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Capital flight, quality of institutions and domestic investment in Africa

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Abstract

The objective of this study is to assess the role played by the quality of institutions in the effect of capital flight on domestic investment in Africa. In pursuit of this objective, data from the World Bank (2020), Boyce and Ndikumana (2018) and the Financial Access Survey (FAS, 2019) have led to the establishment of a study period that extends from 2004 to 2014. The econometric analysis required the generalized method of moments (GMM). It appears that capital flight significantly reduces domestic investment in Africa. But that improving the quality of institutions on the continent would mitigate this harmful effect of capital flight. Especially when it comes to controlling corruption, law and order, investment profile, internal conflict and government stability. Also, the decline in national savings that this capital flight can cause, the ensuing drop in deposits and the decline in the money supply significantly reduce domestic investment spending on the continent.

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Introduction

Capital flight, or "unrecorded capital outflows" (Ndikumana, 2014), is a serious problem in Africa, as evidenced by the work of Efobi and Asongu (2016) as well as that of Ndikumana (2014). The analysis of its effects on domestic investment spending and the role that the quality of institutions plays on this effect is justified by two reasons:

Firstly, the continent suffers from both a low level of domestic investment and high level of capital flight. Indeed, data from the World Bank (2020) shows that in 2018, Sub-Saharan Africa recorded gross fixed capital formation of less than 21% of GDP. A rate already quite low but added to that, it is less than a few years ago. In 1981, the region achieved more than 43% of the GDP. North Africa is not deviating from this trend. Tunisia over the same period saw its domestic investments drop from more than 30% to less than 19%. Morocco saw its investments drop from over 30% to less than 29% and Egypt saw its investments reduce by half over the same period, from 32% to 16%. Algeria still manages to make a difference, going from less than 33% to more than 40%. On the other hand, the work of Asongu and Nwachukwu (2017) explains that between 1970 and 2010, Sub-Saharan Africa lost around US $ 810 billion. Efobi and Asongu (2016) show that this capital flight has grown steadily in recent years across the continent.

Secondly, the empirical literature that examines the effects of capital flight on investments does not take into account the role that institutions can play in this relationship. If on the one hand, studies like that of Ndikumana (2014) show that capital flight is harmful for domestic investments in African countries, and that, on the other hand, studies like those of Asongu and Nwachukwu (2017) show that improving the quality of institutions makes it possible to significantly combat capital flight on the continent, few studies to date have investigated the effect of the quality of these institutions on the relationship between capital flight and domestic investments.

The objective of this study is thus to determine the effect of the quality of institutions on domestic investments in Africa. To achieve this, it mobilizes data from Boyce and Ndikumana (2018) regarding capital flight, data from the World Bank (2020) regarding domestic investments and data on the quality of institutions come from International Country Risk Guide (ICRG, 2018). These data allow us to retain 21 countries on the continent between 2004 and 2014. The econometric analysis required the use of system GMMs and revealed that an upward variation in the level of capital flight in Africa leads to a significant decrease in expenditure on domestic investments. Above all, it appears that this negative effect of capital flight on domestic investment is attenuated when the quality of institutions on the continent improves.

The rest of this work is articulated as follows: the first section reviews some empirical work, the second exposes the methodology mobilized to carry out the empirical analysis, the third section is that of the discussion of the results and following what a conclusion makes it possible to propose some recommendations of economic policies.

1. Literature review

A few empirical studies have assessed the effect of capital flight on investment and the effect of the quality of institutions on capital flight. The work of Ndiaye (2007) is part of this momentum. This study showed that capital flight had a negative impact on domestic investment in the

countries of the Franc zone. It showed that public investments were less affected and that the countries of the Economic Community of Central African States are the highest victims.

The work of Yalta (2010) shares some of these results. Yalta (2010) conducts a study in 22 emerging economies. Using system GMMs, he finds that capital flight significantly reduces private investment in these countries while public investment is not affected. He also finds that financial liberalization does not mitigate this perverse effect on private investment. Dachraoui and Smida (2014) also carry out a study in emerging countries and reach similar results. They assessed the effect of capital flight on domestic investment in emerging countries between 1984 and 2010. They find that capital flight has a negative impact on domestic investment. They also find that this effect is significant only for private investments and not for public investments.

In Africa, Ndikumana (2014) also finds results that demonstrate the negative effect of capital flight on investment spending. Ndikumana (2014) conducted a study of 39 countries between 1970 and 2010 and used system GMMs and fixed effects. It finds that capital flight has a negative effect on national domestic investment and on private investment. This study then concludes that the weakness of domestic investments in Africa can be explained by capital flight. However, the study does not take into account the effect that the quality of institutions may have on this relationship. Indeed, studies have shown that the quality of institutions helps slow capital flight. For example, the work of Efobi and Asongu (2016) shows, thanks to system GMMs and quantile regression on a sample of 29 countries between 1987 and 2008, that terrorism significantly increases capital flight in Africa. They find that even when the level of capital flight is initially low, terrorism accelerates it considerably.

Asongu and Nwachukwu (2017) mobilize system GMMs in a sample of 37 African countries between 1996 and 2010. As a result, they find that controlling corruption most significantly reduce capital flight. Economic governance also acts in this direction even if the quality of the regulation does not produce significant effects. This result across the continent is even more important in Sub-Saharan Africa. Other works attest to this. Osei-Assibey et al. (2018) conducted a study on 32 countries in Sub-Saharan Africa between 2000 and 2012. To carry out the empirical analysis, they mobilized three estimators, system GMMs, generalized least squares and fixed effects. They came to the conclusion that the control of corruption makes it possible to cope with the capital flight on the continent. Moreover, they find that this effect is influenced by the quality of institutions in the region. Mwanga et al. (2019) study the effect of corruption on capital flight in Kenya on quarterly data between 1998 and 2018. The staggered lag model they use does not highlight the significant effects of corruption on capital flight, neither in the short nor in the long term.

This empirical literature has so far not been sufficiently interested in a probable attenuation of the effect of capital flight on domestic investment by improving the quality of institutions.

2. Methodology

This section first presents the choice of variables and then the method chosen for the empirical analysis in this work.

2.1. Choice of variables

The notion of capital flight, since it is somewhat controversial by the illicit aspect or not of the capital concerned is sometimes difficult to assess. The question arises from its difference with the

direct investments made by the region concerned abroad. However, in the literature, one measure that is widely used is that of Boyce and Ndikumana (2012). This is the residual measure of capital flight. Let CF be capital flight, then,

$$CF_{i,t} = \Delta DET_{i,t} + FDI_{i,t} - (DC_{i,t} + \Delta RES_{i,t}) \quad (1).$$

In equation (1) $\Delta DET_{i,t}$ represents the change in the stock of external debt adjusted for exchange rate fluctuations. Ndikumana (2014) explained that it is often the external debt incurred by countries that end up in the private accounts of members of government abroad. Also $FDI_{i,t}$ represents foreign direct investments in the region and thus allows the taking into account of the dimension of legal capital outflow from the territory. Then $DC_{i,t}$ denotes the current account deficit and $\Delta RES_{i,t}$ is the net addition of the stock of external reserves. The data resulting from this calculation comes from Boyce and Ndikumana (2018) and this measurement can be found, for example, in the work of Asongu et al. (2020).

Data on domestic investment comes from World Development Indicators (WDI, 2020). This is gross fixed capital formation as a percentage of GDP. This measure of domestic investment is widely accepted in the literature. The work of Ndikumana (2014) and those of Ndiaye (2009) use this measure. In addition to capital flight, domestic savings, deposits in banks accounts, money supply, inflation, real GDP per capita, trade openness and the quality of institutions appear to be likely determinants of domestic investment. In fact, the more households have financing capacity, the more they will finance those in need of funds. This is why data on gross domestic savings as a percentage of GDP is taken from WDI (2020).

Deposits and money supply also go in this direction, the more households deposit in banks accounts, the more liquidity banks have to grant loans to investors, remembering of course that the bank is only an intermediary financial institution which must transform these often short-term deposits into often medium and long-term loans. Therefore, the percentage in GDP of deposits in banks accounts is taken from the Financial Access Survey (FAS, 2019). In addition, the monetary channel and the credit channel explain that an increase in the money supply by lowering the interest rate leads to an increase in investment spending. In this perspective, the money supply as a percentage of GDP is introduced into the model and its data comes from WDI (2020).

Data on inflation and real GDP per capita reflect the health of the economy. An economy with low inflation and economic growth should encourage investment. Data on the consumer price index and real GDP per capita are therefore taken from WDI (2020). Trade openness is an opportunity to have new demand and then make more investment to respond to it. Thus, data on trade openness as a percentage of GDP comes from WDI (2020). The literature on capital flight supports institutional factors as part of the elements that push economic agents to remove their capital from the national territory. This is why, thanks to the International Country Risk Guide database (ICRG, 2018), the investment profile, the control of corruption, law and order and the capacity of the government to respect its commitments and to get re-elected, are introduced in this work. In order to solve a problem of scale, capital flight and real GDP per capita have been linearized by log-transformation. The availability of data makes it possible to work on 21 countries between 2004 and 2014.

The data in table I shows that on average, the real stock of capital leaving the African territory is 2216 but it happens that in certain countries, in certain years, this amount is 45504. This is nevertheless quite annoying, because it is a big loss in terms of financing for the continent which

already does not have an efficient financial system. While domestic investments are on average 7.51% of GDP and can sometimes go below 9% of GDP.

Table I. Descriptive statistics

	Obs	Mean	Std. Dev.	Min	Max	Source
Investment	231	23.0149	7.507424	8.95112	43.05135	World Development Indicators (2020)
Capital flight	209	2216.075	6999.594	-16803.7	45504.21	Boyce et Ndikumana (2018)
Oustanding deposit	225	27.56471	19.00869	2.452362	88.76253	Financial Access Survey (2019)
Saving	231	21.81389	16.91902	-16.43797	60.49045	World Development Indicators (2020)
Broad Money	231	35.8943	25.85206	4.530351	117.3822	World Development Indicators (2020)
Inflation	217	6.943657	5.701824	-1.409401	43.54211	World Development Indicators (2020)
Gross domestic product	231	2388.113	2466.26	292.3508	9679.072	World Development Indicators (2020)
Trade	230	70.72528	25.23685	30.88519	149.7796	World Development Indicators (2020)
Investment profile	231	7.852273	1.399608	4.5	11.5	International Country Risk Guide (2017)
Corruption	231	2.039141	0.7063012	0.5	4	International Country Risk Guide (2017)
Law and order	231	2.865079	0.9579785	1	5	International Country Risk Guide (2017)
Government stability	231	8.541847	1.479691	5.208333	11	International Country Risk Guide (2017)
Internal conflict	231	8.49026	1.342038	5.208333	11	International Country Risk Guide (2017)

***Source**: Authors. Countries of sample study: Algeria, Angola, Botswana, Burkina Faso, Cameroon, Congo Republic, Congo Democratic Republic, Cote d'Ivoire, Egypt, Gabon, Ghana, Kenya, Madagascar, Morocco, Mozambique, Nigeria, Rwanda, Sierra Leone, South Africa, Tanzania, Uganda.*

2.2. Method of empirical analysis

This analysis uses a dynamic panel to achieve its objective. Such an approach has the advantage of testing whether a country's investments in period t are dependent on its investments in period t-1. This modeling is all the more justified as in this work; the individual dimension (21 countries) is greater than the time dimension (11 years). On the basis of Ndikumana's work (2014), it is possible to use the following specification:

$$Investment_{i,t} = n_i + \beta_0 Investment_{i,t-1} + \beta_1 Capital\ flight_{i,t} + \beta_2 Oustanding\ deposits_{i,t} + \beta_3 Broad\ money_{i,t} + \beta_4 Saving_{i,t} + \beta_5 Inflation_{i,t} + \beta_6 Gross\ domestic\ product_{i,t} + \beta_7 Trade_{i,t} + \gamma_j Quality\ of\ institution_{i,t} + \delta_w Capital\ flight * Quality\ of\ institution_{i,t} + n_t + \varepsilon_{i,t} \quad (2)$$

With $i = 1, \dots, 21$, $t = 2004, \dots, 2014$, $j, w = 1, \dots, 4$, and $quality\ of\ institution_{i,t} = (Investment\ profil_{i,t}; Corruption_{i,t}; Law\ and\ order_{i,t}; Government\ stability_{i,t}; Internal\ conflict_{i,t})$. This specification poses an endogeneity problem. Indeed, in this model $E(Investment_{i,t} * \varepsilon_{i,t}) \neq 0$. This is caused by the presence of the 1st order lag of the dependent variable as an explanatory variable. Since the assumption of exogeneity is no longer verified, a method such as ordinary least squares is no longer appropriate. Rather, the literature proposes to this effect, two estimators which are more adequate. These are first difference GMMs and system GMMs.

The first estimator is developed by the work of Arellano and Bond (1991). This method recommends using the first difference of equation (2) in order to solve the problems of exogeneity. However, this approach suffers from some problems: the first difference does not solve the endogeneity problem, since by construction, the variation of the error term and the variation of the dependent variable are correlated; then, this method does not take into account the specific temporal effects; finally, it produces less reliable results in the presence of small samples. The second estimator is developed by the work of Arellano and Bover (1995) and those of Blundell and Bond (1998). This estimator, on the other hand, has the advantage of trying to fill in the gaps in the first. It consists of considering the first difference equation and the level

equation to solve the endogeneity problem. Works like that of Efobi and Asongu (2016) has explained that the latter estimator is more adequate to deal with the endogeneity problem discussed in this work. However, for small samples as is the case in this study, it is again not the most appropriate.

As a result of this, using system GMMs alone is not enough to get rid of the bias due to small sample size. The extension of this estimator developed by Roodman (2009a, 2009b) is also mobilized in this direction. This latest version addresses the issue of instrument proliferation often common in small samples and which can lead to biased results. Following these estimates, three tests are used: Fisher's global causality test. This test, whose decision threshold is 5%, opposes the null hypothesis: no variable explains domestic investment in Africa, to the alternative hypothesis: at least one variable of the model explains domestic investment in Africa. ; then the test of Arellano and Bond (1991) which tests at the 10% threshold the autocorrelation of the two-order error terms of the difference equation; the Hansen test which tests the robustness of the instruments used in this study at the 10% threshold. This test is preferred over Sargan's test, because Sargan's test is only appropriate if the error terms are homoscedastic, an assumption that is not always true. Although the Hansen test is affected by the issue of instrument proliferation, the number of instruments is appended to the results to ensure that the estimator involved in this work was able to address this issue.

Moreover, this study uses the specific time variables and the first difference equation as instruments, namely iv(years, eq (diff)). This means that all the explanatory variables are suspected of endogeneity in this work and only the specific time effects are assumed to be strictly exogenous. However, the Hansen difference test assesses at the 10% threshold whether this identification process is correct. Finally, the two-step estimate is used because it provides robust estimates. Especially since the use of this two-step approach of Roodman's estimator (2009a, 2009b) is conducive to addressing the simultaneity issues present in the model of this study.

3. Analysis of the results

The results show that Fisher's test cannot lead to the rejection of the alternative hypothesis. So, at least one of the explanatory variables in the model explains domestic investments in Africa. The second-order error terms autocorrelation test reveals p-values greater than 10%, which means that these error terms are not auto correlated. The Hansen test also provided convincing results and confirms the robustness of the instruments used. The Hansen Difference test as a whole also provides good results and thus validates the process of identifying in this work.

These estimates show that capital flight significantly reduces domestic investment in Africa. Ndikumana (2014) explains that there are gaps between savings and domestic investments. Part of the domestic savings is not used to finance investment projects on the national territory. The funds illegally leave the territory to migrate to areas where they remain untouched. These capital outflows are not necessarily due to the search for better returns but more often they are ill-gotten gains which seek to absolve themselves as quickly as possible from probable subsequent sanctions. There is therefore a problem of governance, both because of the illicit nature of these funds and their ability to leave the continent without being detected by the competent authorities.

Table II. Effect of capital flight

	Investment	Investment	Investment	Investment	Investment	Investment
L.Investment	0.310***	-0.293***	0.379***	0.445***	0.434***	1.197***
	(0.056)	(0.0612)	(0.088)	(0.0502)	(0.0346)	(0.0558)
Capital flight	-1.196**	-0.963**	-0.402	-0.336***	-0.354***	-1.075***
	(0.518)	(0.438)	(0.527)	(0.105)	(0.0318)	(0.350)
Oustanding deposit	0.193*		0.090***			
	(0.106)		(0.016)			
Saving	0.215***	0.137***	0.015			
	(0.023)	(0.0413)	(0.061)			
Inflation	0.141	0.533***	0.075			
	(0.166)	(0.125)	(0.1598)			
Gross Domestic Product per capita	0.751	5.205*	2.536**			
	(4.650)	(2.713)	(1.014)			
Broad money		0.409***				
		(0.0963)				
Trade			0.243***			
			(0.045)			
Investment profile				2.591***	2.310***	0.349
				(0.392)	(0.379)	(0.645)
Corruption				2.391*	1.611**	5.337***
				(1.306)	(0.758)	(1.471)
Law and order					0.702	-1.031
					(1.973)	(1.940)
Government stability						1.948***
						(0.334)
Internal conflict						-3.157***
						(0.362)
C	8.62	-23.68	-21.47**	-9.328*	-6.758	4.483
	(29.09)	(15.82)	(9.35)	(5.295)	(7.547)	(6.712)
Obs.	119	122	119	130	130	130
Countries	18	18	18	19	19	19
Fisher	0.000	0.000	0.000	0.000	0.000	0.000
AR(1)	0.701	0.118	0.467	0.632	0.691	0.188
AR(2)	0.111	0.102	0.199	0.178	0.181	0.157
Sargan	0.021	0.000	0.543	0.000	0.000	0.586
Hansen	0.526	0.420	0.410	0.309	0.519	0.685
GMM instruments for levels						
Hansen test excluding group	0.395	0.177	0.605	0.249	0.333	0.570
Difference (null H = exogenous)	0.560	0.726	0.290	0.447	0.699	0.585
iv(years, eq(diff))						
Hansen test excluding group	0.170	0.190	0.380	0.158	0.292	0.430
Difference (null H = exogenous)	0.964	0.767	0.411	0.825	0.976	0.887
Instruments	18	18	18	16	19	18

***Source**: Authors using Stata. Standard deviations in parentheses. *** p <0.01, ** p <0.05, * p <0.1. An increase in the investment profile index means an improvement in investment conditions. A rise in the corruption index means a lower risk of corruption. An increase in the internal conflict index means a decrease in the risk of internal conflict. A rise in the Government stability index means a more stable government, and a rise in the law and order index means an increase in order and law.*

The results of table II reveal that in general, an improvement in the quality of institutions increases domestic investments. However, one result deserves a little attention, namely the one on internal conflict. The negative sign of internal conflict does not mean that countries where there are internal conflicts have better domestic investments, although this is a possibility, since

the devastated country must be rebuilt, but the explanation in the case of Africa is that there are so many internal conflicts that the fight against them cannot yet contribute to the increase of domestic investments in these countries. Moreover, table III shows that the situation of the other variables of the quality of institutions is not so different.

Table III shows in this regard that improving the quality of institutions would reduce the harmful effect of capital flight on domestic investment spending. Since the literature explains that a good part of this capital results from political corruption which monopolizes public funds, sometimes even acquired in the form of international aid. Controlling corruption would make it possible to tackle the problem at the source and leave the continent more resources to finance its investments. This is shown in Table III. The positive sign of the interaction between corruption and capital flight means that capital flight reduces domestic investment less in less corrupt countries. This result finds support in the work of Asongu and Nwachukwu (2017) who show that corruption control reduces capital flight in Africa.

As for law and order, it plays an important role here to sanction early enough the activities that generate these illicit funds and to ensure control over the capital that leaves the territory but in addition it plays on the climate of country affairs. A country's business climate is important not only for attracting external funds but also for maintaining internal funds. With regard to law and order, for example, the theory of law and finance explains that when law and order reign, households with financial capacities feel protected and this reduces the capital flight and therefore promotes domestic investment (Girma and Shortland, 2008). This view is supported in this study, since Table III shows that the cross effect between capital flight and the law and order index is positive. That is, countries where law and order reign feel less the effects of capital flight on their domestic investments.

Government stability is also important. A stable government is a government that achieves its roadmap and therefore is able to be re-elected. This reassures investors who can invest in the country, knowing that the government in place is working to improve public infrastructure for example. Our results share this opinion. Table III shows that capital flight is less harmful in countries with a stable government. This idea is further confirmed with the results on the reduction of the risk of internal conflict. With regard to internal conflicts, they are a source of instability and significantly reduce the probability of making a return on investments and thus scare away capital. That is what we can see in table III. The positive sign of interaction between capital flight and internal conflict mean that, in countries where there is a low risk of internal conflict, capital flight is less harmful to domestic investments. The work of Efobi and Asongu (2016) has also found to this end that the terrorism present in Africa significantly increases the capital flight on the continent. The importance of investment conditions must therefore be considered and further reveal the quality of institutions. The results on the investment profile further confirm the results mentioned above.

Failure to keep one's own savings is not going to benefit Africa's already well-developed financial system. In particular, savings collected by financial institutions are decreasing significantly. Yet this study finds that the decline in deposits with these institutions, precisely the banks in this case, as well as the decline in money supply and domestic savings, significantly reduces investment spending on the continent. It also finds that the increase in trade openness and economic growth favors domestic investment spending.

Table III. Effect of quality of institution on capital flight

Investment	Investment	Investment	Investment	Investment	Investment	Investment	Investment	Investment	Investment	Investment
L.Investment	0.387***	1.138***	0.549***	0.571***	0.604***	0.713***	0.612***	-0.201**	0.990***	0.998***
	(0.0569)	(0.0513)	(0.0440)	(0.122)	(0.105)	(0.147)	(0.0600)	(0.0841)	(0.0367)	(0.0987)
Capital flight	-2.696*	-7.327*	1.134	-16.39***	-5.306*	-4.992**	-4.261*	-5.583**	-1.951**	-9.969**
	(1.349)	(3.495)	(1.150)	(5.262)	(3.040)	(2.039)	(2.054)	(2.308)	(0.752)	(3.929)
Capital flight*corruption	1.430**					2.371**				
	(0.565)					(1.038)				
Corruption	-7.410					-18.45**				
	(4.571)					(8.398)				
Capital flight*Investment profile		1.040**								1.391**
		(0.474)								(0.491)
Investment profile		-5.436								-8.333**
		(3.164)								(3.463)
Capital flight*Law and order			-0.0629						0.527**	
			(0.371)						(0.233)	
Law and order			4.212**						-0.598	
			(1.929)						(2.627)	
Capital flight*Internal conflict				1.985***			0.548**			
				(0.606)			(0.233)			
Internal Conflict				-17.12***			-3.783*			
				(5.466)			(2.024)			
Capital flight*Goverment stability					0.704*			0.659**		
					(0.384)			(0.305)		
Goverment stability					-5.162			-4.635*		
					(3.030)			(2.509)		
Outstanding deposit						0.211	-0.0417	0.455***	0.0170	0.118
						(0.248)	(0.0258)	(0.119)	(0.0277)	(0.103)
Saving						-0.188	-0.128***	0.299***	0.141***	0.0838
						(0.112)	(0.0392)	(0.0697)	(0.0482)	(0.0689)
Inflation						-0.0646	-0.299***	-0.0292	-0.0860	-0.187
						(0.221)	(0.0628)	(0.132)	(0.0735)	(0.129)
C	27.50**	33.91	-8.123	154.8***	48.82*	45.90*	45.74**	47.85**	2.695	54.49*
	(11.61)	(24.11)	(6.823)	(49.59)	(26.27)	(24.20)	(16.97)	(20.60)	(7.811)	(29.76)
Obs.	130	130	130	130	130	119	119	119	119	119
Countries	19	19	19	19	19	18	18	18	18	18
Fisher	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
AR(1)	0.701	0.154	0.338	0.320	0.192	0.018	0.375	0.506	0.257	0.199
AR(2)	0.194	0.200	0.219	0.225	0.236	0.138	0.135	0.180	0.151	0.136
Sargan	0.344	0.814	0.938	0.558	0.223	0.446	0.273	0.000	0.023	0.563
Hansen	0.290	0.482	0.366	0.784	0.559	0.587	0.329	0.325	0.432	0.474
GMM instruments for levels										
Hansen test excluding group	0.173	0.267	0.664	0.569	0.207	0.543	0.231	0.115	0.065	0.747
Difference (null H = exogenous)	0.572	0.783	0.117	0.794	0.967	0.520	0.395	0.600	0.895	0.299
iv(years, eq(diff))										
Hansen test excluding group	0.430	0.464	0.883	0.541	0.558	0.485	0.347	0.168	0.439	0.726
Difference (null H = exogenous)	0.231	0.434	0.165	0.784	0.446	0.803	0.297	0.787	0.362	0.160
Instruments	15	16	18	14	14	16	17	18	18	18

***Source**: Authors using Stata. Standard deviations in parentheses. *** p <0.01, ** p <0.05, * p <0.1. An increase in the investment profile index means an improvement in investment conditions. A rise in the corruption index means a lower risk of corruption. An increase in the internal conflict index means a decrease in the risk of internal conflict. A rise in the Government stability index means a more stable government, and a rise in the law and order index means an increase in order and law.*

Indeed, trade opening means a new market, additional demand to be satisfied, and economic growth means wealthier country. Inflation, on the other hand, produces ambiguous effects, both a significant negative effect and sometimes a significant positive effect. If on the one hand, inflation means a fall in interest rates and therefore an increase in investment spending; on the other hand, it erodes the purchasing power of consumers and reduces the expected demand of

entrepreneurs and consequently their investment expenses. The effects of inflation on investment spending in Africa therefore require additional analyzes to be better understood.

Conclusion

The objective of this study was to determine the role of the quality of institutions in the effect of capital flight on domestic investment in Africa. Data from the World Bank (2020), Boyce and Ndikumana (2018) and FAS (2019) allowed a study period from 2004 to 2014 for 21 countries. The use of system GMMs has shown that capital flight has a negative effect on domestic investment in Africa. It also emerged that the quality of institutions is important to improve the level of these investments, especially when it comes to controlling corruption and the law and order that really helps mitigate the perverse effects of capital flight on domestic investment spending in Africa. It also emerged that a decline in deposits in banks accounts or a decrease in the money supply leads to lower investment on the continent, a result, which is also shared by national savings. A result that shows that by depressing the African financial system, capital flight has harmful effects on domestic investment spending. These results suggest that African states must fight against capital flight since it depresses domestic investment on their continent. Also, these states are invited to work on the quality of their institutions because this is a way of encouraging investors not to look elsewhere. It is thus a question of working to maintain a good business climate in their regions but also to reduce the corrupt practices that cause these capital flight and the illicit practices that generate these financial flows.

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