### TRADE MISINVOICING, EXTERNAL DEBT AND SUSTAINABLE DEVELOPMENT: A NIGERIAN EXAMPLE

#### Collins C Ngwakwe\*

#### Abstract

This paper evaluated how trade misinvoicing orchestrates external debt in Nigeria and its obstructive tendencies on Nigeria's sustainable economic development. The paper is pertinent, given that Nigeria is among the top ten developing countries in the world who are victims of substantial illicit trade misinvoicing outflows. The methodological approach is a mix of descriptive analysis (using tables and graphs) and a t-test of difference in means between trade misinvoicing outflow from Nigeria, external debt and official development assistance (OD) in Nigeria for the period 2003 - 2012. Findings indicate that as trade misinvoicing outflow increased during the period 2003 -2012, Nigeria's external debt increased yearly. Results from the statistical t-test showed that the mean difference in trade misinvoicing outflow is significantly greater than the mean differences in external debt and official development assistance received into Nigeria. This finding attests to the huge internal financial resources that Nigeria lost during the period 2003 - 2012 through illicit trade misinvoicing outflow. The analysis further disclosed that trade misinvoicing outflow has hampered Nigeria's stride to sustainable economic development given the record increases in unemployment, poverty, lack of access to sanitation facilities, low percentage of qualified health staff to child birth and a widening income inequality as measured by GINI index. The paper concludes that the drainage of Nigeria's internal financial resources through illicit trade misinvoicing has denied Nigeria the needed finance to enhance the actualisation of sustainable economic development. Recommendations are proffered to assist in halting trade misinvoicing outflow from Nigeria.

**Keywords:** Trade Misinvoicing, External Debt, Sustainable Development, Illicit Outflow, Taxation, Poverty, Nigeria

\*Turfloop Graduate School of Leadership, Faculty of Management and Law, University of Limpopo, South Africa

#### 1 Introduction

This paper attempts to examine how trade misinvoicing has orchestrated external borrowing in Nigeria and its obstreperous propensities in the achievement of Nigeria's sustainable economic development. The paper is deemed pertinent given that Nigeria and South Africa are the only African countries rated among the top ten developing countries in the world who are victims of substantial illicit trade misinvoicing outflows. It is apparent that the corporate and other informal businesses abuse the national and international trading and tax systems, hence many commercial transactions' real values are advertently obscured through trade misinvoicing to obviate taxation in host countries, which thus render the developing nations poorer, hence draining the necessary resources for poverty eradication, sustainable growth and development (Global Financial Integrity, 2015a; Wu, 2010). There is a growing shocking statistic indicating the extent to which trade mininvoicing schemes, via illicit financial flows, (Global Financial Integrity [GFI], 2015a) shift finances and other assets abroad to avoid tax obligations in developing host countries (Wu, 2010). Surprisingly, this seemingly obscured genre of a corporate profiteering scheme does not seem to receive the expected societal attention and condemnation compared to the prevalent censure of public sector corruption. Fortunately, the Global Financial Integrity (GFI) is doing a sterling job in this regard by blowing the whistle to alert the world about the sustainable development implications of resource deprivation meted out to developing nations through illicit financial flows of which tax revenue loss through trade misinvoicing constitutes an incredibly gargantuan amount, hence the GFI bemoans that of all the illicit financial flows: "The proceeds of commercial tax evasion, mainly through trade mispricing, are by far the largest component" (Global Financial Integrity, 2010:1). Accordingly recent official statistics indicate that trade misinvoicing constitutes about 80% of all illicit financial outflows (IFF) from developing nations (Global Financial Integrity, 2013). This heinous amount of loss in government revenue may appear somewhat concealed probably because of foreign direct investment (FDI) inflows to development countries (UNCTAD, 2014); however a disturbing revelation about the FDI inflows to developing countries is that firstly, the amount of



trade misinvoicing outflow and other illicit financial outflow from developing countries dwarf the amount of FDI inflow to these countries. Secondly is the concern raised by Christian Aid (2013) that a greater percentage of the FDI come from tax havens and/or secrecy jurisdictions, where also it is alluded that money siphoned from developing nations through illicit financial flows find its destination - give little and take more conundrum, or round tripping; according to Reuters (2013). According to Global Financial Integrity (2014), about 80% of illicit financial outflows from all the developing countries are perpetrated via trade misinvoicing. In Sub-Saharan Africa alone, over 68% of illicit financial outflow is via trade misinvoicing (Global Financial Integrity, These figures far exceed the official 2014:25). development assistance received by developing nations:

"The amount of money that has been drained out of Africa – hundreds of billions decade after decade – is far in excess of the official development assistance going into African countries,"(Global Financial Integrity, 2010: 1)

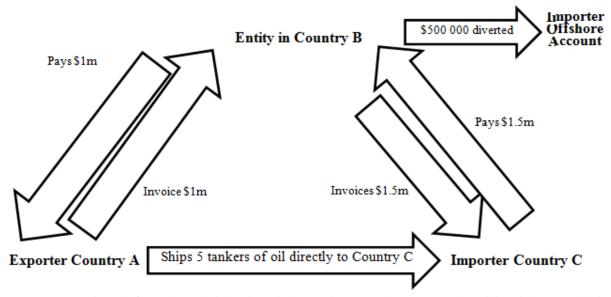
The above revelation seems to infer that if money that is siphoned from developing countries via trade misinvoicing is retained, the rate of poverty and unemployment may decline as developing countries such as Nigeria would have more resources to provide health care, education and infrastructure (Tafirenyika, 2013; OECD, 2014). However, given the staggering amount of funds that Nigeria loses to trade misinvoicing outflow annually, little revenue is left for the government to provide sufficient social and infrastructure services. The alternative thus is heavy reliance on external borrowing. But external debt accumulation with associated cost of capital tends to pose an impediment to sustainable socio-economic development. Accordingly, the question that underpins this paper is how trade misinvoicing outflow compares with the growth of external debt and how this has posed an obstacle to sustainable socio-economic development in Nigeria. Accordingly, the objective of this paper is to discuss and illustrate how trade misinvoicing outflow orchestrates reliance on external debt and the concomitant implication for sustainable socio-economic development in Nigeria.

The rest of this paper is organised as follows; the next section, following the introduction, presents the review of related literature. The section after that presents the method, analysis and discussion. The final section presents the conclusion.

#### 2 Related literature

According to (Buehn & Eichler, 2011, p.1263) "trade misinvoicing occurs if the true value of exports or imports deviates from the amount of exports or imports businesses report to the authorities". It is a scheme for siphoning money across international borders by deliberately over or under invoicing the price of commercial transactions, manipulation of the quantity and quality of transactions, such that the invoice submitted to the customs fail to reflect the real price of the transactions (Global Financial Integrity, 2015b). A schematic representation of the trade misinvoicing process is presented in Figure 1.

Figure 1. How Trade Misinvoicing Occurs



Source: adapted from the Global Financial Integrity (2015b, p.3) Trade misinvoicing, available at:http://www.gfintegrity.org/issue/trade-misinvoicing/ [accessed April 10 2015].

The above chart depicts a typical case of import over-invoicing adapted from the Global Financial Integrity (2015b:3), although the importer in country C's real value of imported oil from country A is \$1m,



it uses its trade intermediary in country B to re-issue an invoice which increases the amount of import to \$1.5m; hence the importer in country C pays \$1.5m to its intermediary in country B who in turn settles the country A exporter \$1m; the importer in country C subsequently uses its intermediary in country B to send the \$500 000 over-invoiced amount to its offshore bank account (see: e.g. Global Financial Integrity, 2015b:3). See also an example of a recent case in the USA about import-export over and under invoicing instances (Buenos Aires Herald, 2014). For more detailed information on import and export misinvoicing see Financial Action Tax Force, (2006). Trade misinvoicing moves money in and out of a country to the benefit of business and to the detriment and denial of tax revenue to the countries affected: "money is moved out of a country by under-invoicing exports or over-invoicing imports. Money is moved into a country by over-invoicing exports or underinvoicing imports" (International Trade Alert, 2015:1). Import over-invoicing may be prevalent in developing countries whose customs have adopted import price surveillance to protect local infant industries from unfairly low prices of imported goods:

"One possible impact of the import surveillance mechanism is over invoicing of imports in order to avoid surveillance procedures since the procedures are applied to goods with prices under a predefined reference price" (Atkas and Aldan, 2013: 1)

The importer makes illicit gain in two ways, the importer over-invoices to avoid customs surveillance and the payment of relevant customs import duties; again the importer also uses the over-invoiced import amount to overstate the operating expenses in the annual income statement, leading to understatement of the period income and hence avoids taxation – in turn, the country loses customs revenue and corporate income tax revenue resulting from a single misinvoicing scheme. An aggregate loss of revenue from numerous importers and exporters in a developing country leads to millions of dollars loss in revenue of a developing country.

It has therefore been established that a major conduit for illicit financial outflow from developing countries is trade misinvoicing (Aizenman, 2008; Global Financial Integrity, 2014). Aizenman posits that the greater the commercial openness in an economy, the greater the degree with which trade misinvoicing orchestrates illicit financial outflow (Aizenman, 2008), and sub-Saharan Africa suffers heavy illicit outflow amounting to 5.5% of the region's GDP - making it the highest in terms of illicit outflow to GDP (Global Financial Integrity, 2014). Consequently, in order to finance development projects, the sub-Saharan African countries embark on international borrowings which in turn makes the region a net creditor to international finance institutions (Boyce & Ndikumana, 2001).

Accordingly, the Global Financial Integrity warns that national revenues drained through

commercial tax avoidance via trade misinvoicing is of a gargantuan proportion when compared to a small percentage (about 3%) of corruption's contribution to illicit financial outflow (Global Financial Integrity, 2014: 1). Nevertheless the small percentage of public sector corruption cannot be taken for granted as corruption is an incubator of trade misinvoicing schemes. "Corruption, while only a small share of overall illicit flows, is a cross-cutting driver of such flows and risks undermining any efforts to curb them" OECD (2014: 2). However some public sector corruption has been seen as being orchestrated by some corporates;

it is alluded that some huge corporate perpetrates trade misinvoicing by weakening the governance processes in some developing countries whose economies are far too low when compared to the wealth of some multinational firms with colossal affluence and influence; hence, with financial enticement, some multinationals wield intimidating control over the governmental processes of developing nations (see e.g. UNECA, 2013). Such weakening thus renders the government's arms vulnerable to corruption which thus opens up the channel for more trade misinvoicing and other forms of illicit financial outflows. The matter is made worse by weak regulations and laws in some developing nations (Amaeshi et al., 2006; Jansky, 2013) - these thus make the perpetrators of trade misinvoicing somewhat invincible. Consequently "Trade misinvoicing remains by far the most popular way to illicitly move money out of developing countries, comprising 77.8 percent of the global ten-year IFF total in real terms" (Global Financial Integrity, 2014: 15).

According to Global Financial Integrity (2014), trade misinvoicing accounts for 77.8% (roughly 80%) of illicit financial flows from developing nations and this decimates domestic resources and heightens poverty and thus retards development; this is also emphasised by the Organisation for Economic Corporation and Development (OECD):

"Illicit financial flows strip developing countries of resources that could be used to finance much needed public services, such as health care and education. A mere portion of these funds would have a significant positive impact: it is estimated that every \$100 million recovered could fund full immunisations for 4 million children or provide water connections for some 250 000 households in a developing country" (OECD, 2014: 3).

Trade misivoicing outflows from developing countries is therefore a bane to social and economic development because it:

"...drains hard currency reserves, heightens inflation, reduces tax collection, cancels investment, and undermines free trade. It has its greatest impact on those at the bottom of income scales in their countries, removing resources that could otherwise be



#### used for poverty alleviation and economic growth. (Global Financial Integrity, 2010: 1)

Illicit financial flows reduce the availability of funds to the government and thus widens income inequality (Jansky, 2013:6; UNECA, 2013). It also reduces private funds and contributes to low investment and hence unemployment (Jansky, 2013). Worse still is, according to UNECA (2013), trade misinvoicing and other illicit financial outflow schemes weaken governance. This is because, with their financial girth, huge companies penetrate government entities and with financial enticements (The Fiscal Times, 2011) they create a fissure along the channels of economic and fiscal policy monitoring systems and/or organs, such that these organs tend to turn a 'blind eye' when trade rules are flouted, (The Fiscal Times, 2011; Stephens, 2002). Furthermore, due to the huge investments of multinational entities, they tend to command an intimidating influence on government policies of most developing countries as the wealth of some multinational entities surpass the wealth of some developing countries (Gray & Bebbington, 1998; Sklair, 2002); "The largest TNCs have assets and annual sales far in excess of the GNP of most of the countries in the world (Sklair, 2002:36). Thus, advertently or inadvertently, some governments of developing economies kowtow to the seemingly colossal influence of multinationals; "the sheer size and power of the TNCs place them beyond the control of States - that TNCs are, indeed, no longer controllable" (Gray and Bebbington, 1998:.6)

The growth of trade misinvoicing is seen to elude control, given that many developing nations frail legislative and weak institutional have frameworks for law enforcement to stem the abuse of trade misinvoicing and other transfer pricing schemes (Jansky, 2013:6), these countries are thus vulnerable to a high loss of tax revenue with concomitant social cost consequence. Given the over 68% illicit financial outflow through trade misinvoicing schemes from Nigeria, efficiency of the regulatory system becomes doubtful (Amaeshi et al., 2006). Whilst it has been recognised that trade misinvoicing is a major conduit for drainage of finance from developing countries (Global Financial Integrity, 2014), corruption is recognised in the literature as an incubator and facilitator of illicit financial outflows orchestrated by companies and other entities (Christensen, 2012), hence policies that are designed to nip trade misinvoicing must also incorporate public sector venality. The following sections present a descriptive and quantitative comparison of trade misinvoicing, external debts and official development assistance in Nigeria.

#### 3 Methodology

In order to visualise the state of and apparent implication of trade misinvoicing outflow from

Nigeria, the researcher applied a mix of descriptive analyses approach (visual descriptions using tables and graphs and a quantitative summary of statistics in this case a t-test of difference in means) in the analysis of data between trade misinvoicing outflow from Nigeria, external debt and official development assistance (OD) in Nigeria for the period 2003 – 2012. Whilst researchers have disagreed about which method of presenting data is better - graphs or tables (Gelman, 2011), they however concur that tables and graphs are useful in research information communication (Gelma et al., 2002). Hence the researcher chose to utilise tables with graphs and charts because graphs communicate the information clearly to a wider audience and thus enhances the accessibility and understanding of research results (Kastellec & Leoni, 2007). In addition to tables and graphs, the researcher also applied the T-test of difference in means to ascertain which mean is greater and at what degree of significance exists between the means of trade misinvoicing outflow and external debt.

#### 4 Comparative Analysis of Illicit Financial Outflow (IFF) and Trade Misinvoicing outflow from Nigeria 2003-2012.

Sub-Saharan Africa represented 8.0 percent of combined illegal financial flows from the developing world for the period 2003-2012, and the two biggest African economies, South Africa and Nigeria, are amongst the top ten developing countries in the world with significant financial outflows through trade misinvoicing:

"There are two Sub-Saharan African countries in the top ten globally: Nigeria and South Africa. IFFs averaged 5.5 percent of the region's GDP over this ten-year period. A significant majority of IFFs from Sub-Saharan Africa – 68.2 percent – were due to trade misinvoicing." (Global Financial Integrity, 2014:25)

This implies that, out of the total illicit financial outflows from Nigeria during 2003 - 2012, more than 68% was through trade misinvoicing; translating this loss into a monetary amount, the total illicit financial outflows from Nigeria during 2003 – 2012 amounted to \$157.4bil (Global Financial Integrity, 2014:13) and a whopping fraction of this amount – 68% (\$107bil) was through trade misinvoicing (see tables and graphs in subsequent sections). Nevertheless, the GFI maintains that its figures are conservative estimates (Global Financial Integrity, 2014). It is thus likely that trade misinvoicing outflows from Nigeria during the period 2003 - 2012 may have been more than the aforesaid conservative amounts.

Table 2 and Figure 2 present a comparison of illicit financial outflow from Nigeria and trade misinvoicing component.



	US\$M	US\$M
	IFF	T.Misinvoicing (68% of IFF)
2003	0	0
2004	1680	1142.4
2005	17867	12149.56
2006	19159	13028.12
2007	19335	13147.8
2008	24192	16450.56
2009	26377	17936.36
2010	20780	14130.4
2011	20144	13697.92
2012	7922	5386.96
	157456	107070.1

#### Table 1. Illicit Financial outflows and Trade Misinvoicing Outflow from Nigeria 2003-2012

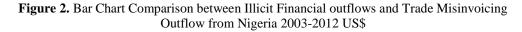
Source: author's table with Illicit Financial Flow data from Global Financial Integrity (2014:13); trade misinvoicing is computed by the author based on 68% ratio of total illicit financial flows from Nigeria as indicated by Global Financial Integrity (2014:25).

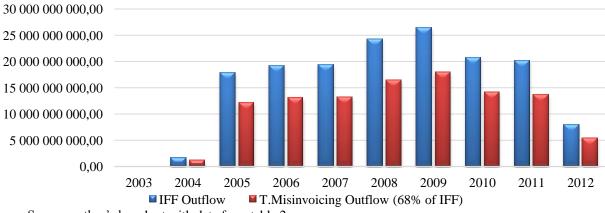
Given that the above amounts were presented in millions by the Global Financial Integrity (2014:13), the author converted these amounts to millions by multiplying each amount by one million (1 000 000), thus the actual amounts of illicit financial flows and associated 68% (Global Financial Integrity 2014:25) trade misinvoicing flows out of Nigeria is presented in Table 2.

<b>Table 2.</b> Comparison between Illicit Financial outflows and Trade Misinvoicing
Outflow from Nigeria 2003-2012

Year	IFF Outflow from Nigeria US\$	Trade Misinvoicing Outflow from Nigeria (68% of IFF) US\$
2003	0.00	0.00
2004	1 680 000 000.00	1 142 400 000.00
2005	17 867 000 000.00	12 149 560 000.00
2006	19 159 000 000.00	13 028 120 000.00
2007	19 335 000 000.00	13 147 800 000.00
2008	24 192 000 000.00	16 450 560 000.00
2009	26 377 000 000.00	17 936 360 000.00
2010	20 780 000 000.00	14 130 400 000.00
2011	20 144 000 000.00	13 697 920 000.00
2012	7 922 000 000.00	5 386 960 000.00
Total 2003-2012	157 456 000 000.00	107 070 080 000.00

Source: author's table with data from Global Financial Integrity (2014:13)





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Source: author's bar chart with data from table 2

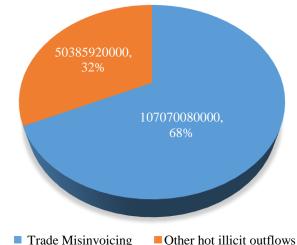


Figure 3. Pie Chart Comparison between Illicit Financial outflows and Trade Misinvoicing Outflow from Nigeria 2003-2012 US\$

Trade Misinvoicing Source: author's pie chart with data from table 2

According to UN (2013), many of the developing countries who are victims of substantial trade misinvoicing schemes and other illicit financial outflows suffer from huge external debts. This thus places the affected countries in a dilemma of choice between using the meagre national resources to provide essential services to the citizenry or to service external debts. Irrespective of the choice made though, the opportunity cost of the forgone alternative remains huge – failure to service the external debts increases the cost of debts and failure to provide social services gives rise to a denial of basic social services that thus deepens inequality, poverty and

retardation of inclusive growth and development. Being amongst the top ten developing countries that are victims of trade misinvoicing (Global Financial Integrity, 2014:25), during the period 2003 – 2012, Nigeria lost billions of dollars in revenue through trade misinvoicing. Within the same period, Nigeria's external debt grew steadily in billions of dollars. Thus the alternative to raising development revenue is apparently through external borrowing. Table 3 and Figure 4 present a comparative analysis of trade misinvoicing outflow from Nigeria and the growth of external debt.

Year	Nigeria External Debt IBRD/IDA Loan US\$
2002	1951004000
2003	1987878000
2004	1993917000
2005	1858694000
2006	2074407000
2007	2309365000
2008	2454540000
2009	2852213000
2010	3704868000
2011	4207748000
2012	4 686 028 000
Source: World Bank (2014)	D loans and IDA credits (DOD, current US\$)

Table 3. Nigeria's External Debt 2002 – 2012

http://data.worldbank.org/indicator/DT.DOD.MWBG.CD

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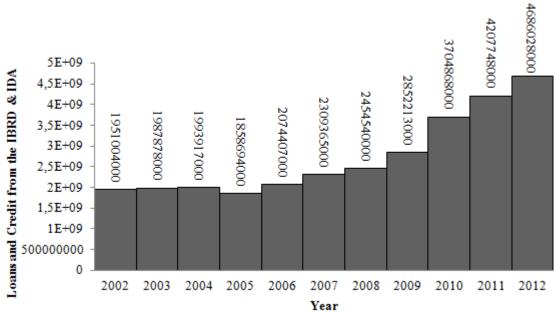


Figure 4. Bar Graph of Nigeria's External Debt 2002 – 2012 US\$

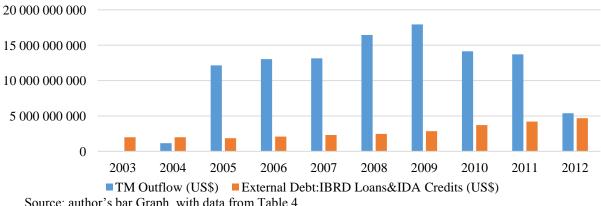
Source: author's graph with data from the World Bank (2014) IBRD loans and IDA credits (DOD, current US\$) http://data.worldbank.org/indicator/DT.DOD.MWBG.CD

Table 4. Comparative table of Trade Misinvoicing outflows and External Debt in Nigeria 2003-2012

Year	TM Outflow (US\$)	External Debt:IBRD Loans&IDA Credits (US\$)
2003	0	1 987 878 000
2004	1 142 400 000	1 993 917 000
2005	12 149 560 000	1 858 694 000
2006	13 028 120 000	2 074 407 000
2007	13 147 800 000	2 309 365 000
2008	16 450 560 000	2 454 540 000
2009	17 936 360 000	2 852 213 000
2010	14 130 400 000	3 704 868 000
2011	13 697 920 000	4 207 748 000
2012	5 386 960 000	4 686 028 000
Total 2003-2012	107 070 080 000	28 129 658 000

Sources: World Bank (2014) IBRD loans and IDA credits (DOD, current US\$), available from http://data.worldbank.org/indicator/DT.DOD.MWBG.CD; Global Financial Integrity (2014) illicit financial flows from developing countries 2003-2012 http://www.gfintegrity.org/wp-content/uploads/2014/12/Illicit-Financial-Flows-from-Developing-Countries-2003-2012.pdf

Figure 5. Comparative Graph of Trade Misinvoicing outflows and External Debt in Nigeria 2003-2012



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Source: author's bar Graph, with data from Table 4

#### 5 Mean Difference between Trade Misinvoicing Outflow & Nigeria's External Debt 2003–2012

## Table 5. t-Test: Paired Two Sample for Means between Trade Misinvoicing Outflow Nigeria's External Debt 2003 -2012

Hypothesis:

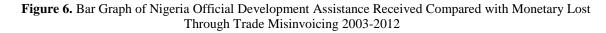
H1<sub>0</sub>: Mean TM < Mean ExtDebt, H1<sub>1</sub>: Mean TM > Mean ExtDebt, *tested at alpha:0.05, accept* H1<sub>1</sub> *if* P<0.05

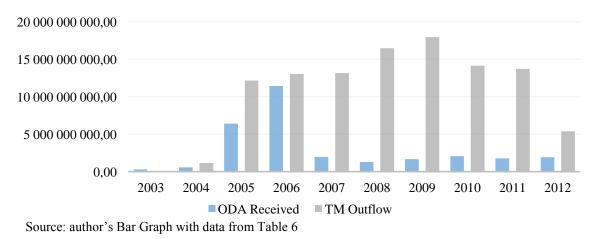
	TM Outflow (US\$)	External Debt:IBRD Loans&IDA Credits (US\$)
Mean	10707008000	2812965800
Variance	3.93075E+19	1.04896E+18
Observations	10	10
Pearson Correlation	0.135546875	
Hypothesized Mean Difference	0	
df	9	
t Stat	4.017143099	
P(T<=t) one-tail	0.001515538	
t Critical one-tail	1.833112933	
P(T<=t) two-tail	0.003031075	
t Critical two-tail	2.262157163	

# Table 6. Official Development Assistance & Official Aids Received (ODA) Compared with TradeMisinvoicing Outflow from Nigeria 2003-2012

Year	ODA Received US\$	TM Outflow US\$
2003	308 220 000.00	0.00
2004	576 940 000.00	1 142 400 000.00
2005	6 408 810 000.00	12 149 560 000.00
2006	11 428 020 000.00	13 028 120 000.00
2007	1 956 260 000.00	13 147 800 000.00
2008	1 290 160 000.00	16 450 560 000.00
2009	1 657 070 000.00	17 936 360 000.00
2010	2 061 960 000.00	14 130 400 000.00
2011	1 768 550 000.00	13 697 920 000.00
2012	1 915 820 000.00	5 386 960 000.00
Total 2003 - 2012	29 371 810 000.00	107 070 080 000.00

Sources: ODA Received, World Bank (2015a) Net official development assistance and official aid received (current US\$), http://data.worldbank.org/indicator/DT.ODA.ALLD.CD





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 Table 7. Paired Two Sample for Means between Trade Misinvoicing Outflow from Nigeria and Official Development Assistance Received

Hypothesis: H1<sub>0</sub> : Mean TM < Mean ODA Received

 $H1_1$ : Mean TM > Mean ODA Received

tested at alpha:0.05, accept  $H1_1$  if P<0.05

	TM Outflow	ODA Received
Mean	10707008000	2937181000
Variance	3.93075E+19	1.16797E+19
Observations	10	10
Pearson Correlation	0.276256308	
Hypothesized Mean Difference	0	
df	9	
t Stat	3.926923606	
P(T<=t) one-tail	0.001737118	
t Critical one-tail	1.833112933	
P(T<=t) two-tail	0.003474235	
t Critical two-tail	2.262157163	

Furthermore, the Global Financial Integrity laments that illicit financial outflows from developing countries exceed the official development assistance (ODA) received by these nations.

"Illicit outflows were roughly 1.3 times the US\$789.4 billion in total FDI, and they were 11.1 times the US\$89.7 billion in ODA that these economies received in 2012" (Global Financial Integrity, 2014a:4)

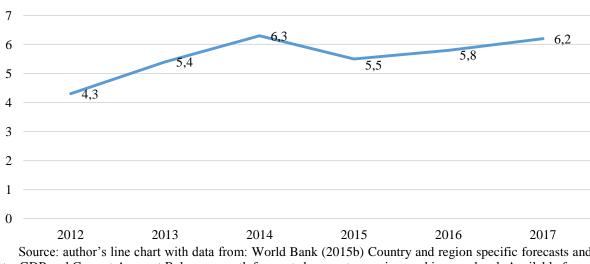
This thus implies that trade misinvoicing outflow may equate or be greater than the ODA received by Nigeria during the period 2003 - 2012. This is also presented in Table 6.

#### 6 Implication on Nigeria's Sustainable Development

The preceding analyses show that during the period 2002 - 2012 Nigeria experienced huge amounts of revenue drained out of its shores through trade misinvoicing, it is also evident that this period of trade misinvoicing corresponded with the growth in Nigeria's external debt. Given therefore that the amount lost through trade misinvoicing exceeds the amount of external borrowing and also exceeds the amount received as official development assistance (ODA), it becomes glaringly clear that Nigeria lost a huge fund that could have been used to enhance the actualisation of sustainable development in Nigeria through infrastructure development and investment. Hence, this section gives brief attention to the performance of some sustainable development indicators such as poverty and employment levels during this period. Albeit, the fact that Nigeria has had an improved GDP growth (Figure 7), and the growth is estimated to continue along the same trajectory, the GDP growth still does not comprehensively represent how well the wealth or income of a nation is distributed and hence not a balanced test of sustainable social, environmental and economic development. A rising GDP does not necessarily lead to advancement in "Ecosystem Sustainability', 'Health and Wellness' and 'Opportunity'' (Social Progress Imperative, 2014:1), the GDP is thus seen as a subjective measure of wellbeing - its growth does not necessarily translate to growth in every household's income level and standard of living (Diener et al., 2013). In their research Dierner et al. (2013:274) found that GDP growth resulted in only 18% shift in household income levels. This finding implies that, in some cases, only a small percentage of the population may benefit from a rising GDP of a country. Accordingly, the Organisation for Economic Cooperation and Development is worried that the GDP can be misleading, it obscures the state of wellbeing of the people, it does not show how a nation's wealth is distributed, and it does little to narrow the gap between the rich and the poor (OECD, 2015). Therefore, a new initiative by the OECD is underway to develop a new and more robust, inclusive indicator of measuring progress and wealth (OECD, 2015). Consequently, in order to visualise the economic and social dent meted out by trade misinvoicing outflow from Nigeria, it is therefore pertinent to look beyond Nigeria's GDP and examine the trend in poverty, employment and equitable distribution of consumption income during these years of trade misinvoicing outflow from Nigeria. These appear in schematic presentations below.



Figure 7. Line Chart of Nigeria's GDP Growth



Source: author's line chart with data from: World Bank (2015b) Country and region specific forecasts and data: GDP and Current Account Balance growth forecasts by country, region, and income level. Available from: http://www.worldbank.org/en/publication/global-economic-prospects/data?region=SST

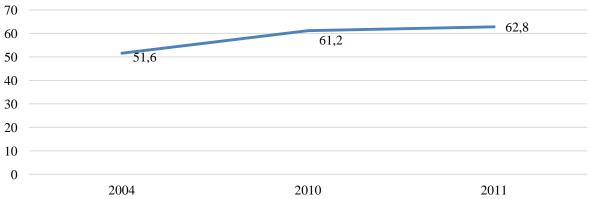


Figure 8. Line Chart Nigeria's Poverty Head Count Ration (PPP) (% of Population below \$1 a day)

Source: author's line chart with data from: National Bereau of Statistics Nigeria (NBS) (2012) Nigerian poverty profile 2010 report, available at: http://reliefweb.int/sites/reliefweb.int/files/resources/b410c26c2921c18a6839baebc9b1428fa98fa36a.pdf

Note: "Although the World Bank standard is now US\$1.25, the old reference of US\$1 was the standard used in Nigeria at the time that the survey was conducted" National Bureau of Statistics (2012: 5) (note also that the 2011 figure was an estimate by the NBS).

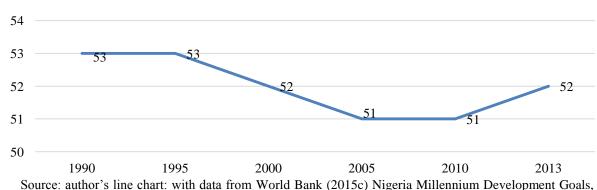
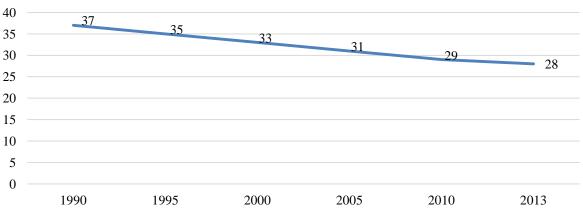


Figure 9. Line Chart Nigeria's Employment to population Ratio (%)

Source: author's line chart: with data from World Bank (2015c) Nigeria Millennium Development Goals, available from: http://databank.worldbank.org/data/Views/Reports/ReportWidgetCustom.aspx? Report\_Name=MDG-Table&Id=c658ae98&inf=n



#### Figure 10. Line Chart Nigeria's % Of Population with Access to Improved Sanitation Facilities

Source: author's line chart: with data from World Bank (2015c) Nigeria Millennium Development Goals, available from: http://databank.worldbank.org/data/Views/Reports/ReportWidgetCustom.aspx?Report\_Name=MDG-Table&Id=c658ae98&inf=n

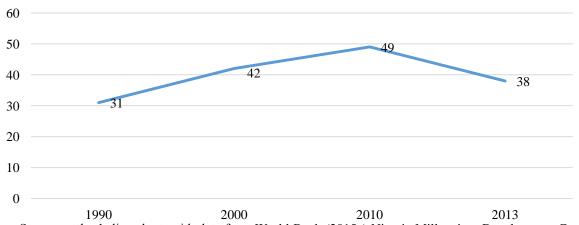


Figure 11. Line Chart: Maternal Health, Nigeria's % Of Births Attended by Skilled Health Staff

Source: author's line chart: with data from World Bank (2015c) Nigeria Millennium Development Goals, available from: http://databank.worldbank.org/data/Views/Reports/ReportWidgetCustom.aspx?Report\_Name=MDG-Table&Id=c658ae98&inf=n

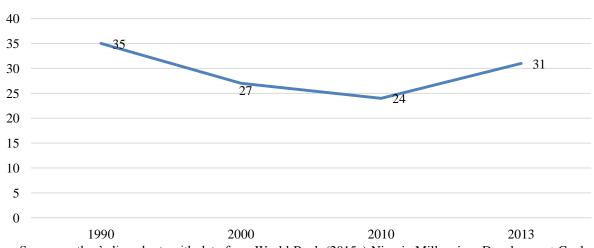
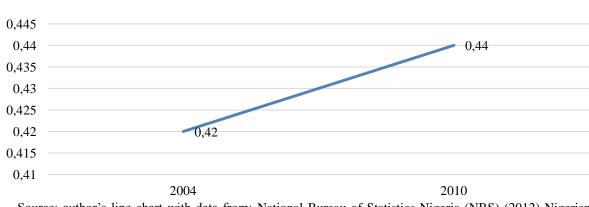


Figure 12. Line Chart: Nigeria, Malnutrition prevalence (% of children under 5)

Source: author's line chart: with data from World Bank (2015c) Nigeria Millennium Development Goals, available from: http://databank.worldbank.org/data/Views/Reports/ReportWidgetCustom.aspx?Report\_Name=MDG-Table&Id=c658ae98&inf=n







Source: author's line chart with data from: National Bureau of Statistics Nigeria (NBS) (2012) Nigerian poverty profile 2010 report, available at: http://reliefweb.int/sites/reliefweb.int/files/resources/b410c26c2921c18a6839baebc9b1428fa98fa36a.pdf

The poverty and income inequality implication of trade misinvoicing is eloquently substantiated by Jansky (2013). According to Jansky, trade misinvoicing schemes drains the government's revenue and reduces government's ability to provide public infrastructure – thus widening the income gap; it also reduces availability of private investment funds as money is shifted outside the country, this thus heightens unemployment –given low investment.

It is thus germane for policy makers to understand how trade misinvoicing has posed a canker to the fabric of Nigerian social and economic development. Within this period of an unprecedented peak in trade misinvoicing outflow from Nigeria, poverty levels increased around the year 2004 when a remarkable illicit financial outflow and associated trade misinvoicing outflow from Nigeria was recorded by the Global Financial Integrity (Global Financial Integrity, 2014). One of the key millennium development goals is the eradication of poverty, however, an obscured but yet perceivable harm meted out by trade misinvoicing to the Nigerian economy can be seen through the poverty ratios in Figure 8. Whilst the percentage of the Nigerian population living in poverty (less than \$1 a day was 51.6% in 2004), the number of poor people climbed sharply to 61.2% in 2011 (National Bureau of Statistics, 2012). Yet the poverty numbers may appear somewhat neutralised, reason being that it does not really show how some parts of the country are poorer than others. For example, according to National Bureau of Statistics (2012), relative poverty was seen to be dominant in Northern part of the country with Sokoto State recording a shocking relative poverty level of 86.4% and other northern regions recording 77.7% and 76.3 percent. In addition, as at 2013, 31% percent of children under the age of five in Nigeria suffered from malnutrition, an increase from 24% in 2010 (Figure 12) - which is another indication of the extent of poverty.

Another important sustainable development indicator related to the poverty level is the

employment level, Figure 9 shows that as at 2013, only about 52% of the Nigerian population were employed - showing that up 48% were unemployed. Another millennium development goal is to ensure environmental sustainability through citizens' access to improved sanitation facilities, but as at 2013, only about 28 percent of the Nigerian population had access to improved sanitation facilities. This implies that more than 70% of the population has little or no access to improved sanitation facilities. Figure 10 shows how the Nigerian population with access to improved sanitation has decreased over the years, corresponding to the years that the development fund has been drained outside Nigeria through illicit trade outflow. Furthermore. misinvoicing another sustainable development goal is to achieve reduction in maternal mortality through improved maternal health care. However, as at 2013, only about 38% of births were attended by skilled health staff (Figure 11). This suggests that more than 60% of expectant mothers had no access to improved maternal health benefits.

Furthermore, a growing refocus about the ideals of sustainability development has identified income inequality as an obstacle to sustainable development. Income inequality breeds economic and social instability and destroys the social structure and unity and hence becomes an impediment to the actualisation of environmental, socio-economic ethical behaviour to spur sustainable development. By draining a nation's financial resources off its shores through trade misinvoicing, a nation's income equality is likely to tilt in favour of the rich. Figure 13 characterises the Nigerian state of income inequality shooting up from 42.0 (GINI Index) in 2004 during huge trade misinvoicing outflow from Nigeria and peaked at 44.0 in 2010 after the 2009 \$17.9b trade misinvoicing outflow from Nigeria (Table 6).

"Gini index measures the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution...a Gini



index of 0 represents perfect equality, while an index of 100 implies perfect inequality" (World Bank, 2015d:1).

A GINI coefficient of 44.0 therefore implies that Nigeria's income and consumption distribution is heavily tilted with the majority having little to sustain daily living. The foregoing analysis epitomises the dwindling state of Nigeria's sustainable development and this is one of the development abrasions in an economy where heavy trade misinvoicing outflow is prevalent – showing that business and other entities engaged in trade misinvoicing have had a free illicit income shifting ride out of the Nigerian economy to tax havens (Tafirenyika, 2013; Global Financial Integrity, 2014).

On recognition of the sustainable development implication of trade misinvoicing, the United Nations Economic Commission for Africa (UNECA) has called for the inclusion of trade misinvoicing in the incoming post-2015 sustainable development goals, with a measurable achievable target for halting trade misinvoicing (Global Financial Integrity, 2015c). UNECA High Level Panel (HLP) on Illicit Financial Flows from Africa has called for, amongst others, that given the high percentage attributed to the trade misinvoicing component of illicit financial flows leaving Africa and other developing nations, a renewed effort with priority accorded to trade aspects of illicit flows from Africa and the rest of the world to curb trade misinvoicing (Global Financial Integrity, 2105a). Part of this effort should be the inclusion of trade misinvoicing in the new post-2015 sustainable development goals: "the final SDGs should include a clear, concise, and measurable target to curb illicit financial flows from trade misinvoicing by 50% by 2030" (Global Financial Integrity, 2015:3).

On their part, given that Nigeria is an unfortunate victim of illicit trade misinvoicing outflow with apparent developmental setbacks, Nigerian policy makers should urgently design a new strategy to stop trade misinvoicing outflow from Nigeria. Part of this strategy may include carving out a special wing from the current customs department and to empower this group with special education and skills on international trade misinvoicing. This special trade misinvoicing customs wing may thus be entrusted with the sole task of monitoring and halting trade misinvoicing outflow from Nigeria. An effort to halt trade misinvoicing may also be enhanced through tracking and registering of all businesses in Nigeria, including the beneficiaries. In this way, fund movements outside the country can easily be traced and queried.

#### 7 Conclusion

This paper set out to examine how trade misinvoicing orchestrates external debt in Nigeria and the concomitant obstructive tendencies on Nigeria's sustainable economic development. The paper revealed that Nigeria is among the top ten developing countries who are victims of illicit trade misinvoicing outflows (Global Final Integrity, 2014:13) and render the country drained of its internal resources that should have been used for much needed developmental projects.

Findings show that trade misinvoicing outflow from Nigeria during the period 2003 - 2012 supersedes official development grants that were received in Nigeria. Findings also indicate that as trade misinvoicing outflow increased during the period 2003 -2012, Nigeria's external debt increased yearly. Aside from a graphical and tabular presentation, the researcher applied a T-test of difference in means to check for the degree difference between trade misinvoicing, external debt and official development assistance. Results from the statistical test showed that P < 0.05 in each case – indicating that the mean difference in trade misinvoicing outflow is significantly greater than the mean differences in external debt and official development assistance. This finding attests to the huge internal financial resources that Nigeria lost during the period 2003 -2012 through illicit trade misinvoicing outflow - and may continue to be lost if this conundrum is unchecked. The analysis further disclosed that trade misinvoicing outflow has hampered Nigeria's stride to sustainable economic development. There has been an increase in the level of unemployment with attendant increase in the poverty head count ratio - the percentage of Nigerians living under \$1 per day. Similarly, the number of children suffering from malnutrition increased, a very small percentage of expectant mothers received child birth care from qualified health staff, a small percentage of the Nigerian population has had access to improved sanitation facilities and income inequality, as measured by the GINI index, widened more during the period 2003 - 2012.

Trade misinvoicing outflow has drained billions of Dollars of internal revenue from Nigeria, and this should be alarming to policy makers. As Nigeria transits into a new democratic leadership, which also coincides with global transition to a post-2015 sustainable development agenda, it is apposite and exigent to prioritise policies to curb trade misinvoicing outflows from Nigeria. This will provide Nigeria with enabling domestic financial resources to successfully implement health, education, domestic investment, and infrastructural development projects to reduce unemployment, poverty and to progress toward a desirable sustainable economic development trajectory.

Nigeria should increase its participation in the global movement for automatic exchange of tax information. This will reduce tax havens and secret cartel activities that incubate illicit trade misinvoicing outflows from Nigeria. This thus calls for a concerted effort from the Nigerian government to join other countries in a new measure of curbing anonymous



shell companies which is a recognised conduit for illicit financial flows. This can be done by creating a public registry of all Nigerian companies; "such registries are considered the gold standard in curtailing the nefarious use of anonymous entities ...., such a move would go a long way toward curbing the terrible flow of dirty money" (Baker, 2014:4). The paper also suggests the creation of a special wing of the Nigerian Customs. Educate and empower this wing with international trade misinvoicing techniques and tracking skills to enable this wing to deal specifically with trade misinvoicing outflows from Nigeria. Effective efforts to achieve a lasting sustainable development in Nigeria would require less reliance on external debt, but improved dependence on the country's internal resources through halting the outflow and retaining trade misinvoicing revenues in Nigeria. Mobilising such internal resources from trade misinvoicing will also require that the government remains committed in its efforts to stop public sector venality - a fault-line and a driver that facilitates the movement of illicit finance out of the country (UNECA, 2013).

#### References

- 1. Aizenman, J. 2008. On the hidden links between financial and trade opening. *Journal of International Money and Finance*, 27(3), 372-386.
- Atkas, Z. and Aldan, A. 2013. Import surveillance and over-invoicing of imports in Turkey, Working paper No: 13/01, Central Bank of the Republic of Turkey 2013, available at: http://www.tcmb.gov.tr/wps/wcm/ connect/9ffc0c2e-a807-44dd-ba48b8c9a8208c0a/WP1301.pdf?MOD=AJPERES&CAC HEID=9ffc0c2e-a807-44dd-ba48-b8c9a8208c0a [accessed 12 April 2015].
- Baker, R. 2014. Want sustainable development? Mobilize domestic resources, curtail illicit capital flows, available at: https://www.devex.com/ news/want-sustainable-development-mobilizedomestic-resources-curtail-illicit-capital-flows-83488 [accessed April 11, 2015].
- 4. Boyce, J. K. & Ndikumana, L. 2001. Is Africa a net creditor? New estimates of capital flight from severely indebted sub-Saharan African countries, 1970-96. *Journal of Development Studies*, *38*(2), 27-56.
- Buehn, A. & Eichler, S. 2011. Trade Misinvoicing: The Dark Side of World Trade. The World Economy, 34(8), 1263-1287.
- Buenos Aires Herald. 2014. Over-invoicing imports, available at: http://www.buenosairesherald.com/ article/174059/gov%E2%80%99t-accuses-ge-ofoverinvoicing-imports [accessed April 12, 2015].
- Christian Aid. 2013. Invested interests, the UK's overseas territories' hidden role in developing countries, available at: http://www.christianaid.org.uk/Images/Invested-Interests-Christian-Aid-tax-report.pdf [accessed April 10, 2015].
- 8. Christensen, J. 2012. The hidden trillions: Secrecy, corruption, and the offshore interface. *Crime, Law and Social Change*, *57*(3), 325-343.

- Diener, E.D., Tay, L. and Oishi, S. 2013. Rising income and the subjective well-being of nations, *Journal of Personal and Social Psychology*, 104(2), 267-276.
- Financial Action Tax Force. 2006. Trade based money laundering, available at: http://www.fatfgafi.org/media/fatf/documents/reports/Trade%20Base d%20Money%20Laundering.pdf [accessed April 12, 2015].
- 11. Gelma, A. 2011. Why tables are really much better than graphs. *Journal Computational and Graphical Statistics*, 20(2), 3-7.
- 12. Gelma, A., Pasarica, C. and Dodhia, R. 2002. Let's practice what we preach: turning tables into graphs, *American Statistician*, 56, 121-130.
- Global Financial Integrity. 2014 Illicit financial flows from developing countries http://www.gfintegrity.org/ wp-content/uploads/2014/12/Illicit-Financial-Flowsfrom-Developing-Countries-2003-2012.pdf [accessed March 15, 2015].
- Global Financial Integrity. 2015. Illicit financial flows, available at: http://www.gfintegrity.org/ issue/illicit-financial-flows/ [accessed March 28, 2015].
- Global Financial Integrity. 2015b. Trade misinvoicing p 3, available at: http://www.gfintegrity.org/issue/ trade-misinvoicing/ [accessed April 10, 2015]
- Global Financial Integrity. 2015c. AU/UN Panel Report Prioritizes Curbing Trade-Related Illicit Flows; Calls for SDGs to Follow Suit, available at: http://www.gfintegrity.org/press-release/au-un-highlevel-panel-report-prioritizes-curbing-trade-relatedillicit-flows-calls-sdgs-follow-suit/ [accessed April 3, 2015].
- Global Financial Integrity. 2013. Illicit financial flows from developing countries: 2002-2011 http://iff.gfintegrity.org/iff2013/Illicit\_Financial\_Flow s\_from\_Developing\_Countries\_2002-2011-HighRes.pdf [accessed March 15, 2015].
- Global Financial Integrity. 2010. \$854 Billion Removed from Africa by Illicit Financial Flows from 1970 to 2008 http://www.gfintegrity.org/pressrelease/854-billion-removed-africa-illicit-financialflows-1970-2008/ [accessed March 15, 2015].
- Global Financial Integrity. 2014. Illicit financial flows from developing countries 2003-2012, Illicit Financial Outflows from the Top 10 Developing Economies, 2003-2012, available at: http://www.gfintegrity.org/ wp-content/uploads/2014/12/Illicit-Financial-Flowsfrom-Developing-Countries-2003-2012.pdf [accessed April 10, 2015].
- Gray, R. & Bebbington, J. 1998. Accounting and the soul of sustainability: hyper reality, transnational corporations and the United Nations. University of Dundee. http://www.apira2013.org/past/apira1998/archives/pdf s/24.pdf [accessed March 15, 2015].
- 21. International Trade Alert. 2015. International price profiling system, available at: http://www.internationaltradealert.com/products.asp [accessed April 12, 2015].
- 22. Kastellec, J. P. & Leoni, E. L. 2007. Using graphs instead of tables in political science. *Perspectives on politics*, 5(04), 755-771.
- 23. National Bureau of Statistics Nigeria (NBS). 2012. Nigerian poverty profile 2010 report, available at:http://reliefweb.int/sites/reliefweb.int/files/resource

s/b410c26c2921c18a6839baebc9b1428fa98fa36a.pdf [accessed April 20, 2015].

- OECD. 2014. Curbing illicit financial flows for domestic resource mobilisation and sustainable development in the post-2015 era, side event report, available at: http://www.oecd.org/development/pcd/ UNGA%202014%20Event%20Report.pdf [accessed March 15, 2015].
- 25. OECD. 2015. Beyond GDP, measuring progress, true wealth and the wellbeing of nations, available from: http://ec.europa.eu/environment/beyond\_gdp/index\_e n.html [accessed May 5, 2015].
- 26. Sklair, L. 2002. *Capitalism and its alternatives*. Oxford: Oxford university press.
- 27. Social Progress Imperative. 2014. Economic Growth Does "Not Automatically" Lead To Social Advancement: New Social Progress Index, available from: http://www.socialprogressimperative.org/ system/resources/W1siZiIsIjIwMTQvMDMvMzAvM DQvMTAvMDMvODM2L1NQSTIwMTRfR2xvYm FsUHJlc3Nlci5wZGYiXV0/SPI2014%20GlobalPress er.pdf [accessed May 3, 2015]
- Stephens, B. 2002. Amorality of Profit: Transnational Corporations and Human Rights, The. *Berkeley J. Int'l* L., 20, 45.
- Tafirenyika, M. 2013. Illcit financial flows from Africa: track it, stop it, get it, available at: http://www.un.org/africarenewal/magazine/december-2013/illicit-financial-flows-africa-track-it-stop-it-getit [accessed May 2, 2015].
- The Fiscal Times. 2011. The Ten Largest Global Business Corruption Cases, available from: http://www.thefiscaltimes.com/Articles/2011/12/13/T he-Ten-Largest-Global-Business-Corruption-Cases [accessed May 3, 2015]
- 31. UNECA [United Nations Economic Commission for Africa]. 2013. The State of Governance in Africa: The Dimension of Illicit Financial Flows as a Governance Challenge, United Nations Economic and Social Council –Economic Commission for Africa, Third Meeting of the Committee on Governance and Popular Participation, Addis Ababa, Ethiopia 20 and

21 February 2013, available at: http://www.uneca.org/sites/default/files/uploadeddocuments/CGPP/cgpp-3\_illicit-financial-flowenglish\_final.pdf [Accessed March 15, 2015].

- 32. UNECA. 2013. The State of Governance in Africa: The Dimension of Illicit Financial Flows as a Governance Challenge http://www.uneca.org/sites /default/files/uploaded-documents/CGPP/cgpp-3\_illicit-financial-flow-english\_final.pdf [accessed March 15, 2015]
- UN. 2013. The negative impact of the nonrepatriation of funds of illicit origin on the enjoyment of human rights, http://www.ohchr.org/Documents/ HRBodies/HRCouncil/RegularSession/Session22/A-HRC-22-42\_en.pdf [accessed Feb 2, 2015].
- World Bank. 2014. IBRD loans and IDA credits (DOD, current US\$) available at: http://data.worldbank.org/indicator/DT.DOD.MWBG. CD [accessed Feb 2, 2015].
- World Bank. 2015a. Net official development assistance and official aid received (current US\$), http://data.worldbank.org/indicator/DT.ODA.ALLD.C D [accessed May 2, 2015].
- 36. World Bank. 2015b. Country and regional specific forecasts and data: GDP and Current Account Balance growth forecasts by country, region, and income level, available at: http://www.worldbank.org/en/ publication/global-economic-prospects/data?region= SST [accessed May 2, 2015]
- 37. World Bank. 2015c. Nigeria Millennium Development Goals, available from: http://databank.worldbank.org/data/Views/Reports/Re portWidgetCustom.aspx?Report\_Name=MDG-Table&Id=c658ae98&inf=n [accessed May 2, 2015]
- World Bank. 2015d. GINI index (World Bank estimate), available from: http://data.worldbank.org/ indicator/SI.POV.GINI [accessed May 2, 2015]
- Wu, R. 2010. "Transfer Pricing: Current Problems and Solutions", CMC Senior Theses. Paper 87. http://scholarship.claremont.edu/cmc\_theses/87 [accessed April 20, 2015]

