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1

Financial liberalisation and illicit financial outflows in African countries: does institutional quality and macroeconomic stability matter?

Leward Jeke, Clement Zibusiso Moyo and Richard Apau
Department of Economics, Faculty of Business and Economic Sciences, Nelson Mandela University, Nelson Mandela Bay, South Africa

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Abstract

Purpose – Although the consequences of illicit financial outflows on the economies of the world continue to exert adverse impacts on many economies of the world, explanations regarding specific drivers of the illicit outflows remain divergent in the literature. This study aims to investigate the effect of financial liberalisation on illicit financial outflows in Africa. Furthermore, the study also examines the effect of macroeconomic stability and institutional quality on illicit outflows.

Design/methodology/approach – To achieve the objectives, the study uses a dynamic panel system generalised method of moments technique to analyse annual data from the period 1995 to 2015 of 22 African countries.

Findings – The results show that financial liberalisation helps to reduce illicit capital outflows. Furthermore, improved institutional quality is associated with lower levels of capital outflows, thus affirming the theoretical expectations that stable political environment boost investor confidence. Overall, the study show that financial liberalisation reduces illicit outflows. However, liberalisation without sound macroeconomic stability and institutional quality may avail opportunities for illicit outflows.

Research limitations/implications – The main limitation of the study was lack of data that spans periods beyond 2015 for most of the variables on financial illicit flows. The available data sources could not test the objectives beyond 2015.

Originality/value – Current literature on the relationship between financial liberalisation and illicit fund outflows are generally conducted in the context implications on economic growth. However, beyond economic growth, financial liberalisation may impact on illicit financial outflows. Furthermore, other institutional and macroeconomic dynamics may influence illicit financial outflow, especially for developing economies in Africa.

Keywords Financial liberalisation, Illicit financial outflows, Institutional quality, Macroeconomic stability, Misinvoicing

Paper type Research paper

1. Introduction

The decline of official development assistance in developing countries has ignited calls for the shift in priority to domestic resource mobilisation for promote economic

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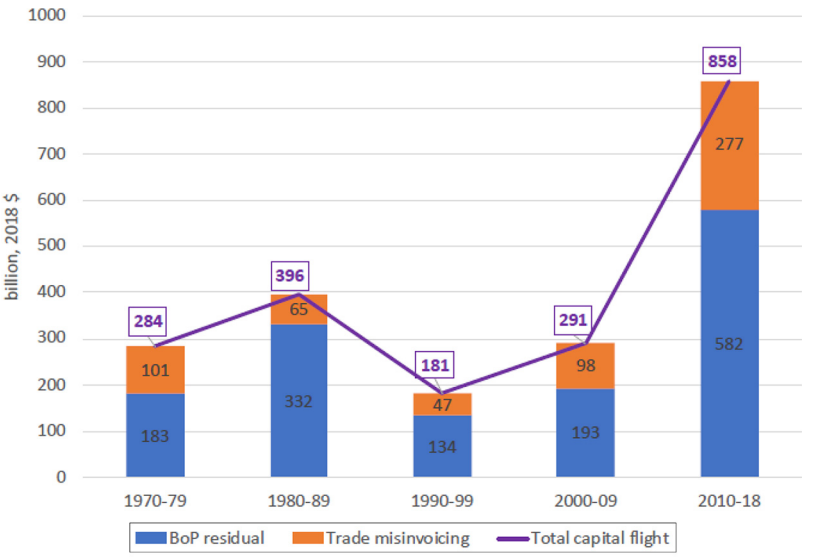
development (Ocran *et al.*, 2020). Enhancing domestic resources mobilisation involves increasing public revenue mobilisation through minimising illicit financial flows (IFFs). IFFs occurs where funds mobilised in one economic jurisdiction are transferred to a different jurisdiction through illegal means (Forstater, 2018). Mechanisms through which illicit financial transfers are undertaken include misinvoicing (MIS) of cross-border trade transactions (in terms of imports and exports) to avoid the payment of mandatory taxes, laundering of funds acquired from unauthorised businesses and commodity sales such as narcotic drugs in foreign bank accounts and irregular money wiring across international borders for purposes of sponsoring criminal groupings and activities.

According to Slany (2020), an estimated U$88.600bn, which is equivalent to 3.7% of Africa's GDP, leaks from the continent as illicit capital flight (CF) yearly. Furthermore, evidence by Signé *et al.* (2020) suggest that more than US$1.300tn has been lost through IFFs in Sub-Saharan Africa between the period 1980 and 2018. Ndikumana and Boyce (2021) reported that CF for a group of 30 African countries reached US$858bn between 2010 and 2018, up from US$291bn recorded during the 2000–09 period. These trends in IFFs are shown in Figure 1. IFFs hinder economic development by reducing government tax revenue, which is critical for infrastructure investment and social spending. As such, significant problems of high unemployment rate, social inequality and macroeconomic instability continue to remain major setbacks for developmental agenda developing countries, especially those in Africa.

In the above context, various nations adopt different financial reform policies to counter the prevalence of illicit financial outflows to promote socio-economic development. One of such policies is financial liberalisation, where various restrictive policies governing financial



Source: Ndikumana and Boyce (2021)

Figure 1. Trends in illicit flows in African countries

sector such as interest rate capping, financial services tax and stringent cross-border funds transfer regulations are eliminated (Chauhan, 2012). Principally, the aim of most financial liberalisation reforms is to achieve financial sector stability, boost savings and investment, which in turn will enhance economic growth (McKinnon, 1973; Shaw, 1973). Financial liberalisation is, thus, expected to help mitigate the rate of occurrence of illicit financial outflow and CF, especially from developing economies to the advanced ones.

There is no consensus in literature on the effect of financial liberalisation on IFFs as some studies emphasise its effectiveness in mitigating illegal transfer of funds and CF, whereas others explain its counter-productive effect in exacerbating the problem of illicit outflows. Scholars explain that financial liberalisation exert positive effects on economic growth in Africa, where the general performance of businesses are enhanced, thereby reducing the level of illicit financial transaction conducts among investors (Akinsola and Odhiambo, 2017). However, the impact on financial liberalisation on economic growth is largely insignificant for developing countries, particularly those located in the Sub-Saharan African region. While supporting the important role of financial liberalisation on economic growth and its consequential implications for illicit financial outflows, Orji *et al.* (2015) emphasise the need for policymakers to formulate harmonising financial regulations and standards to reinforce the impact of the policies being implemented to optimise of the liberalisation regime for economic growth.

Other scholars contend that financial liberalisation impacts adversely on the stability of the financial system (Batuo *et al.*, 2018; Chauhan, 2012). Batuo *et al.* (2018) suggests that financial liberalisation creates avenues for opportunistic investors to implement illicit fund transfer strategies while at the time hampering economic growth of African countries. Specific factors such as regulatory inefficiency, inadequacy capitalisation of financial services' providers, fluctuating market conditions and issues relating to behavioural hazards and biases have been identified in the literature as influences that do not promote effective financial sector liberalisation policies (Chauhan, 2012). As such, the existence of robust financial sector structure and institutional infrastructure are required for the effective implementation of financial liberalisation regimes.

Based on the preceding discussion, it is evident that the prior analysis on the relationship between financial liberalisation and illicit fund outflows are generally conducted in the context implications on economic growth. However, beyond economic growth, financial liberalisation may impact on illicit financial outflows. Furthermore, other institutional and macroeconomic dynamics may influence illicit financial outflow, especially for developing economies in Africa. As such, this study tests the effect of institutional quality and macroeconomic stability on illicit financial outflows in selected African countries using the system generalised method of moments (GMM) technique developed by Arellano and Bover (1995) and Blundell and Bond (1998). This study contributes significantly to the literature on policy debates surrounding the institutional and regulatory requirements for effective implementation of financial liberalisation frameworks across developing economies through the analysis of specific variables linked to its implications for illicit fund transfers. Furthermore, most of the extant studies are focused on the effect of financial liberalisation on economic growth, whereas others focus on the impact of macroeconomic determinants of illicit flows. Therefore, there is limited literature on the effect of financial liberalisation on illicit funds flows. As such, this study contributes to the literature by conducting further analysis on the impact of financial liberalisation policy on IFFs while controlling for the effect of political and macroeconomic stability.

The rest of the paper is organised as follows. Section 2 presents a review of the theoretical and empirical literature. Section 3 presents data and methodology. Section 4 discusses the empirical results, whereas Section 5 concludes with policy recommendations.

2. Literature review

2.1 Theoretical review

Financial liberalisation entails relaxation of government policy regulation and control in the financial sector of the domestic financial market, to boost investment activities and propel economic growth (Herkenrath, 2014). In this way, financial liberalisation is expected to drive stability in the financial system while enabling economic development. The McKinnon (1973) and Shaw (1973) theory of financial liberalisation suggest that the process of financial liberalisation involves the elimination of stringent regulatory regimes pertaining to the conduct of financial transactions. Essentially, this theory supports the de-restricting and controlling of the financial market to allow for fluidity of investment and financial flows, to engender employment creation and economic development. This promotes efficiency in financial resource allocation and intermediation to facilitate critical infrastructural and utility development (Fowowe, 2008). Based on McKinnon–Shaw hypothesis, financial liberalisation policy promotes speedy macroeconomic expansion as the operation of liberal financial markets opens the domestic economic up for the influx more foreign investments while enhancing tax revenue generation (Bhutta *et al.*, 2021). The process of financial liberalisation may involve an intervention by policymakers to strategically adjust interest upwards. In this way, excess funds' holders are motivated to invest for high returns to support macroeconomic expansion and stability. However, the effect of interest rate adjustment through financial sector deregulation and structural reforms on economic growth can be positive if a corresponding conducive market conditions prevails to enable high productivity (Francis and Waithe, 2013; Warman and Thirlwall, 1994). Based on the McKinnon and Shaw theory, financial liberalisation is expected to reduce illicit flows by raising real interest rates in the domestic economy. Therefore, the study tests the following hypothesis:

H1. Financial liberalisation has a negative effect on illicit flows.

Critics of McKinnon and Shaw's theory explain that financial sector liberalisation poses significant challenges to financial development. A contrasting theory by Stiglitz (1994) explain that financial market liberalisation results in a significant alteration of the informational efficiency of the financial system, thereby creating avenues for IFFs (Bhutta *et al.*, 2021). The illicit flow of financial resources deprives the domestic economy of the much-needed revenues to support macroeconomic stability and improve infrastructure. Furthermore, criticism against the financial liberalisation hypothesis by McKinnon and Shaw suggest that financial deregulation allows banks to engage in extensive trading activities, which result in banks overtrading beyond their operating financial capacity. This leads to banks becoming insolvent and, thus, unable to meet their debt obligations as well as customer withdrawal demands. These dynamics creates instability in financial system and exposes the sector to irregular financial transactions such illegal transfer funds across country borders (Bhutta *et al.*, 2021; Ketteni and Kottaridi, 2019).

The implementation of an effective liberalisation policy, thus, requires the existence of a robust financial market and institutions to withstand dynamic systemic fluctuations, which may arise because of the deregulation process (Arifin *et al.*, 2021). Therefore, the study also tests the following hypothesis:

H2. The effect of financial liberalisation on illicit flows is dependent on institutional quality and macroeconomic stability.

2.2 Review of empirical studies

Financial markets and systems constitute important component of the macroeconomic structures around with the flow of financial resources and investments revolve. As such, the efficiency of these dynamics exerts important predictive influence on economic growth. Bhutta *et al.* (2021) explains the sensitive role of financial sector reforms in promoting financial development for economic growth and social improvement. The engineering of economic growth through financial sector liberalisation, thus, requires significant risk management analysis to ensure efficient allocation of investment funds while creating the enabling environment for businesses to thrive.

Employing ordinary least square (OLS) and autoregressive distributed lag models, Fowowe (2008) tests the effect of financial liberalisation on economic growth in Nigeria. The results suggest a positive effect of financial liberalisation on economic growth in the long run. However, the study posits a short run instability for the financial system which may avail opportunities for IFFs. Using MIS and balance of payments disparities as measures of financial illicit flows, higher real GDP, higher inflation (INF) and higher taxes were identified as drivers of higher levels of IFFs (Slany, 2020). This because strategic trading opportunities arise with high economic activities where unstable macroeconomic conditions drive behavioural hazards among investors to indulge in irregular financial transactions. However, prior analysis by Kar (2011), which examined the dynamics of IFFs in India, suggest that illicit funds flows are more linked structural and governance factors than issues macroeconomic policies, which signals the need for institutional strengthening.

Francis and Waithe (2013) apply cointegration and error correction models to analyse the effect of financial liberalisation on economic growth in Trinidad and Tobago. The study finds that persuasive government intervention and involvement in the financial system through the regulatory and supervisory network, particularly in controlling interest rates and allocation of credits, tend to distort financial markets. This supports the explanations posited under McKinnon–Shaw's theory of financial liberalisation. As explained under Section 2.1, proponents of financial liberalisation advocate the removal of all forms of repressive measures to allow for open market operation of the forces of demand and supply in determining the flow of liquidity and investments in the financial system.

Using a system GMM technique, Ahmed (2013) investigates the role of financial liberalisation in promoting financial deepening and economic in Sub-Saharan Africa countries. The study found a negative linkage between financial liberalisation and income growth among economies in Sub-Saharan Africa. This indicates that financial sector deregulation in particularly, emerging and developing countries tend to depress macroeconomic expansion while availing opportunities for the irregular outflow of funds from the domestic market and exposing the financial system to significant levels of instability. However, from the study's results, a positive impact of financial liberalisation on economic growth is reported when INF, institutional quality and fiscal imbalances are accounted for in the analysis. This imply that effective financial liberalisation policy towards macroeconomic stability should be implemented on foundation of efficient legal frameworks and institutions, as well as advanced labour quality to counter trade mispricing and IFFs.

Yalta and Yalta (2012) assess the effect of financial liberalisation on CF in emerging markets, using a panel causality analysis. The analysis established that liberalisation of the financial sector policies in themselves do not guarantee the curtailment of CF from the

domestic economy unless it is premised on robust fiscal and regulatory policies that ensure effective accountability of financial transactions in the system. This evidence is consistent with the prior findings of Schneider (2003), which suggest that financial reforms drive a decreasing trend in CF occurrences. Similarly, Hermes and Lensink (2014) found that deregulation of the banking sector to allow for the flexible entry of new investors exert significant impact on CF by minimising its surge while engendering macroeconomic stability.

Hermes and Lensink (2014) examined the relationship between financial liberalisation and CF on the 18 African continent countries for the period 1973 to 2005. They found that liberalisation on domestic banking markets for new domestic and foreign entrants and bank privatisation programmes reduce CF and that the policies focusing on liberalising the capital account increase CF. Conversely Akinlo and Ajilore (2011) investigated the effects of liberalisation policies in the financial sector on CF phenomenon in Nigeria. Their study revealed that interest rate deregulation policy positively promoted CF and was primarily inflationary.

Adekunle (2011) studied CF in Nigerian environment in episodes of financial globalisation and capital outflows out of the economy. CF was not significantly increased by the financial globalisation process and on the other hand the exchange rates and domestic investment showed significance. The study recommended an improvement in the domestic investment and float of the currency to keep capital to benefit from the process of financial globalisation.

In the above context, the endurance of prudent fiscal policy measures such as the minimisation of INF, reduction in budget deficit and debt sustainability represent important prior conditions for the effective implementation of financial liberalisation policies to ensure improvement in domestic investment while minimising illicit financial outflows. However, the extant analyses on financial liberalisation are generally focused on its effect on general economic growth, whereas literature on its effect on IFFs remain limited. Furthermore, an investigation of the efficacy of macroeconomic and institutional dynamics in mitigating illicit financial outflows in the period of financial liberalisation is of paramount importance.

3. Methodology

3.1 Data sources and sample selection

This study uses a panel data of 22 African countries covering the period 1995–2015. This sample period and scope of the analysis is selected based on the data availability for CF and MIS. Data on CF and trade MIS are obtained from the Political Economy Research Institute and illicit outflows from Global Financial Integrity (GFI, 2022). Data for financial liberalisation proxied by capital account openness (Chinn-Ito index) is based on Chinn and Ito (2006). Political stability and INF data for sampled countries are obtained the World Bank website, whereas tax burden and public debt (DEBT) data are sourced from heritage foundation and International Monetary Fund websites, respectively. Table 1 presents the description of the variables and their sources.

3.2 Empirical model

The adopted model in this study is represented as:

$$ILLICIT_{it} = \alpha_{it} + \alpha_{1it} FINLIB_{it} + \alpha_{2it} POL_{it} + \alpha_{3it} INF_{it} + \alpha_{4it} TAX_{it} + \alpha_{5it} DEBT_{it} + \varepsilon_{it}$$

Table 1. Data description

Variable	Description	Source
CF	Capital flight	Ndikumana and Boyce (2021)
RCF	Real capital flight	Ndikumana and Boyce (2021)
FINLIB	Financial liberalisation proxied by capital account openness (Chinn-Ito index)	Chinn and Ito (2006)
MISINV	Misinvoicing	Ndikumana and Boyce (2021)
RMISINV	Real misinvoicing	Ndikumana and Boyce (2021)
POL	Political stability	World Bank
INF	Inflation	World Bank
TAX	Tax burden	Heritage foundation
DEBT	Public debt	IMF

Source: Authors' own compilation

Where *ILLICIT* represents illicit flows proxied by CF and trade MIS, and ε_{it} is the error term. The independent variables selected are drawn from existing literature on the determinants of IFFs. Tarawalie and Jalloh (2021), Abotsi (2018), as well as Letete and Sarr (2017) showed that institutional quality reduces illicit flows, therefore, the institutional quality variable in the study captured by political stability is expected to be negatively signed. High INF results in loss of purchasing power and is an indication of macroeconomic instability, which encourages CF in search of economies with macroeconomic stability (Signé *et al.*, 2020). Large tax burden on businesses and consumers increases the likelihood of illicit flows as evidenced by Signé *et al.* (2020). Anetor (2019) highlighted the positive effect of high debt levels on IFFs.

3.3 Estimation technique

Following Akbar *et al.* (2016), the effect of financial liberalisation, institutional quality and macroeconomic stability on illicit financial outflows among African countries is tested with a dynamic panel system GMM technique. While the application of other estimation techniques such as pooled OLS, fixed effects, random effects (RE) are feasible in panel data analysis, they are subject to issues such as serial correlation and heteroscedasticity (Baltagi, 2005). Similarly, instrumental variable models such as the two-stage least squares suffer from biases introduced by serial correlation and heteroscedasticity (Wooldridge, 2002). As such, the system GMM framework represents a more robust technique for the panel analysis in this study because of its advantage of its ability to adequately estimate the effect of past observations of the interest variables on the current value, while being able to disentangle the effects of the observed and the unobserved time-variant heterogeneity (Kripfganz and Schwarz, 2019).

The system GMM technique introduced by Arellano and Bover (1995) and Blundell and Bond (1998) is the chosen technique due to its superiority over the differenced GMM of Arellano and Bond (1991). The system GMM technique caters for cross-sectional dependence and can be estimated in the presence of first order autocorrelation and heteroscedasticity dynamics of panel data. Furthermore, the technique is suited for studies where the number of cross-sectional units is greater than the time series components ($n > T$) (Baum *et al.*, 2003; Roodman, 2009). In this study, the number of cross-sectional units (22) is greater than the time series time series components (21).

The identification strategy is specified as follows: political stability, tax and INF are suspected to be endogenous variables along with the lag of illicit flows. The effect of financial liberalisation on illicit flows is expected to be dependent on INF (macroeconomic instability) and political stability (institutional quality). The study used lags of the explanatory variables to control for the issue of simultaneity in line with Tchamyou *et al.* (2019). Diagnostic tests such as the Arellano and Bond (1991) test for second-order serial correlation, the Hansen (1982) as well as the difference-in-Hansen tests are used to test for the validity of the instruments. Given that the study adopted the two-step procedure for estimating the system GMM model, the Sargan test is not selected. According to Kripfganz (2019), the Sargan test is invalid when the two-step procedure is selected. The "collapse" command is used to prevent proliferation of instruments (over-identification) such that the number of instruments is not greater than the number of cross-sectional units (Roodman, 2009).

4. Results and discussion

4.1 Descriptive statistics

Tables 2 and 3 present descriptive statistics of the CF and trade MIS specifications respectively. The descriptive statistics differ due to the differences in the number of countries for each specification. The statistics show that on average CF has been more prevalent in Africa compared to trade MIS. Capital account openness is at low levels indicated by the

Table 2. Descriptive statistics: capital flight specification

Variable	Mean	SD	Min	Max
CF	1,037.226	4,938.302	−16,803.699	45,504.215
RCF	1,126.585	5,392.817	−18,813.434	46,817.255
FINLIB	−0.602	1.242	−1.92	2.334
POL	−0.639	0.858	−2.845	1.106
INF	242.946	144.909	1	494
TAX	71.571	10.68	41	90.9
DEBT	2,824.076	4,319.335	0.895	35,038.578

Source: Authors' own compilation

Table 3. Descriptive statistics: trade misinvoicing specification

Variable	Mean	SD	Min	Max
RMIS	151.712	3,833.837	−28,923.96	19,362.34
MIS	147.226	3,436.978	−27,165.55	19,156.24
FINLIB	−0.654	1.172	−1.920	2.334
POL	−0.695	0.800	−2.845	0.661
INF	221.987	132.723	1	452
TAX	71.340	10.637	41	90.9
DEBT	2,968.558	4,436.195	0.895	3,5038.58

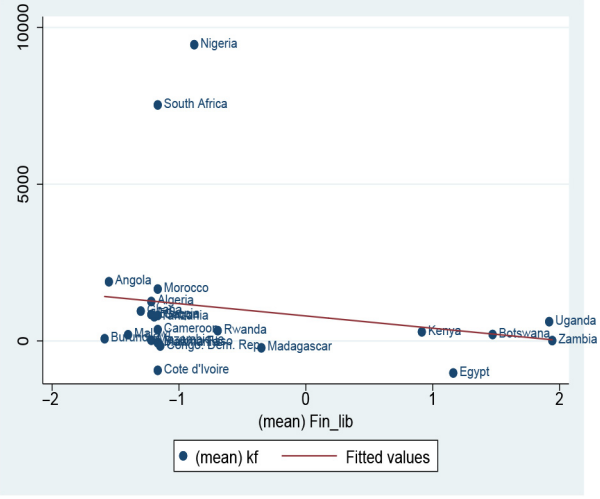
Source: Authors' own compilation

negative sign of the average of the Chinn-Ito index. Political stability is also in negative territory, which is an indication of low levels of institutional quality. Low levels of institutional quality are one of the major causes of CF and trade MIS. INF averages over 200%, which attests to macroeconomic instability which has plagued the region. Macroeconomic instability is also a major driver of IFFs. The average score for tax burden is over 70, which is just below the world average. It should be noted that tax burden is a score whereby a high value signal less burden from taxes, therefore, tax burden is higher is Africa on average. However, the data highlights significant improvements in Africa countries with regards to lowering of tax burden over the past decade. DEBT levels remain high in Africa on average. Due to the large standard deviations, nominal CF, real capital flight, trade MIS, real trade misinvoicing, INF and DEBT are used in logarithmic form.

Figures 2 and 3 plot the scatter graphs for relationship between financial liberalisation and CF and financial liberalisation and trade MIS, respectively, for the sampled countries. The initial data analysis suggests that there is a negative relationship between financial liberalisation and illicit flows as shown by the scatter graphs in Figures 2 and 3. Countries with higher levels of financial liberalisation such as Botswana, Egypt, Kenya, Uganda and Zambia recorded lower levels of illicit flows. Countries such as South Africa and Nigeria have higher levels of illicit flows compared to the rest of the countries in the sample. It should be noted that the two countries have more stringent capital controls that could be an explanation of the illicit flows.

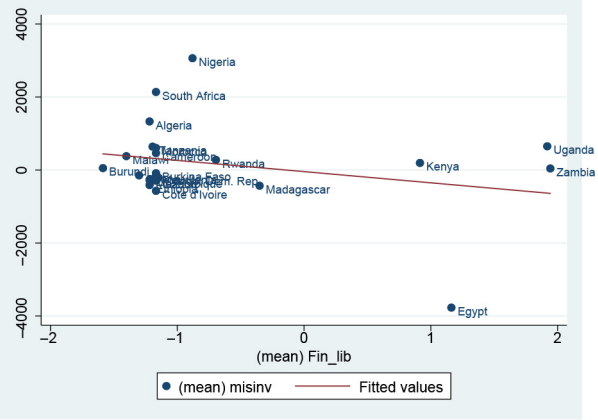
4.2 Discussion of the effect of financial liberalisation on capital flight

Tables 4 and 5 present the results for the effect of financial liberalisation on CF and the robustness checks of the estimated model. In Table 4, financial liberalisation reports a



Note: kf represents capital flight and Fin_lib is financial liberalization. Authors' own computations
Source: Authors' compilation

Figure 2. Financial liberalisation and capital flight



Note: Misinv represents trade misinvoicing and Fin_lib is financial liberalisation. Authors' own computations
Source: Authors' compilation

Figure 3. Financial liberalisation and trade misinvoicing

Table 4. Effect of financial liberalisation on capital flight

Variable	GMM (capital flight)	GMM (misinvoicing)
FINLIB	−0.147 (−4.09)***	−0.216 (−3.59)***
POL	−0.218 (−4.34)***	−0.490 (−3.21)***
INF	0.0004 (2.56)**	0.005 (−5.56)***
TAX	0.046 (4.94)***	0.0925 (17.56)***
DEBT	0.066 (2.14)**	0.352 (4.56)***
CONSTANT	2.626 (4.28)***	−2.194 (−1.72)
AB AR (1)	(−2.57) [0.010]	(−2.28) [0.030]
AB AR (2)	(−0.94) [0.350]	(−1.02) [0.309]
Hansen test	(18.45) [0.240]	(15.58) [0.410]
Diff-Hansen (GMM)	(16.62) [0.175]	(15.59) [0.340]
Diff-Hansen (IV)	(1.84) [0.118]	(7.98) [0.930]
Countries	22	22
Instrument	21	21
Wald test	35.31***	156.12***

Notes: *, ** and *** indicate significance at the 10%, 5% and 1% levels, respectively. Figures in parenthesis () and [] are test statistics and *p*-values, respectively. The GMM models were estimated using Roodman's (2009) xtabond2 command in Stata
Source: Authors' own compilation

negative effect on CF across the sampled African countries. This evidence implies that increase in financial liberalisation leads to a reduction in the outflow of capital generated in the domestic economy. The result is consistent with the position of prior study that financial liberalisation policies exert a mitigating impact on CF, thus minimising its occurrence

Table 5. Robustness checks

Variable	GMM (capital flight)	GMM (trade misinvoicing)
FINLIB	−0.143 (−4.13)***	−0.219 (−3.75)***
POL	−0.220 (−4.36)***	−0.482 (−3.31)***
INF	0.0004 (2.63)**	0.005 (16.94)***
TAX	0.040 (4.26)***	0.087 (7.57)***
DEBT	0.0.588 (2.09)**	0.363 (4.62)***
CONSTANT	3.238 (5.34)***	−1.762 (−1.35)
AB AR(1)	(−2.57) [0.010]	(−2.28) [0.030]
AB AR (2)	(−0.94) [0.349]	(−1.04) [0.301]
Hansen test	(18.35) [0.240]	(15.49) [0.417]
Diff-Hansen (GMM)	(16.62) [0.277]	(15.49) [0.345]
Diff-Hansen (IV)	(1.84) [0.175]	(8.20) [0.609]
Countries	22	22
Instrument	21	21
Wald test	27.63***	649.13***

Notes: *, ** and *** indicate significance at the 10, 5 and 1% levels, respectively. Figures in parenthesis () and [] are test statistics and *p*-values, respectively. The GMM models were estimated using Roodman's (2009) xtabond2 command in Stata
Source: Authors' own compilation

because of the prevalence of flexible financial regulatory regimes (Patnaik *et al.*, 2011). Capital account liberalisation, thus, allows domestic residents to buy and sell assets, which decreases the incentive to undertake in illicit flows in search for higher return in other countries.

In the above context, financial liberation creates opportunities for enhanced individual savings and capital mobilisation for business growth and expansion. However, Hermes and Lensink (2014) and Yalta and Yalta (2012) document contracting evidence to the financial liberalisation mitigating effect on CF and explain that capital account liberalisation is associated with increased CF. They explain that financial regulation flexibility avails opportunities for strategic investors to explore systemic loopholes to engage in illicit transactions, especially in developing and emerging economies where financial system robustness may be at the evolution stage. This imply that premature financial liberalisation in less financially robust economies could drive significant capital outflow tendencies among investors, which can explain the exacerbation of the problem of illicit flows across African countries.

It can be observed in Table 4 that political stability is negatively signed, which suggests that high levels of institutional quality are associated with lower levels of CF. This finding is consistent with theoretical expectations and supports the findings of Abotsi (2018), Letete and Sarr (2017) as well as Tarawalie and Jalloh (2021). As can be observed from Table 4, the variable for INF reports positive significant coefficient, which indicates that an increase in INF as a measure of macroeconomic instability drives CF. This finding supports *a priori* expectations as macroeconomic instability impacts negatively on investments and economic activity. The history of high INF rates in African countries is one of the causes of illicit financial outflows as individuals seeks countries with macroeconomic stability to maintain purchasing power.

Furthermore, higher INF signals a depreciation of the exchange rate, which indicates a decline in the value of domestic assets compared to foreign assets (Raheem and Oyinlola, 2015).

As such, illicit flows are expected to increase. The findings of political stability and INF support the view that financial liberalisation should be accompanied by institutional quality and macroeconomic stability for maximum effectiveness in curtailing illicit financial outflows (Slany, 2020; Klein, 2005). Finally, in Table 4, the variable for tax reports a significant positive coefficient. This result suggests that higher tax burden and DEBT are associated with more capital outflows as expected. Signé *et al.* (2020) found that higher taxes encourage illicit outflows as individuals and firms seek regions with lower and more stable taxes, whereas Anetor (2019) also document a deterministic impact of debt on illicit flows across African countries. This generally implies that high DEBT may be an indication of future higher taxes and INF, which drive significant illicit outflows in Africa.

Robustness checks involving the use of real CF and real trade MIS are presented in Table 5. The coefficient of financial liberalisation retains its negative and significant coefficient and the control variables also retain their respective signs. Therefore, the results are robust to changes in the measurements of illicit flows.

4.3 Policy implications of the study

The findings of this research are critical for most of the developing African economies. These African countries must be careful in implementing economic liberalisation policies, because the lack of an equally strong financial system creates opportunities for strategic investors to engage in large amounts of irregular financial transactions and transfers. In addition, policymakers must ensure that a stable economic and political environment prevails, as improving institutional and macroeconomic characteristics to strengthen investors' confidence in keeping capital in the domestic economy.

4.4 Limitations of the study

The main limitation of the study was lack of data that spans periods beyond 2015 for most of the variables on financial illicit flows. The available data sources could not test the objectives beyond 2015.

5. Conclusion and policy recommendations

This study assessed the effect of financial liberalisation on illicit financial outflows in African countries, and also considering the impact of institutional quality and macroeconomic stability on illicit financial outflows. Using a dynamic panel system GMM technique, this study analyses an annual panel data spanning from 1995 to 2015 of 22 African countries and documents important findings on the dynamic relationship between financial liberalisation and illicit outflows. From the analysis, it was found that financial liberalisation drives declining trends in the illicit outflow of capital from to foreign destinations, implying that the implementation of more liberalised financial sector policies engenders reduction in CF and promotes macroeconomic stability. However, the implementation of financial de-regulation polices during the evolution stage of developing and emerging economies avails opportunities for investors to indulge in illicit financial transfers.

In addition, institutional quality is linked with minimal rate of illicit capital outflows levels, thus affirming the theoretical expectations that stable political environment boost investor confidence to plough back accrued profits into the domestic economy. This enhances economic growth and creates opportunities for business to expand and employ more people, thereby reducing the rate of unemployment. Also, it was found that the rate of INF exerts important predictive influence on the volume of illicit capital that flows out of the domestic economy. This implies that uncontrolled hikes in the cost of production and services delivery drive macroeconomic instability and hence, leads to CF. Practically, the

evidence for the effect of political stability and INF on CF supports the need to implement financial liberalisation policies concurrently with institutional quality and macroeconomic stability to ensure a significant reduction in the outflow of illicit funds. Finally, the analysis found that significant increase in DEBT and tax burdens causes investors to indulge transfer large volumes of capital to offshore investment. Generally, higher DEBT leads to higher tax payments and INF, which drive significant illicit outflows in Africa.

As a policy recommendation, developing and emerging countries should exercise significant circumspection in the implementation of financial liberation policies as the non-availability of an equally robust financial system create avenues for strategic investors to conduct large volumes of irregular financial transactions and transfers. Moreover, policymakers should ensure prevalence of stable economic and political environments as investors' confidence to keep capital in the domestic economy is boosted when institutional and macroeconomic qualities are enhanced. Future studies can analyse the impact of macroeconomic variables on CF under regime-switching conditions of the market, as the interaction between economic and financial time-series may not be the same over time.

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Corresponding author
Leward Jeke can be contacted at: leward.jeke@mandela.ac.za