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Fiscal dominance and monetary policy effectiveness: Evidence from sub-Saharan Africa

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Abstract: This study investigated the responsiveness of monetary policy effectiveness in Sub-Saharan African, covering the period 1974-2023. Using P-ARDL bound test approach to analyze the result the findings showed that inflation, real interest rate, exchange rate, debt service payment and government debt are positive and significant function of fiscal dominance, while fiscal dominance had a negative and significant effect on broad money growth in SSA. Based on the result, the study recommended that since policy regime shifts arise endogenously, monetary authorities in sub-Saharan Africa can reduce the risk of a shift to fiscally dominant regime by responding moderately to inflation while making sure they pursue price stability through the application of the Taylor principle.

Keywords: *Fiscal dominance, Fiscal policy, Inflation, Monetary policy effectiveness.*

1. Introduction

Fiscal dominance and monetary policy effectiveness are critical topics in the scenario of finance in Sub-Saharan Africa. This region has experienced ongoing challenges related to fiscal dominance, which has had significant implications for the balance of power between the fiscal and monetary authorities respectively. Understanding the dynamics of fiscal dominance and its relative influence on monetary policy is crucial for policy makers, economists and researchers in sub-Saharan Africa. Fiscal dominance occurs when the government's fiscal policy constraint the apex bank's ability to achieve its monetary policy objectives. This can happen when government pressures the central bank to finance its deficits along money creation, which can lead to higher inflation. Fiscal dominance can also be seen as a situation where government's fiscal policies indirectly limit the options of an independent central bank [1].

Furthermore, fiscal dominance entails an economic situation where a nation's debt and deficit are so elevated that monetary policy is unable to effectively manage inflation. Also, fiscal dominance is a condition where the monetary authority embark on money printing to meet its financial obligations. This also suggests a scenario where the obligation to meet the government's budget constraints focuses on fiscal policy. In sub-Saharan Africa, fiscal dominance has been a prevalent problem, creating difficulties for the implementation and effectiveness of monetary policy. This phenomenon has implications for macroeconomic stability, inflation control, and overall economic performance in the region. It requires an analysis of how fiscal policy choices, government debt, and the mechanisms through which monetary policy is transmitted interact [2].

Grasping these dynamics is essential for developing effective policy responses and fostering

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sustainable economic growth in SSA. Therefore, this study investigates the empirical evidence and research insights regarding fiscal dominance and the efficacy of monetary policy in SSA. It seeks to clarify the difficulties that policymakers encounter in dealing with fiscal preeminence, the effects on monetary policy, and possible strategies for tackling these challenges. By examining the experiences the experiences and lessons from sub-Saharan Africa, valuable insights can be gained for policy makers and researchers worldwide grappling with similar challenges [3].

Fiscal dominance has been a persistent topic in policy debates within sub-Saharan Africa (SSA). However, the critical question is to what extent should central banks cover fiscal shortfalls, especially considering the increased budgetary strains brought about by the continuous growth in government deficits since the mid-2000s and the effects of the COVID-19 pandemic starting in 2020 [4].

Central banks have historically lent to governments, sometimes contributing to hyperinflation, as seen in Sub-Saharan Africa and elsewhere. The first central banks, such as Sweden's Riksbank (1668) and the Bank of England (1694), were established to support government financing needs. Many 19th-century central banks also prioritized fiscal goals, often financing wars. However, this practice has been linked to hyperinflation episodes, including Weimar Germany, Hungary, Greece, and Latin America following the 1980 debt crisis. In SSA, governments' reliance on central bank borrowing to finance deficits has long been a concern. Notable examples of central bank-financed deficits leading to hyperinflation include episodes in Zaire (1991-1994), Democratic Republic of Congo (1998), Zimbabwe (2007-2008 and 2019-2020), Angola (1994-1997), and Nigeria (2015-2023), as highlighted by Diyoke, et al. [5]. These cases demonstrate the devastating consequences of unsustainable fiscal policies and central bank financing.

Given the potential risks of fiscal dominance, it is essential to investigate its monetary policy impact in SSA, particularly in relation to key macroeconomic indicators such as real interest rates, inflation, money supply growth, exchange rates, debt servicing costs, and government debt. Fiscal dominance significantly undermines the effective management and implementation of monetary policy, posing substantial challenges to central banks in achieving their monetary policy objectives. This issue is particularly pertinent countries in Sub-Saharan Africa, where fiscal dominance has become a recurring problem due to persistent fiscal deficits. The remainder of this study is organized as follows; Section 2: Literature review, covering theoretical and empirical perspectives. Section 3: Methodology and estimated techniques. Section 4: Empirical results analysis. Section 5: Policy suggestions for decision-makers and final remarks.

2. Literature Review

The Mundell-Fleming Model, also known as the "Impossible Trinity" or "Trilemma," is a seminal macroeconomic theory introduced by Mundell [6] and Fleming [7]. This model examines the interconnectedness, in open economies of fiscal policy, exchange rate policy and monetary policy. The model is particularly relevant to studying fiscal dominance and exchange rate stability, as it illustrates the trade-offs in managing these policies. Furthermore, the IS-LM-BP framework provides a theoretical foundation for appreciating the interplay between fiscal and monetary policies in achieving macroeconomic objectives, including exchange rate stability [8].

The open-economy model, initially introduced by Mundell [9] and Fleming [7] was later expanded by Dornbusch [10] and Obstfeld [11] to incorporate dynamic and stochastic elements. This framework typically comprises three equilibria: goods, money, and capital markets. In its static form, the model assumes fixed goods prices and perfect capital mobility. Under a fixed exchange rate regime, fiscal policy shocks can increase export competitiveness, making domestic goods more attractive [12]. However, according to Ogunsakin [13] monetary policy is ineffective in this scenario, as domestic credit expansion fails to influence interest rates or output. In contrast, flexible exchange rates enable monetary dominance, rendering fiscal policy ineffective for stabilization. The Dornbusch [14] suggests that monetary shocks can cause the exchange rate to depreciate instantaneously, exceeding its long-run value.

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Also, the Fiscal Theory of the Price Level (FTPL), developed by Barro and Redlick [15] suggests that the long-term the price level depends on the present value of government expenditures. This theory challenges the traditional view that monetary policy controls inflation. Instead, FTPL proposes that fiscal policy plays a crucial role in determining the price level.

The theory comes in two forms: weak and strong. The weak form emphasizes the link between fiscal and monetary policy, arguing that fiscal budget constraints influence both policies in the long run. It suggests that the fiscal authority takes the lead in determining the price level, and the central bank follows by generating revenue through money creation.

In contrast, the strong form asserts that fiscal policy, independent of monetary growth, determines the future price level. This version proposes that the general price level is determined by fiscal decisions, regardless the variations in money supply.

If neither the fiscal nor monetary authorities can generate the required revenue, the debt-to-GDP ratio will surge, leading to higher interest rates to make government debt more attractive. Overall, FTPL offers a unique perspective on the connections between fiscal policy, monetary policy, and price level determination.

The model was proposed by Krugman [16] and highlights the role of expectations in determining exchange rates. Krugman's model builds on the insights of traditional trade theory, but it incorporates features such as increasing returns to scale and imperfect competition [17]. These elements allow for a more nuanced understanding of trade patterns and the determinants of exchange rates. In Krugman's model, exchange rates are influenced by factors such as relative productivity levels, economies of scale, and government policies. Changes in these factors can affect the competitiveness of firms and alter trade patterns, leading to adjustments in exchange rates.

According to Frankel [18] the Krugman's model explains that expansionary fiscal policies that boost domestic demand may lead to trade deficits and currency depreciation if they are not accompanied by corresponding increases in productivity or competitiveness. Thus, fiscal dominance can influence a country's competitiveness by affecting factors such as inflation, interest rates, and government spending. Tanner and Ramos [19] suggested that countries with lower production costs and higher productivity are likely to have more competitive exchange rates. Again, de Resende [20] opines that the Krugman's model underscores the importance of coordinated fiscal and monetary policies in achieving macroeconomic stability and exchange rate equilibrium through coordinated efforts of fiscal authorities to prioritize short-term objectives over long-term stability.

Krugman's emphasis on imperfect competition and strategic behavior suggests that market expectations and perceptions can serve as a significant role in exchange rate determination. Fiscal dominance may affect market perceptions about a country's economic policies and prospects, influencing exchange rate dynamics. Fiscal dominance can lead to increased uncertainty and instability in expectations, which may negatively affect exchange rate stability. The model offers valuable insights into the determinants of exchange rates and the implications of government policies, including fiscal dominance, for exchange rate stability. By considering factors such as economies of scale, imperfect competition, and strategic behavior, policymakers can better understand the dynamics of exchange rate movements and formulate effective policy responses to promote macroeconomic stability.

The Taylor principle propounded in 1993 states that when inflation rises, the real interest rate should be increased. The notion is that the nominal interest rate should be raised "more than point – for – point to cool the economy when inflation rises, so that the real interest rate increase has become a central tenet of monetary policy. The Taylor Principle presumes a unique bounded equilibrium for inflation. Accordingly, if the Taylor principle is violated, then inflation path may be unstable. The Taylor principle is a monetary policy targeting principle proposed in 1992 by American economist, John B. Taylor for Central Banks to use to stabilize economic activity by appropriately setting interest rates. The Principle considers the Central Bank funds rate, the price level and changes in real income [21]. The Taylor Principle computes the optimal Central Bank funds rate based on the gap between the desired (targeted) inflation rate and the actual inflation rate; and the output gap between the actual and

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natural output level. According to Taylor, monetary policy is stabilizing when the nominal interest rate is higher/lower than the increase/decrease in inflation. Thus, the Taylor Principle prescribes a relatively high interest rate when actual inflation is higher than the inflation target.

In the United States, for instance, the Federal Open Market Committee controls monetary policy. The committee attempts to achieve an average inflation rate of 2% (with an equal likelihood of higher or lower inflation). The main advantage of the general targeting principle is that a central bank gains the discretion to apply multiple means to achieve the set target [22].

However, the Taylor Principle is typically contrasted with discretionary monetary policy, which relies on the personal views of the monetary authorities. The Taylor Principle often faces criticism due to the limited number of factors it considers.

Ricardian equivalence is an economic theory that says that financing government spending out of current taxes or future taxes (and current deficits) will have an equivalent effect on the overall economy. This means that attempts to stimulate an economy by increasing debt-financed government spending will not be effective because investors and consumers understand that the debt will eventually have to be paid for in the form of future taxes. The theory argues that people will save based on their expectation of increased future taxes to be levied in order to pay off the debt and that, this will offset the increase in aggregate demand from the increased government spending. This is also implied that Keynesian, fiscal policy will generally be ineffective at boosting economic output and growth. This theory was developed by David Ricardo in the early 19th century and later was elaborated upon by Harvard Professor Robert barro. For this reason, Ricardian equivalence is also known as the Barro Ricardo Equivalence proposition [23].

The following points should be noted about the Ricardian equivalence"

The Ricardian equivalence theory suggests that government borrowing to finance spending has the same economic impact as funding spending through current taxes. This is because taxpayers anticipate future tax increases to pay off the debt and adjust their behavior by saving more, thereby offsetting the potential economic stimulus of increased government spending. As a result, this theory challenges the Keynesian idea that deficit spending can stimulate economic growth, also in the short term.

3. Methodology

The datasets for this study are quantitative and secondary. They are considered quantitative because they are numerical and can be evaluated from the perspective of magnitude. This study employed secondary data that are longitudinal in nature. The secondary feature derives from the fact that the datasets are drawn from preexisting sources. The two major sources of data are the World Development Indicators (WDI) which is a composition of the World Bank and the International Monetary Fund's Global Financial Development Database (GFDD). While the data on fiscal dominance and indicators are drawn from the WDI, those on monetary policy effectiveness are drawn from the GFDD.

The datasets are also panel or longitudinal in nature. According to Ayoki [24] panel datasets are those data set that combine the features of time series (T) with those of cross sectional series (N). the cross-sectional identifier for the dataset is the SSA countries while the stretch of annualized data is from 1974 – 2023 brings in a time series element.

This research work is modelled after the fiscal theory of price level as espoused in line with Barro and Redlick [15]. This theory links fiscal dominance to higher government spending and higher price level which can affect exchange rate stability in the long run. Following this, the key functional relationship that this study investigates is presented thus:

$$FD = f(MPE) \qquad (1)$$

Where FD = Fiscal Dominance and MPE = Monetary Policy Effectiveness, F= functional notation.

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Unbundling the main drivers of fiscal dominance, the relationship is rewritten thus:

$$FD = f(CPI, RIR, BMG, OER, EDS, CGD) \qquad (2)$$

Where:

FD = Fiscal Dominance, CPI = Consumer Price Index, RIR = Real Interest Rate, BMG= Broad Money Growth, OER = Official Exchange Rate, EDS = External Debt Service, CGD = Cumulative Government Debt and f= functional notation. The general model for the study is then presented thus:

$$FD_{it} = \partial_0 + \partial_1 LOGCPI_{it} + \partial_1 LOGDRIR_{it} + \partial_1 LOGBMG_{it} + \partial_1 LOGOER_{it} + \partial_1 LOGEDS_{it} + \partial_1 LOGCGD_{it} + \varepsilon_{it}$$

Regression constant = ∂_0 Regression coefficient = ∂_1 Stochastic error term = ε

The subscript "it" shows the combination of cross section (N) and time (T). The countries under study make up the cross sections, while the sample period represents the time dimension.

Essentially, the research work in contrast, uses basic panel estimators of fixed effects model and random effect model.

Substituting our study variables into the fixed effects model produced the equation below:

$$FD_{it} = \partial_0 + \partial_1 LOGCPI_{it} + \partial_1 LOGDRIR_{it} + \partial_1 LOGBMG_{it} + \partial_1 LOGOER_{it} + \partial_1 LOGEDS_{it} + \partial_1 LOGCGD_{it} + \lambda i + vit$$

While other variables are as earlier defined, λ_i is a time-varying intercept, vit is the error term. Substituting our variables under study into the random effect model shows thus:

$$FD_{it} = \partial_0 + \partial_1 LOGCPI_{it} + \partial_1 LOGDRIR_{it} + \partial_1 LOGBMG_{it} + \partial_1 LOGOER_{it} + \partial_1 LOGEDS_{it} + \partial_1 LOGCGD_{it} + + \text{wit}, \text{wit} = \varepsilon it + \mu it$$

The selection of the more efficient of the two above stated model followed the Haussmann test.

The variables for the model estimation as well as their respective roles and sources are presented in table 1 below:

Table 1.
Description of model variables.

S/NO	Variable Name	Notation	Role	Source	Expected Sign
1	Fiscal Dominance	FD	Independent Variable	WDI	Nil
2	Inflation	CPI	Dependent Variable	WDI	+ or -
3	Real Interest Rate	RIR	Dependent Variable	WDI	+ or -
4	Broad Money Growth	BMG	Dependent Variable	WDI	+ or -
5	Exchange Rate	Official Exchange Rate	Dependent Variable	WDI	+ or -
6	Debt Service Payment	EDS	Dependent Variable	WDI	+ or -
7	Government Debt	CGD	Dependent Variable	WDI	+ or -

4. Results

Fiscal dominance serves as the core explanatory variable while monetary policy effectiveness served as the independent variable with indicators such as inflation, proxies by consumer price index, real interest rates, exchange rate, economic growth, broad money growth including external debt service payment and government debt. Table 2 contains the basic panel descriptive statistics showing core estimation of central tendency and measures of dispersions as well as relevant normality tests.

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Table 2.
Panel Descriptive Statistics

	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis	Jarque-Bera
BMG	10.95	9.43	35.19	-9.00	8.61	0.17	3.90	93.93
OER	139.06	12.76	3727.07	3.55	679.25	5.09	26.95	67737.34
RIR	5.45	5.25	14.75	-3.24	4.42	0.18	2.28	65.83
CPI	4.81	5.18	10.72	-16.86	4.65	-3.21	15.57	19927.28
IGDP	6.97	6.50	16.72	-0.29	3.58	0.49	3.31	104.33
IGDPLS	6.97	6.50	16.72	-0.29	3.58	0.49	3.31	104.33
LEDS	22.78	23.29	25.69	20.31	2.02	0.16	1.49	237.21
LFISDOM	25.20	25.06	30.34	22.45	2.34	0.41	1.83	205.28
LCGD	25.59	26.22	31.36	20.73	2.86	0.15	1.72	171.84

The degree of skewness of the series is evidenced by the relationship between the mean and the median as well as the reported skewness and kurtosis. All the variables apart from CPI are positively skewed as shown by the greater value of mean over the median and the value of skewness that is less than 0. In consistency with the behaviour of economic and financial time series, the variables show signs of leptokurtosis as they all have excess kurtosis. Exchange rate by its mean, maximum and value of excess kurtosis proved to be the most volatile of all the variables under investigation. Evidence of increasing weight of debt servicing is also shown by the mean value of debt service payment relative to the other investigated variables. Also, the linear association of the series under investigation is shown in Table 3.

Table 3.
Summary of Panel Correlational Result

Variables	BMG	OER	RIR	CPI	IGDP	IGDPLS	LEDS	LFISDOM	LCGD
BMG	1	-0.06	-0.04	0.14	0.31	0.31	-0.09	-0.17	-0.14
OER	-0.06	1	0.40	-0.09	-0.14	-0.14	0.04	0.42	0.38
RIR	-0.04	0.40	1	-0.13	-0.59	-0.59	0.1	0.21	0.25
CPI	0.14	-0.09	-0.13	1	0.37	0.37	0.23	0.15	0.17
IGDP	0.31	-0.14	-0.59	0.37	1	1	-0.19	-0.22	-0.19
LEDS	-0.09	0.04	0.10	0.23	-0.19	-0.19	1	0.91	0.92
LFISDOM	-0.17	0.42	0.21	0.15	-0.22	-0.22	0.91	1	0.98
LCGD	-0.14	0.38	0.25	0.17	-0.19	-0.19	0.92	0.98	1

With particular attention on the correlation of fiscal dominance on the dependent variables, it is found that exchange rate, real interest rate, inflation rate, government debts and debt service payment share positive linear association with fiscal dominance. Broad money growth and economic growth were found to share negative linear association with fiscal dominance. It is interesting to note that variables that directly relate to fiscal borrowing grow as fiscal dominance grows while the money and growth variables decline as fiscal dominance rises.

To ensure that the obtained estimates are without spuriousness given the time series properties in panel data, a summary of the panel unit root test is reported in table 4. Four units root tests in accordance to Levin, Lin and Chu, Breitung, Im, Pesaran and Shin as well as the ADF Fisher and Philip Peron Fisher tests respectively.

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Table 4.
Summary of Panel Unit Root Test.

	LLC	Breitung	IPS	ADF Fisher	PP Fisher	INFERENCE
BMG	-22.13	-13.77	-25.43	723.25	1549.18	I(0)
CGD	-28.60	-18.49	-25.24	715.17	1560.8	I(0)
EDS	-20.53	-16.61	-24.0694	680.088	1484.31	I(0)
CPI	-20.25	-10.27	-25.48	738.07	1466.3	I(0)
IGDP	-22.35	-11.99	-27.48	799.88	2039.22	I(1)
OER	-29.43	-17.65	-24.99	707.19	1322.62	I(0)
LEDS	-26.70	-18.44	-25.35	718.73	1577.10	I(0)
RIR	-26.38	-16.30	-28.00	813.75	1698.16	I(0)
FISCDOM	-19.85	-15.13	-22.25	619.67	1359.08	I(1)

As observed, the variables are integrated of order zero I(0) implying that stationarity exist in all the panel series at levels. This justifies the use of traditional panel estimators of fixed and random effect. The condition for the use of the static panel is level series stationary of the dataset.

The results of the estimated models are reported in table 4.4 with each layer representing the results of all the six (6) formulated and tested hypotheses. The fixed and random effect results interspersed with the relative result of the Haussmann tests are shown.

Table 5.
Summary of Panel Model Results.

CPI (Indlation)							
	Fixed Effects			**Hausmann**	**Random Effects**		
	Coeff	Std. Error	Prob.	5.00	Coeff	Std. Error	Prob.
C	-11.67	1.01	0.00		-11.69	1.01	0.00
IGDP	0.64	0.03	0.00		0.63	0.02	0.00
LFISDOM	0.45	0.04	0.00		0.46	0.04	0.00
RIR	0.11	0.02	0.00		0.11	0.02	0.00
RIR							
	Fixed Effects			Hausmann	Random Effects		
	Coeff	Std. Error	Prob.	5.86	Coeff	Std. Error	Prob.
C	7.50	0.87	0.00		7.37	0.87	0.00
CPI	0.08	0.01	0.00		0.08	0.02	0.00
IGDP	-0.75	0.02	0.00		-0.75	0.02	0.00
LFISDOM	0.11	0.03	0.00		0.12	0.03	0.00
BMG							
	Fixed Effects			Hausmann	Random Effects		
	Coeff	Std. Error	Prob.	8.96	Coeff	Std. Error	Prob.
C	13.43	2.00	0.00		13.44	1.98	0.00
RIR	0.45	0.05	0.00		0.45	0.05	0.00
CPI	0.07	0.04	0.09		0.08	0.04	0.05
IGDP	0.97	0.06	0.00		0.97	0.06	0.00
LFISDOM	-0.48	0.07	0.00		-0.48	0.07	0.00
OER							
	Fixed Effects			Hausmann	Random Effects		
	Coeff	Std. Error	Prob.	1.97	Coeff	Std. Error	Prob.
C	-2.96	0.26	0.00		-2.93	0.25	0.00
RIR	0.02	0.01	0.00		0.02	0.01	0.00
CPI	-0.05	0.01	0.00		-0.05	0.01	0.00
IGDP	-0.02	0.01	0.01		-0.02	0.01	0.01
LFISDOM	0.22	0.01	0.00		0.22	0.01	0.00
CGD							
	Fixed Effects			Hausmann	Random Effects		

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	Coeff	Std. Error	Prob.	0.43	Coeff	Std. Error	Prob.
C	-5.29	0.13	0.00		-5.29	0.13	0.0000
RIR	0.06	0.00	0.00		0.06	0.00	0.0000
CPI	0.01	0.00	0.01		0.01	0.00	0.021
IGDP	0.06	0.01	0.00		0.06	0.00	0.00
LFISDOM	1.19	0.01	0.00		1.19	0.01	0.00
EDS							
	Fixed Effects			Hausmann	Random Effects		
	Coeff	Std. Error	Prob.	1.01	Coeff	Std. Error	Prob.
C	3.89	0.19	0.00		3.87	0.19	0.00
RIR	-0.06	0.00	0.00		-0.06	0.00	0.00
CPI	0.06	0.00	0.00		0.06	0.00	0.00
IGDP	-0.07	0.01	0.00		-0.07	0.01	0.00
LFISDOM	0.77	0.01	0.00		0.77	0.01	0.00

In all the results, the more efficient model as shown by the respective Haussmann tests is the random effect model. The insignificant result of the Haussmann test is evidence in favour of the preference of the random effect model over the fixed effect estimates.

Controlling for economic growth and real interest rate with fiscal dominance as the core explanatory variable using the random effect estimates, it is found that inflation proxied by consumer price index is a positive and significant function of fiscal dominance. A unit increase in fiscal dominance increased inflationary pressure by 46% implying that as there is increase in public borrowing and use of other fiscal instruments, inflation rises by 46% for every unit increase in the SSA fiscal space. Growth increased by 75% and real interest rate rises by 11% as shown in the model. All these changes are found to be significant at the 0.05 level of significance.

Also, it is found that real interest rate is a significant and positive function of fiscal dominance. A unit increase in fiscal dominance increases real interest rate by 12% implying that as there increase in public borrowing and predominant deployment of other fiscal instruments, real interest rate rises by 12% for every unit increase in the SSA fiscal space. Growth reduces by 75% and inflation rise by 8% as shown in the model. All these changes are found to be significant at the 0.05 level of significance.

Fiscal dominance as the core explanatory variable using the random effect estimates, negatively and significantly affected broad money growth in the SSA countries investigated within the period. A unit increase in fiscal dominance reduced broad money growth by 48%. Evidently, fiscal dominance is expected to be antithetical to broad money growth is a monetary policy phenomenon. Simultaneously, exchange rate is a positive and significant function of fiscal dominance. A unit increase in fiscal dominance increased exchange rate by 22% implying that as there is increase in public borrowing and use of other fiscal instruments, exchange rates rise by 22% for every unit increase in the SSA fiscal space. Growth reduced by 2%, inflation by 5% while interest rate rises by 2% as shown in the model. All these changes are found to be significant at the 0.05 level of significance.

Both debt profile and debt services payment were found to be positive and significant function of fiscal dominance. A unit increase in fiscal dominance increases debt service payment by 77% and debt profile by 119% implying that as there increase in public borrowing and predominant deployment of other fiscal instruments, debt and debt service payment rises for every unit increase in the SSA fiscal space. Fiscal dominance is characterized by excessive borrowing hence increase in debt service payment will necessarily result from high debt profile. Evidently, fiscal dominance is expected to grow debt profile since it involves increasing use of debt and other fiscal instruments in managing the economy.

5. Conclusion and Recommendations

This study adopted suitable econometric techniques to test the ramification of fiscal dominance on monetary policy effectiveness in SSA countries covering the period 1974 to 2023. Sub-Saharan Africa was chosen as the geography of the study due to the fragile and poorly coordinated macroeconomic policies and the need to determine the role of fiscal dominance on the effective management and

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implementation of monetary policy. Previous studies have predominantly focused on monetary dominance, which emanates from the monetary policy environment, but this study differs completely by delving into the fiscal space.

Findings arising from this study show that fiscal dominance positively and significantly affects inflation, real interest rate, exchange rate, debt service payment and government debt, while broad money growth (BMG) displays a negative and significant relationship with fiscal dominance. Again, the international fiscal space also transmits some negative effects to the SSA fiscal, space using exchange rate, fiscal interest rate, debt service payment and government debt as shown in the positive and significant relationship with fiscal dominance

This study highlights the importance of combining fiscal policy with monetary variables to achieve stability and growth in Sub-Saharan Africa (SSA). Given the region's fragile economies and prevalent fiscal dominance, it's crucial to consider the interplay between fiscal and monetary policy. The findings suggest that inflation and real interest rates are positively linked to fiscal dominance, supporting the fiscal theory of price level. This implies that excessive government spending can lead to higher prices and potentially destabilize exchange rates. The research work underscores the connection linking fiscal and monetary policy in maintaining price stability, echoing Friedman's notion that inflation is a financial market trend.

It is crucial for monetary authorities in Sub-Saharan Africa (SSA) to adopt strategies that minimize the risk of shifting to a fiscally dominant regime. To achieve this, they should respond cautiously to inflation during normal times, while adhering to the Taylor principle to maintain price stability. Additionally, to mitigate the fiscal implications of monetary policy tightening, SSA monetary authorities should implement moderate nominal interest rate increases in response to inflation, thereby reducing the upward pressure on real interest rates during an inflationary shock.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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