Journal of International Money, Banking and Finance
Vol. 5, No. 2, 2024, pp. 139-152
© ARF India. All Right Reserved
URL: www.arfjournals.com

Exploring the Main Determinants of the Investment in Côte d'Ivoire

ADEL SHAKEEB MOHSEN
Graduate School of Management (GSM), Abidjan, Cote d'Ivoire. E-mail: adelmhsen@hotmail.com

Abstract: Based on the importance of investment in supporting the economic growth, the main objective of this study is to investigate the determinants of the investment in Cote d'Ivoire over the period 1980-2020, by using ADF unit root test, Johansen cointegration test, OLS model, Granger causality test, and CUSUM test. The results showed that investment is positively and significantly related with communication infrastructure, imports and inflation, but it is related negatively and insignificantly with external debt. Imports have the biggest effect on the investment. Besides, there are bidirectional long-run causality relationships between investment, external debt and imports, and unidirectional long-run causality relationships running from communication infrastructure and inflation to investment, but there are no short-run causality relationships between the variables. Hence, it is recommended that the Ivorian government uses external debt more efficiently, reduces corruption, improves the infrastructure and creates an attractive investment climate, as well as reducing most tariff and nontariff barriers, which will support the investment in the country.

Keywords: Cote d'Ivoire, Ivory Coast, investment, external debt, infrastructure, VAR

JEL Codes: O11, E20, G15

Received : 19 September 2024
Revised : 22 October 2024
Accepted : 09 November 2024
Published : 30 November 2024

TO CITE THIS ARTICLE:

Adel Shakeeb Mohsen (2024). Exploring the Main Determinants of Investment in Côte d'Ivoire, *Journal of International Money, Banking and Finance,* 5: 2, pp. 139-152.

1. Introduction

In economics, investment is explained as expenditures to buy capital goods and production equipment in order to replace and especially add capital goods in the economy that will be used in producing goods and services in the future. The leading role of investment in economic development is determined by the accumulation of public capital, scientific and technological achievements implementation. Thus, a framework for expanding countries' economic growth and their manufacturing feasibility will be created. Besides, investments determine the process of expanded reprocessing. New facilities constructions, houses erection, laying roads, and, consequently, providing employment depend on the process of investing or real capital formation.

The early economists like Adam Smith, David Ricardo and Jean-Baptiste Say reviewed the investment process as the process of capital circulation in its various forms, and introduced the foundations for the study of reprocessing proportions and the role of investment in this process. It should be emphasized that the investments are closely connected with the categories of sustainable growth, the economic system in general and macroeconomic equilibrium. Macroeconomic equilibrium is one of the basic concepts of modern macroeconomic theory. General guidance on the sustainability and efficiency of the market economy as a system of economic relations based on a decentralized activity of economic entities is based on it. Keynesian and neo-Keynesian patterns of growth are based on perception of economic system stability and, therefore, focus on the problem of the advancing production potential of the economic system (Menshikov et al., 2015).

The theory of the investment multiplier model was presented in "General Theory of Employment, Interest, and Monetary" by Keynes in 1936 who indicated that investments must be increased to increase the national income (national output). Keynes also added, investment is considered in terms of total supply, which meant that when output changes, investment will be changed too. Investment multiplier shows a relationship between initial increment in investment and the resulting increment in national income. It is a measure of change in national income caused by a change in investment. Thus, it explains the relationship between the increase in investment and the resultant increase in income.

Based on Keynes's thought, in the 1940s, two economists, Harrod and Domar, came up with a model known as the Harrod–Domar growth model, which explained the relationship between economic growth and unemployment in developed countries (Harrod, 1939; Domar, 1946). This model has been also widely used in developing countries to examine the relationship between the growth of the economy and the demand for investment capital (Nguyen and Nguyen, 2021).

Due to the disadvantages of the Harrod-Domar model, based on neoclassical theory, Solow (1956) built a growth model with new perspectives, called the Solow economic growth model. The theory of the Harrod-Domar model only considered the effect of productive capital (through savings and investment) on economic growth. With the Solow model, labor and technology elements were added to the growth process. He also affirmed that technical progress being a decisive factor to the growth, both in the short and long term. This model shows how population, technological progress, and savings had an impact on the level of production and the growth of an economy over the period of time.

The theory of investment and economic growth has been invistecated by many researchers like Blomstrom and Persson (1983), Aschauer (1989), Karikari (1992),

Hadjimichael and Ghura (1995), Devarajan et al (1996), Jwan and James (2014), Tiwari and Mutascu (2011), and Carkovic and Levine (2002). The results of the studies showed that there were conflicting statements about the impact of investment on economic growth. However, investment can play a significant role in supporting the economic growth of the country by creating new job opportunities and producing goods and services for domestic consumption and export, which is reflected positively on the local economy. Besides, an increase in investment creates a higher degree of competition in the local market, which motivates producers to improve the quality and quantity of their production by adopting modern management and using new technology in their production activities.

Investment is also important for improving the productivity of an economy. Investing in education increases labor productivity, and investment in new technology and capital increases the economy's productive capacity. Besides, an increase in investment drives companies to more research and development in the capital structure. If it wants to take new products and services to the market, they will typically engage in research and development activities as their first step towards innovating and introducing new products and services or improving their existing offerings. That will also increase the labor productivity by making companies more productive and efficient. As labor becomes more efficient, this increased efficiency nationwide leads to economic growth for the entire country and a higher nationwide GDP.

Furthermore, a rise in investment can also cause a multiplier effect. If firms gain more sales and profit, they are willing to reinvest this in further investment. Also, households who gain employment from the investment, have more income to spend. Thus, an increase in investment should be a boost to economic growth. Therefore, the Ivorian government has been working hard on improving the investment climate and allowing businesses to thrive, leading them to improve the production level in the country. The government set up a single window system, allowing a business to be set up in 24 hours, and established the Chamber of Commerce and Industry of Cote d'Ivoire and other government bodies to improve the business environment in the country. Besides, the country opened up its economy to foreign trade by reducing tariffs and non-tariff barriers, and lifting of customs and heavy administrative procedures.

Côte d'Ivoire as a developing country depends heavily on the agricultural sector, which contributes to 23% of GDP, and accounts for two-thirds of the country's total exports. Key agricultural products produced in Côte d'Ivoire are cocoa, coffee, cashew, bananas, cassava, palm kernels, sugar, corn, sweet potatoes, cotton, rubber, and timber (Wesgro, 2021). On the other hand, the industrial sector in Côte d'Ivoire contributes 21% of the GDP. Its main industries are food processing, textiles, wood products,

construction materials, and fertilizers (World Bank, 2021). The economy of Côte d'Ivoire is also relying on the energy and petrol sector, with a greater involvement from the private energy companies, especially on the production side. As a result, this involvement has led to an increase in electricity production capacity in 2017. Increasing electricity production capacity is a key part of the government's energy policy, and this has helped the country to be a net exporter of electricity to countries like Benin, Ghana, Burkina-Faso, Mali and Togo (Oxford Business Group, 2018). According to the Deloitte's report in 2017, Côte d'Ivoire has the largest economy in the French-speaking West Africa and the third-largest in West Africa after Nigeria and Ghana. Within the last decade, GDP moved up from USD 36694 million in 2011 to USD 61349 million in 2020, as well as the investment increased from USD 6549 million in 2011 to USD 13765 million in 2020 (World Bank, 2021). However, the investment in Côte d'Ivoire still has a lot of problems such as low levels of productivity, lack of modern management and new technology, inadequate training, skills and education of the workforce, and a poor infrastructure.

Hence, given the importance of investment in supporting the economic growth in the country, and based on the Ivorian government's strategy to motivate the investment in the country, it is imperative to investigate the determinants of investment in Côte d'Ivoire. Thus, the main objective of this study is to determine the factors that affect investment in Côte d'Ivoire from 1980 to 2020. The organization of this study is as follows. The next section is the literature review and Section 3 provides a brief discussion on the methodology. Section 4 reports the empirical results, and the conclusion and recommendations are presented in Section 5.

2. Literature Review

Many studies have investigated the determinants of investment in many countries by using different econometric methods. A number of these studies will be reviewed in this section.

Adamu (2018) investigated the effect of external debt on public capital investment in Nigeria from 1970 to 2013 by using ARDL model, and found that external debt and debt service negatively affect the public capital investment, but the current GDP affects it positively. Onwe and larenwaju (2014) investigated the impact of inflation on corporate investment in the Sub-Saharan African Countries by using Error Correction Model (ECM). The result revealed that in the long-run, inflation has a positive effect on corporate investment, and affects it negatively in the short-run. Costamagna (2015) tested the relationship between inflation and R&D investment in 15 OECD countries within the period 1981-2008. The result confirmed that the higher inflation rate is

related with a lower R&D investment. However, the study suggested that some features such as monetary stability, regional integration, and currency union could be potential determinants that may increase R&D investment.

By using two models, Alawneh et al. (2015) investigated the impact of fiscal and quantitative monetary policy on the domestic and foreign investment in Jordan during the period of 2000-2011. The first model was used to assess the effect of fiscal and quantitative monetary policy on the domestic investment. The results showed that the re-discount rate affects domestic investment negatively, but it was not significant, while there is a positive and significant relationship between the mandatory cash reserve and the domestic investment. The study also showed that there is a negative relationship between taxes and domestic investment, and a positive impact of governmental capital spending on domestic investment. Concerning the second model, which tested the effect of fiscal and quantitative monetary policy on foreign investment, the study revealed that there is a negative impact of re-discount rate on foreign investment, while there is a positive relationship between taxes and foreign investment. Augustine et al. (2019) employed the multiple regression analysis technique to examine the impact of taxation on investment and economic development in Nigeria during the period 2007-2017. The study showed that capital gains tax has a positive significant effect on investment and economic development in Nigeria, but the significant level is low. By using OLS model, Edame and Okoi (2014) investigated the impact of taxation on investment and economic growth in Nigeria from 1980 to 2010. The result showed taxation negatively affects investment and GDP, but it has a positive impact on government expenditures.

Boahen and Evans (2014) tested the effect of exchange rate volatility on FDI in Ghana by using a Vector Autoregressive (VAR) model. The study establishes that the stability of the exchange rates and interest rates helps in improving the foreign direct investment inflows. It also explained that the interest rate indirectly affects FDI, but it directly affects exchange rate and attractiveness of the market, which then affects FDI in the long-run. Fornah and Yuehua (2017) investigated the effect of interest rate and other determinants on foreign direct investment in Sierra Leone during the period 1990-2016, by using OLS model. The results showed that interest rate has a significant impact on FDI inflows. Furthermore, the research revealed that trade openness and GDP growth are the major factors that affect FDI in Sierra Leone. Khan et al. (2018) investigated the relationship between FDI, imports and export in Pakistan during the period from 1978 to 2016. The results showed that there is a long-run relationship between FDI and export, while a short-run relationship is between FDI and imports. Santi and Wisit (2017) also tested the relationship between international trade and

foreign direct investment in 29 OECD and 6 ASEAN countries from 1980 to 2004, and found a positive relationship between international trade and investment.

To find the reason behind the weak performance of Ethiopian's private investment, Sisay (2010) conducted a study on the performance trend and main constraints of private investment in Ethiopia within the period 1950-2003. The results revealed that the Ethiopian's private investment is positively impacted by domestic market, return to capital, trade openness and liberalization measures, infrastructural facilities and FDI, but it is negatively affected by the government activities, macroeconomic uncertainty and political instability. Bosede et al. (2013) investigated the impact of transport infrastructure improvement on the economic growth of Nigeria during the period 1981-2011, by using OLS model. The study revealed that transport output and the investment in transport infrastructure have a positive contribution with economic growth. Khurriah and Istifadah (2019) tested the role of infrastructure in Indonesia's economic growth. The study used a growth model derived from aggregate production functions and the generalized method of moment (GMM) estimation techniques to estimate public infrastructure capital as explanatory power in the model. By using infrastructures like roads, energy, water and telecommunication from 34 provinces of Indonesia during the period 2011-2017, the results showed an evidence that water and telecommunication have a positive effect on economic growth, while road infrastructure affect it negatively.

Toader et al. (2018) tested the impact of information and communication technology (ICT) infrastructure on the economic growth of the European Union (EU) countries from 2000 to 2017 by using panel data estimation techniques, and found that ICT infrastructure has a positive effect on the economic growth. By using panel data of China during the period 2001-2016, Qiying (2020) invistecated how China's investment in ICT affects its economic growth, and found that such investment has a significant effect on the economic growth of China. Besides, by using VAR model and Johansen cointegration test, Mohsen (2015) found that investment is positively and significantly related with the trade openness, GDP and population in Syria over the period 1980-2010.

3. Data and Methodology

To achieve the objective of this study, the investment model will be developed to test the effect of external debt, infrastructure, imports and inflation on the investment in Cote d'Ivoire. Annual time series data over the period 1980-2020 will be used in this study. The data are obtained from the World Bank (WB). The investment model is presented as follows:

$$\ln GFCF = \beta_0 + \beta_1 \ln EXD + \beta_2 \ln TL + \beta_3 \ln IMP + \beta_4 \ln INF + \varepsilon_t \quad (1)$$

where β_0 is the intercept, β_1, β_2, β_3, and β_4 are the slope coefficients, lnGFCF is the natural log of gross fixed capital formation (USD), lnEXD is the natural log of external debt (USD), lnTL is the natural log of communication facilities as an indicator of the infrastructure (number of telephone lines), lnIMP is the natural log of imports (USD), lnINF is the natural log of GDP deflator as an indicator of the inflation, and ε_t is the error term.

Because this study involves time series data, it is necessary to begin the analysis with the unit root tests. Augmented Dickey-Fuller (ADF) unit root tests will be conducted on each variable in the model to find out whether the time series data are stationary at the level or first difference. After testing for stationarity and confirming the order of integration of each time series, and if the variables in the model are found to be integrated of the same order, the Johansen cointegration test will be applied to establish whether there is any long-run or equilibrium relationship between the variables in the model. If the variables are cointegrated, then the Granger causality tests will be conducted based on the VECM to determine the long and short run causality relationships among the variables in the model. However, if the Johansen test results indicate no cointegration among the variables in a particular model, then the Granger causality tests will be based on the VAR model. On the other hand, Ordinary Least Squares (OLS) model will be used in this study to estimate the coefficient of the variables, and it will be subjected to a number of statistical diagnostic tests, namely, the normality, serial correlation, and heteroscedasticity tests to ascertain its statistical adequacy. Lastly, stability test based on the cumulative sum (CUSUM) will be applied to determine whether the parameters of the model are stable over the period of the study.

4. Empirical Outputs

In the first step of the analysis, we have carried out the ADF unit root test to determine whether the variables in the model are stationary or non-stationary. Table 1 below shows that all the variables in the model are not stationary at the level, but became stationary after first differencing at the 1% or 5% level of significance. Hence, all the variables in the model are integrated of order one, or I(1).

4.1. Johansen Cointegration Test Results

Since all the variables are stationary in the first difference, we can apply the Johansen multivariate cointegration test to determine if there is any cointegration or long-run equilibrium relationship between the variables in the model. However, before running

Table 1. ADF unit root test results

	Level			*First difference*		
	Intercept	*Trend and intercept*	*No trend & no intercept*	*Intercept*	*Trend and intercept*	*No trend & no intercept*
lnGFCF	0.026770	-2.436989	0.532757	-4.342368**	-4.532736**	-3.635942**
lnEXD	-2.154991	-2.533428	0.603524	-2.625712	-2.8263083	-2.654163**
lnTL	-1.512498	-0.932021	2.771278	-6.352105**	-6.910282**	-2.735901**
lnIMP	-0.164692	-3.267449	1.123346	-4.734247**	-4.840098**	-4.786207**
LnINF	-0.933028	-2.521013	3.236235	-4.143721**	-4.135062**	-3.337543**

Note: ** denotes significance at the 1 percent level, and * at the 5 percent level.

the cointegration test we need to run the VAR model first to determine the optimal lag length, which is 4 based on the minimum AIC.

After having determined the optimal lag length, we then proceeded with the cointegration test for the model. Table 2 indicates that there are at most five cointegration equations based on the trace test and maximum eigenvalue test. In other words, the results reveal that there is more than one long-run relationship among the variables in the system comprising lnGFCF, lnEXD, lnTL, lnIMP, and lnINF.

Table 2: Johansen Cointegration Test Results

No. of CE(s)	*Trace Statistic*	*0.05 Critical Value*	*Max-Eigen Statistic*	*0.05 Critical Value*
r = 0	324.7054**	0.0001	182.0366**	0.0001
r ≤ 1	225.6528**	0.0000	75.26038**	0.0000
r ≤ 2	65.9004**	0.0000	32.73595**	0.0006
r ≤ 3	32.00264**	0.0003	16.99606*	0.0231
r ≤ 4	13.20633**	0.0007	14.06943**	0.0060

Note: ** denotes significance at the 1 percent level, and * at the 5 percent level.

4.2. Ordinary Least Squares (OLS) Model Results

After having found a cointegration relationships among the variables lnGFCF, lnEXD, lnTL, lnIMP, and lnINF, so now it can estimate the coefficient of the variables using ordinary least square (OLS) model.

Table 3 shows that lnGFCF is positively and significantly related to lnTL, lnIMP and lnINF, but it is related negatively and insignificantly with lnEXD. Besides, R-squared, which indicates how much of the total variation of the dependent variable can be explained by the independent variables, is 86.6% which is more than 60%, then the date of this model is fitted strongly. F-statistic is used to test if the independent variables jointly influence the dependent variable, and we found the probability of F-statistic is 0.000, which is less than 5%. Hence, F-statistic is significant, which

means that all independent variables (lnEXD, lnTL, lnIMP and lnINF) jointly affect the dependent variable (lnGFCF).

Table 3. OLS Model Results

Independent Variables	*Coefficient*	*Prob.*
lnEXD	-0.031583	0.8675
lnTL	0.846582**	0.0004
lnIMP	1.115300**	0.0000
lnINF	0.967688*	0.0160
c	3.208524	0.5777
Dependent Variable	lnGFCF	
R-squared	0.866725	
F-statistic	55.27775	
Prob(F-statistic)	0.000000**	

Note: ** denotes significance at the 1 percent level, and * at the 5 percent level.

From Table 3, the long-run lnGFCF equation can be written as:

$$lnGFCF = 3.208 - 0.031\ lnEXD + 0.846\ lnTL + 1.115\ lnIMP + 0.967\ lnINF \quad (2)$$

The cointegration equation given by equation (2) above shows a negative and insignificant relationship between external debt and investment in Côte d'Ivoire, which indicates that the borrowed resources were misallocated or wasted in inefficient way. The continued negative and insignificant effect of external debt will reduce the country's ability to service its debt in future. Besides, the expansion in external debt poses significant negative connotations for investment, fiscal sustainability, economic growth and poverty reduction in case of poor debt management capacity. Our finding is in line with the result of Adamu (2018). However, telecommunication infrastructure plays a vital role in developing the investment in the country, in the sense that good infrastructure will enhance the economic growth of the country. If the country has a good economy, this will create an attractive investment environment, and therefore local and foreign investment will be increased. This result is similar to the results that obtained by Khurriah and Istifadah (2019) and Toader et al. (2018). Imports also play an important role in improving the investment in Côte d'Ivoire through supporting the country's needs of capital goods such as machinery and new technology, which help in increasing country's productivity and motivating producers to improve and increase their production. Similar results were also found by Santi and Wisit (2017) and Khan et al. (2018). Besides, inflation has a positive impact on the investment in Côte d'Ivoire. When goods and services are produced, and if there are traded at good prices, this will encourage producers to continue investing and even improve the

quality and quantity of what they produce. The rise in prices could be more favourable to businesses because they are always seeking for maximising their profit. Our result agrees with Onwe and larenwaju (2014).

4.3. Statistical Diagnostic Tests Results

In order to check the model adequacy, it is essential to subject the model to a number of diagnostic tests, namely, normality, serial correlation, and heteroskedasticity test. A 5% level of significance will be used in this study. From Table 4, it is clear that the model does not have serial correlation or heteroscedasticity, and the series are normally distributed as well, because the computed P-value is greater than 5% significance level. Hence, based on the results that we got, we can say that the model is the Best Regression Model, because R square value is high, Prob (F-statistic) is significant, residuals are normally distributed, and no serial correlation or Heteroskedasticity in the residual.

Table 4: Diagnostic Tests Results

Normality test	*Serial correlation LM test*	*Heteroskedasticity test*
0.551126	22.96317	13.17225
(0.759145)	(0.1022)	(0.2031)

4.4. Granger Causality Tests Results

Since the variables in the model are cointegrated, the Granger causality tests based on the VECM are used to examine the short- and long-run causality relationships among the variables in the model. The F-test results show the significance of the short-run causal effects, while the significance of the coefficient of the lagged error correction term [ect(-1)] shows the long-run causal effect.

The Granger causality test results based on the VECM are shown in Table 5. It is clear that there are no short-run causality relationships between the variables. However,

Table 5: Granger causality test results

Dependent variables	*Independent variables*					
	∑Δ lnGFCF	*∑Δ lnEXD*	*∑Δ lnTL*	*∑Δ lnIMP*	*∑Δ lnINF*	*ect(-1)*
Δ lnGFCF	-	0.372498	-0.291491	-0.223254	0.660018	-0.38403**
Δ lnEXD	-0.254048	-	-0.005128	0.665610*	0.496461	0.17425*
Δ lnTL	-0.203577	-0.034818	-	0.226029	0.170135	0.07211
Δ lnIMP	0.165282	0.396193**	-0.057996	-	0.610669**	-0.35450**
Δ lnINF	0.126221	-0.041379	0.001963	-0.298196	-	0.00161

Notes: ** denotes significance at 5 percent level and * at 10 percent level.

there are bidirectional long-run causality relationships between lnGFCF, lnEXD and lnIMP, and unidirectional long-run causality relationships running from lnTL and lnINF to lnGFCF.

4.5. The Stability Test Result

CUSUM statistic is used in determining the parameter stability of the model in this study. The decision about parameter stability is based on the position of the plots relative to the 5 % critical bounds. If the plots of the CUSUM statistic stay within the area in the two critical lines, then the parameters of the model are stable throughout the study. Figure 1 indicates that the position of CUSUM plots stay within the area in the two critical lines, which means there are no structural changes in the model.

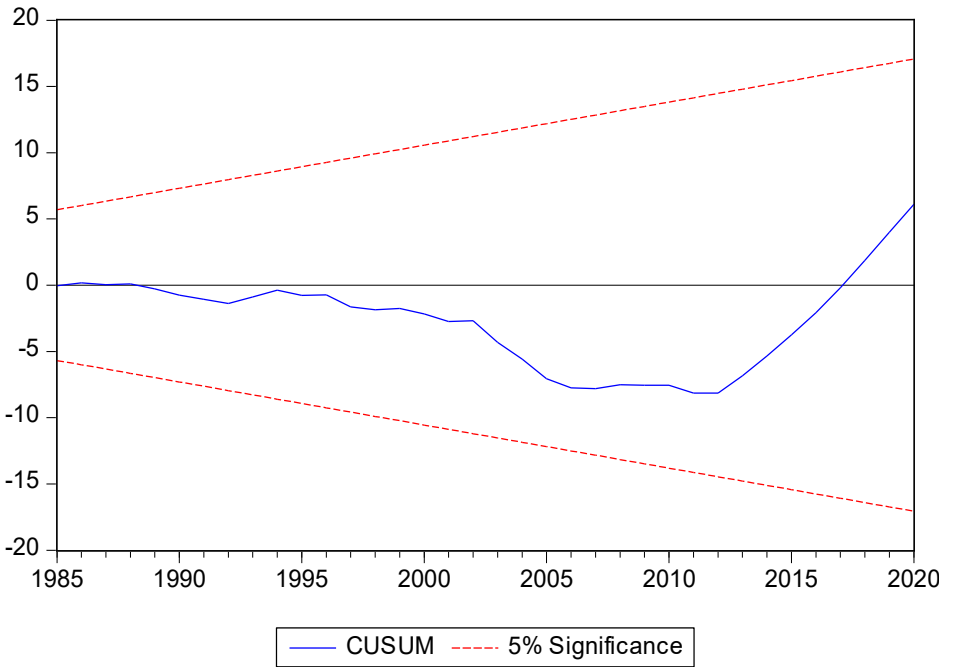

Figure 1: CUSUM Test Results

5. Conclusion and Implications

This study investigated the effect of external debt, communication infrastructure, imports and inflation on the investment in Côte d'Ivoire, using annual time series data from 1980 to 2020. The ADF unit root test, Johansen cointegration test, OLS model, Granger causality test based on the VECM, and lastly CUSUM test were applied in this study.

The ADF unit root test results indicated that all variables in the model are not stationary at the level but became stationary after first differencing. The Cointegration test pointed to a significant long-run relationship among the variables. Besides, the results of OLS model showed that investment is positively and significantly related with communication infrastructure, imports and inflation, but it is related negatively and insignificantly with external debt. The Granger causality test shows that there are no short-run causality relationships between the variables. However, there are bidirectional long-run causality relationships between investment, external debt and imports, and unidirectional long-run causality relationships running from communication infrastructure and inflation to investment. Lastly, CUSUM test indicated that there are no structural changes in the model.

Based on the results of this study, external debt should be using properly by the Ivorian government to support the local economy through improving the infrastructure and creating an attractive investment climate, which motivates the local and foreign investment in the country. Furthermore, based on the vital role of imports as an important source in supporting the production activities with machines and new technology, the government should remove or reduce most tariff and nontariff barriers, which will be reflated positively on the investment and economic growth in the country. Government should also promote investment by reducing corruption and encouraging private sector by making funds available for those young entrepreneurs as well as small and medium enterprise to help them in expanding their businesses.

References

Adamu, I. M. (2018). Public investment in Nigeria. Does external debt matter? *Academic Journal of Economic Studies, 2*(4), 120-138.

Alawneh, A., Alfawwaz, T., & Shawaqfeh, G. (2015). The Impact of the Fiscal and Quantitative Monetary Policies on the Domestic and Foreign Direct Investment in Jordan: An Empirical Study. *International Journal of Academic Research in Accounting, Finance and Management Sciences, 5*(4), 1-10.

Aschauer, D. A. (1989). Public investment and productivity growth in the group of seven. *Economic Perspectives, 13*(5), 17–25.

Augustine, O., Olushola, A., & Abiodun, O. (2019). The impact of capital gains tax on investment, social and economic development in Nigeria. *European Journal of Business and Management, 11*(2), 30-37.

Baddeley, M. C. (2003). *Investment: theories and analysis*. Houndmills: Palgrave Macmillan.

Blomstrom, M., & Persson, H. (1983). Foreign investment and spillover efficiency in an underdeveloped economy: Evidence from the Mexican manufacturing industry. *World Development, 11*(6), 493–501.

Boahen, E. A., & Evans, O. (2014). The effect of exchange rate volatility on foreign direct investment in Ghana. *International Journal of Economic Behaviour and Organization, 2*(2), 20-28.

Bosede, A., Abalaba, B., & Afolabi, D. (2013). Transport Infrastructure Improvement and Economic Growth in Nigeria. *International Journal of Humanities and Social Science Invention, 2*(8). 26-31.

Carkovic, M., & Ross, L. (2002). *Does foreign direct investment accelerate economic growth? Does foreign direct investment promote development?* Washington DC: Institute for International Economics.

CEPICI. (2012). *Nouveau Code d'Investissement*. Cote d'Ivoire: CEPICI.

Costamagna, R. (2015). Inflation and R&D investment. *Journal of Innovation Economics & Management,* (17). 143-163.

Deloitte. (2017). Invest in Côte d'Ivoire. https://www2.deloitte.com/za/en/pages/deloitte-africa/articles/invest-in-cote-divoire.html

Devarajan, S., Swaroop, V., & Zou, H. F. (1996). The composition of public expenditure and economic growth. *Journal of Monetary Economics, 37,* 313–344.

Domar, E. (1946). Capital expansion, rate of growth, and employment. *Econometrica, 14*(2), 137–147.

Edame, G., & Okoi, W. (2014). The impact of taxation on investment and economic development in Nigeria. *Academic Journal of Interdisciplinary Studies, 3*(4). 209-2018.

Fornah, S., & Yuehua, Z. (2017). Empirical Analysis on the Influence of Interest Rates on Foreign Direct Investment in Sierra Leone. *International Journal of Research in Business Studies and Management, 4*(12), 28-35.

Hadjimichael, M. T., & Ghura, D. (1995). *Public policies and private savings and investment in Sub-Saharan Africa: An empirical investigation* (IMF Working Paper No. 95/19). Washington, D.C: International Monetary fund. https://ssrn. com/abstract=883169

Harrod, R. (1939). An essay in dynamic theory. *The Economic Journal, 49*(193), 14–33.

Jwan, H., & James, B. (2014). Public and private investment and economic development in Iraq (1970–2010). *International Journal of Social Science and Humanity, 5*(9), 743–751.

Karikari, J. A. (1992). Causality between direct foreign investment and economic output in Ghana. *Journal of Economic Development, 17*(1), 7–17.

Keynes, J. M. (1936). *The general theory of employment, interest, and money*. London: Macmillan.

Khan, Y., Wang, M., & Hassan, T. (2018). Foreign Direct Investment and Import-Export: The case of Pakistan. *Research Journal of Economics, 2*(3). 1-7.

Khurriah, H., & Istifadah, N. (2019). The Role of Infrastructure in Indonesia's Economic Growth. *International Journal of Advances in Scientific Research and Engineering, 5*(7). 215-222.

Menshikov, A., Kalabashkina, Y., & Zverev, S. (2015). Investment as a Factor of Economic Growth. *Mediterranean Journal of Social Sciences, 6*(3). 259-264.

Mohsen, A. S. (2015). The relationship between trade openness and Investment in Syria. *Journal of Life Economics, 2*(2). 19-28.

Nguyen, K. T., & Nguyen, H. T. (2021). The Impact of Investments on Economic Growth: Evidence from Vietnam. *Journal of Asian Finance, Economics and Business, 8*(8), 345-353.

Onwe, O. J., & larenwaju, R. R. (2014). Impact of Inflation on Corporate Investment in the Sub-Saharan African Countries: An Empirical Analysis of the West-African Monetary Zone. *International Journal of Business and Social Science, 5*(8), 189-199.

Oxford Business Group. (2018). The Report: Côte d'Ivoire 2022

Oxford Business Group. (2022). The Report: Côte d'Ivoire 2018

Qiying, W. (2020). Empirical Research on the Investment Performance of Information and Communication Technology in China. *International Journal of Economics and Finance, 12*(2). 94-106.

Rahman, M. Z. (2011). An Empirical Study on the Relationship between Foreign Investment and International Trade in Bangladesh. International Journal of Financial Research, 2(2). 33-39.

Santi, C., & Wisit, C. (2007). *Imports, Exports and Foreign Direct Investment Interactions and Their Effects*. Working Papers 4507, Asia-Pacific Research and Training Network on Trade (ARTNeT), an initiative of UNESCAP and IDRC, Canada.

Sisay, A. M. (2010). Determinants of private investment in Ethiopia. *Ethiopian Journal of Economics, 19*(1). 75-126.

Solow, M. R. (1956). A contribution of the theory of economic growth. *Quarterly Journal of Economics, 70,* 65–94.

Tiwari, A., & Mutascu, M. (2011). Economic growth and FDI in Asia: A panel-data approach. *Economic Analysis & Policy, 41*(2), 173–187.

Toader, E., Firtescu, B., Roman, A., & Anton, S. (2018). Impact of Information and Communication Technology Infrastructure on Economic Growth: An Empirical Assessment for the EU Countries. *Sustainability, 10*(10). 1-22.

World Bank. (2021). World Bank Data.