations, no adequate studies focus on the chosen sample countries of interest and sub-Saharan countries. Furthermore, these studies evaluated various variables which were not always directly comparable with those of this study. The IMF implemented the surveillance toolkit reviewed in 2018 and found that surveillance has become better modified to the global assessment for the period 2014 to 2017, covering only three years of our panel data. Thus, the quality, completeness and reliability of the data of the period of this study are limited.

6.4 Recommendations

This research found the IMF bailout to have no significant influence on the country's real GDP and inflation and found moderate to strong influence on the exchange rate. The results on the influence of the IMF bailout on real GDP and inflation were found to be inconclusive

as scholars arrived at different conclusions. There was no adequate literature found on the countries of interest or in sub-Sahara. It is therefore recommended that:

a) South Africa must not resort to the IMF bailout option. Instead, it must put all efforts to resolve balance of payments issues. How can South Africa maintain sovereign recovery? South Africa must not resort to the IMF bailout option. Instead, it must put all efforts to resolve balance of payments issues. Although our study did not evaluate this question, we recommend that the government assess countries like Malaysia's policies that helped with sovereign recovery. The government should also review those potential IMF policies that could be implemented and assess if it is feasible to implement without IMF less atrociously. Ultimately, we recommend that the government choose sovereignty over uncertainty and plausible atrocious bailout conditions because the country is unlikely to attain the promised growth from an IMF bailout. This can only be successful if the government deals with leadership issues and holds people accountable to gain confidence from foreign investors. Addressing other issues such as corruption will contribute to the country's growth, thereby contributing to a sovereign state. As the World Bank report stated, the government will need to take bold decisions to change the global perception of South Africa. Equally, leadership in the private sector also takes a similar stunt as the government cannot solve the slow growth and skills gap. The business has to become part of the solution for the country to remain sovereign.

b) Should the government choose to opt for an IMF bailout, they must carefully consider suitable facilities and their conditionalities. Thus, we recommend the government consider the following facilities. i) Flexible Credit Line (FCL) designed to prevent and mitigate crises for countries that have solid policies and adequately take a record of their economic performances because it offers members flexibility and insurance (IMF, 2016). ii) Stand-By Arrangement (SBA) because of the flexibility it offers, ex-post conditionality with fewer conditions and specific policies implementation after receiving the loan granted. The government must not simply accept the conditionalities, like with South Korea, and must ring-fence some of the policies. More specifically, they must ring-fence the transformation policies. To further mitigate the risk of long entanglement in an IMF bailout situation like Kenya, the government must respond first to internal review own reforms that can be implemented and must have a clear strategy of what the money is going to be used for, to safeguard against wasteful expenses. South Korea "never simply accepted the

IMF demands as originally dictated" (Dohyung, 1999, p. 509). The government implemented its own reforms, dubbed 4 (IMF reforms) plus 1 (trade, investment and capital liberalization).

c) Further scholarly research to understand the influence of the IMF, specifically in sub-Sahara countries. The questions such as how IMF bailout influences Sub-Saharan countries when compared to the developed regions? Is evaluating the relationship between the country's growth and IMF bailout an optimal method? What are the factors that influence a successful IMF bailout? What economic reforms can the government implement do to avoid a bailout situation? Are sub-Saharan countries worse off when compared to developed countries? What is the underlying cause that leads the country to balance payment, leading to the government resorting to the IMF? We also recommend a study assessing conditionalities, what was implemented in the sub-Sahara, which policies are less atrocious?

REFERENCES

Amadeo, K. (2019a). Keynesian Economics Theory How It Works with Examples.

Amadeo, K. (2019b). Unemployment, Its Causes, and Its Consequences.

Baloch, M. S., Khaliq, S., Bhatti, S., & Faqeer, S. (2014). Influence of International Monetary Fund (IMF) on Taxation policy of Pakistan: A Systematic literature Review.

Bird, G., & Rowlands, D. (2016). The Effect of IMF Programmes on Economic Growth in Low Income Countries: An Empirical Analysis.

Bogeti, Z., & Fedderke, a. J. W. (2005). Infrastructure and Growth in South Africa: Benchmarking, Productivity and Investment Needs∗.

Chand, S. (2001). Balance of Payments Theory of Exchange | International Trade.

CHAPPELOW, J. (2020). Keynesian Economics.

Cheelo, C. (2018). Financing the Economic Stabilization and Growth Programme (Zambia Plus) in the Shadow of the IMF

Cheelo, C., & Mungomba, N. (2019). In Further Pursuit of an IMF-Programme: Possible Pathways for Zambia and Lessons for Africa

Chipman, J. S. (1984). Balance of payments theory.

CIA. (2018). WORLD FACTBOOK INDEPENDENCE. Central Intelligent Agency.

Dreher, A. (2008). IMF conditionality: theory and evidence.

Dreher, A., & Walter, S. (2008). Does the IMF Help or Hurt? The Effect of IMF programs on the likelihood and outcome of currency crises Research Gate.

Embassies. (2018). Mozambique - Mining and Mineral Resources.

GhanaianFinanceMinistry. (2001). Memorandum of Economic and Financial Policies of the Government of Kenya, 2000-03. Retrieved from https://www.imf.org/external/np/loi/2000/ken/01/index.htm

GhanaianFinanceMinistry. (2003). Ghana—Letter of Intent, Memorandum of Economic and Financial Policies, and Technical Memorandum of Understanding.

GhanaianFinanceMinistry. (2010). Ghana: Letter of Intent, Memorandum of Economic and Financial Policies, and Technical Memorandum of Understanding Retrieved from https://www.imf.org/external/np/loi/2010/gha/051310.pdf

Gyebi, F., & Boafo, G. K. (2013). Macroeconomic determinants of inflation in Ghana from 1990–2009. International Journal of Business and Social Research, 3(6), 81-93.

Haque, N. U., & Khan, M. S. (1998). Do IMF-Supported Programs Work? A Survey of the Cross-Country Empirical Evidence.

Connors, T.A., 1979. The Apparent Effects of Recent IMF Stabilization Programs. International

Finance Discussion Papers 135. Board of Governors of the Federal Reserve System.

Gylfason, T., 1987. Credit Policy and Economic Activity in Developing Countries with IMF Stabilization

Programs. Studies in International Finance 60, Princeton.

IMF. (2016). The IMF's Flexible Credit Line (FCL).

IMF. (2017). IMF Staff Completes Review Visit to Rwanda.

IMF. (2019). IMF Fact Sheet. IMF website.

IMF. (2020a). The IMF's Rapid Financing Instrument (RFI). Factsheet.

IMF. (2020b). IMF Conditionality.

IMF. (2020c). IMF Flexible Credit Line (FCL). Factsheet.

IMF. (2020d). IMF Precautionary and Liquidity Line (PLL). Factsheet.

IMF. (2020e). IMF Rapid Credit Facility (RCF). Factsheet.

Index Mundi. (2019a). Country Comparison > Population below poverty line.

index Mundi. (2019b). Country Comparison > Unemployment rate.

Jahan, S., Mahmud, A. S., & Papageorgiou, C. (2014). What Is Keynesian Economics?

KenyanFinanceMinistry. (2011). Kenya: Letter of Intent, Memorandum of Economic and Financial Policies, and Technical Memorandum of Understanding. Retrieved from https://www.imf.org/external/np/loi/2011/ken/011711.pdf

KenyanFinanceMinistry. (2016). Kenya: Letter of Intent; Memorandum of Economic and Financial Policies; and Technical Memorandum of Understanding. Retrieved from https://www.imf.org/external/np/loi/2016/ken/022616.pdf

Khan, M. S. (1990). The Macroeconomic Effects of Fund-Supported Adjustment Programs. Staff Papers, 37(2), 195-231. doi:10.2307/3867289

Khan, M. S., & Sharma, S. (2001). IMF Conditionality and Country Ownership Program

Killick, T., & Mwega, F. M. (1990). MONETARY POLICY IN KENYA, .

King'ola, E. N. (2018). Influence of Exchange Rate on Economic Growth in Kenya.

Li, L., Sy, M., & McMurray, A. (2015). Insights into the IMF Bailout Debate: A Reviewand Research Agenda. Researchgate.

MozambiqueFinanceMinistry. (2009). Mozambique: Letter of Intent, Memorandum of Economic and

Financial Policies, and Technical Memorandum of Understanding Retrieved from https://www.imf.org/external/np/loi/2009/moz/111809.pdf

MozambiqueFinanceMinistry. (2015). Republic of Mozambique: Letter of Intent, Memorandum of Economic

and Financial Policies, and Technical Memorandum of Understanding.

Muhumed, M. M., & Gas, S. G. (2016). The World Bank and IMF in Developing Countries: Helping or Hindering? International Journal of African and Asian Studies. Vol. 28, 2016.

Ose, B. (2000). External Debt and Capital Flight in Sub-Saharan Africa 3 Ghana: The Burden of Debt-Service Payment Under Structural Adjustment: INTERNATIONAL MONETARY FUND.

Reisman, D. (2018). Stagflation (pp. 167-192).

RwandanFinanceMinistry. (2007). Rwanda: Letter of Intent, Memorandum of Economic and Financial Policies, and Technical Memorandum of Understanding. Retrieved from https://www.imf.org/external/np/loi/2007/rwa/060707.pdf

RwandanFinanceMinistry. (2016). Rwanda: Letter of Intent, Memorandum of Economic Financial Policies, and Technical Memorandum of Understanding.

SEGAL, T. (2019). Understanding Capital And Financial Accounts In The Balance Of Payments.

Sequeira, A. H. (2014). Conceptualization in Research.

Stals, D. C. (1993). The balance of payments constraint on economic growth in South Africa.

Stats SA. (2019). Mid-year population estimates 2019.

Thomas, B. G. P. (2012). Zambia: Mining, Minerals and Fuel Resources. AZO Mining.

Trade Portal, s. (2020). The economic context of South Africa. Trade Portal.

Tsikata, T., Rosales, M., Filho, T. d. S., Jasmin Sin, Kipyegon, L., Greenidge, K., & Baldini, A. (2017). ASSESSING ZAMBIA'S FISCAL SUSTAINABILITY __.

UNPD. (2019). About Ghana. UNDP Journal.

Vreeland, J. R. (2003). The IMF and Economic Development.

Williams, R. (2018). Panel Data 4: Fixed Effects vs Random Effects Models.

World Bank. (2019). The Global Competitiveness Report 2019. WEF.

WorldBank. (2018). Mozambique Economic Update: Less Poverty, but More Inequality.

ZambianFinanceMinistry. (2004). Zambia—Letter of Intent, Memorandum of Policies, Agreement, Memorandum of Economic Policies, Memorandum of Economic and Financial Policies.

ZambianFinanceMinistry. (2007). Zambia: Letter of Intent, Memorandum of Economic and Financial Policies, and Technical Memorandum of Understanding

ZambianFinanceMinistry. (2011). Zambia: Letter of Intent, and Memorandum of Economic and Financial Policies.

Zeleke, G. (2015). Time series analysis on monthly average Rwanda currency exchange rate against US dollars. Journal of Business and Economic Management 2(5): 074-083.

Bird, G., 1996. Borrowing from the IMF: the policy implications of recent empirical research. World

Development 24, 1753–1760.

Kerr, P. (2005). A history of post-Keynesian economics. Cambridge Journal of Economics, 29(3), 475-496. Retrieved January 12, 2020, from www.jstor.org/stable/23602063

Edwards, S., Santaella, J.A., 1993. Devaluation controversies in the developing countries: lessons from the Bretton Woods Era. In: Bordo, M.D., Eichengreen, B. _Eds.., A Retrospective on the Bretton

Woods System. University of Chicago, Chicago, pp. 405–455.

Barro, R. J., & Lee, J. W. (2005). IMF programs: Who is chosen and what are the effects? Journal of Monetary Economics,52, 1245–1269.

Where the IMF gets its money, (2020), International Monetary Fund, Retrieved from https://www.imf.org/en/About/Factsheets/Where-the-IMF-Gets-Its-Money)

Jorra, M. (2012). The effect of IMF lending on the probability of sovereign debt crises. Journal of International Moneyand Finance, 31, 709–725.

Atoyan, R., & Conway, P. (2005). Evaluating the impact of IMF programs: A comparison of matching and instrumental-variable estimators. Review of International Organizations, 1(2), 99–124.

IMF Lending, (2020), International Monetary Fund, Retrieved from https://www.imf.org/en/About/Factsheets/IMF-Lending)

https://play.google.com/books/reader?id=NpV3CgAAQBAJ&hl=en_GB&pg=GBS.PP2

https://www.tandfonline.com/doi/full/10.1080/03050629.2019.1582530?scroll=top&needAccess=true

https://tradingeconomics.com/south-africa/indicators

https://www.focus-economics.com/blog/fastest-growing-economies-in-the-world

https://www.investopedia.com/terms/i/inflation.asp

https://library.sacredheart.edu/c.php?g=29803&p=185919 Cherry, Kendra. Introduction to Research Methods: Theory and Hypothesis. About.com Psychology; Gezae, Michael et al. Welcome Presentation on Hypothesis. Slideshare presentation.

https://academicjournals.org/journal/AJBM/article-full-text-pdf/96DA7D821291

https://books.google.co.za/books?id=LL9EHAkdUdMC&printsec=frontcover&dq=Phillips+curve&hl=en&sa=X&redir_esc=y#v=onepage&q=Phillips%20curve&f=false

APPENDICES

Appendix 1: One-page bio of the researcher including declaration of interest in the research and funders, if any

Konoto Queen Tsoai is an MBA candidate at Wits Business School. She holds a bachelor's degree in Accounting Sciences and post graduate diploma in Business Administration. She is a finance executive with over 15 years' experience in finance, most of which is in the ICT sector. She held various positions in various size organisations, ranging from Business Analyst, Finance Manager and Chief Financial Officer (CFO). She currently works as a Senior Financial Analyst in the area of Financial, Planning and Analysis (FP&A) at Canon South Africa, supporting senior executives in developing and executing business strategy.

Queen's research focuses on the IMF framework and its operations, specifically evaluating the influence the IMF has on the economic prosperity of those countries after acquiring the IMF bailout. Her interest was sparked by the continuous reports, both by the media and government, suggesting a plausible IMF bailout for South Africa, as the economy deteriorates to an unacceptable level, seeing the unemployment levels raising to 29%. Her interest was to establish if and how the country can prepare for these possibilities.

Queen is also passionate about leadership matters, always keen to understand the influences leadership has on decision making, such as a decision for the government to opt for an IMF bailout. She also passionate about people development and believes that education and development is critical to the country's economic stability and prosperity.

Appendix 2: Background of the countries in the study

Ghana

Ghana is a low-income country with Gini coefficient[1] estimated at .42, Poverty level[2] is at 24.2% (raking 81 in the world) and unemployment rate[3] of 11.9%, ranking 59 in the world (index Mundi, 2019b). It has history of arrangements with the IMF since 1966 (UNPD, 2019). Although the country has reduced poverty levels from 85% in 1998 to 56% in 2016, the poverty levels remain a challenge despite the IMF presence in the country for 53 years. Furthermore, the country is still faced with challenges of hunger and access to clean water amongst other basic human needs even though the nation is the second largest cocoa and gold producer in the world. Ghana signed various arrangements with IMF including; standby arrangements (SBA), extended fund facility (EFF), structural adjustment facility (SAFC) and extended credit facility (ECF) (IMF, 2019).

Ghana entered three ECF agreements in the past 20 years, with the last ECF signed on April 2015 after its economy suffered unfavourable cocoa and gold production and the never-ending energy crisis. The conditionality attached to these ECF agreements include; fiscal policy, monetary policy and structural reforms. On the front of fiscal policy, Ghanaian government expressed an intention to implement hard budget constraints for the first time in 2003 (GhanaianFinanceMinistry, 2003). On the front of monetary policies, the government expressed the intention to bringing down inflation to a single digit and transforming the financial services sector. A lot of effort was put on structural reforms such as Tax policy reform (increasing VAT rate), transforming revenue administration which resulted in integrating VAT and Income tax under one management, oil management, public finance management including the finance management information systems, public sector reform and payroll management as well as transforming energy sector amongst other reforms. One of the success is the payroll management reform, that resulted in elimination of ghost employees within the Ghanaian payroll system that the government carried for years (GhanaianFinanceMinistry, 2010). Total balance outstanding as at 31 March 2020 is 249.96

[1] Gini coefficient – "Gini index measures the degree of inequality in the distribution of family income in a country, where zero represent perfect equality and hundred represent perfect inequality on the measurement scale".

[2] Poverty line – "purchasing power of $1.90 per day, calculated using basket of cost of living for basic food, clothing, and shelter around the world changes"

[3] Unemployment rate – "Unemployment is defined by the Bureau of Labour Statistics as people who do not have a job, have actively looked for work in the past four weeks, and are currently available for work" (Amadeo, 2019b)

million SDR arising from the 2015 ECF. IMF was consistently satisfied with progress from Ghanaian government, approving various waivers on non-observance requested by minister of finance.

Zambia

Zambia is a middle-income country with high inequality (.57), high poverty levels (54.4%) and high unemployment at 15%. It is rich with natural resources. Zambia boast a vast natural resources such silver, coal cobalt, copper, lead, silver, uranium, emeralds and Zinc (Thomas, 2012). Zambia is also a "chief global producer of semi-precious gemstones and cobalt" (Thomas, 2012). Zambia has long history of different arrangements with IMF, with the first arrangement dating back to 1973 (IMF, 2019). Over the past forty-six years, Zambia had in total twelve arrangements, totalling 64billion SDR, that IMF offer to Low-income countries. The four arrangements consist of standby arrangements, which is a short-term facility given to the stable economies within the low-income cluster, extended fund facility (EFF) which is typically offered to medium income countries, extended credit facilities (ECF) and structural adjustment facility commitment which are also extended to low-income countries.

In the last 20 years, Zambia signed three ECF agreements (in 2003, 2007 and in 2011) with similar conditions. The letters of intent to IMF board contained the government's intention on fiscal policies, monetary and exchange policy, and structural reforms. The fiscal policies conditions required the country to increase capital expenditure, improve revenue performance and public wage bill reduction amongst others. The monetary and exchange rates policies targets include; decrease inflation to eight percent, manage interest rate (using it as the main instrument to anchor inflation) and smoothing of the exchange rates. On structural policies, the government expressed their intent to improve public finance management and prioritise integrated financial management system (IFMIS).

While the government of Zambia consistently requested waivers on non-observance of some of the ex-post conditionalities, it also reported some progress at the same time. In 2003, the government implemented the fiscal policy it intended on reduction of public wage bill, resulting in retrenchments of 2,498 jobs (ZambianFinanceMinistry, 2004). The government also made significant progress in structural policies, implemented successful tax administration modernisation program, opening large tax payer office (ZambianFinanceMinistry, 2007). In addition to structural policies the government implemented a success IFMIS pilot (ZambianFinanceMinistry, 2011). IMF staff was consistently satisfied with the progress made by the government, approving waivers where

possible. Zambia borrowed in excess of 677k SDR for the past 20 years, the outstanding balance as at March 2020 is 11.04 million SDR. The last agreement was signed on 04 June 2008.

Kenya

Kenya is ranked a lower middle-income country since 2014 which is an improvement from low-income cluster. It has high inequality rate at .48, poverty levels estimated at 36.1% and unemployment at 40% (Index Mundi, 2019a). The country gained independence back in 1957 and yet there is still high-level of poverty and inequalities (World Bank, 2017). Its natural resources include iron ore, gold and gemstones amongst other resources. Its relationship with IMF dates to 1975, accounting for 19 agreements over a period of 45 years. The IMF arrangements entered with Kenya consists of "Standby arrangements (SBA), extended credit facility (EFF) and structural adjustment facility commitment (SAFC)" (IMF, 2019).

Kenya accounts for seven agreements conclude in the past 20 years. The country suffered unfavourable economic conditions resulting in instability, loss of confidence and high real interest rates exacerbated by HIV/AID pandemic (GhanaianFinanceMinistry, 2001). Kenyan government committed to various fiscal, monetary and structural policies. Some of the policies committed under fiscal policy includes expenditure management system, rationalizing recurrent expenditure and customs revenue management amongst other (KenyanFinanceMinistry, 2016). On the front of monetary policy, the letter of intent expresses commitment to managing inflation, implementing floating exchange rate regime (prudent money supply) with the biggest focus in privatisation in the utilities and transport sector (KenyanFinanceMinistry, 2011). Under this monetary policy commitment, Kenya commercial bank and Kenyan utilities were successfully privatised (GhanaianFinanceMinistry, 2001). Total balance outstanding as at 31 March 2020 is 249.96 million SDR arising from the 2011 ECF agreement. The last agreement was concluded on 14 March 2016.

Rwanda

Rwanda is a low-income country with high levels of inequality (0.50), high poverty level (39.1%). The country has made concerted effort improving the level of poverty from 57% to 45% poverty rating (World Bank, 2018). While it made progress in reducing the inequality levels, the levels of poverty are still not desirable. It has not recovered from the genocide and its economy is still is dependent on the aid programs, making up to 30% of its revenue.

Its economy is mainly service economy backed by agriculture. Its history with IMF goes back to 1966, accounting for ten different arrangements with IMF consisting of standby agreement (SBA) and structural adjustment facility commitment.

Rwanda accounts for a total of three credit facilities with IMF in the last 20 years. In its letter of intent, the Rwandan government intent to increase capital expenditure, fiscal expansion and monitoring local government spent on the front of fiscal policy. On the front of monetary policy, the government intent to transform its public finance management by decentralising the cash management and develop financial sector to increase access outside Kigali (RwandanFinanceMinistry, 2007). The overarching principle of its structural reform present in all of the three agreements in improved reporting (RwandanFinanceMinistry, 2016). Rwandan government intent to improve public enterprises financial statements with the objective of increasing monitoring (RwandanFinanceMinistry, 2007). Total balance outstanding as at 31 March 2020 is 144.18 million SDR. The last agreement was concluded on 08 June 2016.

Mozambique

According to the WorldBank (2018), the country still has high poverty levels and an increased income inequalities, ranked in the top ten countries with high Gini-Coefficient (WorldBank, 2018). The country boasts important deposit such as high quality coal, iron ore and gold among others and its mineral is largely untapped (Embassies, 2018). Mozambique became a member of IMF since 1987, accounting for a total of 7 arrangements with IMF up to 2015, comprising mostly extended credit facility (ECF) arrangements and Exogenous Shock Facility (ESF), Structural Adjustment Facility Commitment as well recently standby credit facility (SCF) which are arrangement under low-income countries (IMF, 2019).

Mozambique accounts for three PRGT facilities in the past 20 years. In its letters of intent, Mozambique expressed their intent on fiscal, monetary and structural policies. The intended fiscal policies include reducing public expenditure, specifically wage bill. Other policies under fiscal policies includes social protection and management of electricity tariffs (MozambiqueFinanceMinistry, 2009). From monetary policy, government intent to maintain flexible exchange rates and implementation of new exchange rates (MozambiqueFinanceMinistry, 2009). On the front of structural reforms, government's intention had exhaustive list of structural reforms. It intended to increase monitoring of public investment project (defining various approval threshold), public debt management limiting it to domestic funding, scrutinising payroll for potential ghost employees

(MozambiqueFinanceMinistry, 2015). Furthermore, the government intended to implement robust revenue administration by implementing e-bill, modernising revenue collection (creating large tax pay unit), strengthen supervision of public enterprise, implement financial sector surveillance and prioritising social spending (HIV/AID being on the priority spending) amongst other structural reforms (MozambiqueFinanceMinistry, 2015). Total balance outstanding as at 31 March 2020 is 144.18 million SDR. The last agreement was concluded on 08 June 2016.