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#### The Political Economy of Social Inclusion

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#### Abstract:

We build a political economy model of state policy choice highlighting the challenges to breaking barriers to the adoption of inclusive policies in Africa. We highlight necessary and sufficient conditions for a political leader to gain from implementing exclusive policies: (i) Implementing inclusive policies must be risky; (ii) the political leader must have adequate access to an overseas' financial safe haven as a technology for protecting the spoils from implementing exclusive policies, or investing the looted funds in the domestic economy must sufficiently contribute to mitigate the risk of a revolution. Our results suggest that breaking barriers to inclusive policies in Africa is not an easy task. Bans on international money-laundering schemes may not be sufficient if domestic money laundering is easy and sufficiently discrete.

**Keywords:** Inclusive policies, social exclusion, rebellion, financial safe havens, development

JEL Classification: D70, D74, H50

## Introduction

The January 2011 mass uprising which started in Tunisia, spread to Burkina Faso, Egypt and Libya, are the latest signs of massive discontent across Africa. Social marginalization and the fight over control of the continent's riches are some of the reasons why Africa has been mired in revolutions and armed conflicts. Yet it is not clear why social exclusion permeate public policy in Africa. By social exclusion, we mean deliberate actions by the political leader to channel jobs, favors, and public goods disproportionately to those who back him, on the basis of ethnicity, religion, culture, age, or gender. Angola, Burkina Faso, Cameroon, Chad, Côte d'Ivoire, The Democratic Republic of Congo, Equatorial Guinea, Egypt, Libya, Tunisia, Uganda, and many others have in common a history of exclusive policies, a high reputation for corruption, and unpopular political leaders with immense personal fortunes. Their leaders also share a high likelihood of being deposed. Dividing and ruling, favoring a few faithful ones and violently repressing public discontent, these are some of the ingredients of their survival guide (Milante, 2007). When overthrown, they are often replaced by replicas of themselves. Can African states move out of this cycle? What are the factors that hinder social inclusion in these countries?

This paper advances the idea that unlike the political leaders of Western societies, African political leaders may face a political cost from implementing inclusive policies. In most African countries that have embraced political competition as part of their democratization efforts, social cleavages, have become powerful tools for political entrepreneurs to gain advantage over their opponents (Posner 2004; Bannon, Miguel and Posner 2004; Eifert, Miguel and Posner 2010). In such a context, for an incumbent political leader whose social group is large enough to win on its own, adopting inclusive policies—understood as policies that downplay the salience of social cleavages between different groups— may have a political cost, measured, for example, by the proportion of members of the core social group that would defect or become demobilized in protest against the loss of their exclusive right over the country's economic resources. Thus incumbent African political leaders must balance between the cost of social inclusion and the cost of social exclusion—measured by violent conflicts and revolutions. Provided incumbent African political leaders have adequate access to a technology allowing them to mitigate the risks of social unrest and revolution, they may therefore reap a higher expected payoff from implementing exclusive policies in an environment where all political competitors are allowed to play the social cleavages card in order to gain political support. Central to this idea is the fact that implementation of exclusive policies gives political leaders a carte blanche for looting their countries' treasury, which in turn help them devise mechanisms for mitigating the risks of social unrest and revolution such policies may entail. These mechanisms include access to overseas financial safe havens for laundering public funds looted during the exercise of political office as well as entrusting a section of the country's armed forces with the task of mitigating the revolution threat through political intimidation and repression. We articulate this idea in a simple political economy model of social policy choice.

Nearly 200 years ago, inequality was high and increasing in Western countries, including

 $<sup>^{1}\</sup>mathrm{See}$ also, Coolidge and Rose-Ackerman (1997), Rose-Ackerman (1997), Acemoglu, Robinson and Verdier (2004).

Britain, raising the specter of poverty traps for millions of Europeans. But, by the end of the nineteenth century, a wave of political and social reforms had swept through the West, leading to unprecedented redistributive programs that reduced inequality and erased poverty traps (Acemoglu and Robinson, 2000). The existing literature focusing on this remarkable turnaround links these social changes to the ruling classes' fear of social unrest and revolution (Acemoglu and Robinson, 2000), inducing them to adopt inclusive (as opposed to pro-elite) policies. This literature thus suggests that poverty traps and high income inequality are linked to the adoption of exclusive policies, and thus may only be a temporary diversion, as evidenced by the contemporary experiences of non-Western countries such as Japan, the Republic of Korea, and Taiwan (Sharma, 1999). But in Africa, such traps and inequality seem rather tantamount to an unmovable rock blocking the path to economic development.

Indeed, Africa stubbornly remains a continent of many paradoxes. Rich in natural resources and arable land, but plagued with the highest poverty rates in the world; a continent that posted some of the highest growth rates and demonstrated a surprisingly high recovery capacity in the aftermath of the 2008/2009 global financial and economic crises, but also an arena for growing inequality and social unrest (AfDB, 2011); one of the largest recipients of foreign aid, but also, according to *Transparency International*, a victim of its political leaders' ongoing money laundering schemes that deprive the continent of a significant share of its gross domestic product per year.<sup>2</sup>

Development scholars are yet to come up with explanations likely to guide remedial actions, although advances have been made in the understanding of the pillars of inclusive growth, as imbedded for example in the Millennium Development Goals. These pillars include, investment in infrastructures; mainstreaming agricultural development to enhance the living standard of the 70% of the population who derive their livelihood from farming; expanding and deepening access to basic services such as health, education, safe water and sanitation to combat child and maternal mortality; and financial development to enable the benefits of growth to trickle down to the poor.

While providing a catalog of actions needed to enhance a process of growth that leaves no one behind is helpful and commendable, it is not, however, an explanation of why African political leaders have been slow or uncommitted to undertake these remedial actions — an inaction many see as costly not just for Africa, but for the international community at large. Such inaction or lack of political will is indeed one of the remaining puzzles of African development: Why do African leaders persist with the implementation of exclusive policies in spite of the threat of civil unrest and revolutions? Addressing this important question may hold the key to unlocking Africa's poverty trap and high inequality conundrum.

Suppose a political leader (hereafter PL) must decide whether or not to adopt exclusive policies that marginalize a large section of the citizenry. Adopting such policies, however, exposes the PL to the risks of social unrest and revolution, as in Acemoglu and Robinson (2000). The effect of such unrest is the PL's removal from power, and a loss of his legitimate income from holding political office. Arguably, the risk of losing his income in the aftermath of a revolution may indeed provide the PL with a disincentive to adopt exclusive policies. However, to the extent that implementing exclusive policies enables the PL to embezzle

<sup>&</sup>lt;sup>2</sup>Exceptions exist, of which Botswana is the most notable example (Coolidge and Rose-Ackerman, 1997; Acemoglu, Johnson and Robinson, 2004).

economic resources, this may enhance his capacity to acquire a technology for mitigating the risk of a revolution, thus raising the expected payoff associated with the implementation of such policies. Still, unless the risk of a revolution is completely mitigated, one may expect the PL to find it in his best interest to implement inclusive policies if the associated payoff is sufficiently high. Drawing on the experiences of Tunisia and Egypt, we take as our starting point the fact that counter-revolution technologies available to African PLs can only incompletely mitigate the risk of a revolution. In this political environment, we then investigate factors likely to predispose the PL to implement exclusive policies.

In our model, the PL's decision is construed as a three-stage decision problem, each stage of which has an impact on the probability that the PL will be overthrown through a revolution if he implements exclusive policies. In the first stage, the PL either implements inclusive policies or exclusive ones. If he elects to implement exclusive policies, the PL then decides, in a second stage, whether or not to share some of the embezzled resources with a section the country's armed forces or with a private militia invested with the authority to stifle unrest, by spying and hunting down potential organizers. Finally, in the third stage, the PL decides how to best protect the looted funds, the choice being between investing these funds in the domestic economy, or placing them in overseas financial safe havens. However, investing the looted funds in the domestic economy carries the risk that if a revolution occurs, domestic assets comprising this investment will be seized or vandalized, which may make access to overseas financial safe havens a more attractive proposition to the PL. Furthermore, domestic investment may render looting too obvious to the excluded majority.

We highlight necessary and sufficient conditions for the PL to gain from implementing exclusive policies: (i) Being inclusive carries some risk in the sense that the PL can nevertheless lose political power; (ii) the PL has adequate access to an overseas' financial safe haven, or investing the looted funds in the domestic economy sufficiently mitigates the risk of a revolution. Inclusive policies can be politically costly in environment where ethnicity, culture, or religion play a central role in the political process, as is often the case in many African countries. Political pluralism, fair elections, advocated as a path to democracy, have so far led to the entrenchment of ethnic, cultural, or religious loyalty in politics. In this context, inclusive policies may simply provide an autonomous base of power to non-elite groups from which they can challenge the political elites. Social exclusion may therefore be a strategic decision by incumbent political elites to limit the extent to which political opponents can challenge their power.

Clearly, breaking barriers to inclusive policies is not an easy task. The fight over exclusive policies must be undertaken both inside and outside. The international community needs to make access to international money-laundering difficult. Institutions need to provide for checks and balances and prevent political competition from becoming a winner-take-all political game in addition to preventing culture, religion or ethnicity to permeate party politics. Such institutions often need to be built.

The rest of this paper is structured as follows: Section 1 discusses empirical evidence supporting key assumptions of the model. Section 2 presents the model, Section 3 discusses the result, and Section 4 concludes.

# 1 Stylized facts

Our model assumes (i) inclusive policies are risky, (ii) exclusive policies can lead to social unrest, (iii) political leaders often have access to money-laundering schemes, and (iv) political leaders often set up personal protection groups, either hidden or openly, a private militia, or a special police corps. We next provide supporting evidence towards those assumptions.

## 1.1 Cultural cleavages as barriers to social inclusion

One of our main assumptions in this paper is that inclusive policies (such as universal education and healthcare, provision of public goods, equal opportunities) entail a political risk to the incumbent political leader, thus creating a disincentive for their adoption. In this subsection, we provide supporting evidence for this assumption. First, we draw from evidence in the field of political science to argue that cultural identities (either based on language, religion, race, or region) play a prominent role in the competition for political power across Africa. Second, we also draw from research in various social science sub-fields including, economics, political science, and sociology to document that inclusive policies have an opportunity cost in political competition arenas where cultural cleavages have political salience, in the sense of Posner (2004).

#### 1.1.1 Ethno-religious identities as tools of political mobilization in Africa

In their paper, Political Competition and Ethnic Identification in Africa, Eifert, Miguel and Posner (2010) argue that the salience of ethnicity and religion in Africa is intrinsically linked to exposure to political competition, reflecting the struggle for power and scare resources. In other words, cultural cleavages are primarily a functional tool of political mobilization—which political elites can exploit in order to gain and maintain power. In an earlier paper, Bannon, Miguel and Posner (2004) identify political competition as the main source of the political salience of cultural identities in Africa, a viewed echoed by Glaeser (2005). In a related paper, Posner (2004) argues that the political salience of a cultural cleavage depends on whether it defines cultural groups that are large enough to constitute viable coalitions in the competition for political power.

When applied to post-1990 Côte d'Ivoire, Posner's theory suggests that ethno-religious cleavages in Côte d'Ivoire became politically salient after 1993 for two main reasons. First, the sizes of the Muslim population (which at 38.6% represent the largest ethno-religious group in Côte d'Ivoire) and the Christian population (which at 32.8% represent the second largest group) are sufficiently large to make each of these cultural groups potentially viable coalitions in the competition for political power. Second, post-1990 political institutions in Côte d'Ivoire prescribed a multi-party political competition on the basis of winner-take-all presidential elections, which provide political entrepreneurs with the incentive to prime the cleavage that divides these two largest cultural groups for their own political gain.

Evidence of strong political salience of ethnicity, race, or religion in Africa is by no means restricted to Côte d'Ivoire. Indeed, it is ubiquitous throughout Africa. For example, in its

August 31st 2011 issue, The New York Times<sup>3</sup> reveals that in the recent presidential elections in Nigeria, voting was split along regional, religious and ethnic lines, with one of the two main candidates gathering most of his votes in the largely Christian south and southwest, while the other gathered most of his in the Muslim north. In a cross-country natural experiment involving the Chewas and Tumbukas communities, Posner (2004) document that while the two cultural groups coexist in both Malawi and Zambia, the cleavage between them is politically salient only in Malawi, where each of these two communities is a large group in the arena in which political competition takes place, thus providing a viable base for political coalition-building. Manson (2007) reveals that in the run-up to Sierra Leone's 2007 presidential election, politicians were allow to play the kinship card to gather political support. Gibson and Long (2008) reveal that voters in the 2007 presidential election in Kenya supported presidential candidates from their own ethnic groups, while Ferree (2006) find similar evidence in South Africa.

#### 1.1.2 Does it pay to be inclusive when cultural cleavages are politically salient?

We documented above that cultural cleavages have strong political salience in Africa because African governments have failed to come up with political institutions and mechanisms to prevent exposure to political competition from establishing these cleavages as tools political entrepreneurs can use for gaining advantage in the struggle for power. In this sub-section, we document the political risk of inclusive policies in such an environment, drawing essentially from the post-1990 Côte d'Ivoire (Langer 2004).

Take two political entrepreneurs each with cultural ties to one of two cultural groups comprising a society. Suppose political competition is winner-take-all. Suppose also that each political entrepreneur has a choice between two policy strategies: an inclusive strategy and an exclusive one. Playing the exclusive strategy amounts to giving salience to the cultural cleavage between the two groups, while playing an inclusive strategy amounts to down-playing the inter-group cultural cleavage. A political entrepreneur, who elects to prime the cultural cleavage, does so by raising the danger, among his in-groups, of sharing the country's resources with the out-groups. But this strategy only yields a payoff if in-groups derive no private gain from verifying the truthfulness of this claim (Glaeser 2004). A political entrepreneur who elects to play-down the cultural cleavage does so by pledging to legitimize the out-groups claim to a fair share of the country's resources. But this strategy only pays off if the (opportunity) cost for out-groups of verifying the truthfulness of this pledge is less than the benefit of inclusion. By playing out the cultural cleavage as a tool of electoral mobilization, each political entrepreneur increases the opportunity cost for his in-groups of verifying the truthfulness of the inclusion pledge (if any) made by his political opponent. Therefore for each political entrepreneur, playing the inclusive strategy carries the risk that out-groups may not be able to costlessly verify the truthfulness of this pledge, in which case he may fail to mobilize a large enough electoral base needed to gain political power. Glaeser (2004) uses this argument to explain why politicians have been able to fan hatred and division as tools for gaining political power.

Indeed, post-1990 political competition in Côte d'Ivoire is a perfect illustration of Glaeser's

<sup>&</sup>lt;sup>3</sup>See http://topics.nytimes.com/top/news/international/countriesandterritories/nigeria/index.html.

theory about the political risk of social inclusion. It suggests in the context of Côte d'Ivoire, that social inclusion under ethno-religious cleavages was politically risky because acquiring information about the truthfulness of the claim of social inclusion was too costly for each of the two main cultural groups (Muslim and Christian) comprising the country's population. In 1995, the incumbent presidential candidate, Henri Konan Bédié, as a strategy for building a winning political coalition around Christian southerners who represent about 32.8% of the total population (CIA, The World Fact Book), used legal acrobatics through the concept of *Ivoirité* to delegitimize Muslim northerners in the eyes of Christians, by claiming that northerners were not true Ivoirians. Perhaps as remarkable as the invention of the notion of *Ivoirité* was the fact that subsequent political incumbents including, General Robert Gueï and Laurent Gbagbo, all of which are tied to the Christian southerners, persevered with the adoption of strategies and policies of political monopolization and ethnic favoritism towards Christian, despite the violent conflicts that erupted as a result of social exclusion of Northerners.

This case study of post-1990 Côte d'Ivoire suggests that social inclusion may be politically costly in the context of a winner-take-all political competition and of a culturally heterogeneous country. In our model, social inclusion exposes the leader to a positive probability of losing his political power. On one hand, the fear of a revolution gives the political leader an incentive to include all cultural groups. But, losing political power as a result of political salience of cultural cleavages, on the other hand, gives him an incentive to exclude so as to limit the extent to which the opposition can challenge his power. Our model therefore suggests that in a country like Côte d'Ivoire, social exclusion is optimal when the costs of including outweigh the costs of excluding.

# 1.2 Exclusive policies and the threat of social unrest: A short review of historical evidence

Social exclusion pervades Africa. For example, Dunning (2005) shows that in many resource-dependent countries, political leaders who control natural resource windfalls face a trade-off in their attempt to promote diversification of the economy that would benefit the rest of the citizenry. A diversification of the economy would likely lead to the emergence of competing bases of power that may facilitate future challenges to the political incumbent's control of natural resources. Dunning's analysis thus suggests that social exclusion is the outcome of a winner-take-all political competition between incumbent political leaders and various social groups aspiring to political power. Such competition, he argues, is the engine that drives economic policies in resource-dependent states leading to political resistance to the imperatives of diversification. Examples include Mobutu's Zaire, Angola, Nigeria.

But resource-dependent states are not the only arena of social exclusion. In non-resource dependent agricultural-based states, social exclusion also permeates the political economy of agricultural development, with smallholder farmers representing the marginalized section of the population. Central in this case is the allocation of Official Development Assistance (ODA) in the promotion of farmers' adoption of technological solutions to the problem of soil fertility management. The domination of the supply-chain for such technological solutions by state-owned or parastatal companies financed by ODA has been blamed for

agricultural stagnation in sub-Saharan Africa. Indeed, despite decades of foreign aid, Africa ranks the lowest in the world in terms of yield-enhancing practices, mechanization, use of agrochemical and irrigated land. African countries also use on average only 125 grams of fertilizer per hectare compared to the world average of 1020 grams per hectare (UNECA 2009). Pickering (1989) reveals that the monopoly power these companies enjoy allows them to earn substantial profits at the expense of farmers.

African countries which produce mostly primary commodities or minimally process goods typically occupy the lower ranks of measures of institutional quality like the World Bank's Doing Business Index or Transparency International's Corruption Perception Index, reflecting the prevalence of inefficient states and poor state-citizens accountability relationships. They also rank highest in the world, by most international measures, in terms of debt, poverty, misery, malnutrition, diseases, infrastructure decay and political instability. It is also well-documented, notwithstanding a few exceptions, that African countries generally lack schools, hospitals, roads, adequate sanitation, irrigation facilities, electricity, and other basic services, making them appear as laggards in the race to a timely achievement of the Millennium Development Goals.

Historically, countries with poor record in basic inclusive policies, while affording status privileges to a select few known as the elite, have been the siege of social unrest. The French revolutions of 1789 and 1848 are two of the well-documented illustrations of the link between inefficient state and social unrest. Toward the end of 1789, the French peasants, burdened with high taxes and high rents, handicapped by rudimentary farming practices, and hopelessly confronted with soaring food prices had little to lose in using their last energy to unleash the forces of revolution (Kreis, 2000). Similar reasons are at the core of the 1917 Russian revolution. Another example is provided by the 1974-1975 Portuguese revolution, led by a disgruntled Portuguese working class then burdened by the weight of the state's resource-draining foreign wars, malnutrition, high infant mortality, and high unemployment rates (Chilcote, 2010).

Africa itself is rich in evidence. Examples include social unrest in Togo in 1990, and more recently in Tunisia, Burkina Faso, Côte d'Ivoire, Egypt, Libya, Syria in 2011. The developments in Egypt and Tunisia show several common characteristics. First, in both countries, the ruling elites failed to effectively deal with corruption, the continually rising gap between the rich and the poor, and falling standards of living. Second, in both countries the political leaders and their associates had virtual control of their respective countries' economy. For example, it is estimated that prior to the social unrest in Tunisia, the families of deposed president Ben Ali and his wife controlled between 30% and 40% of the Tunisian economy. In the case of Egypt, it is estimated that the deposed president Mubarak, his wife, his two sons and two daughters-in-law secretly amassed assets in the region of \$1 billion to \$70 billion. Second, both unrests took place in the aftermath of the global economic downturn, implying that crises hit the poor hardest, leading to desperation and chaos.

The above evidence points to exclusive policies as a cause of social unrest and revolution, which raises the question of why African leaders fail to internalize this threat in their policy making.

<sup>&</sup>lt;sup>4</sup>BBC News, January 11th 2011, available online at http://www.bbc.co.uk/news/world-africa-12302659.

<sup>&</sup>lt;sup>5</sup>BBC News, February 11th, 2011, available online at http://www.bbc.co.uk/news/uk-politics-12527404.

### 1.3 Social exclusion in Africa and money-laundering schemes

An important feature of our model is that African political leaders resort to overseas money-laundering schemes to mitigate the risk of revolution. In this subsection, we offer empirical support for this assumption.

The persistence of social exclusion in Africa, despite the threat of revolution and social unrest, is quite puzzling. But such persistence cannot be separated from the money-laundering schemes involving African leaders. Press releases and reports abound exposing looting and overseas' money-laundering by African political leaders, their families and close associates. For example, at the country level, such evidence can be seen in the recent move by western countries governments to freeze the assets of African political leaders. In Switzerland, the Foreign Minister, Micheline Calmy-Rey, announced on May 3rd, 2011, that nearly \$1 billion worth of assets linked to Libya's Muammar Gaddafi and the deposed political leader of Egypt and Tunisia have been frozen since January 2011.<sup>6</sup> Earlier in 2011, the government of Canada tabled a bill aimed at freezing assets of corrupt regimes, in the aftermath of the recent social uprising in the Middle East and North Africa. In 2010, in the United States, a Senate investigation committee provided evidence linking top African politicians and their families to money-laundering schemes in the United States. <sup>8</sup> According to the committee's report, among the guilty African leaders, we find the son of Equatorial Guinea President Teodoro Obiang Nguema — alleged to have introduced more than \$110 million in suspect funds into the U.S. from 2004 to 2008 —, the wife and daughter of the late former president of Gabon, Omar Bongo, the Head of Angola's Central Bank, Aguinaldo Jaime—who is alleged to have placed \$50 million in Angolan government funds to a private account in the U.S., in 2002.

Interestingly, in 2008, in a dispute with Switzerland over the arrest of one of Gaddafi's sons, Libya openly threatened to withdraw several billion dollars from Swiss banks, prompting apologies from the Swiss President, Hans-Rudolf Merz.<sup>9</sup> A Swiss news agency claimed that Libya's \$5.2 billion withdrawn from Swiss banks in 2008-2009 accounted for 0.3% of all foreign assets in that countries banking system.<sup>10</sup>

The Swiss central bank (BNS, 2011) reports that in 2010, the assets from African and Middle Eastern countries in Swiss banks represented 43 billion Swiss francs (approximately \$40 billion). In 2007, these assets amounted to 64 billion Swiss francs (BNS, 2008).

At the international level, recognition of the magnitude of public funds laundering by developing countries leaders is reflected in the Stolen Asset Recovery Initiative (also known as STAR Initiative), jointly launched in 2007 by The United Nations Office on Drugs and

<sup>&</sup>lt;sup>6</sup>BBC News, available online at http://www.bbc.co.uk/news/world-europe-13264931.

<sup>&</sup>lt;sup>7</sup>Press Release No.89 published in March 03, 2011 by the Ministry of Foreign Affairs and International Trade of Canada and available online at http://www.international.gc.ca/media/aff/news-communiques/2011/089.aspx.

 $<sup>^8\</sup>mathrm{The}$  Wall Street Journal, February 4th, 2010. Available online at http://online.wsj.com/article/SB10001424052748704041504575044903763356876.html.

 $<sup>^{9}</sup>$  Le président suisse s'excuse auprès de la Lybie: la presse est atterrée." L'Express, August 21, 2009. See also "Libya 'to pull Swiss bank assets'," BBC News, October 2008. Available online at http://news.bbc.co.uk/2/hi/africa/7662856.stm.

<sup>&</sup>lt;sup>10</sup>"Libya pulls assets from Swiss banks", SwissInfo.ch, June 28, 2009.

Crime and the World Bank.<sup>11</sup> The magnitude of this problem was also revealed in a 2002 BBC report estimating at \$148 billion a year, the amount of ill-acquired funds laundered by African political leaders in Western Countries' banking institutions.

### 1.4 Militia, special police, and the dictators' stronghold

Another important feature of our model is that political leaders choosing social exclusion typically enlist a section of the national armed forces or raise a special militia for their personal protection against popular uprising. In this subsection, we provide supporting evidence for this assumption.

Haiti's Duvaliers, father and son, had set-up a private militia known as the tontons macoutes, responsible for many atrocities. In Zimbabwe, Robert Mugabe's party (Zanu-PF) enroled young militians into the National Youth Service, a paramilitary organization suspected of many crimes against civilians (SPT, 2003). Recently deposed Laurent Gbagbo, in Côte d'Ivoire, was protected by a militia called the Young Patriots. Tunisia's Ben Ali had his own groups of diehards, the political police and the DSE (Direction de la sûreté de l'Etat) directly under his supervision (Séréni, 2011). In Egypt, Moubarak's regime controlled a similar parallel police corps. Charles Taylor, of Liberia, and Idi Amin, of Ouganda, are two other well-known examples of past authoritarian rulers with strong special military forces. The history of the Democratic Republic of Congo is also full of examples of private militias (Ndikumana and Emizet, 2003).

Militias and special police corps follow no rule of law. They arbitrarily tax, extort, torture, rape, murder those suspected of opposing the regime. Their goal is terror. They use every means to establish it, even the destruction of whole villages where an insurgent is thought to have lived (Mbembe, 1999). Doing so, they encourage informing.

In the next section, we develop a model incorporating the stylized facts discussed above.

# 2 The setup

Consider a PL, in a winner-take-all political system, endowed with the power to manage a windfall,  $\bar{R}$ , say, a stream of ODA or of royalties from the extraction of state-controlled natural resources. The PL may either use this windfall to enhance a process of inclusive growth, or pursue non-inclusive policies that marginalize the majority of the citizenry. The PL receives a legitimate payoff,  $\omega$ , from running the country.<sup>12</sup>

A PL committed to implementing inclusive policies is one that enacts institutional reforms aimed at strengthening citizen-state accountability relationships, and thus manages the windfall,  $\bar{R}$ , in a way that benefits the whole society. However, in this environment, being inclusive does not necessarily enlarge the PL power base, say because the political process entrenches ethnic, religious, or cultural loyalty. In that context, being inclusive can amount to political suicide in the sense it expands the opposition's organizational resources

 $<sup>^{11}</sup>$ World Bank, 2007. Stolen Asset Recovery (STAR) Initiative: Challenges, Opportunities, and Actin Plan. Available online at <a href="http://siteresources.worldbank.org/NEWS/Resources/Star-rep-full.pdf">http://siteresources.worldbank.org/NEWS/Resources/Star-rep-full.pdf</a>

<sup>&</sup>lt;sup>12</sup>The legitimate payoff,  $\omega$ , can be understood in this static model as a wage, but in a more dynamic set-up could be interpreted as the reward the politician obtains when leaving office peacefully.

with which they can successfully challenge the PL's power. We denote as  $\underline{\rho} \in [0,1]$  the probability that the PL loses political power, despite implementation of inclusive policies.

A PL committed to implementing non-inclusive policies is therefore one that does not enact political reforms that would endow citizens with accountability mechanisms. In this model, exclusive policies are understood as a scheme allowing the PL to divert a share of the windfall,  $\alpha \bar{R}$ , for private benefit, where  $\alpha \in (0,1]$ . However, pursuing non-inclusive policies is not without a risk: it raises the chances of a successful revolution that overthrows the PL. Indeed if the PL elects to pursue such policies, with probability  $\rho$  a successful revolution occurs. When overthrown, the PL loses his legitimate payoff,  $\omega$ , as well as the looted public funds,  $\theta \in [0, \alpha \bar{R}]$ , unless he had previously laundered these funds in an overseas' financial safe haven, in which case he will flee his country and claim a payoff  $\phi(1+i_F)\theta$ , where  $i_F$  denotes the exogenous interest rate in the foreign capital market,  $\phi \in (0,1)$  a positive parameter measuring the PL's ability to recover looted public funds laundered overseas. If the PL elects to invest the looted funds in his home country, he will earn a return  $(1+i_D)\theta$  on top of the legitimate payoff in absence of a successful revolution; but he will lose all of it if he is deposed, where  $i_D$  denotes the return on domestic investments. To mitigate the risk of rebellion, the PL may finance the creation of a private militia at a cost M.

## 2.1 The PL's decision problem

The PL's decision problem can be modelled as a sequential decision problem involving three stages. Let  $a_s$  denote the PL decision in stage  $s \in \{1, 2, 3\}$ . In the first stage (s = 1), the PL must choose a binary level of policy action  $a_1 \in \{0, 1\}$ .  $a_1 = 0$  means he opts for inclusive policies, in which case he will receive a payoff,  $\omega$ , with probability  $1 - \rho$ , and 0 with probability  $\rho$ . By contrast,  $a_1 = 1$  means that he engages in non-inclusive policies, in which case he has another decision to make (second stage).

In the second stage, given that he elected to pursue non-inclusive policies, he must choose a binary level of protective action  $a_2 \in \{0, 1\}$ . Action  $a_2$  pertains to whether or not he will create a private militia given that he elected to pursue non-inclusive policies, and thus determines the net size of the looted funds,  $\Theta(a_2)$ . If he chooses  $a_2 = 1$ , he will incur a cost M to form the protective militia. In this case, the net size of the looted funds will reduce to  $\Theta(1) = \alpha \bar{R} - M$ . One can think of M as funds allocated to bribing a section of the national army for his private protection.

If, instead, he makes the decision  $a_2 = 0$  in the second stage, he will pass on the opportunity to have a private militia, despite his pursuit of non-inclusive policies. Making this move will entitle him to a level of net funds  $\Theta(0) = \alpha \bar{R}^{13}$ 

Choosing  $a_2$  also affects the probability that a coup occurs when public funds are looted by the PL. We will return to this relation further below. At this stage, the PL can still affect his realized payoff by making a final decision (third stage).

In the third and last stage, the PL must take a binary level of action  $a_3 \in \{D, F\}$ . Choosing  $a_3 = D$  means investing the looted funds in the domestic economy. In this case, he will receive a payoff  $\omega + (1 + i_D) \Theta(a_2)$  if no successful revolution occurs, and 0 otherwise. By contrast, choosing  $a_3 = F$  means laundering the looted funds overseas. In this case, he will

<sup>&</sup>lt;sup>13</sup>The model easily generalizes to the case of different sizes of militias.

receive a payoff  $\omega + \phi(1 + i_F) \Theta(a_2)$  if no successful revolution occur, and  $\phi(1 + i_F) \Theta(a_2)$  otherwise. Choosing  $a_3$  also affects the probability to be deposed, as we show below.

#### 2.2 Revolution

We define the probability that a successful revolution occurs by  $\varrho : \{0,1\} \times \{0,1\} \times \{D,F\} \rightarrow [0,1]$ . We make the following parametric assumption:

**A.1.** 
$$\varrho(a_1, a_2, a_3) = (1 - a_1) \varrho + a_1 (\alpha \bar{R} - a_2 M) \gamma_{a_3}$$
 where:

- (i)  $\rho \geq 0$
- $(ii) \quad \bar{\gamma}_{a_3} \in (0,1)$

The function  $\varrho$  thus has the following property:

$$\forall a_3 \in \{D, F\}, \quad \varrho(1, 1, a_3) < \varrho(1, 0, a_3)$$

This property implies that creating a political dictatorship supported by a section of the state's formal armed forces decreases the probability that a successful revolution will occur. With assumption A.1 in hand, we can now proceed to investigate barriers to the adoption of inclusive policies.

Note that Assumption A.1-(i) states that the probability that the PL will be overthrown even if he pursues inclusive policies is not necessarily zero. This probability can be strictly positive, for example, in fragile democracies where ethno-linguistic divisions pervade the political landscape, as is the case in many African countries. Unless political institutions adequately address the issue raised by such divisions,  $\underline{\rho}$  is likely to be positive, raising the political costs of inclusive policies.

It is important to note the role played by the parameter  $\gamma_{a_3}$  in the value of the probability of a successful revolution.  $\gamma_F$  or  $\gamma_D$  reflect the intensity of civil mobilization when social exclusion is implemented, depending on whether the PL chooses to invest looted funds abroad or domestically.

# 2.3 Expected payoff

In this subsection, we characterize the PL's expected payoff given the probability profiles outlined in subsection 3.2 above.

Let  $V: \{0,1\} \times \{0,1\} \times \{D,F\} \to \Re$  by  $\forall (a_1,a_2,a_3) \in \{0,1\} \times \{0,1\} \times \{D,F\}, u = V(a_1,a_2,a_3)$  denote the expected payoff of the PL when he makes the decision  $(a_1,a_2,a_3)$ . First, observe that  $\forall (a_2,a_3) \in \{0,1\} \times \{D,F\}$ ,

$$V\left(0, a_2, a_3\right) = \left(1 - \rho\right)\omega \equiv V_0$$

is the expected payoff from implementing inclusive policies. In the first stage of his decision process, the PL balances this payoff against the expected payoff,  $V_1(a_2, a_3) = V(1, a_2, a_3)$ , from not doing so.

Second, if the PL, having decided to implement non-inclusive policies  $(a_1 = 1)$ , chooses not to fund the creation of an counter-revolution private militia  $(a_2 = 0)$  he will receive an expected payoff,

$$V_1(0,D) = (1 - \varrho(1,0,D))[\omega + (1+i_D)\alpha \bar{R}], \tag{1}$$

if he elects to invest the looted funds in the domestic economy (i.e.,  $a_3 = D$ ). If, instead, having chosen  $(a_1, a_2) = (1, 0)$  in the earlier stages, he elects to launder the looted funds in an overseas financial safe haven (i.e.,  $a_3 = F$ ), he will receive an expected payoff:

$$V_1(0,F) = (1 - \varrho(1,0,F))\omega + \phi(1+i_F)\alpha\bar{R}$$
(2)

Third, if the PL, having decided to implement non-inclusive policies (i.e.,  $a_1 = 1$ ), chooses to fund the formation of a counter-revolution militia ( $a_2 = 1$ ), his expected payoff will be:

$$V_1(1, D) = (1 - \varrho(1, 1, D)) \left[\omega + (1 + i_D) \left(\alpha \bar{R} - M\right)\right], \tag{3}$$

if he elects to invest the looted funds in his home-country (i.e.,  $a_3 = D$ ). If, instead, he elects to launder the looted funds in an overseas financial safe haven (i.e.,  $a_3 = F$ ), he will receive an expected payoff:

$$V_1(1, F) = (1 - \varrho(1, 1, F))\omega + \phi(1 + i_F)(\alpha \bar{R} - M). \tag{4}$$

Since the PL decision problem is sequential, it can be solved by applying the usual backward induction method. Figure 3 presents the decision tree facing the PL.

The next section characterizes the solution to this decision problem.

## 3 The determinants of social exclusion

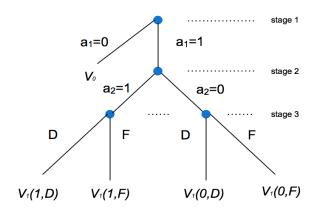
Our goal is to find the conditions under which the PL finds it in his interest to implement exclusive policies  $(a_1 = 1)$ . Once these conditions have been found, it becomes possible to speak about remedies.

To solve the optimization problem of the political leader, we proceed by backward induction. In the last stage, for all possibilities of decisions he may have taken earlier in the decision tree, we can determine his optimal choice and the corresponding payoff. We then move back one step. Given what we know he will do if he reaches any node passed that point, we can infer his optimal decision in this step. And so on to the initial node of the decision tree.

In the third stage, given that the PL is corrupt (i.e. he must have chosen  $a_1 = 0$  to end up there), his next choice is where to invest the looted funds, mindful of the impact this choice can have on the likelihood of a revolution. Again, just to recall, the choice at this stage is between purchasing domestic assets  $(a_3 = D)$  or acquiring foreign assets, as part of an overseas' money-laundering scheme  $(a_3 = F)$ .

There are two possible scenarios at this stage. On the one hand, it may be best for the political leader to use overseas money-laundering schemes, to maximize the secrecy of the

Figure 1: The political leader's decision tree



looting operation, avoid drawing public attention, and minimize the risks of a revolution. Available evidence reveals that many African dictators have indeed devised money-laundering schemes in overseas financial safe havens.

On the other hand, investing the looted funds domestically may be a reasonable option for the political leader if it sufficiently mitigates the risk of revolutions. That must be the case if there are sufficient external benefits to the population. We analyze both cases in turn.

# 3.1 Case 1: the overseas option

Hiding his fortune overseas', at the third stage of the decision tree (Fig. 3), is the head of state's best strategy for mitigating the risk of a revolution if the following condition is satisfied:

$$\gamma_D - \gamma_F \ge \frac{(1+i_D)\left[1 - \gamma_D\left(\alpha\bar{R} - M\right)\right]}{\omega} \tag{5}$$

If this condition is satisfied, at the third stage of the decision tree, the overseas option dominates the possibility to invest looted funds locally (i.e.  $V_1(a_2, F) > V_1(a_2, D)$ ), see the Appendix for technical derivation of this condition). It does so, whether the PL has chosen to hire a militia or set up a special police force  $(a_2 = 1)$  or not  $(a_2 = 0)$ . Condition (5) is satisfied if social exclusion is more mobilizing when the PL chooses to launder the looted funds in the domestic economy than when he chooses to launder them in an overseas financial safe haven. This may be the case for example, when channels through which the PL launders money in the domestic economy can be easily exposed to the public eye, thus making it easier for the excluded to mobilize against exclusion.

Moving back to stage two, the PL finds it optimal to back his power with a military or paramilitary force if the benefits of doing so outweigh the cost (i.e.  $V_1(1, F) > V_1(0, F)$ ):

$$\gamma_F > \frac{\phi \left(1 + i_F\right)}{\omega} \tag{6}$$

This latter formulation highlights the PL's fear of a successful revolution if he chooses exclusion. Condition (6) suggests that the PL will resort to a military-backed dictatorship if social exclusion is sufficiently mobilizing, i.e. if it sufficiently affects the probability of a successful revolution. If Condition (6) was not satisfied, the PL could do without a military support. While this possibility theoretically exists, it is empirically implausible since all African PL who chose exclusion, also sought the protection of a military or paramilitary force. In this implausible scenario, however, social exclusion is all the more tempting for the PL, since it comes without the cost of corrupting the army or a militia. We skip this case in the coming lines, focusing on the more realistic scenario in which condition (6) is indeed satisfied.

Moving back to stage one, the PL chooses exclusion over inclusion if

$$V_1(1,F) > V_0$$

which is equivalent to

$$\gamma_F < \frac{\underline{\rho}}{(\alpha \bar{R} - M)} + \frac{\phi (1 + i_F)}{\omega} \tag{7}$$

As appears from Condition (7), the PL will favor social exclusion if the latter is not excessively mobilizing given that the money-laundering of looted funds will take place overseas. This is usually the case when there is high secrecy surrounding private investment made by political leaders abroad, as illustrated by a relatively high value for  $\phi$ .

All in all, our discussion leads us to the following prediction: In this first scenario in which financial safe havens are attractive abroad, the PL chooses to implement social exclusion within a military-backed dictatorship if the revolution parameter  $\gamma_F$  lies in the following interval:

$$\frac{\phi(1+i_F)}{\omega} < \gamma_F < \frac{\underline{\rho}}{(\alpha \bar{R} - M)} + \frac{\phi(1+i_F)}{\omega} \tag{8}$$

Proposition 1, whose proof has just been undertaken, summarizes the findings: 14

**Proposition 1** The political leader whose access to foreign safe havens is sufficiently easy—in the sense of condition (5)—will favor exclusive policies and a military-backed dictatorship if and only if condition (8) is satisfied.

As can readily be seen from the inequations above, a sufficient condition for the interval in Condition (8) to be non-empty is that the probability to be ousted by a coup when implementing inclusive policies is non-zero, i.e.  $\rho > 0$ .

<sup>&</sup>lt;sup>14</sup>The Appendix more formally establishes all the necessary steps for the proof of this proposition.

Condition (8) offers important clues as to why African leaders are more disposed to favor exclusive policies. One reason is that  $\underline{\rho}$  is often strictly positive in Africa. In other words, implementing inclusive policies does not eliminate the risk that the PL will lose hold of political power. The strict inequality  $\underline{\rho} > 0$  is likely to hold in ethnically segmented Africa where ethnic politics continues to permeate identity formation and inter-ethnic relations. Well-documented examples include, but are not restricted to, Benin, Côte d'Ivoire, the Democratic Republic of Congo, Egypt, Ethiopia, Gabon, Liberia, Nigeria, Sudan, Zimbabwe. But while  $\underline{\rho} > 0$  is necessary for an African PL to engage in a systematic campaign of embezzling public resources through the imposition of a military-backed dictatorship, the pervasiveness of ethnic segmentation need not condemn Africa to corruption and civil unrest.

Observe that even if  $\rho > 0$ , Proposition 1 may still fail to hold under an international ban on money-laundering schemes (i.e.,  $\phi = 0$ ), thus effectively depriving political leaders of access to overseas financial safe havens as a strategy for laundering looted funds. In this sense, recent decisions by developed countries' governments to crack down on money-laundering schemes benefiting African dictators is a step in the right direction, and if systematically adopted by all countries, can have indeed a positive impact in the fight against corruption and dictatorships in Africa. But is such a ban sufficient? Does it hold the key to the emergence of accountable governments in Africa? The next subsection analyzes the other case, where money laundering is more effective at home.

### 3.2 Case 2: the home laundering option

Whether military protection has been chosen by the PL, home laundering is the preferable option at stage 3 of the decision tree (Fig. 3) if  $V_1(a_2, D) > V_1(a_2, F)$ . A sufficient condition for this inequality to hold is given by:

$$\gamma_F - \gamma_D > \frac{(1+i_D)\gamma_D \alpha \bar{R} + (\phi i_F - i_D)}{\omega} \tag{9}$$

Condition (9) states that social exclusion is less mobilizing when looted funds are laundered in the domestic economy rather than in an overseas financial safe haven. This is likely to be the case when the channels through which the PL launders the looted money in the domestic economy lead to job creation among the excluded, which, in turn, reduces their incenitive to mobilize. By contrast, laundering the money in overseas financial safe havens creates jobs abroad at the expense of the domestic economy.

The choice of seeking military protection at stage 2 is thus optimal in this case if  $V_1(1,D) > V_1(0,D)$ . This inequality can be shown to reduce to:

$$\gamma_D > \frac{1 + i_D}{\omega + (1 + i_D) \left(2\alpha \bar{R} - M\right)}.\tag{10}$$

As in the previous case, we disregard the scenario in which the PL does not need to resort to military protection since it is not empirically plausible. Condition (10) means that exclusive policies are mobilizing enough that they make the risk of revolution too high not to seek protection of the military or a militia.

Moving backward to the root of the decision tree, it is optimal for the PL to choose social exclusion within a military or paramilitary dictatorship if doing so dominates the choice of inclusive policies, i.e. if:

$$V_1(1,D) > V_0$$

which is equivalent to

$$\gamma_D < \frac{\omega\underline{\rho} + (1 + i_D) \left(\alpha \bar{R} - M\right)}{\left[\omega + (1 + i_D) \left(\alpha \bar{R} - M\right)\right] \left(\alpha \bar{R} - M\right)}.$$
(11)

Condition (11) states that social exclusion is not exceedingly mobilizing when looted funds are laundered in the domestic economy.

Hence social exclusion within a military or paramilitary dictatorship is observed if the revolution parameter  $\gamma_D$  lies in the following interval:

$$\frac{1+i_D}{\omega+(1+i_D)\left(2\alpha\bar{R}-M\right)} < \gamma_D < \frac{\omega\underline{\rho}+(1+i_D)\left(\alpha\bar{R}-M\right)}{\left[\omega+(1+i_D)\left(\alpha\bar{R}-M\right)\right]\left(\alpha\bar{R}-M\right)}$$
(12)

The following proposition summarizes the discussion. The proof is again straightforward, following the steps we have just taken.

**Proposition 2** The political leader whose access to foreign safe havens is difficult — in the sense of condition (9) — will favor exclusive policies and a military-backed dictatorship if and only if condition (12) is satisfied.

Importantly, Proposition 2 states that even in the absence of access to overseas' money-laundering schemes, African political leaders can still find it in their best interest to set up a political dictatorship as a mechanism for embezzling public funds provided condition (12) is satisfied.

Unlike in the previous case, however,  $\underline{\rho} = 0$  is not a sufficient condition for the corresponding interval to be empty. Hence, we may witness social inclusion even in countries in which ethnicity, race, religion, or culture do not permeate politics. What makes exclusion attractive in this case is purely (i) the prevalence of a winner-take-all political competition, (ii) the weakness of state institutions allowing the PL to retain discretion over the use of public funds, (iii) the lack of constitutional entrenchment of civil rights (including the rights for peaceful demonstrations), enabling the PL to use special military forces to intimidate or repress. The case of Tunisia is more in line with this scenario.

# 3.3 Promoting social inclusion

As we have just discussed, we cannot conclude that putting all efforts in eliminating the influence of ethnicity, religion, race, or culture in politics will always induce political leaders to implement social inclusion. The following proposition formalizes this observation:

**Proposition 3**  $\underline{\rho} = 0$  is not a sufficient condition for political leaders to favor inclusive policies.

Indeed, while setting  $\underline{\rho} = 0$  does make the interval in Condition (8) of Proposition 1 vanish, it is not sufficient to take care of the other case. The interval in Condition (12) of Proposition 2 is not empty in such case as can be seen from a visual inspection of the borns of the interval.

What does Proposition 3 mean? How relevant are the efforts to lower  $\underline{\rho}$ ? Clearly, they are efforts in the right direction to fight social exclusion. While not sufficient, they make the Conditions in both Proposition 1 and 2 less likely. The key to understand in which other directions to work lies in the observation that, whether in Cases 1 or 2, a necessary condition for social exclusion to dominate social inclusion in the eye of the PL is that social exclusion is not mobilizing enough. That is formalized by Conditions (7) and (11). Social inclusion would be the result of the PL's maximization problem if these conditions were in fact violated. This is the sense of the next important result.

**Proposition 4** Social inclusion is the optimal choice of political leaders if both Conditions (7) and (11) are simultaneously violated.

If access to financial safe havens is difficult (low  $\phi$ ), if the cost of controlling a militia or a special police force, M, is too high, and if domestic assets make social exclusion too obvious, we may be more likely to witness the implementation of inclusive policies. Conditions (7) and (11) are indeed more likely to be violated, the poorer the access,  $\phi$ , or the return,  $i_F$ , to foreign money laundering, the higher the legitimate wage,  $\omega$ , the lower  $\underline{\rho}$  and the lower the possible returns to local money laundering,  $i_D$ .

Combined efforts to expose money-laundering of political leaders, strengthen democratic institutions and make the legitimate pay-off attractive will all be steps in the right direction to promote the prevalence of inclusive regimes.

# 4 Concluding remarks

In this paper, we explore the nature of barriers to the implementation of inclusive policies in Africa. For this purpose, we use a simple three-stage, political-economy, model of social policy choices by a forward-looking political leader. In this model, a political leader who elects to implement exclusive policies must take protective measures to guard against the risks and the effects of a revolution on his well-being. In such an environment, we highlight necessary and sufficient conditions for the political leader to favor exclusive policies: (i) Implementing inclusive policies is risky; (ii) the PL has adequate access to an overseas' financial safe haven, or investing the looted funds in the domestic economy sufficiently mitigates the risk of a revolution.

Bans on overseas money laundering are useful, but may not be sufficient to make inclusive policies the best option of the political leader. One other key element in our results is the building and the protection of institutions that make the political game different from a winner-take-all political competition. If the political leader was sure he would not be overthrown when opting for inclusive policies, our model predicts social inclusion would be more likely in many countries where it is currently lacking. Institutions also need to bar ethnicity, culture or religion from politics. These institutions should ensure that political

leaders are accountable to all citizens, not just a specific group. The international community may have a role in inducing the adoption of such institutions.

One may wonder if our model is limited to Africa. The answer is no. It is relevant for all non-democratic countries where a political leader has the opportunity to manage a sizeable windfall. This is especially relevant for Africa for two reasons. First, that continent is extremely rich in natural resources. Second, for several decades after African countries' independence, the receipts from foreign aid have averaged more than 10% of the recipient gross domestic product (Pallage and Robe, 2001), well above the proportion for recipients in other continents.

Since the beginning of the last decade, China has emerged as a key new player in Africa (Wang, 2007). Does China's growing involvement in Africa affect the prospect for inclusive policies? The answer to that question is not straightforward. On the one hand, China's economic involvement in countries with strong dictatorships, helps maintain unpopular regimes by providing them with financial resources and international legitimacy. In our model, it is tantamount to a reduction in the cost of raising a militia or a special police force. Given the importance of this factor in our results, it cannot be seen as good news for the adoption of inclusive policies. On the other hand, to the extent that trade with China has positive spillovers on the standard of living of the population, it may reduce inequality. It is not clear, however, that the proceeds of such trade do not simply increase the size of the windfall at the disposal of the political leader, in which case, they only make the problem more striking.<sup>15</sup>

# 5 Appendix

In this section, we detail the technical steps to solving the PL three-stage decision problem. We argued that the PL is forward-looking, implying that his three-stage decision problem can be solved by backward induction. First, the PL decides on action  $a_3$ , given  $(a_1, a_2)$ ; then he decides on  $a_2$  given  $a_1$ , also taking into account how this decision affects his last stage decision  $a_3$ ; finally, he moves back to the first stage where he decides on  $a_1$ , taking into account how this decision affects those in the subsequent stages.

# 5.1 Optimal decision at Stage 3

We first look at the PL's decision at the third stage of the decision tree (see Fig. 1) when he must choose where to invest the looted funds. In other words, we want to determine  $a_3^*$  such that, given  $(a_1, a_2)$ ,

$$a_3^* = \arg\max_{a_3} V(a_1, a_2, a_3)$$

We know that if  $a_1 = 0$ , then  $\max_{a_3} V(a_1, a_2, a_3)$  admit no solution, because the PL elects not to loot public funds. Therefore, for the rest of this analysis, we look for a solution to  $\max_{a_3} V(a_1, a_2, a_3)$  conditional upon the PL choosing  $a_1 = 1$ . That is, given  $a_2$ , we determine

$$a_3^* = \arg\max_{a_3} V_1(a_2, a_3)$$

<sup>&</sup>lt;sup>15</sup>For an interesting perspective on this, see Keenan (2008).

where  $V_1(a_2, a_3) \equiv V(1, a_2, a_3)$  is obtained as follows, using Assumption A.1:

$$V_{1}(a_{2}, a_{3}) = \begin{cases} [1 - \gamma_{D}\Theta(a_{2})] [\omega + (1 + i_{D})\Theta(a_{2})] & \text{if } a_{3} = D \\ [1 - \gamma_{F}\Theta(a_{2})] \omega + \phi(1 + i_{F})\Theta(a_{2}) & \text{if } a_{3} = F \end{cases},$$
(13)

where

$$\Theta\left(a_{2}\right) = \alpha \bar{R} - a_{2}M\tag{14}$$

all  $a_2$ .

Using (13), it is straightforward to establish the following facts:

**Lemma 1** Given  $a_2$ , the following statements are all true:

$$F = \arg\max_{a_3} V_1(a_2, a_3),$$

if and only if

$$\gamma_D - \gamma_F > \frac{\left[1 - \gamma_D \Theta\left(a_2\right)\right] \left(1 + i_D\right) - \phi\left(1 + i_F\right)}{\omega},\tag{15}$$

and

$$D = \arg\max_{a_3} V_1(a_2, a_3),$$

if and only if

$$\gamma_F - \gamma_D > \frac{\phi \left(1 + i_F\right) - \left[1 - \gamma_D \Theta \left(a_2\right)\right] \left(1 + i_D\right)}{\omega},\tag{16}$$

where  $a_2 \in \{0, 1\}$ .

Lemma 1 gives the configuration of the PL optimal decision in the third and last stage. In this stage, the relative performances of the money-laundering technologies (domestic versus foreign) play a decisive role in the PL's choice of the optimal investment strategy for laundering the looted funds. Condition (15) social exclusion is less mobilizing when the PL hides the looted money in an overseas' financial safe haven, than when he invests it domestically. This is likely to occur if foreign financial safe havens sufficiently shield the PL from suspicions of social exclusion and money laundering. Condition (16) states exactly the reverse of condition (15). It is likely to materialize when investing the looted funds in the domestic economy has trickle-down effects, for example, in the form of job creation, which may mitigate social unrest; whereas, investing the looted funds in an overseas financial safe haven squeezes job-creation at home, in favor of job-creation abroad, which in turn may increase the risk of social unrest. Unfortunately, to our knowledge, there is no empirical evidence backing the likelihood of one condition over the other. Therefore, to characterize the PL optimal decisions in the remaining stages, we have no choice but to distinguish between two cases, i.e., one where a condition like (15) materializes, and another where the opposite does, i.e., condition (16) obtains instead.

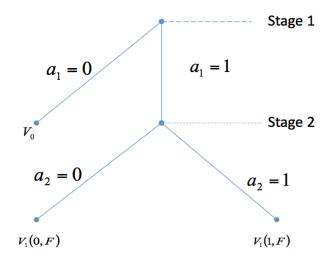
## 5.2 Optimal decision at Stage 2.

At this stage, we distinguish between two cases:

#### 5.2.1 Case 1. The overseas money-laundering option

In this second stage, we continue the backward induction process by examining the PL optimal second-stage decision,  $a_2 \in \{0, 1\}$ , given that in the third-stage, condition (15) holds, so that  $F = \arg \max_{a_3} V_1(a_2, a_3)$ . The truncated decision under this condition becomes:

Figure 2: Truncated decision tree – Case 1



The PL's problem at this stage is

$$\max_{a_2} V_1\left(a_2, F\right)$$

The following Lemma highlights the determinants of this optimal decision:

Lemma 2 Let condition (15) holds:

(i) If

$$\gamma_F > \frac{(1+i_F)\,\phi}{\omega},\tag{17}$$

then,

$$1 = \arg\max_{\langle a_2 \rangle} V_1(a_2, F).$$

**Proof.** Consider the difference  $V_1(1, F) - V_1(0, F)$ . Using (13) and (14), re-arranging, this difference can be expressed as follows:

$$V_1(1, F) - V_1(0, F) = [\gamma_D \omega - (1 + i_D)] M.$$

Clearly,  $V_1(1, D) - V_1(0, D) > 0$  if and only if

$$\gamma_F \omega - \phi \left( 1 + i_F \right) > 0.$$

The result then follows from condition (17). This completes the proof. ■

Condition (17) states that social exclusion is sufficiently mobilizing, even when the PL hides the looted funds in an overseas' financial safe haven. This situation instills a fear of revolution, thus prompting the PL to finance the creation of a special military force as a protection against the risk of a revolution (i.e.,  $a_2 = 1$ ).

#### 5.2.2 Case 2. The domestic money-laundering option

In this sub-section, we characterize the PL's second stage problem, this time assuming that condition (16) holds instead. This condition ensures that laundering the looted money in the domestic economy is the best possible option for the PL to minimize the likelihood of a revolution induced by social exclusion. When this is the case, the truncated decision tree becomes as follows:

Lemma 3 Let condition (16) holds:

(i) If

$$\gamma_D > \frac{(1+i_D)}{(1+i_D)\left(2\alpha\bar{R} - M\right) + \omega},\tag{18}$$

then.

$$1 = \arg\max_{\langle a_2 \rangle} V_1(a_2, D).$$

**Proof.** Consider the difference  $V_1(1, D) - V_1(0, D)$ . Using (13) and (14), re-arranging, this difference can be expressed as follows:

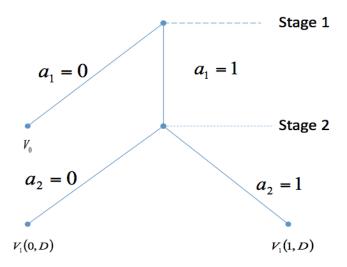
$$V_1(1, D) - V_1(0, D) = \left[\gamma_D \left[ (1 + i_D) \left( 2\alpha \bar{R} - M \right) + \omega \right] - (1 + i_D) \right] M.$$

Clearly,  $V_{1}\left(1,D\right)-V_{1}\left(0,D\right)>0$  if and only if

$$\gamma_D \left[ (1+i_D) \left( 2\alpha \bar{R} - M \right) + \omega \right] - (1+i_D) > 0.$$

The result then follows from condition (18). This completes the proof. ■

Figure 3: Truncated decision tree – Case 2



## 5.3 Step 3

In this step, we conclude our backward induction process by solving the PL's first-stage decision problem, which is to choose  $a_1 \in \{0, 1\}$  so as to solve

$$\max_{a_1} V\left(a_1, a_2^*, a_3^*\right)$$

given that

$$(a_2^*, a_3^*) = \arg \max_{(a_2, a_3)} V_1(a_2, a_3),$$

where

$$V(a_1, a_2^*, a_3^*) = \begin{cases} (1 - \underline{\rho}) \omega & \text{if } a_1 = 0 \\ V_1(a_2^*, a_3^*) & \text{if } a_1 = 1 \end{cases}$$
 (19)

Observe furthermore at as an implication of Lemma 1 and Lemma 2, we have that

$$V_1\left(a_2^*, a_3^*\right) = \omega - \left[\gamma_F \omega - \phi \left(1 + i_F\right)\right] \left(\alpha \bar{R} - M\right)$$

if and only if conditions (15) and (17) hold simultaneously, and

$$V_1\left(a_2^*, a_3^*\right) = \left[1 - \gamma_D\left(\alpha \bar{R} - M\right)\right] \left[\omega + (1 + i_D)\left(\alpha \bar{R} - M\right)\right]$$

if conditions (16) and (18) hold simultaneously, instead. At this stage, the choice is obviously between social inclusion (i.e.,  $a_1 = 0$ ) or social exclusion (i.e.,  $a_1 = 1$ ). The following Lemma lists the determinants of the PL optimal decision in the first stage:

Lemma 4 The following statements are all true:

(i) If (15) and (17) hold simultaneously, then

$$1 = \arg\max_{a_1} V(a_1, a_2^*, a_3^*)$$

if and only if

$$\gamma_F < \frac{(1+i_F)\,\phi}{\omega} + \frac{\underline{\rho}}{(\alpha\bar{R} - M)} \tag{20}$$

(ii) If (16) and (18) hold simultaneously, then

$$1 = \arg\max_{a_1} V(a_1, a_2^*, a_3^*)$$

if and only if

$$\gamma_D < \frac{(1+i_D)}{(1+i_D)\left(\alpha\bar{R}-M\right)+\omega} + \frac{\underline{\rho}\omega}{\left(\alpha\bar{R}-M\right)\left[\omega+(1+i_D)\left(\alpha\bar{R}-M\right)\right]}$$
(21)

**Proof.** We start with the proof of Lemma 3-(i). In this case, (15) and (17) hold simultaneously. This implies that the payoff to the PL from implementing social exclusion is

$$V_1\left(a_2^*, a_3^*\right) = \omega - \left[\gamma_F \omega - \phi \left(1 + i_F\right)\right] \left(\alpha \bar{R} - M\right). \tag{22}$$

Consider the difference  $V(1, a_2^*, a_3^*) - V(0, a_2^*, a_3^*)$ . Using (19) and (22), we obtain this difference as follows:

$$V(1, a_2^*, a_3^*) - V(0, a_2^*, a_3^*) = \omega \rho - [\gamma_F \omega - \phi (1 + i_F)] (\alpha \bar{R} - M).$$

It is optimal for the PL to implement social exclusion if and only if  $V(1, a_2^*, a_3^*) - V(0, a_2^*, a_3^*) > 0$ , which yields the following inequality:

$$\omega \rho - [\gamma_F \omega - \phi (1 + i_F)] (\alpha \bar{R} - M) > 0.$$

The result then follows from (20). The proof of Lemma 3-(ii) follows in a similar manner. This completes the proof  $\blacksquare$ 

## References

- [1] Acemoglu, Daron, Simon H. Johnson, and James A. Robinson (2004). An African Success Story: Botswana, in *In Search of Prosperity: Analytical Narrative on Economic Growth*, Dani Rodrik, ed., 80-119. Princeton NJ: Princeton University Press.
- [2] Acemoglu, Daron and James A. Robinson (2000). Why Did the West Extend the Franchise? Democracy, Inequality, and Growth in Historical Perspective. *The Quarterly Journal of Economics* 115(4), 1167-1199.
- [3] Acemoglu, Daron, James A. Robinson and Thierry Verdier (2004). Alfred Marshall Lecture: Kleptocracy and Divide-and-Rule: A Model of Personal Rule. *Journal of the European Economic Association* 2(2-3), 162-192.
- [4] Acemoglu, Daron, Davide Ticchi, and Andrea Vindigni (2011). Emergence and Persistence of Inefficient States. *Journal of the European Economic Association* (forthcoming).
- [5] AfDB (2011). Towards Inclusive Growth in Africa: Policy Options and Partnerships. World Economic Forum on Africa, Cape Town, South Africa.
- [6] Bannon, Alicia, Edward Miguel, and Daniel N. Posner, 2004. Sources of Ethnic Identification in Africa, AFROBAROMETER Working Paper No. 44.
- [7] BNS (2008). Les banques suisses: 2007. Zurich: Banque nationale suisse.
- [8] BNS (2011). Les banques suisses: 2010. Zurich: Banque nationale suisse.
- [9] Chilcote, Ronald H. (2010). The Portuguese Revolution: State and Class in the Transition to Democracy. Rowman and Littlefield Publishers, Inc.
- [10] Coolidge, Jacqueline and Susan Rose-Ackerman (1997). *High-Level Rent-Seeking and Corruption in African Regimes: Theory and Cases*. World Bank Policy Reserch Working Paper 1780.
- [11] Dunning, Thad (2005). Resource Dependence, Economic Performance, and Political Stability. *Journal of Conflict Resolution* 49(4), 451 482.
- [12] Eifert, Benn, Edward Miguel and Daniel N. Posner (2010). Political Competition and Ethnic Identification in Africa. American Journal of Political Science 54(2), 494Ũ–510.
- [13] Ferree, Karen, 2006. Explaining South Africa's Racial Census. *Journal of Politics* 68, 803Ũ-815.
- [14] Gibson, Clark C., and James D. Long, 2008. What Explains the African Vote? Using Exit Poll Data from Kenya to Explore Ethnicity and Government Performance in Vote Choice. Unpublished manuscript, University of California, San Diego.
- [15] Glaeser, Edward. 2005. The Political Economy of Hatred. Quarterly Journal of Economics 120(1), 45-86.

- [16] Keenan, Patrick J. (2008). Curse or Cure? China, Africa, and the Effects of Unconditioned Wealth. Berkeley Journal of International Law. Available at: http://works.bepress.com/patrick\_keenan/4
- [17] Kreis, Steven (2000). *The History Guide*. Available online at http://www.historyguide.org/intellect/lecture11a.html.
- [18] Langer, Arnim (2004). Horizontal inequalities and violent conflict: The Case of Côte d'Ivoire CRISE Working paper No. 13.
- [19] Mbembe, Achille (1999). Du gouvernement privé indirect. *Politique africaine* 73, 103-121.
- [20] Milante, Gary (2007). A Kleptocrat's Survival Guide: Autocratic Longevity in the Face of Civil Conflict. World Bank Policy Research Working Paper 4186.
- [21] Ndikumana, Léonce and Kisangani Emizet (2003). The Economics of Civil War: The Case of the Democratic Republic of Congo. Political Economy Research Institute, Working Paper 63, UMASS.
- [22] Pallage, Stephane and Michel A. Robe (2001). Foreign Aid and the Business Cycle. *Review of International Economics* 9(4), 641–672.
- [23] Pickering, Donald (1989). Agricultural Research and Its Linkages with Extension. In *Agricultural Extension in Africa: A World Bank Symposium*, Nigel Roberts (Ed), Washington, DC: The World Bank.
- [24] Posner, Daniel. 2004. The Political Salience of Cultural Difference: Why Chewas and Tumbukas are Allies in Zambia and Adversaries in Malawi. *American Political Science Review* 98(4), 529–545.
- [25] Robinson, James A. (2009). Botswana as a Role Model for Country Success. UNU-WIDER Research Paper, World Institute for Development Economic Research (UNU-WIDER).
- [26] Rose-Ackerman, Susan (1997). The Political Economy of Corruption. In *Corruption and the Global Economy*, Kimberly Ann Elliott (Ed), Washington, DC: Institute for International Economics.
- [27] Séréni, Jean-Pierre (2011). Après Ben Ali, quelle police en Tunisie? Le Monde diplomatique, April 1st.
- [28] Sharma, Shalendra D. (1999). Development and Democracy in India. London: Lynne Rienner Publishers.
- [29] Stewart, Frances, Manuel Barrón, Graham Brown, and Marcia Hartwell (2005). Social Exclusion and Conflict: Analysis and Policy Implications. CRISE Policy paper.

- [30] SPT (2003). National Youth Service Training Shaping Youths in a Truly Zimbabwean Manner: An Overview of Youth Militia Training and Activities in Zimbabwe, October 2000 August 2003. Kwazulu-Natal, South Africa: The Solidarity Peace Trust.
- [31] Wang, Jian-Ye (2007). What Drives China's Growing Role in Africa? IMF Working Papers 07/211, Washington, DC: International Monetary Fund.