Investigating the Impact of Financial Development Channel on Domestic Investment in Sub-Saharan Africa

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Abstract

Our study aims to investigate whether the Keynesian or Neoclassical view of the financial sector's impact on domestic investment is pertinent in the context of East, Central, and Southern Africa. Using panel data from nineteen African countries (1980-2020), the study employs the fixed effects with robust standard errors and without AR (1) disturbances' assumption. Further, the paper estimates the fixed effects with country-specific effects and AR (1) disturbances' assumption and adjusted for autocorrelation, finally, the study employs the random effects with instrumental variables to deal with the presence of endogeneity in the data. Our empirical results highlight a negative relationship between the financial factors and

domestic investment in our study. The country fixed effect revealed globally a negative correlation with domestic investment. The empirical findings seem to support the neoclassical view; however, the pertinence of such a result is not effective in the context of Africa where the capital market is incomplete, and the rationing of credit and government inferences exist in the capital market, as it is contrary to the neoclassical assumptions of conventional models.

Keywords: FDI, financial development, domestic investment, fixed effects, random effect-IV

1. Introduction

Investigating the factors that influence domestic investment in the context of Africa is interesting given the decline in investment rates that those nations experienced since the 1980s. Numerous studies gave more emphasis to this issue in developed economies (Kormendi & Meguire, 1985; Khan &Reinhart, 1990; Barro, 1991). Therefore, the focus of this paper is to investigate the effect of financial development on domestic investment in Sub-Saharan African countries.

Previous studies regarding investment behavior in developed countries are well established. However, there is no specific model constructed with regard to developing countries. Since the assumptions of conventional models in terms of perfect capital markets, the absence of liquidity constraints, and the absence of government inference seem to not match with the Sub-Saharan African financial markets environment. The role of financial development in determining economic growth is following the seminal contribution by Schumpeter (1932) and further development by Keynes. In the Keynesian view, credit is a pertinent determinant of investment (1937; 1973). While the further study by Gurley and Shaw (1967) argued that economic growth is retarded if the financial sector is not advanced. The study concludes that the difference between advanced economies and developing economies is through the structure and the development of the financial intermediaries in their role of enabling the flow of resources from lenders to borrowers. The theoretical and empirical foundation regarding the role of the financial sector as a determinant of investment was given by the study by Mckinnon (1973) and Shaw (1973). According to their studies, investing in emerging economies has been positively linked with the growth of real money balances. Their theory is predicated on the idea that because credit is limited in developing countries, investors are compelled to save up money before starting any investment ventures. This demonstrates how real interest rates and investment have a positive connection. Therefore, higher deposit interest rates draw more money, which makes funding investments easier. This perspective runs counter to the neoclassical one, which contends that higher interest rate increases the cost of borrowing money and discourage investment. In the neoclassical investment theory, real output growth rates are positively correlated with investment because they reflect shifts in the overall demand for products that producers are trying to satisfy. The accelerator effect is supported by empirical research, which also demonstrates that higher productivity growth is linked to higher investment volume (Fielding, 1993, 1997; Greene & Villanueva, 1991; Wai & Wong, 1982). Previous studies, however, have had less success in demonstrating a strong negative link between interest rates and investment. According to neoclassical theory, a high-interest rate increases the cost of capital, lowering therefore the level of investment.

Although real interest rates are frequently below zero due to high inflation rates in most African countries, the nominal interest rates are typically high. Only through the saving channel can the interest rate in this situation negatively affect investment (Mckinnon-Shaw hypothesis). Real interest rates that are low or negative dissuade saving, which lowers the quantity of money available for investment.

In this study the Mckinnon (1973) and Shaw (1973) financial development framework is used to assess the effectiveness of the Keynesian and Neoclassical view of the financial sector's effects on domestic investment in sub-Saharan Africa. To the best of our knowledge, this is the first study seeking to analyze the effectiveness of both views to highlight the no accountancy of conventional models in the context of Africa. The remainder of the paper is structured as follows: section 2 presents the literature review. Section 3 presents data and methodology. Section 4 highlights the empirical findings and discussion. Section 5 concludes.

2. Literature Review and Theoretical Background

2.1 Literature Review

The literature related to financial development is well-established. Greenwood & Smith (1997) study stressed the role played by financial markets in the transfer of investment capital to high-return activities. While the role of financial intermediaries in optimizing information issues, lowering liquidity risk and handling costs, and directing credit to certain borrower categories that can't access non-intermediated forms of credit cannot be overstated (Levine, 1997; Pagano, 1993; Gertler, 1988). This analysis suggests that the low levels of investment seen within developing economies may be due to weak financial intermediation, which is indicated by an incomplete selection of financial instruments and long-run loaning, as well as by ineffective political lending practices, direct credit controls, and the eviction of private investment by the government takes on debt to fund consumption. Furthermore, Tang et al. (2008) used a multivariate VAR system with an error correction model (ECM) and innovation accounting method to investigate the relationship between Foreign Direct Investment (FDI), domestic investment, and financial development in China from 1988 to 2003. Moreover, it was discovered that although there is a one-way directional correlation between foreign direct investment (FDI) and domestic investment as well as financial development, there is a bi-directional causality from FDI to internal investment and monetary development.

Numerous studies have revealed that nonfinancial factors also impact domestic investment in developing economies. Most of the empirical research regarding the linkage between FDI and growth is supported by neoclassical models of growth and endogenous growth models (Ozturk, 2007; Solow, 1956). The neoclassical development hypothesis states that factor accumulation and growth in total factor productivity (TFP) are the two main drivers of financial development in general (Felipe, 1997). These are dependent mostly on the host nation's ability to negotiate favorable terms for FDI, such as its infrastructure, geography, human resources, and market size (Fedderke and Romm, 2005). Fedderke and Romm's (2005, p. 758) study concluded that the risk profile and net rate of return of FDI liabilities have a significant impact on FDI influx. The development of factor inputs has received more attention in previous literature. This may not be detached from the way that growth is simpler

to investigate and evaluate, while challenges have large amounts of the estimation of TFP growth because of the inaccessibility of proper data and the absence of suitable econometric modelling methods (Johnson, 2006; Madsen, 2007). The literature emphasizes that FDI contributes to financial development through technology transfers and capital formation, but also through the enhancement of the level of knowledge via skill acquisition and labour training, considering the neoclassical development hypothesis's limited contributions (Lucas, 1988; Merican, 2009; Blomstrom et al., 1996; De-Mello, 1999; Solow, 1956). From the perspective of capital formation, the impact of FDI on economic growth is uncertain, according to a study by Li-jun and Hong-qin (2006). It is depending on whether foreign direct investment completely crowds-out or crowds-in domestic investment. The findings indicated that FDI had alternately crowding-in and crowding-out effects on domestic investment, but overall, there was a "net crowding-in" effect. It was discovered that FDI actually had a beneficial spillover effect on domestic investment. Although foreign direct investment (FDI) has improved China's ability to overcome its capital shortfall and has complemented domestic investment to spur economic growth. Three key mechanisms by that FDI can influence economic growth were discovered under the framework of endogenous growth models.

First of all, FDI might promote capital accumulation in the host nation. by introducing new data sources and technological advancements (Dunning, 1993).

Second, through training, FDI can increase the level of expertise and knowledge in the host nation (De-Mello, 1999).

Third, by lowering sectional barriers and leveraging the market forces of existing businesses, FDI can increase the degree of competitiveness in the host country (Johnson, 2006).

Therefore, the results of David Ricardo's "comparative advantage", Heckscher-Ohlin's "factor proportions", and Porter's "competitive advantage" demonstrate the practical necessity of FDI as the cornerstone for a country's economic development and wealth (Aregbesola, 2014).

Domestic investment is influenced by government policies in several ways. First of all, government expenditure may reduce domestic investment by driving up interest rates, limiting the amount of available capital on the markets, and rising investment-related distortionary taxes. On the contrary, government expenditure has crowding-in effects on national investment through the accelerator channel.

Moreover, trade and external debt also impact investment volume in Sub-Saharan African countries. It has been shown evidence of a consistent connection between trade (import and export) and local investment (Levine & Renelt, 1992). Thus, the size of trade (through both import and export) affects positively domestic investment. A rise in exports leads to a rise in foreign exchange which is crucial for the transfer of capital and expands therefore the market for local goods. While increasing the imports may boost investment if it infers better access to investment products in the global markets. However, the negative impact of trade on domestic investment was as well stressed (Levine and Renelt, 1992). Numerous studies in developing countries highlighted a negative connection between external debt and national

investment (Jenkins, 1998; Greene and Villanueva, 1991).

More recent literature already highlighted the issue of the financial sector in Sub-Saharan Africa (Ekouala, 2022; Nyinawuntu and al., 2022). It was found by Ekouala (2022) that the financial factors increase the borrowing incentive in the CEMAC countries while the study by Nyinawuntu and al. (2022) argued that the weak development of the credit sector explains the insufficient domestic investment in Sub-Saharan Africa.

2.2 Theoretical Background

The primary underpinning theory of this study is the financial development framework proposed by Mckinnon (1973) and Shaw (1973). The claim made here is that financial constraints reduce the rate of domestic investment and the capacity of the financial system to support economic growth. Economic theory holds that while Government-imposed restrictions and price distortions on the financial system obstruct the growth of the financial sector, financial liberalization helps the progress of the financial sector. Other barriers to the expansion of the financial industry comprise political restrictions on the economy, government-owning banks, and a poor legal system. A mature and efficient financial system plays an important role in enhancing the effectiveness of financial intermediation by reducing transaction and information costs as well as pool risks, according to the theoretical foundation for the linkage between domestic investment and financial development. A contemporary financial system mobilizes savings from the economy's surplus sector and encourages investment by providing huge credits to the economy's deficit sector.

3. Data and Methodology

3.1 Data

Table 1 below reviews the data used in this paper. Our study uses a sample of 19 African countries[1]over the period from 1980 to 2020.

Table 1. Summary statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
domestic investment	645	7.32	19.586	-65.69	231.93
interest rate	524	19.67	19.25	-26.148	217.875
expenditure	646	14.75	5.33	2.04	34.35
GDP	762	1.423	8.623	-47.5	140.367
Bank liquid	341	25.96	19.65	1.638	125.081
Monetary credit	711	15.516	14.95	0	106.306
Domestic credit	697	15.534	15.07	0	106.26
Claims	711	5.469	16.56	-93.77	72.823
Inflation	670	26.46	203.0115	-17.64	4145.11
External debt	765	21.749	1.274	17.59	24.93
financial index	340	-2.14	1.522	-3.55	6.45

3.2 Data and Stylized Facts

Figure 1 below shows the connection between GDP and domestic investment. It can be observed little evidence of the positive effect of GDP on local investment in our data. Globally, the trend of both variables is volatile highlighting the instability of GDP growth in Sub-Saharan Africa. However, some countries such as Burundi, the Central African Republic, Chad, the Republic of Congo, Gabon, Madagascar, and Mozambique seem to have experienced more periods of volatile national investment with periods of high internal investment compared to other countries and also periods of negative local investment highlighting the instability of domestic investment trend in these countries. Figure 2 confirms

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[1] Angola, Botswana, Burundi, Cameroon, the Central African Republic, Chad, Congo, Equatorial Guinea, Ethiopia, Gabon, Kenya, Madagascar, Mauritius, Mozambique, South Africa, Tanzania, Uganda, Zambia, and Zimbabwe

the volatility of a domestic investment in most Sub-Saharan African countries. Besides, the financial factors seem to have no positive impact on domestic investment in Sub-Saharan Africa. The effect is even negative in some countries, particularly Central African countries as well as Burundi, Madagascar, Mauritius, Mozambique, and Tanzania. This is highlighting the issue of the financial sector in Sub-Saharan Africa. Recent studies stressed already the issue of the financial sector in Subsaharan Africa (Ekouala, 2022; Nyinawuntu and al.2022). Ekouala (2022) found that the financial factors increase the borrowing incentive in the CEMAC countries. In fact, the financial sector is very underdeveloped in the continent which contributes to the inadequacy of financial development in improving the domestic investment of Sub-Saharan African countries.

Figure 1. trends of Domestic investment and GDP
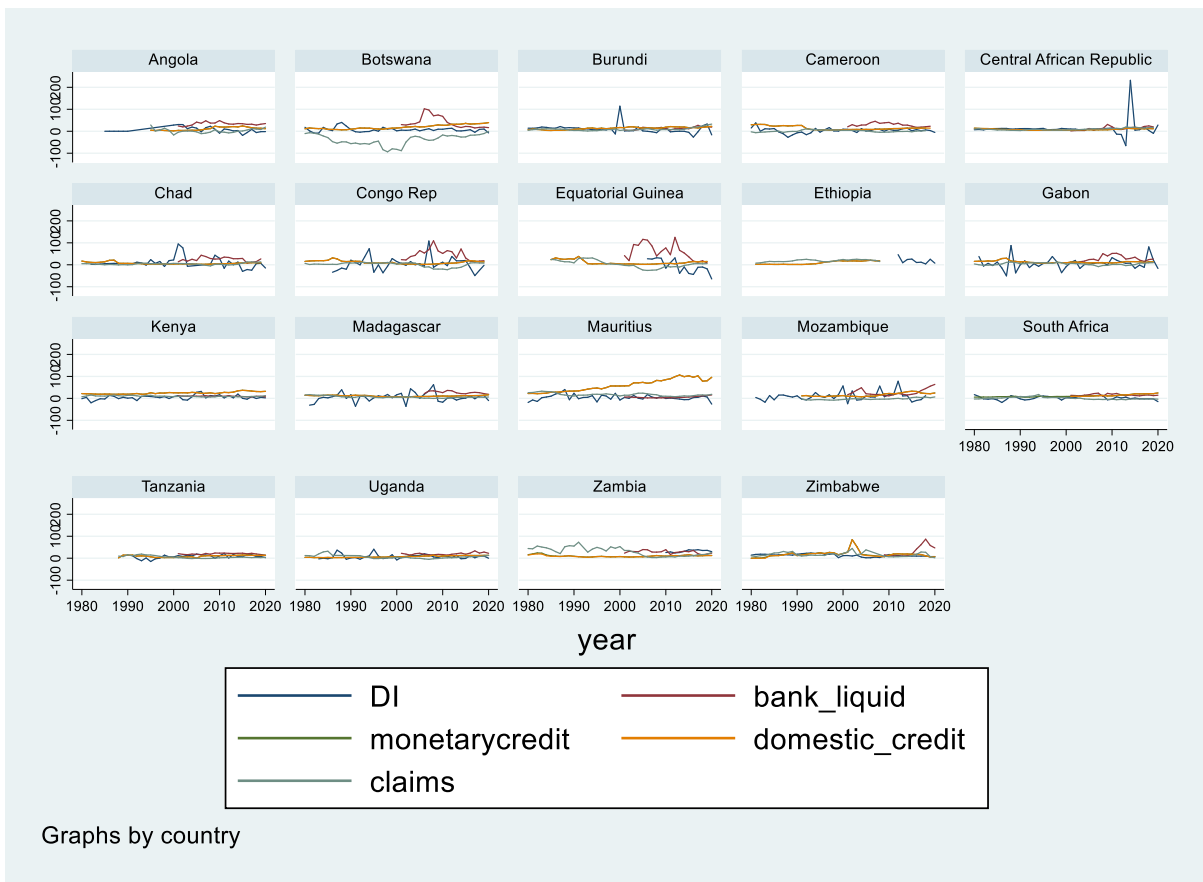
Source: current research

Figure 2. trends of domestic investment and financial factors

Source: current research

3.3 Estimation Strategy

To study the effect of financial development on domestic investment in Sub-Saharan Africa, the paper first uses the fixed effects (FE) with robust standard errors and without the assumption of AR (1) disturbances as a baseline model. Where monetary credit to the private sector, bank liquid reserves to asset ratio, domestic credit to the private sector, claims on central government, and the financial index have been used as financial development regressors and GDP, log of FDI, interest rate, government expenditure, and external debt are taken as control variables. Further, we estimate the FE with country-specific effects[2] assuming AR (1) disturbances and adjusted for autocorrelation, and finally, the paper uses the random effects (RE) with instrumental variables to deal with the presence of endogeneity in the data.

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[2] The country effect includes as well the interaction effects between the financial index and FDI

3.4 Models' Specifications

Model 1

$$DI_{it} = \alpha_{it} + \beta_1 BankL_{it} + \beta_2 MonC_{it} + \beta_3 DomC_{it} + \beta_4 Claims_{it} + \beta_5 logFDI_{it} + \beta_6 CombinedFin\_FDI_{it} + \beta_7 ControlVar_{it} + \varepsilon_{it}$$

(1)

where domestic investment is the dependent variable and gross fixed capital formation is used as its proxy, $BankL_{it}$, represents the effect of bank liquid reserves to bank assets ratio, $MonC_{it}$, is the monetary sector credit to the private sector, $DomC_{it}$, captures the effect of domestic credit to the private sector by banks, $Claims_{it}$, refers to the claims on the central government, $\beta_6 logFDI_{it}$, represent the effect of foreign direct investment, $CombinedFin\_FDI_{it}$, represents the interaction effect of the financial sector and FDI on domestic investment, $ControlVar_{it}$, represents the set of the following control variables: GDP, government expenditure, interest rate, inflation, and log of external debt, and ε_{it} is the robust error terms.

Model 2

The fixed effects in this model take into account the AR (1) disturbances and are autocorrelation-adjusted.

$$DI_{it} = \alpha_{it} + \beta_1 BankL_{it} + \beta_2 MonC_{it} + \beta_3 DomC_{it} + \beta_4 Claims_{it} + \beta_5 logFDI_{it} + \beta_6 CountryFin\_FDI_{it} + \beta_7 ControlVar_{it} + \varepsilon_{it}$$

(2)

Where, $CountryFin\_FDI_{it}$, represents the combined effect of the country's fixed effect and the interaction between financial factors and FDI, the other variables remain as described in model 1.

Model 3

This model controls the endogeneity problem in the data by using the lag of GDP and FDI as instrumental variables.

$$DI_{it} = \alpha_{it} + \beta_1 BankL_{it} + \beta_2 MonC_{it} + \beta_3 DomC_{it} + \beta_4 Claims_{it} + \beta_5 Fin\_index_{it} + \beta_6 ControlVar_{it} + \varepsilon_{it}$$

(3)

Where, Fin_index_{it} capturing the effect of the financial index is the index constructed using the principal component analysis method applied to the following financial factors "bank liquid, monetary credit, domestic credit, and claims to government" and other variables staying as described in model 1.

4. Results & Discussion

Table 2 provides the empirical findings of the effect of financial development on domestic investment. A negative relationship is detected between the bank liquid reserves to asset ratio, monetary credit to the private sector, domestic credit to the private sector by banks, and domestic investment in our study period even if the results are not statistically significant. The only financial factor affecting positively domestic investment is the government claims. However, the result is not statistically significant. While combining the interaction between the FDI and the financial index the impact is negative and statistically significant. This shows that global financial factors harm domestic investment in East, Central, and Southern Africa which seems to support the neoclassical view on the effect of financial sectors on domestic investment. This result is therefore contrary to the Keynesian view (Schumpeter, 1932; Keynes, 1937, 1973; Mckinnon, 1973; Shaw, 1973). However, the neoclassical view has certain assumptions such as perfect capital markets, the absence of liquidity constraints, and the abstraction of governments' inference. This is not the case in Sub-Saharan Africa where the capital market is incomplete, the rationing of credit and government inferences exist in the capital market. The reason for this negative impact is not the one argued by neoclassical theory: "it suggests that high-interest rates raise the cost of capital, which reduces the investment rate". The negative impact of financial factors on domestic investment in Africa is due to the weak financial development common to Sub-Saharan Africa which does not facilitate access to credit and therefore, affects negatively domestic investment. The results in table 3 conform to our baseline model (table 2), while investigating the impact of financial factors using the instrumental variables the negative impact of financial factors on domestic investment is statistically significant as well as the impact of the financial index (table 4) confirming evidence of the negative impact of financial factors on domestic investment in Sub-Saharan Africa. Besides, the results show evidence of the positive impact of FDI on domestic investment in East, Central, and Southern African countries (tables 2 and 3). The results in table 3 display that the country fixed effect combined with the interaction between the financial index and FDI affect negatively the domestic investment in almost all countries and the results are statistically significant for Equatorial Guinea and Mozambique except for Botswana, Chad, Zambia, and Zimbabwe where the effect is positive but not statistically significant. Regarding the control variables, the positive impact of GDP growth on domestic investment found in the literature (Fielding, 1997, 1993; Greene & Villanueva, 1991; Wai & Wong, 1982) is confirmed by our results. Thus, the GDP per capita impacts positively domestic investment in East, Central, and Southern Africa (table 2, 3, and 4) while inflation and government expenditure are having as well a positive impact on domestic investment, however, these results are not statistically significant except from the positive impact of inflation in table 4. On the contrary, the external debt and interest rate affect negatively domestic investment and the results of external debt are globally significant.

Table 2. the impact of financial factors on domestic investment

VARIABLES	(FE) Bank liquidity	(FE) Monetary credit	(FE) Domestic credit	(FE) Claims
bank_liquid	-0.0168			
	(0.113)			
lnfdi	1.524	1.602	1.599	1.745*
	(0.998)	(1.013)	(1.013)	(0.996)
gdp	0.798**	0.798**	0.798**	0.835***
	(0.315)	(0.315)	(0.315)	(0.315)
expenditure	0.243	0.232	0.231	0.152
	(0.368)	(0.369)	(0.370)	(0.379)
interest_rate	0.00179	-0.00246	-0.00224	-0.00511
	(0.107)	(0.106)	(0.106)	(0.103)
inflation	0.00509	0.00491	0.00492	0.00942
	(0.0291)	(0.0290)	(0.0290)	(0.0291)
lnxdebt	-2.627	-2.616	-2.616	-3.132*
	(1.903)	(1.819)	(1.819)	(1.857)
Fin_index and FDI Combined effect	-0.278*	-0.219	-0.220	-0.280**
	(0.162)	(0.164)	(0.165)	(0.117)
Monetary credit		-0.118		
		(0.331)		
domestic_credit			-0.115	
			(0.332)	
claims				0.194
				(0.205)
Constant	32.56	32.87	32.85	40.01
	(47.98)	(45.48)	(45.49)	(45.69)
Observations	218	218	218	218
Number of countries	18	18	18	18

The dependent variable is domestic investment. FE is the fixed effects without assuming AR (1) disturbances with robust standard errors in parentheses

*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Source: current research

Table 3. impact of financial factors on domestic investment assuming a country-specific effect

VARIABLES	(FE) di	(FE) di	(FE) di	(FE) di
bank_liquid	-0.00253			
	(0.171)			
lnfdi	1.942*	1.919*	1.921*	2.187*
	(1.119)	(1.117)	(1.116)	(1.153)
gdp	0.747**	0.732**	0.733**	0.799**
	(0.344)	(0.341)	(0.341)	(0.344)
expenditure	0.323	0.347	0.346	0.302
	(0.446)	(0.446)	(0.445)	(0.441)
interest_rate	-0.0364	-0.0408	-0.0409	-0.0425
	(0.139)	(0.137)	(0.137)	(0.137)
inflation	0.0209	0.0184	0.0184	0.0340
	(0.0396)	(0.0374)	(0.0374)	(0.0400)
lnxdebt	-2.983*	-2.869*	-2.867*	-3.389**
	(1.718)	(1.650)	(1.650)	(1.692)
Angola	-0.452	-0.314	-0.312	-0.436
	(0.529)	(0.618)	(0.619)	(0.518)
Botswana	0.0202	0.0765	0.0774	-0.0514
	(0.286)	(0.216)	(0.216)	(0.195)
Burundi	-0.328	-0.210	-0.212	-0.621
	(0.843)	(0.890)	(0.888)	(0.915)
Cameroon	-0.594	-0.605	-0.606	-0.712
	(1.534)	(1.482)	(1.482)	(1.487)
Central African Republic	-0.906	-0.907	-0.902	-0.721
	(4.954)	(4.926)	(4.926)	(4.924)
Chad	2.721	2.756	2.756	2.429
	(2.545)	(2.531)	(2.531)	(2.554)
Congo	-0.403	-0.396	-0.396	-0.506
	(0.394)	(0.312)	(0.312)	(0.338)
Equatorial Guinea	-0.659*	-0.628**	-0.628**	-0.699***
	(0.380)	(0.256)	(0.256)	(0.252)
Gabon	-0.894	-0.866	-0.866	-0.963
	(0.801)	(0.765)	(0.765)	(0.767)
Kenya	-0.420	-0.277	-0.276	-0.427
	(0.438)	(0.559)	(0.559)	(0.434)
Madagascar	-0.971	-0.896	-0.895	-0.999
	(0.655)	(0.656)	(0.657)	(0.632)
Mauritius	-0.235	-0.0613	-0.0603	-0.185
	(0.193)	(0.469)	(0.468)	(0.202)
Mozambique	-0.783**	-0.637	-0.637	-0.820**
	(0.366)	(0.509)	(0.507)	(0.366)
South Africa	-0.214	-0.0808	-0.0795	-0.178
	(0.415)	(0.515)	(0.515)	(0.402)
Tanzania	-0.0851	0.0769	0.0823	-0.136
	(0.605)	(0.724)	(0.730)	(0.607)
Uganda	-0.379	-0.245	-0.241	-0.515
	(1.102)	(1.150)	(1.152)	(1.113)
Zambia	1.343	1.325	1.326	1.194
	(0.995)	(0.959)	(0.959)	(0.974)
Zimbabwe	-0.0531	0.00712	0.00774	0.0608
	(0.571)	(0.447)	(0.448)	(0.446)
Monetary credit		-0.247		
		(0.609)		
domestic_credit			-0.249	
			(0.608)	
claims				0.220
				(0.270)
Constant	31.02	32.44	32.38	34.21
	(40.26)	(39.32)	(39.30)	(39.32)
Observations	218	218	218	218
Number of countries	18	18	18	18

The dependent variable is domestic investment. FE is the fixed effects with AR(1) disturbances and adjusted for autocorrelation. Standard errors in parentheses

*** $p<0.01$, ** $p<0.05$, * $p<0.1$. The country effect for all countries includes also the financial index and FDI combined effects.

Source: current research

Table 4. impact of financial factors on domestic investment with instrumental variables

VARIABLES	(RE-IV) di	(RE-IV) di	(RE-IV) di	(RE-IV) di	(RE-IV) di
gdp	3.112**	2.925***	3.573**	2.173***	3.275***
	(1.332)	(1.100)	(1.580)	(0.682)	(1.157)
lnfdi	-1.743	-1.300	-1.648	-0.947	-1.785
	(1.359)	(0.860)	(1.396)	(0.761)	(1.328)
bank_liquid	0.215*				
	(0.117)				
expenditure	0.0172	0.132	0.190	-0.136	0.163
	(0.369)	(0.276)	(0.324)	(0.259)	(0.371)
interest_rate	0.0188	-0.0813	-0.0970	-0.0144	-0.0350
	(0.0607)	(0.0949)	(0.107)	(0.0870)	(0.0754)
inflation	0.0484**	0.0488**	0.0587**	0.0442**	0.0526**
	(0.0226)	(0.0230)	(0.0289)	(0.0219)	(0.0222)
lnxdebt	2.699	2.984	3.568	1.586	3.524
	(2.393)	(1.880)	(2.619)	(1.176)	(2.577)
Monetary credit		-0.240***			
		(0.0809)			
domestic_credit			-0.263***		
			(0.0969)		
claims				-0.0491	
				(0.0876)	
fin_index					-3.120***
					(1.067)
Constant	-28.47	-33.75	-41.19	-10.06	-41.66
	(45.08)	(34.60)	(42.35)	(24.91)	(46.11)
Observations	228	366	361	366	228
Number of countries	18	18	18	18	18

The dependent variable is domestic investment (DI). RE-IV is the random effects with instrumental variables. Robust standard errors in parentheses
*** $p<0.01$, ** $p<0.05$, * $p<0.1$
Source: current research

4. Conclusion

The purpose of this study was to look into how FDI affected domestic investment through the financial development channel. The study makes use of panel data from 19 Sub-Saharan African nations from 1980 to 2020. The research uses a fixed effects baseline model without assuming an AR(1) disturbance and with robust standard errors. We then estimated the FE with country-specific effects under the assumption of AR (1) disturbances and corrected them for autocorrelation. Finally, we employed the RE with instrumental variables to address the endogeneity issues in our data. The empirical findings highlight a negative relationship

between the financial factors and domestic investment in our study in East, Central, and Southern Africa. The country fixed effect revealed globally a negative correlation with domestic investment where the negative relationship is statistically significant for Equatorial Guinea and Mozambique, solely, the country fixed effect of Botswana, Chad, Zambia, and Zimbabwe come with a positive result, however, these results are not statistically significant.

The negative impact of financial factors on domestic investment in Sub-Saharan Africa seems to support the neoclassical view; however, this is not the case in Sub-Saharan Africa where the capital market is incomplete, the rationing of credit and government inferences exist in the capital market, which is contrary to the neoclassical assumptions. The reason for this negative impact is not the one argued by neoclassical theory: "it suggests that high-interest rates raise the cost of capital, which reduces the investment rate". The negative impact of financial factors on domestic investment in Africa is due to the weak financial development common to Sub-Saharan Africa which does not facilitate access to credit and therefore, affects negatively domestic investment.

Statement and declaration

The authors have no financial or non-financial support to declare.

Conflict of interest

The authors declare no conflict of interest.

Data availability

Our data are sourced from World Bank and African Development Bank available at these links: https://databank.worldbank.org/source/world-development-indicators and

https://dataportal.opendataforafrica.org/nbyenxf/afdb-socio-economic-database-1960-2021?indicator=1000110-Production

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