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Unjust Enrichment from Official Corruption in Africa: Theory and Model on how Lenders have benefited

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Abstract

A 2015 World Bank report on the achievement of Millennium Development Goals (MDGs) revealed that since the 1990s, extreme poverty has been decreasing in all regions of the world with the exception of Africa where about 50 percent of countries in Sub-Saharan Africa did not achieve the MDG extreme poverty target despite the sub-region enjoying more than two decades of GDP growth resurgence.   The purpose of this chapter is twofold. *First* to understand the interconnections between the large pool of capital transferred to the OECD countries and the corrupt deposits of stolen public funds. *Second*, to illustrate how such diversion of funds overseas are related to the spread of poverty in the African economies. We enunciate a 'poverty multiplier theory' and propose a model for its application within an African context. The 'poverty multiplier theory' postulates that: (i) one unit of currency deposited abroad represents a loss in financial development at home (ii) a fraction of the unit currency placed in foreign bank accounts is redirected to the domestic economy in the form of external debt. This external debt is further siphoned overseas through interest and loan principal repayment. Policy implications of these processes are discussed.

1. Introduction

African governments borrow from United States (US), European and Asian lenders. But, much of this external debt operates in a way that transfers income and wealth from Africa. Some of this transfer is excessive, a representation of an unfair return on investment and misappropriation. Such produces an unjust enrichment in the North and West. Consequently, '*Output may be growing, and yet the mass of the people may be becoming poorer*' (Lewis, 1955). The contemporary relevance of this citation is most applicable to Africa because extreme poverty has been rising in spite of the continent enjoying more than two decades of growth resurgence that began in the mid-1990s[1]. The conjecture of Lewis has been confirmed by a 2015 World Bank report on the achievement of Millennium Development Goals (MDGs) extreme poverty targets which revealed that extreme poverty has been decreasing in all regions of the world expect in Africa where close to 50 percent of countries in Sub-Saharan Africafailed to reach the MDG extreme poverty target (Caulderwood, 2015; Asongu& Nwachukwu, 2016a).

As illustrated in Figure 1, whereas other developing sub-regions of the world have been experiencing decreasing levels of extreme poverty, Sub-Saharan Africa has been experiencing increasing poverty. This unfortunate statistic sharply contrasts with an evolving stream of literature on 'Africa rising' (Young, 2012, Leautier, 2012 and Pinkivskiy& Sala-i-Martin, 2014).notablythat, with the exception of the Democratic Republic of Congo, Africa had reached the MDG extreme poverty target one year ahead of time.Obeng-Odoom (2015) has suggested that the 'Africa rising' narrative could be strongly influenced by the need to extol the rewards of the neoliberal ideology and capital accumulation. In essence, this neoliberal ideology fundamentally neglects ethical concerns like inequality, ecological crisis and sustainable development.

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[1] The interested reader can consult Fosu (2015) for more insight into the timelines.

Figure 1: Comparative regional poverty levels
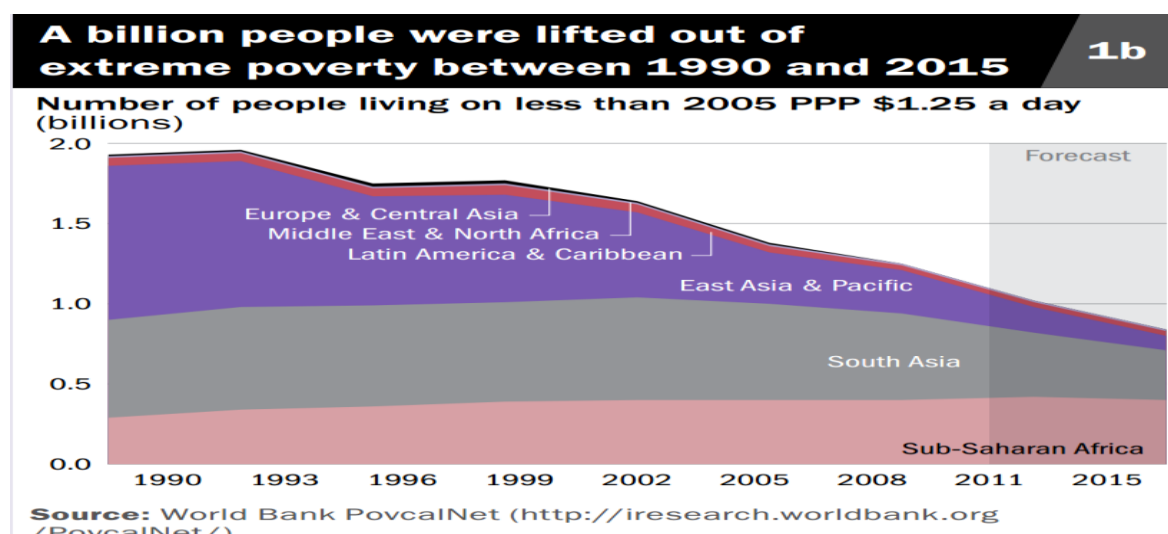
For many decades scholars have been concerned about the causes of underdevelopment and poverty in Africa (Kodila-Tedika & Agbor, 2014; Jerven, 2011; Englebert, 2002). Many inquiries have been motivated by the hypothesis of an African dummy. Some of the documented causes of poverty have centred on social obstacles to economic growth and technological improvements (see Amavilah, 2016). Other established causes of poverty have included: (i) deinstitutionalization (Nunn & Puga, 2012; Nunn, 2008, 2009) and loss of traditional institutions (Lewis, 1955; Amavilah, 2006); (ii) juxtaposition of 'private property rights' with 'private use rights (Amavilah, 2016); (iii) undervaluation of local know-how and overvaluation of foreign know-how (Tchamyou, 2015; Asongu, 2016a; Lwoga et al., 2010; Raseroka, 2008; Brush &Stabinsky, 1996); (iv) the roles of institutions, policy and destiny in comparative cross-country development (Acemoglu et al., 2012ab; Acemoglu & Robinson, 2010; Austin, 2008; Collier & Gunning, 1999); (v) over emphasis on the idleness of natural resources (Lewis, 1955; Doftman, 1939); (vi) less or no acknowledgement of scarcity (Dorfman, 1939; Lewis, 1955; Lucas, 1993; Fosu, 2013b; America, 2013; Looney, 2013; Drine, 2013; Asongu, 2014bc); (vii) "surplus consumption" of luxurious goods and services by the wealthy (Efobi et al., 2013: Adewole & Osabuohien, 2007); (viii) issues surrounding colonialism and neo-colonialism (Ndlovu-Gatsheni, 2013); (ix) over dependence on development assistance (Asongu, 2014c; Oben-Odoom, 2013; Moyo, 2009) or Western-oriented policies (Fofack, 2014); (x) Washington consensus and lost decades (Lin, 2015), partially because of the false economics of preconditions (Monga, 2014); (xi) the evolving interest in the impacts of diversity on economic prosperity (Hjort, 2014; Parrotta et al., 2014) and a novel strand of literature on epigenetics, genetics and

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economics (Fedderke et al., 2014); (xii) corruption in international trade (Musila & Sigué, 2010) and policies on rational asymmetric development (Asongu, 2015a); (xiii) low-degree of regional integration (Kayizzi-Mugerwa, et al., 2014); (xiv) the failure to integrate qualitative measurements of progress into the development paradigms of Africa (Obeng-Odoom, 2013) and (xv) the absence of conducive local conditions, presence of fragile institutions and the incapacity to effectively negotiate foreign aid conditions (Kayizzi-Mugerwa, 2001).

The purpose of this chapter is to complement existing literature with another perspective to the poverty tragedy of Africa. Building on the underpinnings of the Money Multiplier (MM) theory and poignant stylized facts, we provide an integrating model for growth, financial development, external debt and corruption. We theorize contemporary roots of Africa's underdevelopment by modelling the domestic development consequences of siphoning one unit of currency abroad. The model also partly explains why 'creditor developed countries' which have tax havens under their jurisdictions excel to the detriment of poorer countries.

The rest of the study is structured as follows. Important fundamentals are covered in Section 2 while Section 3 elucidates the theory, assumptions, concepts and model. The underpinnings of rational asymmetric development and poverty in Africa and other implications for development policy are covered in Section 4. We conclude in Section 5with future research directions.

2. Important Fundamentals

This section discusses important fundamentals on the relationship between corruption, financial development, economic growth, capital flight, external debt and poverty. The factors are organized in six main strands, namely: (i) the substitutability of corruption and financial development; (ii) openness and corruption; (iii) connections between corruption, financial development, doing business and economic growth; (iv) corruption and the savings rates and (v) linkages between corruption, capital flight, poverty and 'external flows-driven" poverty.

In the first strand, Ahlin and Pang (2008) tested the substitutability of corruption and financial development to establish that low corruption and financial development both facilitate the undertaking of productive projects. This is apparent because financial development and low levels of corruption are substitutes. The need for this substitutability is based on the fact that corruption increases the need for liquidity and therefore financial

development. The authors also conclude that corruption is made burdensome by financial underdevelopment.

In the second feature, there is a broad stream of literature which has established that corruption is negative for economic development (see Blackburn et al., 2006). Judge et al. (2010), Forgues-Puccio and Blackburn (2010) have both shown that whereas corruption negatively affects economic development, the negative effect is more apparent in open compared to closed economies. According to Vinod (2003), the cost of capital is higher in economies where corruption is much more prevalent.

In the third part, it is important to articulate why financial development is relevant at the early stages of industrialization. While Rose-Ackerman (2002), Ahlin and Pang (2008) and Wei and Javorcik (2009) found financial development and control of corruption to positively influence economic growth and Fung (2009),after testing convergence in financial development and economic growth, has provided some findings that could explain the great disparity between poor and rich countries. On the one hand, human capital is more important to growth at the early stage of economic development, while economic freedom becomes more important at the later stage. On the other, financial development and economic growth are stronger at the early stage of economic development and slow down with sustained economic growth. It follows that low income countries with low financial development are likely to remain poor whereas, their counterparts with relatively higher financial development, may easily catch up with middle and high income countries.

The fourth element is on the relationship between corruption and the savings rate. This is another important dimension that is relevant to the understanding of what corrupt officials do with squandered money. Swaleheen (2008) investigated the relationship between corruption and 'the gross national savings rate' to establish a negative correlation. It is demonstrated that since the gross national saving rate captures capital flight and not gross domestic investment, a proportion of wealth acquired through corruption transactions flees the country to avoid detection. The results are consistent with Vinod (2003) who has also established that corruption affects financial development. Therefore we can reasonably assume that since banking institutions depend on savings or deposits for their activities, depositing corrupt money in foreign banks is an indirect opportunity cost to domestic banks and economic growth. Hence, there is cost to financial development and growth respectively; assuming constant demand for deposits by domestic economic agents.

Linkages between corruption, capital flight, poverty and external flows are engaged in the fifth strand. We discuss the ambiguity of foreign aid in reducing poverty in situations where the rate of capital flight is higher than the corresponding rate of economic growth. The political economy of development assistance as an external flow is important because foreign aid (like external debt) is a significant dichotomy of illicit capital flight. To be sure, there is a mainstream consensus in the literature that capital flight is about ten times the amount of official development assistance and twice the amount of debt that is repaid annually by developing countries (Diak, 2014). Such implies that Africa is a net creditor to the rest of the world (Asongu, 2014d). This is in accordance with theoretical postulations that globalization-driven debts increase inequality (Azzimonti et al., 2014); a theory that has been confirmed by Asongu et al. (2015) in Africa from the perspective of globalization-fuelled external debts.

The assumptions in the section that follows are based on the aforementioned fundamentals. Accordingly, current estimates establish a loss of about 25 percent of annual GDP due to corruption in Africa (Podobnik et al., 2008). Moreover, from a domestic financial point of view, the siphoned money represents loss of funds that should be deposited in domestic banks instead of Western foreign financial institutions[2].

3. Theory, Assumptions, Concepts and Model

A theory denotes a series of generalised statements or continued abstractions for the purpose of clarifying a phenomenon, but a model seeks to provide useful instruments with which to understand a specific occurrence. Therefore, a theory and a model can be linked in the view that, for the most part, a model is employed to illustrate the applicability of a theory to a specific event.

The phenomenon this inquiry seeks to explain is poverty based on the ideas of the 'poverty multiplier theory'. This postulates that: (i) one unit of currency transferred abroad represents a loss in financial development (ii) a fraction of the unit currency deposited abroad is redirected back to the domestic economy in the form of external debt. The repayment of interest and capital represents a further siphoning of funds overseas. This process which has continued unabated is linked to the accumulation of a large pool of capital in financial

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[2]See, Hugh Bayley (29th March 2006), M.P Chair-House of Commons Africa All Party Parliamentary Group: "*Corruption is bleeding Africa to death and the cost is borne by the poor. Some estimates put money corruptly leaving the continent greater than that arriving as aid. Much of the money is banked in Britain or our overseas territories and dependencies and sometimes British citizens or companies are involved in corrupt deals. We want our government to get touch on corruption*"

intermediaries in OECD countries as well as to the spread of poverty in the domestic economy.

In the sections that follow, we first present the series of assumptions/generalizations on which the empirical model of the study is based. This is followed by a clarification of the concepts and finally a formulation of the empirical model.

3.1 Assumptions

The enunciated theory is based on the following assumptions/generalizations.

A1: The economy from which you take-out your money is poor in terms of financial development and growth, while that in which you invest your money is rich[3].

A2: A significant percentage of corrupt money is deposited in banks abroad to escape domestic scrutiny/detection and facilitate laundering (Bayley, 2006; Swaleheen, 2008).

A3: The financial development impact is based on the overall economic depth or money supply (M3)[4] (Beck et al, 1999; Gries et al, 2009).

A4: The interest rate of deposits is taken into account at the end of the year for country or individual cases[5].

A5: A corrupt official deposits siphoned money in a bank (usually c percent of X_1 for 1 unit deposit from a corrupt individual or c percent of GDP for a country)[6].

A6: The Deposit Bank represents the "Rest of the World" or a "Foreign Country"[7].

A7: The depositor (corrupt) after depositing borrows part, all or nothing of the money (or deposit) back. This part borrowed is captured as external debt[8].

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[3] This is economic common sense.
[4] The underlying assumption is that loss in corrupt money is not only a function of the monetary base, it is also a function of the resulting money supply loss. This is within the framework that once money is deposited in a bank, there's a continuous domestic demand for cash by investors. For less developed countries, a loss in M2 should be the corresponding amount resulting from the Money Multiplier (MM) formula. Within this spectrum, it is relevant to mention that the money supply measure is a function of currency, deposits and reserves. These factors are considered in our model to indicate loss in financial depth through the deposit multiplier.
[5] This is a wide practice by banks.
[6] X1 refers to the amount siphoned by « Corrupt Individual One »: this is when computing individual corruption to obtain country corruption.
[7] This is also common sense. Assuming that we want to evaluate the effect from a domestic perspective, we consider deposit bank(s) as the rest of the world. Deposit bank(s) must be on foreign soil to capture the loss. It might just be a single bank, group of banks in the same country or groups of banks in different countries. Also, financial globalization eliminates any imperative for financial frontiers.

A8: The constant reserve requirement ratio (r1) is the difference between the corruption rate (c percent of GDP) and variation of external debt (change in 'e' percent of GDP) for a given year[9]. External debt is constant throughout a given period, but could vary from one period to another. An average deposit in the case of individual corruption units is also constant for a given period and could vary across time. Therefore: r1=(c-e) percent[10], and E=C-r1; where "E" is the proportion of corrupt money loaned back as foreign debt to the corrupt country.

A9: c percent of external debt, accruing from previously deposited money is still siphoned and deposited at the same bank, group of banks or rest of the world[11].

A10: Debt Service: interest at end of period on external debt is balanced by the positive role (e-c) percent invested domestically plays on the economy. So Debt Service is equal to domestic economic advantages of the uncorrupted part of external debt. Thus interest due on external debt is equal to advantages of domestic projects resulting from the use of external debt.

A11: Expected financial depth (expected liquidity liability) is equal to the deposit multiplier.

A12: Depositors are either 'one country' or 'many individuals in a country' per year. While working on 'corrupt individual' basis requires c percent of the average amount of corrupt money to be deposited at the foreign bank in the foreign country, working on a 'corrupt country basis' requires c percent of GDP. GDP maybe constant or varying over time, but it is assumed to be constant during a single period (one year).

A 13: Corrupt Money deposited is hardly ever withdrawn. Thus it is within the framework perpetuity. So the Total Loss is the present value of this perpetuity[12].

A14: Money spent by corrupt officials is abroad, for the most part.

A15: There are no transaction costs.

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[8] If outgoing money is destined to banks of the rest of the world, then in-coming money under the canopy of external debt should be coming too from banks in the rest of the world. This hypothesis depends on the country's propensity to external debt. Hence, it may be high, moderate or low, respectively where the country borrows all, part or nothing of the money deposited.

[9] Depending on the countries propensity to external debt, r1 could be zero ("e" exceeds "c"), small ("c" slightly exceeds "e") or large ("c" largely exceed "e").

[10] Where c>e

[11] External debt given corrupt country is part or all of initial deposit of corrupt money from corrupt country.

[12] Maximum Total Annual Loss= [c/(r1+s)(f-g)]+[(1-r1)c/(r1+s)(i-g)]+[cs/(r1+s)(f-g)]

3.2 Definition of concepts

i)Expected liquidity liability (expected financial depth): measures the maximum amount of loss that can be endured by a given unit currency of corrupt money, deposited in a foreign bank in a foreign country or rest of the world.

ii) Rate(c) and Quantity(C) of Corruption: percentage (percent) of corruption is represented by 'c' and its quantity by 'C'. c may be 25 percent like with the case of Africa. (For simplicity in computation, C is replaced by 1, as one unit of corrupt currency based on a total GDP of 4).

iii) Reserve requirement (r1): this is the difference between the percentage of GDP siphoned and the percentage of External debt variation of the same period. (This is synonymous to the reserve requirement ratio in the MM).This is the proportion of C kept by the bank to meet-up with unexpected demands from depositors.

iv) Spent money (s): amounts to the percentage or proportion of money the corrupt official wishes to hold (this may be equivalent to the currency drain ratio in the MM). It is assumed that this money is not invested in the home country and thus, is spent on vacations and lavish life styles abroad (in the same country [or Rest of The World] as the deposit bank). 's' could be 10 percent of C if the corrupt decides to retain and lavishly enjoy 10 percent of corrupt money.

N.B: 'r1' and 's' are in the range of 0 and 1, (0 1).

v) Total Annual Depth Loss (TADL)…..(could be equivalent to total deposits in the MM)

$$TADL = c\sum_{t=0}^{\infty}(1 - r1 - s)^{\wedge}t$$

Where '1' is the deposit of the preceding period (initial deposit).

vi) TotalAnnual External Debt (TAED)….(maybe equivalent to Total loans in MM)

TAED=(C-r1)*TADL

vii) Total Annual Spent Money (TASM)…(maybe equivalent to Publicly held money in MM)

TASM= s*TADL

viii) Total Expected Annual Depth Loss (TEADL)….(maybe equivalent to the MM)

TEADL = Corruption Stock/Monetary Base = (TADL+TASM)

ix) <u>Total Expected Annual Financial Loss</u> (TEAFL)…(Maybe equivalent to MM plus Total Loans).

TEAFL = TEAFL + TAED

ix) <u>Maximum Annual Financial Loss with individual computations</u>:

TADL, TAED, TASM, TEADL and TEAFL could either be country or individual based. In the individual sense, we talk of people with high administrative portfolios in a country.[13]

xi) <u>Total Expected Financial Loss</u>(TEFL):

TEFL= Present Value of a perpetuity of TEAFL

3.3 Model formulation

3.1.1:Case 1: c>e; a fraction of corrupt money deposited is borrowed back[14]

<u>Step1</u>: Annual Loss Computation

t=multiplication phase of initial C (Ct):this include bank(s) in the country of deposit	Depth Loss	External Debt	Spent Loss
t=0 (bank A)	C_0=1(e.g. c*GDP)	-	-
t=1 (bank B)	C_1= $(E_1- R_1)$*c=$(1-r1-s)c$	E_1=$(1-r1)$* C_0=1- r1	S_1=C_0*s=1* s= s
t=2 (bank C)	C_2=$(E_2- R_2)$*c =$(1-r1-s)^2c$	E_2=$(1-r1)$*C_1=$(1-r1)(1- r1- s)c$	S_2= C_1*s=$(1- r1-s)c$* s
….	….	….	….
t=k (bank K)	C_k=(E_k-R_k)*c =$[(1- r1- s)^k]c$	E_k=$(1-r1)$*C_{k-1}=$(1-r1)[(1- r1- s) ^{k-1}]$ c	S_k=C_{k-1}*s=$[(1- r1-s) ^{k-1}]$ c * s
….	….	….	….
t=∞	C_∞=0	E_∞=0	S_∞=0
Maximum Total Annual Loss(A+B+C)	**Total Annual Depth Loss(A)**	**Total Annual External Debt(B)**	**TotalAnnual Spent Loss(C)**
$[(c+(1-r1)+cs]/(r1+s)$	$c/(r1+s)$	$(1-r1)c/(r1+s)$	$c s/(r1+s)$

Source (authors)

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[13] Examples are individuals with ministerial portfolios who can siphon and at the same time have stakes in external debt contract negotiations.

[14]Some corrupt money deposited in the foreign bank or rest of the world, is loaned back to the corrupt country and a threshold (c) is siphoned and deposited back in the foreign bank by the same corrupt country.(Where the corrupt country relies on external debt and 'c' is greater than % variation in annual external debt on GDP).

N.B: Total Annual Depth Loss, Total Annual External Debt Loss and Total Spent funds, represent a single corrupt unit in one period (normally years, since GDP on which "c" is computed for $C_0$is on a yearly basis). Consequently the model showsfor a given percentage of corrupt GDP (c), the Total Annual Depth Loss, Total Annual External Debt incurred and Total amount spent by the corrupt for a given period of time.

Proposition 1: Under the assumption of moderate reliance on external debt, if the rates of corruption, reserve requirement and spending are equal, the total amount of annual financial loss is equal to GDP.(where r1=s=c).

Proposition 2: Under the hypothesis of moderate reliance on external debt, if the reserve requirement ratio and spending ratio are equal but the corruption rate differs, financial loss is equal to:(c/r1)*GDP. (where s=r1).

Step 2: Integrating GDP growth (g), inflation (f) and nominal interest rate (i). (with: g<f and g<i)[15]

A12: It is assumed that**Total Annual Depth Loss** and **Total Annual Spent Loss** are a function of inflation (**f**), while **Total Annual External Debt** is a function of both inflation and real interest rate [nominal interest rate (**i**)]. The underlying hypothesis here is that the GDP Deflator (Inflation)>GDP Inflator (Growth rate)[16].

Maximum Total Annual Loss=[c/(r1+s)(f-g)]+[(1-r1)c/(r1+s)(i-g)]+[cs/(r1+s)(f-g)]

3.1.2:Case 2: c<e; all of corrupt money deposited is borrowed back[17]

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[15] Proof that, since independence in the 1960s average GDP deflator has been greater than average GDP inflation for African countries can be provided upon request.

[16] Using African Development Indicators, with the exceptions of Botswana, Cape Verde and Equatorial Guinea, the average difference between GDP Deflator and GDP growth is positive. This substantiates fact thatInflation on average is higher than GDP growth.

[17] All corrupt money deposited in the foreign bank or rest of the world is loaned back to the corrupt country and a threshold (c) is siphoned and deposited back in the foreign bank by the same corrupt country (where the corrupt country relies heavily on external debt and 'c' is less than % variation of annual external debt on GDP).

Step 1: Annual Loss Computation

t=multiplication phase of initial C (Ct):this include bank(s) in country of deposit	Depth Loss	External Debt	SpentLoss
t=0 (bank A)	$C_0=1$(e.g. c*GDP)	-	-
t=1 (bank B)	$C_1= (E_1-R_1)*c =(1-s)c$	$E_1=C_0=1$	$S_1=C_0*s=1*s= s$
t=2 (bank C)	$C_2=(E_2- R_2)*c =(1-s)^2c$	$E_2=C_1=(1- s)c$	$S_2=C_1*s=(1-s)c* s$
….	….	….	….
t=k (bank K)	$C_k=(E_k-R_k)*c =[(1-s)^k]c$	$E_k=C_{k-1}=[(1- s)^{k-1}] c$	$S_k=C_{k-1}*s=[(1-r1- s)^{k-1}] c * s$
….	….	….	….
t=∞	$C_\infty=0$	$E_\infty=0$	$S_\infty=0$
Maximum Annual Total Loss(A+B+C)	**Total Annual Depth Loss(A)**	**Total Annual External Debt(B)**	**Total Annual Spent Loss(C)**
$(2c+s)/s$	c/s	c/s	c

Source(authors)

Proposition 3:

Under the hypothesis of over-reliance on external debt, if the rates of corruption, reserve requirement and spending are equal, the total amount of annual financial loss is equal to : $(2+r1)*GDP$(where r1=s=c)

Proposition 4:

Under the hypothesis of over reliance on external debt, if the reserve requirement ratio and spending rate are equal but the corruption rate different, financial loss is equal to:
$[(10c+c)*GDP]$((where r1=s)

Step 2: Integrating GDP growth (g), inflation (f) and nominal interest rate (i). (with: g<f and g<i)

Expected Total Loss: $[c/s(f-g)] + [c/s(i-g)]+ [c/(f-g)]=(1/s)[c/(f-g) + c/(i-g)]$

The enunciated theory and corresponding models are substantiated with the role of Western countries in poverty multiplication. Here we engage two main sections: 'Western tax havens, Western lending and African capital flight' and 'Western rational asymmetric development' and poverty implications for Africa'.

4. The Role of Western Countries in Poverty Multiplication

The argument here is presented under the following main subheadings:

4.1Western tax havens, Western lending and African capital flight

Consistent with recent literature, due to governance malpractices, a substantial bulk of wealth in African nations end-up in offshore financial institutions that are under the jurisdictions of the Organisation of Economic Co-operation and Development (OECD) nations (see Fofack & Ndikumana, 2010; Boyce & Ndikumana, 2003, 2010). This perspective has recently been confirmed by Asongu (2016b) with more emphasis that these offshore financial centres are politically and economically managed by OECD nations for the most part. If a substantial proportion of debts in African countries is external (ororiginating from advanced economies), it follows that both debt service and illicit capital flight contribute towards decreasing the amount investment that the home government may allocate for social spending, *inter alia*: health, sanitation and education.

A principal constraint to the continent's development is the lack of financing (see Boyce & Ndikumana, 2012; Asongu, 2014d). In accordance with the corresponding literature, Africa is facing growing issues in financing that are substantially hindering the delivery of public services. Paradoxically however, the continent is also a source of a substantial amount of capital flight which has been increasing over the last decades. To put this point into greater perspective, thirty-three countries in sub-Saharan Africa (SSA) lost a total of about eight hundred and fourteen billion (in constant 2010 US Dollars) between 1970 and 2010. This loss is above the amount of external flows received by these countries. Moreover, if moderate interest was to be earned on the amount corresponding to the flight of capital (as estimated by the US Treasury Bill rate), the stock of accumulated capital flight from the sampled countries would have been about 1.06 trillion US Dollars in 2010. This is far above the group of countries' external liabilities which stood at 189 billon US Dollars in 2010, paradoxically given SSA the status of net creditor to the rest of the world. The notion of 'rest of the world' is important because the models we have formulatedhave theoretical underpinnings between Africa and the rest of the world. Overall, the status of net creditor to the rest of the world debunks stereotypes about Africa's heavy dependence on external flows.

4.2 Western Rational Asymmetric Development' and Poverty Implications for Africa

Three strands are discussed in this section in order to articulate the poverty implications of Western rational asymmetric development, notably: (i) a clarification of the notion of 'rational asymmetric development' used in these implications; (ii) engagement of rational asymmetric development within the context of Western-fuelled debts and (iii) the implications of capital flight in increasing poverty in Africa. The last is consistent with the World Bank report on the reasons why nearly half of African countries failed to achieve the MDG extreme poverty target. As documented by Asongu (2015a), it is also relevant to understand the role of Western-instrumented capitalism in the impoverishing of some developing countries.

In the first category, 'rational asymmetry development' employed within the framework of this inquiry denotes unfair globalisation practices that are prescribed by developed nations to the impoverishment and detriment of developing countries. The interested reader is invited to get more knowledge on the subject in 'Making Globalization Work' (Stiglitz, 2007) where "*The average European cow gets a subsidy of $2 a day; more than half of the people in the developing world live on less than that. It appears that it is better to be a cow in Europe than to be a poor person in a developing country*" (p. 85).

Furthermore, "*Without subsidies, it would not pay for the United States to produce cotton; with them, the United States is, as we have noted, the world's largest cotton exporte*r" (p.85). The 'Bad Samaritans: The Myth of Free Trade and the Secret History of Capitalism' byChang (2007) is an interesting read that provides a good perspective of insights into rational asymmetric development policies. Mshomba (2011) has also substantially documented a systematic review of the relationship between the World Trade Organisation (WTO) and Africa.

In the second category, the motivation for development asymmetry in Western-oriented illicit capital flight is fundamentally guided by a multitude of factors. There is an evolving stream of literature maintaining that a great bulk of stolen assets and funds by corrupt officials in African countries is hidden in offshore financial centres that are controlled from a judicial point of view by OECD nations (see Boyce & Ndikumana, 2003). We request the interested reader to find more information consolidating this perspective in a study on 'black hole' through capital flight regulation by the European Network on Debt and Development which is focused on addressing development's 'black hole' through capital

flight regulation(EURODAD, 2008).Characteristics of Western-fuelled capital flight emphasised in the report include, among others: hedge funds, regulatory failures in hedge funds and private equity, capital flight facilitation by European nations, the International Monetary Fund's (IMFs) failure in financial surveillance and regulation, tax concessions, tax havens, capital account liberalisation and implications, investment and abusive transfer pricing, speculation and volatility and the emergence private equity and hedge funds. The narrative above can be synthesised in one sentence: Western-fuelled illicit capital flight is a fundamental cause of Africa's underdevelopment. It is worthwhile to engage corresponding poverty implications.

The third classification discusses the poverty implications of illicit capital flight. We begin by discussing some of the reasons why capitalism-oriented capital flight reduces the growth impact on poverty. In accordance with Asongu (2014d), the growing disparity in developing countries is partly traceable to the effects of inequitably distributed wealth. This is essentially because the responsiveness of poverty to growth is a decreasing function of inequality. In other words, the poverty elasticity of growth is lower than the poverty elasticity of income inequality (see Fosu, 2010a, 2010b, 2010c, 2011).

Furthermore, for the most part, the politico-economic elite contribute to the increasing inequality and poverty rates because they are often responsible for siphoning and depositing funds abroad. Boyce and Ndikumana (2001,2008) have shown that the processes of stealing and transferring such funds are often associated with corruption-oriented practices like, *inter alia*: the embezzlement of export revenue, kickbacks from public and private contracts, falsifications of trade documents and trade misinvoicing. The nefarious externalities from unfavourable foreign exchanges and reductions in revenue contribute to greater poverty and income inequality. They have also resulted in a transfer of income and wealth from Africa to the OECD, directly and indirectly, actively and passively.

4.3. Further Implications for Development Policy

Further policy implications are discussed inthree main categories, namely: (i) the paradox of capital flight from capital starved and debt-ridden Africa; (ii) the role of Western governments in reducing corruption and capital flightand (iii) arguments for odious external debt. *First*, a fundamental cause of Africa's underdevelopment is the shortage of investment capital (Asiedu et al., 2012; Biekpe, 2004; Bartels et al., 2009). The Harrod-Domar model which was developed to address concerns of financing gap has not been effective because, as shownin

the enunciated theory and corresponding model, external debts that are channeled to increase domestic financial resources are for the most part recycled and deposited in tax havens that are managed by the initial creditors to a large extent. To put this point into greater perspective, it is important to articulate the three arguments underpinning the Harrod-Domar model: (i) Africa has a financing gap because capital required for sustainable growth investment is higher than the corresponding invested capital; (ii) long-run development is achievable if the financing gap is bridged and (iii) for the financing gap to be bridged, Africa needs foreign capital in the form of external debts.

Second, Western governments also have some responsibility in fighting corruption in and capital flight from Africa. But such flights are not a one-way traffic because African governments by themselves cannot successfullyaddress these scourges unilaterally in view of fighting poverty for inclusive development in the post-2015 sustainable development agenda. Western governments have a very vital role to play in uprooting practices that permit banks to accept deposits from corrupt African officials. These governments can also play a paramount mission in the recovery process of stolen assets by making-use of available financial and economic intelligence services to track illegally acquired funds that are deposited abroad by African leaders and their acolytes.

In the light of the above, concerted efforts would be required by the international community of nations for the ratification and implementation of well-tailored conventions against money laundering, corruption and fraud. Within this framework, initiatives like the United Nations 55/188 on the Stolen Asset Recovery Initiative, illegal transfer of assets and the International Center for Asset Recovery need to be encouraged and supported in order to enhance transparency at the level of international financial institutions (Fofack&Ndikumana, 2009).It is important for regulatory channels to include the following: (i) appropriate sanctions to both Western bankers and African corrupt officials; (ii) identify mechanisms of disclosure of corrupt holders of substantial balances to the appropriate authorities of both asset holders' country-of-origin and bank's country-of-incorporation and (iii) the inclusion of transparency features related to stolen assets in the business ratings of banks in the West as a means of deterring their collusion with financial crime activities.

Third, as far as challenging the legitimacy of some African external debt is concerned, the following positions are worthwhile: (i) non-contemporary practices of borrowing did not pass the test of benefiting the people; (ii) the contracted debts were not for the most part borrowed in the name of citizens because such was done without their consent and (iii)

historical evidence is consistent with the perspective that creditors were aware of the first-two points (Boyce &Ndikumana, 2011; Asongu, 2014d). The recommendations in this third category are fully in line with the perspective that the burden of proof of the legitimacy of historical debts rest on creditors on the one hand and on the other, enforcing an odious debt doctrine would results in a win-win scenario for both lenders and borrowers.

5. Conclusion and Future Research Directions

A World Bank report on the achievement of Millennium Development Goals (MDGs)has revealed that since the 1990s, extreme poverty has been decreasing in all regions of the world with the exception of Africa where about 50 percent of countries in Sub-Saharan Africa have been substantially off-track from achieving the MDG extreme poverty target. Building on the underpinnings of the Money Multiplier(MM) theory and poignant stylized facts, we provide an integrating model for growth, financial development, external debt and corruption. We theorize contemporary roots of Africa's underdevelopment by modelling the domestic development consequences of depositing one unit of money siphoned abroad or the rest of the world. The model also partly explains why the 'creditor developed countries' which have tax havens under their jurisdictions excel to the detriment of poorer countries.

The 'poverty multiplier theory' postulates that: (i) one unit of currency siphoned and deposited abroad (or rest of the world) represents a loss in financial development (ii) a fraction of the unit currency deposited abroad is then channelled to the domestic economy in the form of external debt. This is further siphoned (at the height of the corruption rate) and deposited in the west (or rest of the world) in the form of repayment of interest and loan principal. The process which continues in perpetuity helps explain how the large capital deposited in financial intermediaries in OECD countries is the outcome of the illegal and corrupt practices of the ruling African elite. The overall implication is the growing poverty rates in their domestic economies.

The inquiry has addressed an important policy question. Ceteris paribus, what if external debt in Africa is simply a proportion of GDP lost to corruption (and deposited in tax havens) that is recycled back to the continent on interest/debt service? We have enunciated a "poverty multiplier theory" and a corresponding model for its application within an African context. This naturally leaves room for future empirical research that engages the theoretical underpinnings and modelling approach with the relevant data.

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