

Comparing the Illicit Financial Flows in Some African Countries: Implications for Policy

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Abstract

Due to the deleterious effect of the illicit transfer of funds on Africa economies the paper determines and compares the volume of illicit funds which should have been used for development but otherwise channeled into private benefits in seven African countries during 2005-2015. Using the World Bank Residual Model, we found that illicit financial flows are being experienced in all the sample countries otherwise unabated. In quantum terms, illicit transfers of funds are more in upper-middle-income countries while and it was highest in low- income countries as a proportion of the country's GDP. The study concluded that relative to aggregate income low-income countries engage more in illicit financial transfers than the other income groups whereas in quantum terms it was substantial in upper-middle-income group. We recommend that all income groups should improve on regulatory controls in order to curb illicit transfers in Africa, more importantly, the low-income group.

Keywords: Illicit financial flows, Gross domestic Product, World Bank Residual Model

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1. Introduction

The paper employs the World Bank Residual Model (WBRM) in determining the level of financial inflows and outflows for a sample of seven African countries in 2005-2015. In addition, the paper compares, which of the countries experienced the highest illicit funds transfer through financial flows as a proportion of the gross domestic product (GDP) of each country. The essence of the comparison is to determine whether illicit financial flows differ or exhibit common pattern by the level of individual's country income.

There are not many studies that have engaged in determining the level of illicit financial flows in Africa. The few that did so were able to provide an estimate of how much is lost to illicit financial flows on the aggregate and regional basis. Estimating individual country financial flows into illicit cover has been very scanty in the literature. Whereas, a knowledge of such a country-specific illicit financial flows would not only *prima-facie* provides an estimate of what is lost to illicit financial flows in each country it may inform the need for a new policy or policy revision to curb the illegal activities

The concerns to minimize the increasing illicit financial flows around the world and in particular, Africa have been evolving in the literature over the last two decades. Movement of funds across borders is imperative for world economies to grow but the flow of "dirty money" out of Africa from evidence deny the continent of the essential financial sources for the funding of infrastructural needs such as education and health facilities among other basic needs. The economic benefits of increased movement of funds across the globe are numerous. It enhances greater, the level of economic activities, which have the tendency to improve world employment opportunities, global welfare, reduction in income inequality and world peace. However, the gains and losses in financial flows depend largely on net flows that are, the level of legal versus immoral fund movements, and the management of available funds in each economy.

A study by Kar and Cartwright (2010) suggest that for about 39 years (1970-2008) after making some adjustments, the estimated monetary value of illicit financial outflows from developing countries may be about US\$1.8 trillion while Ndikumana and Boyce (2010) found that about US\$ 814 billion were illicitly transferred out of Africa within 40 years (1970-2010). Mevel, Siope and Karingi (2013) also found that US\$409 billion passed through illicit financial flows in Africa based on trade mispricing method in one decade (2001-2010). A panel chaired by Thabo Mbeki (2015) found that in Africa, an average of about US\$50 million is lost annually due to illicit financial flows. In spite of the fact that these studies and the panel of enquiry chaired by Thabo Mbeki used different methods for estimating the illicit financial flows, the outcome of the respective studies appears to pass a similar verdict, which suggest that the quantum of illicit financial flows are quite high considering the low national incomes of most Sub-Saharan African (SSA) countries (AU/ECA 2015).

The World Bank (2016) classification of countries by income affirms that just one country (Seychelles) out of 49 countries in the SSA attains the high-income status, 26 countries representing 53 per cent who are in the low-income bracket while 45 per cent are middle-income countries. The inability of many nations in the Sub Saharan Africa to move up the income ladder over time has been as a result of leakage in each country's financial income such as the increasing illicit financing outflows engendered by high level of corruption, mis-invoicing of services, trade mis-pricing, over-invoicing and under-invoicing (AU/ECA 2015). Consequently, the issue of illegal transfers of financial resources out of the continent is

regarded as one of the major sources of substantial loss of resources that could have been used for developing the continent Kar and Cartwright (2010).

The findings from earlier studies suggest that indeed net illicit financial flows are prevailing in Africa. Arising from this background, this study examines the same phenomenon with a sample comprising of Seychelles, Angola, South Africa, Cote d'Ivoire, Nigeria, Mali and Tanzania, which are selected respectively from four income groups as follows; high, upper middle income, lower middle income and low income. There is a need for the individual countries to be aware of how much is lost to illicit flows not only because of tracking such funds but to be able to recover same for public use.

While an estimated aggregate of illicit financial flows out of Africa has been derived from some studies like Ndikumana and Boyce (2010), Kar and Cartwright (2010) and Thabo Mbeki Report (2015), the main motivation for this study, which is country specific, is to determine the volume of illicit financial flows of each country in the sample and also compare how countries dealing with this issue for policy. The bases for the selection of the sample are two-fold. First, is to find out the differences if any in the pattern of illicit financial flows amongst Anglophone, Francophone and Lusitania countries in Africa. Second, is to determine the value of illicit financial flows experienced by each country as a proportion of their level of income. We found that all the sample countries experienced illicit financial flows that deny them of substantial financial resources, which would have been used for improving the welfare of their people. This is particularly in the low-income and upper middle-income groups.

The rest of the paper is organized as follows; section two of the paper reviews the relevant literature, section three deals with the methodology while section four discusses the results and section five concludes the paper with policy recommendations.

2. Literature Review

Kar and Cartwright (2010), define illicit financial income as money that is obtained through extra-legal either by transfer or earnings without considering the type of transfer process. But Mevel, Siope and Karingi (2013) view that precise meaning and definition of illicit financial flow is scanty in the literature. This is partially due to, according to them, the controversy over how the “illicit” portion of the phenomenon and the “official” portion of financial flows are to be defined.

A modest composition of the flows, according to United Nations Economic Commission for Africa (2012) revolves around the following sources: misappropriation of financial resources by government officials; income from drug and human trafficking, terrorism and related criminal activities and illegal activities of multinationals who engage in tax evasion and or avoidance from their legal operations in Africa nations. Based on the composition of sources of illicit financial flows by UNECA (2012), tracking the leakage in any country may be quite but not completely impossible. Furthermore, the Thabo Mbeki Report (2015) also observed that obtaining complete information on this phenomenon in Africa is almost futile due to the clandestine process of conducting the affairs. However, little information obtained by the panel suggest that large multilateral corporations are the biggest perpetrators of illicit financial flows out of Africa.

The preoccupation of government is to capture official records of international trade and financial transactions through the Balance of Payments (BoP) accounts by each nation. In the process of capturing the BoP records, the problem of capturing invoice over-estimates and under-estimates by the appropriate government agency remains one of the challenges affecting the possibility of tracking illicit financial flows in Africa. On the other side of the coin are firms who evade tax payable to government and repatriate same out of the country of a domain through illegal means in order to avoid being caught or detected (AU/ECA 2015). In addition, the repatriation of illicit flows from drug trafficking and human trafficking also bypass the official process of the BoP records. Due to this shortcoming in maintaining proper BoP records, illicit financial flows do occur, in one form or the other, which include false invoicing and Hawala transactions (AU/ECA 2015).

Illicit financial flow is dual, therefore, the inflow of illicit funds and outflows do occur and the difference between the flows represents the net position. Unfortunately, Kar and Cartwright (2010) argue that netting the inflows from the outflow does not represent a net benefit to the nation even if the inflows are greater than the outflows. The argument is based on the fact that positive net inflows are not recorded in the official records of BoP; such inflows are neither taxed nor used for productive purposes. In view of this rational argument, this paper will emphasize the absolute position of illicit financial flows of individual countries as a proportion of GDP for comparison.

In spite of the declining level of income in the continent, illicit financial flows are still increasing otherwise unabated by the sampled countries (Thabo Mbeki Report, 2015). This culminates in the loss of financial resources for development as pointed out by Kar and Cartwright (2010). The pattern of illicit financial flows in the different categories of income level relative to the gross domestic product (GDP) is relatively unknown for individual countries but the regional grouping by Ndikumana and Boyce (2010) found that in the period 1970-2004 illicit financial flows is about 82% of the regional GDP. The findings from earlier studies, justify a more in-depth study so as to determine the proportion of illicit financial flows relative to the income level of individual nations and how vulnerable, in each country considering the proportion of income lost to illicit financial flows.

Prior studies on this phenomenon, have not only awakened the fact that financial resources that should have been used for improving the domestic economy in the area of infrastructural development, health, education as well as the improvement of good living standards for the African nations, escape outside the nations through illegal processes. Regrettably, illicit financial flows into the domestic economy may also be used to fuel the insurgency and negative activities such as terrorism, radicalism and human trafficking to mention a few. How these degenerate activities in Africa by citizens of the continent and their foreign collaborators affect different income levels in Africa is important for policy formulation and revision.

There are four (Hot Money Method, Dooley Method, World Bank Residual Method and Trade Mispricing Method) methods of estimating illicit financial flows in the literature UNECA (2012). Kar and Cartwright (2010) discuss two of the methods while Mevel, Siopo and Karingi (2010) explain the four channels, which included the two that is contained in Karand Cartwright (2010). However, the two studies explain that the IMF Direction of Trade and Statistics (DOTS) and used trade mis-invoicing method by assuming that the difference in case of imports between actual cost of such invoice and the increased adjustment of the

invoice price and in case of export a reduction in the invoiced prices of import and actual invoiced prices enhances the outflow of illicit funds out of a country. A comparison of the prices of the country's trade relationship in some bilateral international trade and the world price of such trade represents the mis-invoiced estimate having adjusted for insurance and freight. Kar and Catwright (2010) explain that the World Bank residual model depends on the use of Balance of Payments (BoP) accounts for determining the quantum of Illicit financial flows experienced by a nation on annual basis. It was observed by UNECA (2012) that the disparity between the estimates from the two methods is marginal. This implies that the use of either of the two methods suffices.

The model considers the source of funds by a nation and the uses of such funds in determining illicit financial flows in and out of a country. The difference between the two (sources minus uses) sources if positive, represents illicit financial outflow and if negative, it means illicit financial inflow. List of items recorded in the source column is the annual change in the stock of external debts contracted by the public sector and the net inflow of foreign direct investment. The uses of funds include financing the net current account deficit of the BoP and foreign reserves. In cases where a country's sources of funds are greater than the use of such funds this represents illicit funds inflow into the country and vice-versa. The review of literature affirms the aggregate some estimates of illicit financial flows experienced in Africa but as far we know, individual African country's illicit financial flows have not been relatively investigated. Using a sample of some African countries, this is the gap this study tries to fill.

3. Methodology

This paper adapts the World Bank Residual Model but instead of using the net current account deficit of the BoP used by Kar and Catwright (2010), the net financial account balance (NFAB) was considered for the derivation of use of funds. The NFAB measures how net lending to or borrowing from non-residents is financed. This is conceptually equal to the sum of balances on the current and capital account (World Bank 2015). In view of the fact that the net position on current and capital account as well as how net lending to or borrowing from non-residents are being funded are inclusive in NFAB, the use of net final flow is considered in this study.

Out of the four methods for estimating illicit financial flows mentioned under literature review, the World Bank Residual Model and the Trade Mispricing Method are more popular for the estimation of this type of phenomenon (UNECA (2012)). Given the fact that the two methods are both conservative they are able to accommodate multiple channels of illicit financial flows and data compilation error from the original sources. Furthermore, they have both been used by earlier studies as mentioned with negligible difference in the estimates (UNECA 2012). Due to these limitations but accommodating stance, the paper adopts the World Bank Residual approach for the empirical analysis

3.1 Country Sample Frame and Modality

The sample for this study covers the four income groups as prescribed by the World Bank for the period 2005-2015. The lists of nations used as the sample are Seychelles (high-income nation); Angola and South Africa (upper middle-income); Cote d'Ivoire and Nigeria (lower middle-income) and Mali and Tanzania (low-income). Seychelles is included in the sample being the only high-income country in SSA World Bank ranking in 2016. South Africa and Nigeria were included due to the size of the economies while Cote d'Ivoire, Angola, Tanzania

and Mali are included based on data availability within the constraint of our choice stratum. Suffice to mention that many African countries data for this type of study were either not available for the full or partial period of the study. This is a major constraint in the selection of the sample by strata. Otherwise, the selection of study sample would have been based on simple random sampling which gives every member of SSA within a stratum the chance of being selected.

3.2 Data and Data Sources

In respect of the seven countries the data span cover 2005-2015 for five of them but Cote d'Ivoire and Mali data span are for 2005-2013 and 2005-2014 due to non-availability of data for uses of funds. The figures are expressed in the current US Dollars. The data are divided into two classifications based on the World Bank Residual Model. The first group comprised of the sources of funds that includes the country's external public debts stocks and publicly guaranteed external debts and the net inflow of foreign direct investment. The time series data for public debts are obtained from World Bank International Debts Statistics through the World Bank Development indicators and net inflow of direct investment are obtained from the International Monetary Fund – Balance of Payments database supplemented by data obtained from the United Nations Conference on Trade and Development (UNCTAD) and Official National Statistics. Data on Financial Openness is defined as the Foreign Direct Investment Net Inflow as a percentage of Gross Domestic Product (GDP). The data is obtained from the World Bank – World Development Indicators database.

The second group is made up of the use of funds as follows; net financial account balance and reserve assets. The net financial account balance is conceptually equal to the sum of balances on current and capital account. The data is obtained from the World Bank Development Indicators data files. Finally, the reserve assets data are obtained from International Monetary Fund (IMF) 6th edition of the Balance of Payments IMF data warehouse. The country's GDP considered for this paper is at purchasers' prices made of the gross value added by all residents' producers in the economy plus any product taxes and less any subsidies that are not included in the value of the products. The estimation is made without making deductions for depreciation and fabricated assets or depletion and degradation of natural resource (World Bank 2015).

4 Discussions of Results

4.1 High Income Country

Table 1, contains the sources of funds and uses of funds for Seychelles, the only high-income country in SSA in 2016. In the sources of funds rows, debt obtained by the public sector for the country is blank because, available information in the World Bank development indicator database does not contain any information about the public sector debts for the country. The only source of funds for the country is from the net foreign direct investments while the uses of funds are the net financial account balance and foreign reserves. In addition, the Table contains the gross domestic product (GDP) and the proportion of financial illicit flows (outflow/inflow) as a percentage of GDP.

In absolute terms, the Table indicates the least illicit financial outflow experienced by the country during the period of the study as US\$ 39004 in 2009 and the highest was US\$ 876473 in 2013 while the highest illicit financial inflow was US\$ 182467 in 2015. The total illicit financial outflow experienced by the country was US\$ 3,322,280 while illicit financial inflow was US\$ 239323 as indicated in Table 8.

In Table 1, approximately 22.11% of the GDP passed through illicit financial outflows in 2005 and this increased to 32.16% in 2007. The highest illicit financial outflow as a percentage of GDP was in 2012 with a value of 69.15%. In the following year (2013) the illicit financial outflows reduced to 18.12% as a proportion of the GDP. This may be due to a reduction of about 6.67% in the net inflow of FDI into the country between 2012 and 2013. Generally, the country experienced a higher proportion of illicit money through illicit funds outflow compared to inflows.

On the aggregate, the country experienced US\$ 3,322,80 through outflows of illicit money and an outflow of US\$ 239,323 in the period of the study. These transfers of illicit money represent an average of 28.07% of the country's GDP in absolute terms and a net financial flow of 24.70% as a proportion of GDP respectively. The evidence from the data confirms that although there is no uniform trend in the pattern of illicit financial outflows it is greater than the inflow in Seychelles for the period of the study.

The fluctuations in the pattern of illicit financial flows in Seychelles during the period of the study may be due to the changes in the level of financial openness of the country. Table 1 indicates that in periods when net inflows of FDI rise, illicit financial outflows also increase. For example, 2012 and 2013 the net inflow of FDI was the highest and illicit financial outflow for the two periods are also relatively high compared to 2007 and 2008 and other years. The implication of this evidence is that the government of the country must put in place an increased monitoring process on import/export, inflow/outflow of funds for investment and money laundering operations in order to curb illicit financial flows in the country.

The average annual GDP of Seychelles for the period of the study was about US\$ 1 billion and about 25% of it was assumed to have been illicitly transferred out of the country. This is relatively high in spite of the fact that Seychelles is a high-income country. Sequel to the period of the study, the real GDP of the country dropped from 5.7% in 2015 to 4.8% in 2016 (African Economic Outlook 2017).

4.2 Upper middle-Income Countries

Unlike Seychelles, the two upper middle-income countries (Angola and South Africa) have public debts as indicated in Tables 2 and 3. The details of the illicit financial flows for these countries are also contained in the same Tables. The two countries experienced both illicit outflow and inflow into their respective countries during the period of the study. In the case of Angola, the illicit financial outflow was experienced in 2009, 2014 and 2015 for US\$15,256,572, US\$13,762,294 and US\$21,775,170 respectively (Table 2).

In the case of South Africa, in Table 3, illicit financial outflows were relatively higher compared to Angola. Evidence from South Africa affirms that illicit financial outflows occurred in 2005-2014 except 2015 in which the country experienced illicit funds inflow. During the period of the study, the highest illicit funds outflow from South Africa was US\$39,179,944 in 2012 followed by US\$21,364,724 and US\$21,338,912 in 2010 and 2007 respectively.

The pattern of illicit financial flows in each year in Angola as reported in Table 2 shows that inflow of funds is relatively more than outflows. Whereas, as indicated in Table 3, for South Africa illicit financial outflows are more than inflows in each year. This evidence suggests

that at least, there is a flow back effect of illicit funds in Angola compared to South Africa. The Inflow of illicit funds to Angola (Table 2) shows that in 2005 it was (US\$6,340,349) thereafter it continues to increase and by 2011 it has reached (US\$22,761,802). However, by 2013 it reduced to (US\$11,555,470). In 2014 and 2015 the country experienced a higher illicit financial outflow of US\$13,762,294 and US\$ 21,775,170 respectively.

In the case of South Africa (Table 3) illicit funds outflow was fluctuating in 2005-2014. It was US\$ 9,978,535 in 2005 and by 2012 it was US\$ 39,179,944 representing the highest outflow in the entire period of the study. The outflow dropped in 2013 and 2014; incidentally, the only inflow of illicit funds was experienced in 2015. As indicated in Table 3, the country experienced substantial illicit outflow in 2012 when public debts were the highest and net inflow of FDI was not relatively high. Perhaps this is a signal for misappropriations of public financial resources through the illicit transfer of borrowed funds which might have been used for developmental purposes.

The summary of illicit financial flows is reported in Table 8 for all the countries. As indicated in the Table, the average illicit financial flows into Angola as a proportion of GDP was 17.75% while that of South Africa was 5.58%. In quantum terms, the illicit financial outflow was substantially high in South Africa totalling US\$196,335,868, the total inflow was substantially high in Angola for US\$ 104,738,541 while inflows were relatively lower for South Africa compared to Angola. The flow back of illicit financial flows in Angola is higher than South Africa although the financial resources may not be available for public use due to its illicit nature the illicit outflow experienced in South Africa are not of any benefit for both the public and private sector. The results of the upper middle-income countries suggest that both countries exhibit a different pattern of illicit financial flows. Angola was relatively higher than South Africa in absolute terms, estimating illicit financial flows as a proportion of their respective country's GDP. But in quantum terms, illicit outflow is higher in South Africa while inflow is higher in Angola.

The governments of the two countries need to improve on the financial regulatory measures to curb illicit financial flows. Although, the increase in the real GDP of South Africa was 1.3% in 2015 but it declined to 0.6% in 2016 and rose to 1.3% in 2017 (South African National Treasury), Angola real growth rate was 0.10% in 2016 and dropped to (2.5%) in 2017 (African Development Bank 2017). In the upper middle-income group, in spite of the declining real GDP growth rate, illicit financial flows to GDP were high in quantum terms and in comparison to the GDP growth rate. It can be inferred that resources, which should have been used for developmental purposes are lost to illicit financial outflows.

4.3 Lower Middle Income Countries

Tables 4 and 5 contain the records of illicit financial flows of lower middle-income countries comprising of Cote d'Ivoire and Nigeria respectively. Both countries experienced both inflow and outflow of illicit funds in different years and for different amounts. However, Nigeria experienced a more substantial amount of illicit financial flows compared to Cote d'Ivoire. This may be partially due to the size of the economy and for lack of data for 2014-15 (uses of funds) in the case of Cote d'Ivoire. Cote d'Ivoire experienced the highest illicit outflow in 2013 and the least in 2006 for US\$ 1,663,119 and US\$ 733,553 respectively. The illicit financial outflow was a negative of (US\$ 11,806,936) in 2012 and in 2005 it was (US\$ 806,360).

In Nigeria (Table 5) data span is complete the highest illicit financial outflow was US\$ 31,898,218 in 2009 followed by 2014 for US\$ 26,073,791 while the least outflow was recorded in 2011 for US\$ 4,377,217. The inflow of the illicit funds was highest in 2005 with a negative of (US\$ 45,175, 610) thereafter it declined slightly in 2006 but substantially in 2007, 2008, and 2010 representing (US\$ 41, 486, 916), (US\$7,426,114), (US\$ 1,534,436) and (US\$ 1,164,043) respectively.

The aggregate illicit financial inflows and outflows of money for the two countries are as shown in Table 8. The aggregate illicit outflow of money for Nigeria was US\$87,739,590 and inflow was US\$114,410,096 representing an average of about 9.77% as a proportion of the GDP in absolute terms. The net illicit financial flow as a proportion of the GDP was (4.37%). In case of Cote d'Ivoire, the aggregate illicit inflow of money was US\$5,453,123 while the outflow of illicit financial flows was US\$21,744,347. This represents an average of 9.65% of the absolute illicit financial flows as a proportion of GDP and (5.80%) of net inflow as a proportion GDP. The results of the lower middle-income countries suggest that both countries have a relatively close proportion of absolute illicit financial flows as a proportion of their respective country's GDP. But in quantum terms, the amount of illicit financial flows in Nigeria was substantially higher than Cote d'Ivoire for both the inflows and outflows Cote d'Ivoire GDP annual growth rate was 9.16% in 2015 and it dropped to 8.77% in 2016 showing a decline of 0.39% (World Bank 2017). In case of Nigeria, the GDP growth rate dropped to a negative of -1.6% in 2016 but the country is expected to return to the positive growth rate of about 2.2% in 2017 (African Economic Outlook 2017). The two lower middle-income countries experienced a high inflow of illicit financial inflows but their GDP still dropped with Nigeria experiencing a negative real economic growth rate in 2016.

4.4 Low-Income countries

The data of the two income countries considered in this paper are contained in Tables 6 and 7. Mali experienced illicit financial outflows flows in all the years during the period of the study except for 2006. The highest outflow occurred in 2010 and the least was in 2005 for US\$ 1,676,696 and US\$259,926 respectively. The only illicit financial outflows experienced by the country in the period of the study occurred in 2006 for (US\$ 349,035), as indicated in Table 6.

In Tanzania, financial illicit outflows also occurred every year just like Mali except for 2006 when an inflow of (US\$8,082,969) was experienced by the country. The financial inflow experienced by Tanzania was substantially higher than that of Mali incidentally, in the same year. The highest illicit financial outflows in Tanzania was in 2013 and the least was in 2007 for US\$7,712,241 and US\$1,774,782 respectively.

In Table 8, the average proportion of illicit financial flows to GDP in absolute terms for the period of the study was 11.41% and 17.02% for Mali and Tanzania respectively while the average net illicit financial flow was 2.59% and 9.20% for Mali and Tanzania respectively. The inference from the results of this group is that outflow of illicit funds flow was greater the inflow for the two countries but Tanzania was higher than Mali. The outflow of illicit money is suggestive of the fact that no benefit is derived by both the private and public sector.

In Tanzania, real GDP growth rate was estimated at 7.2% and the same position was projected for 2017 (African Economic Outlook 2017). In case of Mali, the economic growth

rate was 5.3% in 2016 and this is expected to be maintained in 2017 due to consistent domestic demand in the country (African Development bank 2017).

4.5 Aggregate illicit financial outflows by country

Chart 1, shows the aggregate illicit total financial outflows for each country across the income level in the period 2005-2015. The chart is derived from the summary of the individual country indicated in Table 8 column 3. Out of a total illicit financial outflow of US\$ 401,762,657 Million in the period of the study, South Africa experienced the highest outflow of 49% followed by Nigeria 22% and third is Angola with 13%. Closely following is Tanzania 12% while Mali came fifth with 2% and Seychelles and Cote d'Ivoire were even at 1% respectively.

The high share of illicit outflows by South Africa and Nigeria may be partly related to the size of net inflow of FDI into the two countries. In the period of the study, South Africa as an emerging economy has a relatively higher net inflow of FDI and by extension, the level of business activities by foreign firms may be higher. Activities of illicit financial flows due to tax avoidance and or money laundry may be more prevalent in both Nigeria and South Africa compared to other countries in the sample. This assumption is further buttressed by the fact that South Africa and Nigeria though are of different income group share illicit financial flows of the sample of the study while the other five countries shared 28%.

In terms of income category, the upper middle income had the highest illicit financial outflow of 62% followed by the lower middle income comprising of Nigeria and Cote d'Ivoire, which shared 23% while Mali and Tanzania came third with 14% and Seychelles is last with 1%. This in spite of the fact that Seychelles level of financial openness is the highest though not the biggest recipient of net FDI among the countries, it has the least illicit financial flows among the countries. In terms of financial openness, Tanzania came second but the level of illicit financial flows is still relatively smaller compared to South Africa and Nigeria whose illicit financial flows are high with low financial openness (See Tables 1-7 for the analysis of financial openness of each country as defined by the UNCTAD *de facto* measure of financial openness

4.6 Aggregate illicit financial inflows by country

Chart 2 indicates the level of illicit financial inflows. That chart is derived from column 4 of Table 8. It shows that out of a total illicit financial outflow of US\$259,023,243 million by the sample countries, the pattern of each country's contribution to the illicit financial inflows differs compared to the illicit outflows. Under this circumstance, in the period 2005-2015, inflow into Nigeria was 44% of the total financial illicit inflows for the sample countries followed by Angola with 41% and third in rank is Cote d'Ivoire at 8%. The two countries in the lower middle-income level in West Africa (Nigeria and Cote d'Ivoire) share 52% of the total illicit financial inflows in the period of the study.

The second in rank is Angola that shares 41% of the total illicit financial inflow for the sample countries while South Africa is fourth with 3% of the total illicit financial inflows. The upper-income level countries share 44% of illicit financial inflow with Angola in the substantial lead and a marginal contribution of 3% by South Africa. Seychelles is the least in this category followed by Mali and Tanzania who shares 1% and 3% respectively.

4.7 Summary of Comparative Analysis

The summary of the comparative analysis in Table 9 indicates that Seychelles, as a high-income country experienced a relatively low amount of illicit financial flows compared to other countries in the sample. However, comparing illicit absolute financial flows as a proportion of GDP, it came second with 28.07% illicit financial flows.

In the same Table, the upper middle-income category, exhibit different patterns of illicit financial flows. South Africa was relatively higher than Angola in quantum terms but 62% of total illicit financial outflows occurred in this income group and 44% for illicit financial inflow. In absolute terms, the income group came third with 23.33% representing the proportion of illicit financial flows to the GDP

The results of the lower middle-income countries as indicated in Table 8 suggest that both countries have a relatively close proportion of absolute illicit financial flows as a proportion of their respective country's GDP as they account for 19.42%, which made them the fourth in the rank of income group. But in quantum terms, the amount of illicit financial outflows of the two countries is 52% financial illicit inflow and 23% outflow however, Nigeria's experience was substantially higher than Cote d'Ivoire for both the inflows and outflows (Table 9).

The results of the low-income group indicate that outflow of illicit funds was relatively greater than others inflow for the two countries but Tanzania was higher than Mali. The estimation of absolute illicit outflow as a proportion of the GDP of the two low-income countries was the highest at 28.43% in the period of the study.

5.0 Conclusion and Recommendations

The paper employs the World Bank Residual Model for determining the level of illicit financial flows in a sample of seven countries in SSA. Evidence from the study shows that illicit financial flows prevail in all the countries in the sample unabated. The economic implications of this phenomenon are that the perpetuation of financial illicit flows affects negatively the country's potential to improve their national income. Due to loss of such financial resources to illicit transfers out of the country.

It has been widely discussed in public official circles, that illicit financial transfers most often result into the reduction of public investment as well as private investment for the benefit of the people. What the government losses in from tax income, money laundering and some other clandestine transfers implies the possibility of a decline in education infrastructure, provision of basic learning materials, scholarship for gifted and brilliant indigent students. Such illicit outflows also affect the provision of other public goods like health facilities, improvement and maintenance of road network as well as multiplication of social problems if the level of unemployment continues to increase.

Based on the sample, this study has been able to establish that in quantum terms, upper middle income experienced the highest amount (US\$) of illicit financial flows followed by lower middle-income while the least was Seychelles as the only high-income country in SSA. In terms of the proportion of illicit financial flows to GDP our findings reveal a different hierarchy amongst the income groups. Based on absolute estimates of illicit financial flows to the GDP low-income countries was in the lead followed by high-income while upper middle- and lower middle-income groups came third and fourth respectively

Based on the sample, the paper concluded that low-income countries experienced the highest absolute illicit financial outflow as a proportion of GDP while in quantum terms upper middle-income countries experienced the highest amount (US\$) of illicit financial outflows. The inference from this finding is that in spite of the low level of income of some SSA countries illicit financial transfer may still be highly prevalent at a level which may be relatively worse than what is being experienced in the supposedly other higher rank income groups in SSA.

The unabatingly experience of SSA countries of outflow/inflow of illicit money has negative implications as mentioned earlier. Therefore, the following policy recommendations are desirable in curbing illicit financial flows in the countries considered in this paper as well as other countries in Africa. The checking of the value of import and export of firms through a multiple agencies set up through private and public sector participation apart from port (sea or air) process may be entrenched in the process validating import/export invoices.

SSA countries should consider the establishment of regulatory agencies that will be responsible for monitoring the business activities of multinationals in order to minimize tax evasion that may be illegally transferred out of the country. The banking system is always reluctant to the disclosure of financial crimes due to their duty of secrecy. In order to overcome this hurdle, enabling laws should be made to liberalize the process of reporting financial crimes suspected by banks in the interest of the public.

The process of doing business in most SSA countries do not conform to international best practices in view of this those countries that are lacking in this area should step-up and design a more efficient process of trailing financial transactions so as to track down in good time any of such financial deals that are considered illegal or suspicious. Fiscal transparency should be adopted by all SSA countries as a means of reducing corruption and eventual curtailment of misallocation of government financial resources.

References

- Africa Economic Outlook. (2017), Tanzania Economic Brief Available at: <http://www.africaneconomicoutlook.org/en/country-notes/tanzania>
- Africa Economic Outlook. (2017), Nigeria Economic Brief Available at: <http://www.africaneconomicoutlook.org/en/country-notes/nigeria>
- Africa Economic Outlook. (2017), Seychelles Economic Brief Available at: <http://www.africaneconomicoutlook.org/en/country-notes/seychelles>
- African Development Bank. (2017), Mali Economic Outlook Available at: <https://www.afdb.org/en/countries/west-africa/mali/mali-economic-outlook/>
- African Development Bank, (2017), Angola Economic Outlook Available at: <https://www.afdb.org/en/countries/southern-africa/angola/angola-economic-outlook/>
- AU/ECA, (2015), Thabo Mbeki Briefing on Illicit Financial Flows from Africa. A report to the African Union Commission/United Nations Economic Commission for Africa (AUC/ECA) Available at: www.uneca.org
- Baker, R. W. (2005), *Capitalism's Achilles Heel: Dirty Money and How to Renew the Free-Market System*. Hoboken, NJ: John Wiley and Sons.
- International Monetary Fund. (2015), *International Financial Statistics*, Washington, D.C.
- Kar, D. and Catwright-Smith, D. (2010), *Illicit financial flows from Africa - Hidden Resources for Development* Washington DC; available at: www.gfip.org
- Mevel, S, Siope, V. O. and Karingi S. (2013), *Qualifying illicit financial flows from Africa through trade mis-pricing and assessing their incidence on Africa Economics* A paper prepared at the 16th GTAP Conference Shanghai China 12 -14 June.
- Ndikumana, L. and Bogce, J. K. (2010), *Measurement of capital flight: Methodology and Results for sub-Saharan African countries*. *Africa Development Review* Vol. 22, No 4, December, 471-481
- South Africa National Treasury. (2017), *Economic Overview* Available at: <http://www.treasury.gov.za/documents/national%20budget/2017/review/Chapter%202.pdf>
- UNECA. (2012), *Illicit financial flows from Africa scale and Development challenges*, Background Document, ECA, Addis Ababa.
- World Bank, (2015), *World Development Indicator Data Base*, Washington, D.C.
- World Bank, (2017), *The World Bank In Côte d'Ivoire*. Available at: <http://www.worldbank.org/en/country/cotedivoire>

Table 1: High Income (Seychelles)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Sources of funds:											
Debt obtained by public sector	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Net inflow of FDI	80729	140556	175928	179825	168252	159795	143241	613208	572289	108307	105894
Total sources (A)	80729	140556	175928	179825	168252	159795	143241	613208	572289	108307	105894
Uses of funds:											
Net financial account balance	-144472	-118923	-156509	-178922	-3552	135551	-150464	-198988	-400584	-191931	215761
Foreign reserves	22000	n.a	n.a	46800	132800	81100	36000	27900	96400	42500	72600
Total uses (B)	-122472	-118923	-156509	-132122	129248	216651	-114464	-171088	-304184	-149431	288361
(A) - (B)	203201	259479	332437	311947	39004	-56856	257705	784296	876473	257738	-182467
Illicit cash outflow	203201	259479	332437	311947	39004		257705	784296	876473	257738	
Illicit cash inflow						-56856					-182467
GDP	919103	1016418	1033561	967200	847397	969936	1065826	1134267	1411061	1422530	1437722
illicit cash flow (% of GDP)	22.11	25.53	32.16	32.25	4.60	-5.86	24.18	69.15	62.11	18.12	-12.69
Financial Openness is the FDI Net Inflow (% of GDP)	8.78	13.83	17.02	18.59	19.86	16.47	13.44	54.06	4.06	7.61	7.37

Note: Figures are in Current US\$

Sources: World Bank Development Indicator; IMF 6th Edition Country BOP country Data

n.a – not available

Table 2: Upper Middle Income (Angola)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Sources of funds:											
Debt obtained by public sector	1351951	-2170385	1883012	3459794	944259	1831442	2058495	1678226	4146622	4476982	-522710
Net inflow of FDI	-1303837	-37715	-893342	1678971	2205298	-3227211	-3023770	-6897954	-7120017	1921670	928216
Total sources (A)	48114	-2208100	989670	5138765	3149557	-1395769	-965275	-5219728	-2973395	6398652	875943
Uses of funds:											
Net financial account balance	4571463	10957772	8947428	5971223	-7103015	7746598	13072527	11408737	8804075	-3433642	-995671
Foreign reserves	1817000	-	-	6673000	-5004000	5569000	8724000	4112000	-222000	-3930000	-3059000
Total uses (B)	6388463	10957772	8947428	12644223	-12107015	13315598	21796527	15520737	8582075	-7363642	-1301571
(A) - (B)	-6340349	-13165872	-7957758	-7505458	15256572	-14711367	-22761802	-20740465	-11555470	13762294	2177511
Illicit cash outflow					15256572					13762294	2177511
Illicit cash inflow	-6340349	-13165872	-7957758	-7505458		-14711367	-22761802	-20740465	-11555470	-	-
GDP	28233713	41789479	60448921	84178033	75492385	82470913	104115923	115398371	124912063	126776874	10262692
illicit cash flow (% of GDP)	-22.46	-31.51	-13.16	-8.92	20.21	-17.84	-21.86	-17.97	-9.25	10.86	21.21
Financial Openness is the FDI Net Inflow (% of GDP)	-4.62	-0.09	-1.48	1.99	2.92	-3.91	-2.90	-5.98	-5.70	1.52	9.00

Note: Figures are in Current US\$

Sources: World Bank Development Indicator; World Bank International Debt Statistics and IMF 6th Edition Country BOP country Data

Table 3: Upper Middle Income (South Africa)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Sources of funds:											
Debt obtained by public sector	2,395,938	-200,565	-1,071,184	-191,594	3,035,535	13,958,949	5,277,205	14,950,802	-1,915,959	2,055,716	956,000
Net inflow of FDI	6,522,098	623,292	6,586,792	9,885,001	7,624,490	3,693,272	4,139,289	4,626,029	8,232,519	5,791,659	1,521,000
Total sources (A)	8,918,036	422,727	5,515,608	9,693,407	10,660,025	17,652,221	9,416,494	19,576,831	6,316,560	7,847,375	2,477,000
Uses of funds:											
Net financial account balance	-6,826,499	-12,432,250	-15,823,304	-9,770,188	-14,376,174	-7,508,503	-9,052,229	-20,801,113	-13,571,579	-13,917,745	11,645,000
Foreign reserves	5,766,000			2,226,000	4,171,000	3,796,000	4,709,000	1,198,000	499,000	1,399,000	-757,000
Total uses (B)	-1,060,499	-12,432,250	-15,823,304	-7,544,188	-10,205,174	-3,712,503	-4,343,229	-19,603,113	-13,072,579	-12,518,745	10,888,000
(A) - (B)	9,978,535	12,854,977	21,338,912	17,237,595	20,865,199	21,364,724	13,759,723	39,179,944	19,389,139	20,366,120	-8,411,000
Illicit cash outflow	9,978,535	12,854,977	21,338,912	17,237,595	20,865,199	21,364,724	13,759,723	39,179,944	19,389,139	20,366,120	
Illicit cash inflow											-8,411,000
GDP	257,772,766	271,638,630	299,415,359	286,769,850	295,936,471	375,349,396	416,418,862	396,342,265	367,593,603	351,304,929	314,571,000
illicit cash flow (% of GDP)	3.87	4.73	7.13	6.01	7.05	5.69	3.30	9.89	5.27	5.80	-2.67
Financial Openness is the FDI Net Inflow (% of GDP)	1.05	2.17	2.18	3.76	2.38	1.55	1.79	1.21	1.42	1.56	0.47

Note: Figures are in Current US\$

Sources: World Bank Development Indicator; World Bank International Debt Statistics and IMF 6th Edition Country BOP country

Data

Table 4: Lower Middle Income (Cote d'Ivoire)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Sources of funds:											
Debt obtained by public sector	-1,116,613	857,252	823,957	-1,019,007	2,087,021	-3,313,112	483,100	-4,875,817	1,230,889	181,243	728,000
Net inflow of FDI	348,921	350,653	443,216	466,490	396,031	358,119	301,577	330,274	407,476	438,773	430,000
Total sources (A)	-767,692	1,207,905	1,267,173	-552,517	2,483,052	-2,954,993	784,677	-4,545,543	1,638,365	620,016	1,158,000
Uses of funds:											
Net financial account balance	186,668	474,352	-10,944	497,005	1,805,541	1,617,929	2,772,795	7,714,393	-156,754		
Foreign reserves	-148,000			-136,000	915,000	566,000	853,000	-453,000	132,000		
Total uses (B)	38,668	474,352	-10,944	361,005	2,720,541	2,183,929	3,625,795	7,261,393	-24,754	0	
(A) - (B)	-806,360	733,553	1,278,117	-913,522	-237,489	-5,138,922	-2,841,118	-11,806,936	1,663,119	620,016	1,158,000
Illicit cash outflow		733,553	1,278,117						1,663,119	620,016	1,158,000
Illicit cash inflow	-806,360			-913,522	-237,489	-5,138,922	-2,841,118	-11,806,936			
GDP	17,084,929	17,800,887	20,343,635	24,224,903	24,277,494	24,884,505	25,381,617	27,040,562	31,264,187	34,217,693	31,759,000
illicit cash flow (% of GDP)	-4.72	4.12	6.28	-3.77	-0.98	-20.65	-11.19	-43.66	5.32	1.81	3.65
Financial Openness is the FDI Net Inflow (% of GDP)	2.04	1.97	2.18	1.93	1.63	1.44	1.19	1.22	1.30	1.24	1.36

Note: Figures are in Current US\$

Sources: World Bank Development Indicator; World Bank International Debt Statistics and IMF 6th Edition Country BOP country Data

Table 5: Lower Middle Income (Nigeria)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Sources of funds:											
Debt obtained by public sector	-12,302,079	-16,419,217	-214,519	287,380	319,472	469,689	1,245,602	743,348	1,606,361	847,121	1,499,000
Net inflow of FDI	4,982,534	4,854,417	6,034,971	8,196,607	8,554,841	6,026,232	8,841,113	7,069,934	5,562,874	4,655,849	3,128,000
Total sources (A)	-7,319,545	-11,564,800	5,820,452	8,483,987	8,874,313	6,495,921	10,086,715	7,813,282	7,169,235	5,502,970	4,627,000
Uses of funds:											
Net financial account balance	26,520,065	29,922,116	13,246,566	8,370,423	-12,508,905	-2,033,036	5,403,598	12,375,898	-7,685,845	-12,186,821	1,049,000
Foreign reserves	11,336,000			1,657,000	-10,515,000	9,693,000	305,900	11,099,000	-980,000	-8,384,000	-5,977,000
Total uses (B)	37,856,065	29,922,116	13,246,566	10,027,423	-23,023,905	7,659,964	5,709,498	23,474,898	-8,665,845	-20,570,821	-4,927,000
(A) - (B)	-45,175,610	-41,486,916	-7,426,114	-1,543,436	31,898,218	-1,164,043	4,377,217	-15,661,616	15,835,080	26,073,791	9,555,000
Illicit cash outflow					31,898,218		4,377,217		15,835,080	26,073,791	9,555,000
Illicit cash inflow	-45,175,610	-41,486,916	-7,426,114	-1,543,436		-1,164,043		-15,661,616			
GDP	112,248,353	145,429,765	166,451,213	208,064,754	169,481,318	367,127,873	408,707,161	457,061,383	508,696,795	546,682,345	486,792,000
illicit cash flow (% of GDP)	-40.25	-28.53	-4.46	-0.74	18.82	-0.32	1.07	-3.43	3.11	4.77	1.96
Financial Openness is the FDI Net Inflow (% of GDP)	4.44	3.34	3.63	3.94	5.05	1.63	2.15	1.53	1.08	0.81	0.63

Note: Figures are in Current US\$

Sources: World Bank Development Indicator; World Bank International Debt Statistics and IMF 6th Edition Country BOP country Data

Table 6: Low Income (Mali)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Sources of funds:											
Debt obtained by public sector	-33,289	-1,494,707	264,561	177,946	17,528	261,407	235,920	281,026	300,053	27,129	223,000
Net inflow of FDI	160,218	148,196	206,065	266,433	646,609	371,570	556,147	397,865	307,853	144,023	152,000
Total sources (A)	126,929	-1,346,511	470,626	444,379	664,137	632,977	792,067	678,891	607,906	171,152	376,000
Uses of funds:											
Net financial account balance	-255,997	2,002,524	-230,039	-665,713	-317,417	-899,719	-319,156	-188,601	-149,332	-484,084	-250,000
Foreign reserves	123,000			46,000	482,000	-144,000	79,000	-60,000	-93,000	-427,000	
Total uses (B)	-132,997	2,002,524	-230,039	-619,713	164,583	-1,043,719	-240,156	-248,601	-242,332	-911,084	-250,000
(A) - (B)	259,926	-3,349,035	700,665	1,064,092	499,554	1,676,696	1,032,223	927,492	850,238	1,082,236	376,000
Illicit cash outflow	259,926		700,665	1,064,092	499,554	1,676,696	1,032,223	927,492	850,238	1,082,236	376,000
Illicit cash inflow		-3,349,035									
GDP	6,245,032	6,899,780	8,145,695	9,750,823	10,181,021	10,678,749	12,978,108	12,442,748	12,813,249	14,004,068	12,746,000
illicit cash flow (% of GDP)	4.16	-48.54	8.60	10.91	4.91	15.70	7.95	7.45	6.64	7.73	2.95
Financial Openness is the FDI Net Inflow (% of GDP)	2.57	2.15	2.53	2.73	6.35	3.48	4.29	3.20	2.32	1.00	2.24

Note: Figures are in Current US\$

Sources: World Bank Development Indicator; World Bank International Debt Statistics and IMF 6th Edition Country BOP country

Data

Table 7: Low Income (Tanzania)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Sources of funds:											
Debt obtained by public sector	-82,206	-3,993,850	728,859	529,884	928,777	960,663	837,593	927,825	1,745,908	799,157	778,859
Net inflow of FDI	935,521	403,039	581,512	1,383,260	952,630	1,813,200	1,229,361	1,799,646	2,087,261	2,044,550	1,960,859
Total sources (A)	853,315	-3,590,811	1,310,371	1,913,144	1,881,407	2,773,863	2,066,954	2,727,471	3,833,169	2,843,707	2,739,718
Uses of funds:											
Net financial account balance	-1,538,871	4,492,158	-464,411	-2,442,792	-1,615,462	-2,690,709	-3,045,104	-3,553,439	-4,513,072	-4,149,741	-3,795,859
Foreign reserves	-252,000			108,000	681,000	378,000	-162,000	292,000	634,000	-283,000	-292,000
Total uses (B)	-1,790,871	4,492,158	-464,411	-2,334,792	-934,462	-2,312,709	-3,207,104	-3,261,439	-3,879,072	-4,432,741	-4,087,859
(A) - (B)	2,644,186	-8,082,969	1,774,782	4,247,936	2,815,869	5,086,572	5,274,058	5,988,910	7,712,241	7,276,448	6,826,577
Illicit cash outflow	2,644,186		1,774,782	4,247,936	2,815,869	5,086,572	5,274,058	5,988,910	7,712,241	7,276,448	6,826,577
Illicit cash inflow		-8,082,969									
GDP	16,929,977	18,610,460	21,501,741	27,368,386	28,573,777	31,407,909	33,878,632	39,087,748	44,333,456	48,197,218	45,628,859
illicit cash flow (% of GDP)	15.62	-43.43	8.25	15.52	9.85	16.20	15.57	15.32	17.40	15.10	14.96
Financial Openness is the FDI Net Inflow (% of GDP)	5.53	2.17	2.70	5.05	3.33	5.77	3.63	4.60	4.71	3.47	3.43

Note: Figures are in Current US\$

Sources: World Bank Development Indicator; World Bank International Debt Statistics and IMF 6th Edition Country BOP country Data

Table 8: Summary of Illicit Financial Inflow/Outflow of Sample Countries

Country Name	Income Level	Total Financial Outflows	Total Financial Inflows	Absolute Financial Average % to GDP (2005-2015)	Illicit Financial Flows Average % to GDP (2005-2015)	Net Illicit Financial Flows
Seychelles	High	3,322,280	239,323	28.07		24.70
Angola	Upper middle	50,794,036	104,738,541	17.75		-8.24
South Africa	Upper middle	196,335,868	8,411,293	5.58		5.34
Cote d'Ivoire	Lower Middle	5,453,123	21,744,347	9.65		-5.80
Nigeria	Lower Middle	87,739,570	112,457,735	9.77		-4.36
Mali	Low	8,469,913	3,349,035	11.41		2.59
Tanzania	Low	49,647,867	8,082,969	17.02		9.12
Total		401,762,657	259,023,243			

Note: Figures are in Current US\$

Absolute illicit financial flows are based on the information in row 14 Tables 1-7 without considering the signs

Net illicit financial flows considered the (+) and (-) negative signs in row 14 Tables 1-7

Source: Compiled Authors

Table 9: Summary of Illicit Financial Inflow/Outflow and proportion of GDP by Income Group

Income Group	Illicit Outflows (% of total US\$)	Illicit inflows (% of total US\$)	Absolute Illicit outflows (% of GDP)
High	1		28.07
Upper Middle	62	44	23.33
Lower Middle	23	52	19.42
Low	14	4	28.43
Total	100	100	

Source: Compiled Authors

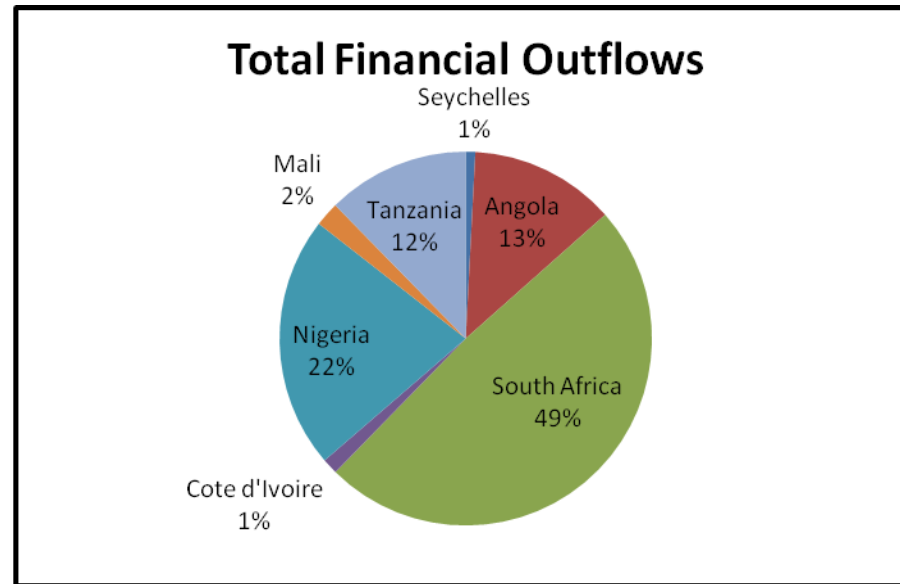


Chart 1: Proportion of financial outflows by country (2000-2015)

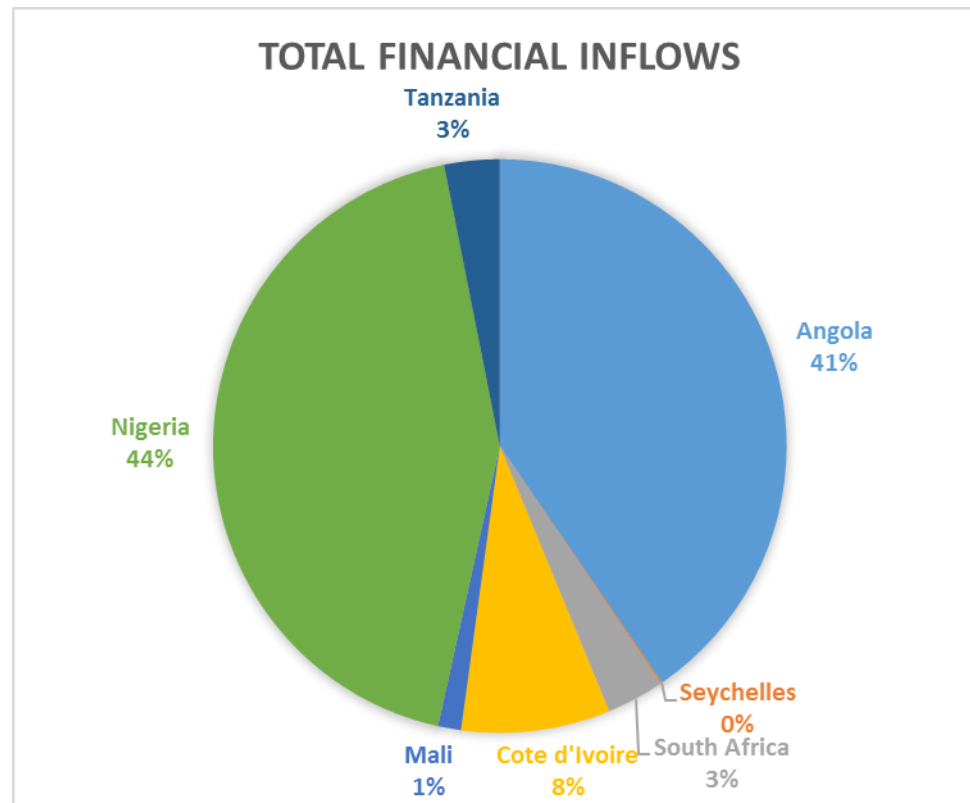


Chart 2: Proportion of financial inflows by country (2000-2015)