Institutions are a diamond's best freind: An institutionalist perspective to the resource curse theory

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INSTITUTIONS ARE A DIAMOND'S BEST FRIEND

AN INSTITUTIONALIST PERSPECTIVE TO THE RESOURCE CURSE THEORY

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1 An Introduction to the Research Puzzle

In the 1980s, scholars started observing that resource-rich countries in Africa, Latin America, and the Middle East experience a lower rate of economic growth, as opposed to resource-scarce countries. Auty (1993) was the first to coin the inverse relation of natural resource dependence and economic growth as the 'Resource Curse'. Sachs and Warner (1995) supported Auty's Resource Curse theory by documenting a "statistically significant, inverse, and robust association between natural resource intensity and growth" (p. 21).

Sierra Leone and Botswana are two countries sharing a similar dependence on natural resources, namely diamonds. The expectation emerging from the Resource Curse theory predicts both countries to experience low economic growth. Sierra Leone indeed is characterized by high resource extraction and a "stagnant or shrinking economy" (James & Aadland, 2011, p. 443). Moreover, through civil war and conflict Sierra Leone has lost control over its natural resource abundance (Wilson, 2013; Wong, 2012). While the traditional Resource Curse theory holds for Sierra Leone, it fails to predict the economic growth of Botswana. Contrary to the expectation, between 1966 and 1999 Botswana's per capita GDP grew at an average rate of above 9%, the highest worldwide at that time (Leith as cited in Pegg, 2010). The empirical puzzle emerging from the observation, calls to uncover the explanations for the occurrence of the Resource Curse. Therefore, to research question asks:

"Why has the Resource Curse trapped Sierra Leone, while Botswana has experienced economic growth?"

The mechanisms regulating diamond revenues have important implications for socio-economic and human development. The African continent is abundant in natural resources, however, its "people continue to experience low per capita income and a low quality of life" (Badeeb, Lean & Clark, 2017, p. 124). Natural resource abundance tends to be appropriated for the benefit of the governing elite, "rather than investing it to upgrade infrastructure and sustainable economic development" (Badeeb et al., 2017, p. 126). Hence, it becomes necessary to examine how resource management impedes or enhances economic growth and human development.

Acemoglu, Johnson, and Robinson (2003) find that an accumulation of specific institutional features led to Botswana's economic and developmental success. While the authors compare Botswana to several countries on the basis of cultural, historical, institutional, and political features, a research gap emerges, as Botswana has not been compared with a country that is similar in its natural resource dependence. The Most Similar System Design (MSSD) indicates that Sierra Leone is a suitable case to fill the gap, hence this comparative case study examines both countries' diamond redistributive mechanisms through process-tracing. While the institutionalist approach serves to uncover the differences in the institutional structure, the focus on agency allows to account for the influence of political leadership. Chapter 4 compares both countries in terms of economic and human development while chapter 5 reviews the countries' pre-colonial, colonial, and post-colonial histories to set the basis for the analysis. This research finds that Botswana's inclusive economic and political institutions have enabled the country's development, while Sierra Leone's poor institutional setup hindered the country from redistributing diamond-rents in favor of economic growth and human development. In line with the examination that "[i]nstitutions may be decisive for *how* natural resources affect economic growth", I argue that deterministic explanations of the Resource Curse do not sufficiently account for the varying experiences of resource-dependent countries (Mehlum, Moene & Torvik, 2006, p. 3). This research suggests that the timing and the institutions in place at the discovery of natural resources, the degree of governmental centralization, and the characteristics of the leadership are essential to determine whether a country will be entrapped within the Resource Curse. In line with the institutionalist explanation to the Resource Curse, this research suggests that institutions are a mediating factor influencing the extent to which countries experience the Resource Curse (Boschini, Pettersson & Roine, 2007; Mehlum et al., 2006; Robinson, Torvik & Verdier, 2006; Torvik, 2009). Therefore, this analysis challenges Sachs and Warner (1995) and Brunnschweiler's (2008) findings that institutions do not matter.

2 The Traditional Explanations of the Resource Curse, the Role of Institutions and the Research Expectations

The Resource Curse and its Main Explanations

The Resource Curse mainly refers to resource-dependent countries because "a nation that is resource abundant may not be resource dependent if it diversifies its production structure" (Badeed et al., 2017, p. 127). Resources such as minerals and oil create point-rents because they emanate from a relatively capital-intensive resource extraction (Isham, Woolcock, Pritchett & Busby, 2005). Point-rents are "extracted from a narrow geographic or economic base" and thus concentrate ownership in the hands of the few (Isham et al., 2005, p. 143). Contrary, diffuse-rents are derived from resources such as agriculture and livestock and produce more widely dispersed incomes (Auty, 2001). The difference between point-rents and diffuse-rents "explains to some extent why mineral-resource countries have tended to endure higher degrees of income inequality *vis-à-vis* agricultural resource-rich countries, and generally have a bad record on poverty reduction" (Auty as cited in Mold, 2003, p. 670).

Rent-seeking explanations to the Resource Curse suggest that "resource wealth may relieve governments of tax collection pressures and reduce fiscal discipline", hence decreasing the necessity to be democratically accountable to their citizens (Iimi, 2007, p. 667). Often, a small economic and political elite has access to resource rents, opening up the possibilities to misuse revenues for personal benefits at the expense of the majority of the population, subsequently resulting in high levels of inequalities (Auty, 2001; Karl, 2005; Wilson, 2013). Resource rents increase corruption and non-productive activities while politicians neglect political reform and investment in urbanization, education, and infrastructure (Gylfason, 2001; Tornell & Lane, 1999). Besides experiencing low economic growth, resource-dependent states are often "economically troubled, conflict-ridden, and poorly governed" (Karl, 2005, p. 8).

More economic explanations focus on the international market of resources. As resource booms generate wealth in a country's non-traded mineral sector, goods in the traded sector become uncompetitive in the world market due to inflation and an appreciation of the real exchange rate, therefore decreasing the traded sector which is associated to be the engine of growth (Corden, 1984; Corden & Neary, 1982; Sachs & Warner, 1995; van der Ploeg, 2010). This mechanism is referred to as the Dutch Disease and is best summarized by Sachs and Warner (2001) who examine that "Natural Resources crowd-out activity x. Activity x drives growth. Therefore Natural Resources harm growth" (p. 833). Other explanations focus on how the volatility of commodity prices and market instabilities hamper economic growth by reducing steady revenue flows (Frankel, 2010). Moreover, the structure of the mining sector is associated with disadvantaging the local governments which collect "low withholding revenues because foreign-owned mining companies repatriated their earnings overseas" (Badeeb et al., 2017, p. 124).

The Role of Institutions: The Resource Curse is Not Cast in Stone

Several rent-seeking and Dutch Disease models "do not explain why resource abundance retards growth in some countries but not in others" (Mehlum, Moene & Torvik, 2002, p. 3). Therefore, a puzzle emerges when examining the "enormous variety of experiences of resource rich countries" (van der Ploeg, 2010, p. 2). Badeeb et al. (2007) examine that the role of institutions as explanatory for the occurrence of the Resource Curse "has been a point of divergence" (p. 126) and divide the literature into three standpoints.

First, scholars such as Eregha and Mesagan (2016), Hodler (2006), and Iimi (2007) emphasize that resource rents negatively influence institutional quality. The second strand of literature finds that institutions do not play a significant role in explaining the occurrence of the Resource Curse (Brunnschweiler, 2008; Sachs & Warner, 1995). Thirdly, the institutionalist explanation to the Resource Curse infers that high-quality institutions stimulate economic growth, while low-quality institutions aid the occurrence of the Resource Curse (Boschini et al., 2007; Mavrotas, Murshed, & Torres, 2011; Mehlum et al., 2006; Robinson et al., 2006).

The institutionalist literature points to the influence of the quality of institutions at the time of resource discovery, suggesting that natural resources "will be a curse only when political elites rule and corruption or repression are already prevalent" (Deacon, 2011, p. 197). Moreover, Frankel (2010) summarizes the findings of authors such as Mehlum et al. (2006) and Robinson et al. (2006) who suggest that in countries with good institutional quality at the time of resource discovery, resource rents are "more likely to be put to use for the national welfare instead of the welfare of an elite" (p. 17).

A more historical strand of the literature concentrates on the colonial legacy of institutions. Acemoglu, Johnson, and Robinson (2001) examine that different colonizing strategies created either extractive states or settler states. In the former, the colonizers minimally invested into institutional and infrastructural capital to maximize the predatory activities of profit extraction. In the latter, colonization created inclusive institutions defined through constraints on power and a secure property rights regime. Economic growth, therefore, depends on the country's colonial institutional legacy (Acemoglu et al., 2001). Good institutions are defined by inclusive and secure property rights for "a broad cross-section of the society" to prevent the accumulation of political and social power in the "hands of a small elite" at the expense of the majority of the population (Acemoglu et al., 2003, p. 86). On the contrary, colonial extractive institutions "did not introduce much protection for private property, nor did they provide checks and balances against government expropriation", instead the goal was "to transfer as much of the resources of the colony to the colonizer" (Acemoglu et al., 2001, p. 1370). Correspondingly, Mehlum et al. (2006) suggest that 'grabber-friendly' institutions, in which "rent-seeking and production are competing activities" (p. 3) cause the Resource Curse, while "good enough institutions can eliminate the resource curse entirely" (p. 12).

Moreover, Acemoglu, Osafo-Kwaako, and Robinson (2014) argue that pre-colonial state centralization is indispensable to prevent dysfunctionally weak states characterized with "endemic under-provision of public goods" (p. 5). Likewise, Poteete (2009) argues that politicians, supported by a broad coalition, are more likely to foster development, while "narrow and unstable coalitions see rentier politics as an attractive coalition building strategy" (p. 545). The complexity of the dynamism is underlined as "state building accounts for institutions, which in turn account for policies", all of which alter the occurrence of the Resource Curse (Poteete, 2009, p. 545).

Research Expectations

As noted, the Resource Curse fails to predict Botswana's developmental and economic paths. Drawing on Boschini et al.'s (2007) prediction that "institutional quality is most crucial for countries rich in diamonds" (p. 598), this research suggests that an influential factor in determining whether resource dependence presents itself as a blessing or a curse is the institutional quality at the time of the resource discovery, which is influenced by the colonial legacy. The reasoning behind this is that inclusive institutions constrain the power of the elite, while extractive institutions may be abused as tools for resource exploitation (Acemoglu et al., 2001). Therefore, the quality of institutions has direct implications for a country's potential to be trapped within the Resource Curse. Based on Boschini et al.'s (2007) claim that Sierra Leone could perform as well as Botswana if it had the "necessary institutional setting" (p. 614), following expectations emerge:

H_1 Institutions are a mediating factor, influencing the extent to which countries are entrapped within the confines of the Resource Curse.

H_2 Unlike Botswana, Sierra Leone's institutional system has hindered the country from redistributing diamond-rents in favor of economic growth and human development, therefore causing the Resource Curse.

3 Design, Methodology, and Operationalization

To account for context and detail and to test whether institutions are a key mechanism determining the occurrence of the Resource Curse, a comparative case study design is selected. The MSSD has been adopted to choose the optimal case from the ten strongest diamond producing countries (Table 1). First, while recognizing the essentialist nature of this claim, only Sub-Saharan countries are selected because regions act as a "control in order to test whether the crucial difference between the countries is associated with the variation in the dependent variable" (Halperin & Heath, 2017, p. 219). Second, Steven and Dietsche's (2008) classification of countries at risk of being affected by the Resource Curse is selected. Third, the percentage of diamond exports to total exports serves as a proxy for diamond dependence (Dietz, Neumayer & De Soysa, 2007). Only Sierra Leone and Botswana qualify as diamond dependent Sub-Saharan countries at risk of being affected by the Resource Curse, hence these similarities set a comparable initial condition. The crucial difference between Botswana and Sierra Leone is their political and economic institutional quality, serving as the main explanatory factor accounting for the occurrence of the Resource Curse.

An institutionalist approach is adopted by using qualitative and quantitative data to conduct process tracing and to examine the "sequencing of key decisions and events" (Lowndes, Marsh & Stroker, 2018, p. 68). In this research institutions are defined as "integrated systems of rules that structure social interactions" (Hodgson, 2015, p. 501), while critical junctures denote "relatively short periods of time during which there is a substantially heightened probability that agents' choices will affect the outcome of interest" (Capoccia & Kelemen, 2007, p. 348). Hay and Wincott emphasize that institutionalists must consider the relationship between structure and agency to reach the approach's full potential, because "politics creates policies, policies also remake politics" (Skocpol as cited in Hay and Wincott, 1998, p. 955). The agency of the actors (who themselves are products of the structure, i.e. institutions), is constrained by their knowledge of the structure, the institutional quality and the consequences of their action (Thelen, Steinmo & Longstreth, 1992). Their decision-making changes due to strategic learning and alters the institutional context in which they operate (Hay & Wincott, 1998). To account for unanswered questions about "the varying interests, institutional capacities, and aspirations of actors", this approach recognizes that structure and agency exist in a creative relationship and a complex duality (Batty, 2013, p. 355). Moreover, it allows to account for dynamism and transformation as well as the long-term processes of change facilitating "certain forms of intervention whilst militating against others" (Hay & Wincott, 1998, p. 956).

Table 1

Top-10 Diamond Producing Countries in the year 2016

Country	Diamond Production in Carats	Sub-Saharan country	Countries at risk of contracting the Resource Curse	Top Export over Total Export (percentage)	Percentage of Diamonds Exports over Total Exports	Mean of World-wide Gover-nance Indicators *	Ease of doing business ranking **
Russian Federation	40.322.030	no	no	Crude Petroleum (28%)	2.1%	-0.72	70.99
Botswana	20.954.000	yes	yes	Diamonds (20%) ***	20% ***	0.65	64.98
Canada	11.103.500	no	yes	Cars (13%)	0.65%	1.68	80.07
Democratic Republic of the Congo	12.377.000	yes	yes	Refined Copper (52%)	8.4%	-1.57	38.14
Australia	13.958.000	no	yes	Iron Ore (20%)	0.31%	1.58	80.08
South Africa	8.450.758	yes	no	Gold (20%)	10%	0.21	64.89
Angola	9.021.767	yes	yes	Crude Petroleum (89 %)	7.5%	-1.01	39.64
Zimbabwe	2.102.873	yes	no	Gold (32%)	7.4%	-1.22	48.17
Namibia	1.584.168	yes	no	****	6.6% ****	0.34	60.17
Sierra Leone	549.502	yes	yes	Iron Ore (16%)	13%	-0.68	49.69

Notes * Calculated Mean; Measurement from -2.5 (low) to +2,5 (high)
** Measurement from 0 (low) to 100 (high)
*** No data available at Simoes & Hidalgo (2020), information from 2017 used as proxy for 2016 (Honde, 2018)
**** No data available at Simoes & Hidalgo (2020), information from Wakeford (2017)

Sources: Column 1 & 2 British Geological Survey (2016); Column 4 Steven & Dietsche (2008); Column 5 & 6 Simoes & Hidalgo (2020); Column 7 World Bank (2016b); Column 8 World Bank (2016a)

Drawing on Acemoglu et al.'s (2003) examination that economic interests, political losers, and institutional constraints are essential factors for institution-building, Sierra Leone and Botswana's diamond-regulating institutions are examined. To account for structure and agency, a particular focus is shed on the resource ownership, the interests of the owners, and the redistributive mechanism of resource rents. If the dependent variable changes in response to the variation in the institutional setup, "the presence (or absence) of the key explanatory factor is able to account for the variation in the outcome of interest" (Halperin & Heath, 2012, p. 218). To support the hypothesis, the evidence needs to indicate that institutions affect how diamond resources are managed and redistributed and thus alleviate or magnify the Resource Curse.

4 Economic Growth and Human Development: Botswana and Sierra Leone in Comparison

Even though Sierra Leone's GDP per capita purchasing power parity (PPP) has tripled from 2001 to 2014, it remains extremely weak in comparison to Botswana (World Bank, 2016b). From 1987 onwards, Sierra Leone's current account balance has on average been negative, while Botswana has averagely run a surplus from 1985 onwards (World Bank, 2016b). Botswana suffers from high unemployment and has little arable land compared to Sierra Leone, where two-thirds of the population participate within the agricultural sector (Saravia-Matus, Gomez y Paloma & Mary, 2016). Sierra Leone however has a pervasive shadow economy which peaked at 50% of the country's GDP at the end of its civil war and has declined to 34% in 2015 (Medina & Schneider, 2018). Table 2 presents some comparative economic indicators underlining the differences in the countries' economic well-being.

Table 2

Economic Comparative Data from Botswana and Sierra Leone in 2016

	GDP per capita (current US$)	GDP per capita, PPP (current international $)	Current account balance (BoP, current US$, Thousands)	Exports of goods and services (% of GDP)
Botswana	7,243.853	17,260.215	1,212,879.64	49.76
Sierra Leone	501.416	1,597.775	-162,822.04	24.91

Source: World Bank (2016b)

Sub-Saharan Africa is the worst-performing region regarding human development. While Botswana forms part of the high human development group, Sierra Leone continues to suffer from low development which has implications for poverty reduction and inequality (Table 3). When examining the poverty line of $1.90 per day in purchasing power parity, Sierra Leone decreased poverty from 71.6% in 2003 to 52.2% in 2011, while Botswana was able to reduce the poverty rate from 29.8% in 2002 to 18.2% in 2009 (World Bank, 2016b). In Botswana, 89.6% of women and 90.3% of men enjoy at least some secondary education, while on average only 28.8% of women and 39.8% of men enjoy the same access in Sub-Saharan Africa (Human Development Report, 2019). While Botswana continues to be challenged by high inequality and the HIV/AIDS epidemic, the country's overall success in comparison to Sierra Leone underlines the necessity to follow up with an explanation for such divergences.

Table 3

Human Development Index Trends, 1990-2018

	1990	2000	2010	2013	2015	2016	2017	2018
Sub-Saharan Africa	0.402	0.423	0.498	0.521	0.532	0.535	0.539	0.541
Sierra Leone	0.270	0.298	0.391	0.426	0.422	0.423	0.435	0.438
Botswana	0.570	0.578	0.660	0.699	0.714	0.719	0.724	0.728

Source: UNDP (2019)

5 A Brief History of Sierra Leone and Botswana

Acemoglu et al. (2001) point to the importance of the colonial and historical legacy for the state-formation process. Therefore, this historical review serves to provide an overview of the political power relations governing each country. This sets the foundation for examining the environment in which institutions regulating the diamond industry emerged. The reasoning is that the institutional quality at the time of natural resource discovery is essential for determining how natural resources will be redistributed (Deacon, 2011; Mehlum et al., 2006; Robinson et al., 2006). Table 4 compares the different ruling elites, their interests, and the institutional constraints in Sierra Leone and Botswana.

Table 4

Elites, Interests and Institutional Constraints in Sierra Leone and Botswana

		Pre-Colonial Period	Colonial Period			Post-Colonial Period
			Colonizers		Colonized	
Ruling Elite	Botswana	Tswana chiefs	Great Britain (asserts little control)	<	Tswana chiefs	Botswana Democratic Party
	Sierra Leone	Paramount Chiefs	Great Britain (asserts much control)	>	Krios in Freetown Chiefs in the interior of Sierra Leone	SLPP, APC, RUF with the influence of foreign forces
Institutional Constraints	Botswana	Assembly	British Colonialism, Indirect Rule		Indigenous institutions of accountability remain prevalent and are enhanced	Democracy (e.g. elections as constraints on power)
	Sierra Leone	Assembly, Secret Societies			Indigenous Institutions of accountability are weakened or destroyed	One-party state (democracy destroyed, close to no constraints, rule based on patronage)
(Economic) Interests	Botswana	Cattle Farming	Little interest in the territory (contain German and Boer expansion, access to inland)		Development strategies (enhance the cattle industry and institutions of private property)	Remain in power: infrastructure enhancement and rural development, reduction of ethnic and tribal cleavages
	Sierra Leone	Agriculture	Strong interest in the territory (Transatlantic slave trade and natural resources extraction)		Profit from the Colonial Resource Extraction (both chiefs in the interior and Krios in the capital)	Remain in power: patrimonialism, exploitation, rent-seeking

Notes: Information for Sierra Leone summarized until the end of the civil war in 2002

Sources: composed on the basis of Acemoglu et al. (2003, 2014), Datzberger (2014), Grabowski et al. (2015), Gulbrandsen (2012), Maconachie and Binns (2007), Pham (2007), Wong (2002)

Sierra Leone’s History

In the 16th century, the Mane invasion significantly influenced the political centralization in the region of modern-day Sierra Leone (Datzberger, 2014; Pham, 2007). The chief had the role to “protect the lives and property of his subjects, maintain law and order, and make laws for the social and economic well-being of his people” (Abraham, 2003, p. 159). The chiefs’ decision-making was based on reciprocity, cultural and religious norms and it was constrained through the advice of the council (Harris, 2013). Secret societies “were the most effective socio-political mechanism to sanction any barbarous behaviour of chiefs" (Datzberger, 2014, p. 123). While tribal institutions were relatively democratic, colonial rule was very strong in Sierra Leone, because of the country's attractiveness in terms of the supply of slaves and natural resources. The transatlantic slave trade distorted African economies because engaging in warfare to capture slaves was more appealing than focusing on productive activities such as public goods provision (Grabowski, Shields & Self, 2015; Rodney, 1966). When the British annexed Freetown in 1808, their focus shifted from slavery "to convert[ing] Africans into producers of raw materials for British industry" (Datzberger, 2014, p. 124). Only in 1896, the inland of Sierra Leone was placed under British control. To cost-efficiently administer resource extraction, the British "granted paramount tribal chiefs with control over local affairs, such as migration, land tenure and re-settlement", while replacing antagonistic chiefs with more favorable ones (Wong, 2012, p. 84). Such delegations of power allowed chiefs to retain their legitimacy from the colonial mandate rather than through pre-colonial tribal institutions, therefore distorting the degree of accountability (Acemoglu et al., 2014; Keen, 2003). Moreover, the administrative divisions between the capital Freetown and the interior "fuelled ethnic divisions, tribalism, clientelism and patrimonialism" which affected post-colonial rule (Datzberger, 2014, p. 118).

At independence in 1961, Sierra Leone inherited a distorted institutional structure, marked by extractive institutions. Milton Margai, the first prime minister and leader of the Sierra Leonean People's Party (SLPP) attempted to establish a multi-party democracy, however, this occurred "within an authoritarian state architecture" from British colonialism (Kieh, 2005, p. 165). After Milton Margai's death, his brother Albert Margai turned to "authoritarian rule and suppressed the opposition" (Wong, 2012, p. 85). When Siaka Stevens, the leader of the All People Congress (APC) won the elections in 1967, the SLPP refused to hand over the power, therefore ending "the experiment of democracy in Sierra Leone" (Zack-Williams, 2012, p. 15). Following several coups, Siaka Stevens assumed power in 1968. Together with the APC he "perpetrated widespread violence against opponents and imposed a one-party state in 1978" (Jalloh, 2006, p. 517). Stevens' highly corrupt regime is often associated to have "led to the creation of a socially excluded underclass, which fomented the pre-conditions for war in the 1990s" (Maconachie & Binns, 2007, p. 105).

The civil war broke out in 1991 when the Revolutionary United Front (RUF), "originally a diminutive force" invaded Eastern Sierra Leone from Liberia (Pham, 2007, p. 37). The government was unable to control the RUF because "Sierra Leone had become a failed state where vital social and political institutions had either collapsed or had ceased to function, and the economy had been bankrupted through neo-patrimonial politics and kleptocracy" (Zack-Williams, 2012, p. 3). The civil war was defined through the emergence of rebel and paramilitary groups, coups, and severe human rights violations (Datzberger, 2014; Isham et al., 2005). After a decade of warfare, the war ended in 2002.

Botswana's History

In the eighteenth century "ancestors of the modern Tswana tribes migrated into the area of modern-day Botswana" while conquering and amalgamating the San and other indigenous tribes (Acemoglu et al., 2003, p. 92). Tribal institutions were of quite democratic nature, compared to its African neighbors at the time, and the majority of political power centered around cattle farming (Acemoglu et al., 2003). The chief was "the dominant individual who allocated land for grazing, crops, and housing", while topics of interest to the tribe were discussed among male tribe members in public forums which "acted as effective constraints on arbitrary rule by the chief" (Grabowski et al., 2015, p. 146).

The British established the Bechuanaland Protectorate in 1885. The territory served "both to contain German and Boer expansionism and guarantee Britain and later Rhodes.... a route into the interior" (Acemoglu et al., 2003, p. 95). However, beyond the Protectorate's strategic location it was of little interest because it possessed few exploitable resources besides cheap labor (Beaulier, 2003; Gulbrandsen, 2012). Colonial rule was therefore light, and the tribes and their leaders were officially recognized and strongly empowered, which strengthened the Tswana tribal customs and institutions (Acemoglu et al., 2003).

At independence, Botswana was one of the poorest countries in Africa. Infrastructure development and economic growth were extremely low in the arid, landlocked country. Exemplary, Botswana had "12 kilometers of paved road, 22 Batswana who had graduated from university and 100 from secondary school" (Acemoglu et al., 2003, pp. 80-83). Nevertheless, Botswana inherited an institutional setup of accountability, rooted in its pre-colonial tribal structures. Seretse Khama, Botswana's first president, founded the Bechuanaland Democratic Party, which later became the Botswana Democratic Party (BDP). The BDP enjoyed profound legitimacy because Khama bridged the gap between hereditary leaders and the emerging educated elite, while the tribal incorporative dynamics served as a basis for social transformation towards the state formation process (Acemoglu et al., 2003; Gulbrandsen, 2012; Robinson & Parson, 2006). Despite its poor initial conditions, the country developed into an upper-middle-income country within three decades after independence (Koitsiwe & Adachi, 2015). Moreover, Botswana's democracy manifested after independence and the BDP accommodated democratic contestation in the late 1960s and early 1970s through infrastructure investment programs in rural areas rather than through repression (Acemoglu et al., 2003). Since independence Botswana experienced "no coups, no political instability, no civil wars, no threats of secession, and excellent, dedicated, uncorrupt leadership" (Robinson, 2009, p. 1).

6 Diamond-Regulating Institutions in Botswana and Sierra Leone

6.1 Botswana

The Discovery of Diamonds & the Mines and Minerals Act - A Critical Juncture

Tshekedi Khama, the king of the BaNgwato tribe first prevented mining companies from entering the BaNgwato Reserve out of fear that diamond explorations would "destroy his tribal traditions" (de Wit, 2018, p. 514). At the time, the government was creating strategies for social and economic development to overcome Botswana's status as one of the poorest countries in the world. Tshekedi Khama realized that development was necessary and signed a mining agreement in 1959 which paved the way for the discovery of the Orapa kimberlite fields in 1967 through the mining company De Beers (de Wit, 2018, Hillbom, 2014; Poteete, 2009).

The discovery of diamonds occurred one year after Botswana's independence from Britain. Cook and Sarkin (2010) indicate that if the British had "known of Botswana's diamond deposits" they "may not have relinquished control of the Protectorate quite so easy and quickly" (p. 470). Having discovered diamonds after independence allocated the resource ownership and the control over rents into the hands of Botswana's ruling party. Acemoglu et al. (2001) suggest that Seretse Khama and De Beers were aware of the location of diamonds even before independence in 1966. Consequently, the BDP and Khama started campaigning to nationalize mineral resources one year before the diamond discovery (Leith as cited in Poteete, 2009). In 1967, Khama passed the Mines and Minerals Act (MMA) which redirected the rights of subsoil minerals from the subnational level to the national government (Acemoglu et al., 2003). Previously land and mineral rights were owned by tribal leaders, hence such actors possessed considerable power over the allocation and negotiation of mining contracts. The decision to centralize mineral rights through the MMA must be interpreted as a critical juncture in Botswana's institution-building process regarding its diamond wealth.

First, the MMA maintained and further strengthened pre-existing economic institutions. The BDP was largely made up of cattle owners who "were the most important economic interest group" (Acemoglu et al., 2003, p. 104). Given the poor initial conditions at independence, the ranching sector was the only sector with real prospects to be developed, therefore the governing elite had previously actively enhanced institutions of private property to promote the worldwide trade of their goods (Acemoglu et al., 2003; Grabowski et al., 2015). Rather than pursuing expropriation of mineral rights, maintaining the economic institutions was in the interest of the BDP. Thus, the centralization of mineral rights was achieved "through a process of negotiation and a mineral rights tax that encouraged either rapid exploration or surrender of mineral rights" (Jefferis, 2010, p. 79). This procedure was advantageous to "protect the property rights of actual and potential investors, provide political stability, and ensure that the political elites are constrained by the political system and the participation of a broad cross-section of the society" (Acemoglu et al., 2003, p. 84). While previously the government was lacking the resources to fund the country's development, the discovery of diamonds opened the possibilities to invest into development and infrastructure which was "entirely in the interests of the BDP political elites" (Acemoglu et al., 2003, p. 101).

Secondly, Botswana's success cannot only be accredited to Botswana's institutional legacy but must also account for the agency of positive leadership. Besides being Botswana's first president, Seretse Khama was Paramount Chief of BaNgwato, the biggest and most populated district and home to the Orapa mines (Jefferis, 2009). By extending the mineral benefits beyond his own tribe to the entire nation, Khama's decision "amounted to an offer to share mineral revenues with potential competitors" in the whole country (Poteete, 2009, p. 558). Indeed, redirecting mineral rights "subordinated narrow tribal interests to the overall national interest, and provided the basis for the subsequent national stability" (Jefferis, 2009, p. 79). The underlying reasoning is that decentralization "reduces the capacity of the central government to run countercyclical fiscal policies and to arrange equalization transfers among regions" because sub-national actors seek to maximize profits from resources (Iimi, 2007, p. 690). Instead, the MMA further centralized the state's power by allowing the government rather than tribal leaders to negotiate future diamond mining contracts. Thus, the resource centralization prevented "much greater conflict among tribes over the control of the wealth from diamonds" (Acemoglu et al., 2003, p. 106).

Moreover, the BDP's decision-making was reactive to various societal demands, due to the broad coalition and inclusive institutions on which the BDP and Khama based their legitimacy (Acemoglu et al., 2003; Beaulier, 2003). Broad coalitions incentivize politicians to ensure political support through long-term investment in the country's institutions and public goods (Poteete, 2009; Tornell & Lane, 1999). Botswana's inclusive tribal institutions of accountability incentivized the BDP to promote development, rather than to pursue resource exploitation. Indeed, political leaders such as Seretse Khama and later Ketumile Masire were interested in building "an independent, viable and prosperous nation and seem to have been completely uninterested in extracting rents for cementing themselves in power" (Robinson, 2009, p. 4).

The implementation of the MMA was a critical juncture because the act determined that the power over diamond revenues was vested in the national government, which set in stone the successful negotiation with De Beers (Jefferis, 2009). Moreover, the MMA suited the BDP's overall strategy to construct a strong, centralized, national state by reducing the potential for conflict and power struggles associated with decentralized autonomy (Acemoglu et al., 2003; Iimi, 2007; Leith as cited in Poteete, 2009). Such conditions, in combination with existing inclusive economic and political institutions of accountability and property rights, laid the foundation to invest diamond rents into the national development.

Resource Management through Debswana and Negotiations with De Beers

Alluvial mining is labor-intensive, as large numbers of artisanal miners search for diamonds with basic tools like shovels in widely dispersed areas such as riverbeds (Frost, 2010; Jefferis, 2009; Wilson, 2013). On the contrary, kimberlite mines are usually located in small, well-defined areas and require capital-intensive mining technology (Frost, 2010; Jefferis, 2009; Wilson, 2013). As a result of the amount of actors involved in alluvial mining "production is more difficult to monitor and tax" (Jefferis, 2009, p. 84), while kimberlite mines "are often exploited by a few capital-intensive operators, and are under fiscal control" (Wilson, 2013, p. 999). While Botswana has an abundance of kimberlite diamonds, Sierra Leone is rich in alluvial diamond deposits.

Two years after the diamond discovery, the government of Botswana and De Beers created Debswana Diamond Company Ltd., a shared venture to mine Botswana's kimberlite deposits and to regulate diamond sales (Grynberg 2013; Hillbom, 2014). Due to De Beers' management of the diamond supply in the world market to maintain the prices at a desirable level, the company has been characterized as an oligopoly (Grynberg, 2013). As multinational companies own the know-how, the technology, and the access to market structures, the relationship between De Beers and Botswana has been portrayed as asymmetric, given that De Beers may manipulate policies in favor of profit-maximization (Gapa, 2016). Nevertheless, Botswana's centralized state control over its diamonds has given the government considerable leverage in negotiations with De Beers, which resulted in a gradual increase in power over diamond revenues from Debswana.

When production increased and new mines were discovered by De Beers in Letlhakane and Jwaneng in the 1970s, Botswana's government used its leverage as the world's largest producer of diamonds to renegotiate its share in Debswana from 15% to 50% (Gapa, 2016; Jefferis, 2009). In a transaction of diamonds in the 1980s, the government gained a 5% ownership of De Beers which eased its access to the global diamond industry (Jefferis, 2009). Being able to "appoint two directors to the main De Beers board" enlarged the government's power beyond Debswana to the corporation of De Beers (Jefferis, 2009, p. 66). Due to problems such as De Beers' "association with purchasing conflict diamonds and the inability to control the value chain" the company's market power decreased in the 1990s (Grynberg, 2013, p. 4). At the time Botswana's government "used the negotiations around the renewal of mining leases to further increase its share of the profits earned by Debswana to over 80%" (Jefferis, 2009, p. 85). To prevent the "thoroughly unnecessary risk of undermining its position in Botswana", De Beers had to adhere to Botswana's demands to move parts of the diamond sorting and cutting activities from London to Botswana, thereby allowing Botswana to pursue downstream value-added activities (Grynberg, 2013, p. 5). Botswana has been able to assert significant control over its natural resources through shares in the partnerships, taxes on resource revenues, and information gathering.

Redistributive Mechanisms of Debswana's Diamond Revenues

The government's goal has been to devote "mineral revenues to investment in economic, social or financial assets" for long-term development (Jefferis, 2009, p. 86). As "strong institutions and good governance are a prerequisite for effective fund management" the government has pursued to enhance its institutional setup and limit the abuse of diamonds rents (Meijia & Castel, 2012, p. 11). Indeed, "corruption has been avoided and the revenues have been used for the benefit of the society at large" (Jefferis, 2009, p. 85). For example, the National Development Plans (NDP) are set in dialogue with the civil society for 6 years and once agreed upon, adherence is assured "by a rule that makes it illegal to implement any additional projects without going back to parliament once the plan has been approved" (Meijia & Castel, 2012, p. 8). Botswana's inclusive institutions and "the breadth of the BDP coalition" incentivized resource distribution of point-rents to diffusely benefit the population (Acemoglu et al., 2003, p. 105). Nevertheless, the country has not been immune to problems as "the scale of government-financed construction created opportunities for rent-seeking" (Poteete, 2009, p. 554). However, Botswana's strict regulatory system and its anti-corruption policies mostly prevent politicians from abusing diamond rents (Iimi, 2007; Meijia & Castel, 2012). Moreover, a policy regulating non-renewable resources allowed such revenues "only [to] be used for… development expenditure and recurrent spending on education and health" (Pegg, 2010, p. 16). Botswana's spending programs ultimately led to the country's graduation from one of the 25 poorest countries in the world to a high-income country (Jefferis, 2009; Gapa, 2016).

The government has created a degree of stability through de-linking its expenditures from diamond revenues to manage economic recessions and shocks with the help of safety cushions in the form of foreign exchange reserves (Jefferis, 2009; Venables, 2016). For example, as a result of the declining diamond market in the 1980s, Debswana halted its sale of diamonds for six months, without having to cut its spending because "the government was able to optimally smooth expenditures relative to income" (Acemoglu et al., 2003, p. 101). In a similar manner, the Pula Fund, the government's "stabilization fund and a savings fund for future generations" seeks to circumvent the problem of mineral depletion by investing in long-term profitable activities (Meijia & Castel, 2012, p. 10).

To sum up, Botswana's democratic institutions materialized after independence and created incentives for successful resource management, which constrained the "political elite that, unlike so many neighbouring countries, did not undertake a wholesale pillage of those resources" (Grynberg, 2013, p. 1). The inclusive political institutions of accountability and the economic institutions of property rights have mitigated rent-seeking and corruption while facilitating developmental strategies. While its inclusive institutions are likely to self-reinforce, Botswana's future success also depends on the continuation of its profitable resource management as well as the country's ability to reduce inequality while economically diversifying to reduce its natural resource dependence.

6.2 Sierra Leone

Institutions under Colonial Rule: The Sierra Leone Selection Trust & the Alluvial Diamond Mining Scheme

When alluvial diamonds were discovered in 1930, Sierra Leone was under British control. The British Colonial authorities created a diamond monopoly by granting a 99-years "exclusive exploration, mining and marketing license to the Sierra Leone Selection Trust (SLST)" (Fanthorpe & Gabelle, 2013, p. 20). The SLST, a subsidiary of De Beers, served as a tool to extract resources while favoring the interests of the colonial government (Wong, 2012). While previously the Paramount Chiefs allocated mining rights through a tribute system, the SLST's monopoly created "competition for access to diamonds with the local chiefs and miners" (Silberfein, 2004, p. 216). All diamonds, even those "found outside the SLST concession area… became the property of the Government", therefore neglecting the property rights of Sierra Leoneans (Frost, 2012, p. 37). As Sierra Leone's diamonds were "relatively easy to access and notoriously difficult to police", illegal diamond exploitation increased (Frost, 2012, p. 9). The colonial government started policing the diamond-rich Kono district and SLST security forces harassed non-Kono traders (Fanthorpe & Gabelle, 2013; Wilson, 2013; Zack-Williams, 1990). Contrary to the anticipated effects, the "[i]llicit diggers began to form their own 'protection squads' against the actions of the police" (Frost, 2012, p. 10).

In 1956, the SLPP government passed the Alluvial Diamond Mining Scheme (ADMS) seeking to mitigate the conflict through legalizing diamond mining (Frost, 2012). The ADMS turned the chiefs into "the primary authorizers of both mining licenses and land leases" (Fanthorpe & Gabelle, 2013, p. 20). However, before Sierra Leone discovered diamonds, the "socio-economic and political interests of this country were geared towards serving the colonial power" (Frost, 2012, p. 7). Due to the "remoteness from government control" and the lack of government centralization, chiefs served as middlemen for resource extraction under the colonial administration (Wilson, 2013, p. 999). Chiefs were not accountable, as "the pre-colonial rule of family-based hierarchies, clans and traditions" had been destroyed (Datzberger, 2014, p. 128). The lack of inclusive institutions of accountability incentivized chiefs to tap into rent-seeking and corruption rather than diffusely redistributing diamond licenses to benefit the majority of the society. The high competition for mining licenses led to the allocation of licenses to the highest paying entities as "diamond investors, most of whom non-Konos, paid bribes to paramount chiefs to secure most license plots" (Wilson, 2013, p. 1001).

Between the 1930s and 1970s mining accounted for more than 25% of Sierra Leone's GDP and two-thirds of the country's export revenues (Maconachie & Binns, 2007). However, the diamond boom did not lead to the country's development, as the property rights regime fostered by the colonial government largely excluded Sierra Leonean small-scale miners. Instead, extractive institutions benefited the colonial government, several powerful chiefs as well as foreign diamond investors.

Institutions in Post-Colonial Sierra Leone: Siaka Stevens' Rentier State

After colonization much of Sub-Saharan Africa was dominated by "[p]redatory, extractive institutional structures" which violated indigenous property rights of land and resources, leading to an extreme intensity of inequality (Grabowski et al., 2013, p. 138). Sierra Leone faced difficulties to "de-colonize economic structures" because extractive institutions were not sufficiently transformed after independence (Rohdie, 1966, p. 165). As a consequence of indirect colonial rule, post-colonial Sierra Leone was divided by ethnic cleavages which weakened state control (Wong, 2012). When Stevens' legitimacy was challenged due to limited APC support in the countryside, his "strategic response to insecurity was to co-opt the state to his regime's interest" (Fanthorpe & Gabelle, 2013, p. 13). Stevens tapped into rentierism, a strategy that the Resource Curse literature has identified as a norm for resource-dependent countries with "narrow and unstable political coalitions" (Poteete, 2009, p. 548). In rentier states, politicians remain in power "by diverting revenues to themselves and their supporters through subsidies, protection, the creation of public employment, and overspending" (Karl, 2005, p. 25). As a consequence of the accessibility of resource rents, the government can buy off critics without "extending government control throughout the countryside" (Deacon, 2011, p. 171). In the long run rent-seeking damages state-building efforts, government accountability, and the potential for long-term economic development (Deacon, 2011; Isham et al., 2005; Karl, 2005; Poteete, 2009).

Stevens understood that "political power was tied to the economy", hence he and the APC started controlling the diamond industry (Hayward, 1989, p. 175). The legacy of extractive colonial institutions laid the foundation for Stevens' abuse of the state as "a powerful instrument of economic self-enrichment and political oppression, instead of aiming to protect and enhance the welfare and humanitarian needs of its citizens" (Wong, 2012, p. 88). By drawing on decree 49, a legacy from the military junta in 1967, the APC "shifted the level of control of alluvial diamonds from the local to the national scale", hence decreasing the powers of the chiefs over resource revenues (Wilson, 2013, p.

1002). To control the diamond deposits, the APC drew on informal networks in the shadow economy, where "sovereign authority was used less to govern the country than to secure elite dominance over trans-local markets" (Fanthorpe & Gabelle, 2013, p. 14). The state's reliance on the shadow state increased profits in the short run but it "undermined state control of the economy in the 1980s" (Wilson, 2013, p. 1004). In 1971, the APC quasi-nationalized the SLST by purchasing a controlling share of the company and subsequently creating the National Diamond Mining Company (NDMC) (Kabia, 2018). To increase revenues, the government taxed 70% of the NDMC's profit, but instead of developing the country, "Stevens' ulterior motive was to find avenues for compensation of his senior stalwarts and cronies" (Wilson, 2013, p. 1003). Moreover, "Sierra Leone's extractive economy and the corrupt and autocratic political system were mutually reinforcing" (Keen, 2003, p. 70). Besides pursuing rent-seeking, in 1979 Stevens had likely extracted $500 million for his personal use (Frost, 2012).

While diamond revenues benefited the APC and their allies, the benefits largely excluded Sierra Leone's population who suffered from abject poverty, the lack of development, and human capital investment (Kieh, 2005). Siaka Stevens and the state had become indistinguishable, thus the institutions of the state "lost legitimacy when the man lost legitimacy" (Hayward, 1989, p. 177). A combination of the international economic crisis and the destructive corrupt economic policies of the APC led to a serious crisis in the 1980s (Kieh, 2005, p. 166). When Stevens' handpicked successor Joseph Momoh ascended in 1985, following Stevens' "seventeen-year plague of locusts", the country was ranked among the poorest countries in the world (Hirsch, 2001, p. 29).

(No) Institutions in Civil War Sierra Leone and Institution-Building in Post-Conflict Times

The civil war was a "product of the 'politics of decline'… characterized by patrimonialism, clientelism, corruption and state failure" (Kabia, 2018, p. 97). Due to governmental institutional decay diamond regulating institutions virtually ceased to exist. Instead, the shadow economy and smugglers took over the diamond trade, which constrained the government's ability to set an end to the warfare due to the lack of revenues (Wilson, 2013; Wong, 2012).

The RUF sustained themselves through illicitly trading "diamonds for arms in open smuggling operation" (Forest, 2001, p. 633). A group of opportunistic 'sobels' (soldiers by day, rebels by night) operated "as diamond dealers by using mixed tactics of forging patron-client bonds with villagers, and coercion and terrorism", while forcing the population to work in the mines (Wong, 2012, p. 86). With the increasing role of rebels, military, and paramilitary forces "former illicit miners enlisted on either side (RUF and *sobels) with* the primary aim of mining diamonds and looting" (Wilson, 2013, p. 1006). Diamond exploitation mainly occurred "at the expense of civilians who suffered the brunt of war", with such conditions being "a clear manifestation of the resource curse at national and local (mining community) levels" (Wilson, 2013, p. 1006).

After the war ended in 2002, the government sought to challenge extractive institutions to "encourage more production through legal channels so that subsequent revenue flows could be redirected back into local communities" (Cubitt, 2010, p. 174). Few to no formal institutions were left after the civil war, increasing the difficulty to lift the country out of the Resource Curse. Sierra Leone's post-conflict rebuilding was challenged by creating state institutions to control all of territorial Sierra Leone (Kieh, 2005). When accusations of De Beers' involvement in purchasing Sierra Leonean Conflict Diamonds increased, the company initiated the Kimberley Process Certification Scheme (KPCS), which monitors the origins of diamonds and which was introduced in Sierra Leone in 2003 (Batty, 2013). The Mines and Minerals Act passed in 2009 as well as other laws were criticized as unsatisfactory to "rapidly lift the post-war country out of poverty" (Batty, 2013, p. 353). Problematically, high royalties on diamonds would incentivize companies to bribe the government or to go through illicit channels, while low tariffs would lead to a loss of government revenues and play profits "into the hands of questionable investors" (Batty, 2013, p. 371). While the government was able to partially reduce conflict diamonds and therefore increase growth, taxes, and diamond revenues, "a large percentage of Sierra Leone's diamonds continued to be handled through illicit channels and old patrimonial networks" (Cubitt, 2010, p. 180). While the situation has improved since the civil war, many problems remain to be solved and Sierra Leone's future development depends on its ability to challenge the root causes of inequality within the extractive institutional setup.

7 Findings: The Resource Curse - Institutional Legacy, the Timing of Diamond Discovery and Post-Colonial Leadership

This research finds that an important factor in determining a country's development pathway is how resource rents are redistributed. The redistributive mechanisms in turn are influenced by the interests of the governing actors and the institutions in place at the discovery of diamonds. Diverging institutional setups give rise to different strategic action and decision-making possibilities for politicians.

While British colonial rule was light and did not destroy tribal institutions in Botswana, colonialism distorted Sierra Leone's institutions in favor of resource extraction. Kimberlite diamonds were discovered one year after Botswana's independence in 1966 and therefore the power over such resources was in the hands of the governing elite. The strategic action emerging out of Botswana's inclusive institutional system of accountability incentivized to redirect diamond revenues in favor of development in order to maintain political support. Contrarily, Sierra Leone's diamonds were discovered much earlier, when the country was under British control. The British colonial authorities were interested in extracting resources and maximizing profit. Therefore the country's institutions were altered to suit these goals and the property rights regime excluded the majority of the population, by first making it illegal for Sierra Leoneans to possess diamonds and then complicating their ability to obtain diamond mining licenses.

While Khama's decision to nationalize resource rights mitigated power struggles over diamond revenues, Sierra Leone faced a very different reality at independence which was defined through a diversity of interests "pulling the state in opposite directions" (Hayward, 1989, p. 178). Moreover, Sierra Leone had inherited extractive institutions from colonial times. Such conditions incentivized Siaka Stevens and the APC to maintain power through rent-seeking rather than public goods provision. On the contrary, inclusive tribal institutions and the broad support for the BDP rendered Botswana's governing party accountable to the population, therefore creating "an environment which encouraged elites to make good decisions" (Robinson, 2009, p. 4). Moreover, Botswana "could stipulate provisions from a position of strength" and therefore was able to set higher tariffs and royalties precisely "because the government exercised a greater degree of institutional control than that exercised by the government of Sierra Leone over its minerals sector" (Batty, 2013, p. 371). Therefore, the differences in the institutional setup opened different opportunities for governing actors in Botswana and Sierra Leone.

While Botswana's elite faced institutional constraints on their power, Sierra Leone's "state became almost solely an instrument for the economic accumulation of the state elite, including the party, bureaucracy, police, and military" (Hayward, 1989, p. 178). Such behaviour is in concordance with the theory about the legacy of extractive institutions discouraging new elites "to incur the costs of introducing better institutions" but instead to exploit "the existing extractive institutions for their own benefits" (Acemoglu et al., 2001, p. 1376). Sierra Leone's mismanagement of diamond revenues led to the total state collapse, economic deprivation and low development all of which trapped the country within the Resource Curse. The argument sheds light on how extractive institutions established in colonial times may create negative feedback loops by allowing post-colonial political leaders to abuse power and alter resource distributing mechanisms to suit their interests. The opposite is true for Botswana, whose inclusive institutions were not destroyed under colonialism and materialized after independence, incentivizing the governing elite towards "exploiting the diamonds rationally and allocating the resulting rents to developing the economy" rather than pursuing corrupt policies (Robinson & Parson, 2006, p. 134). The redistribution of point-rents in a diffuse way prevented Botswana to be trapped within the Resource Curse. In line with Acemoglu et al.'s (2003) findings, this research suggests that Botswana's diamond-regulating redistributive mechanisms are the fruits of a complex mix of the country's inclusive institutional legacy, positive post-colonial leadership, and the timing of diamond discovery.

This research implies that the Resource Curse varies in accordance with the institutional quality and the redistributive mechanisms of the respective countries, therefore indicating that institutions act as a mediating factor. Good institutions facilitate good governance and policies in favor of economic growth and human development while mitigating rent-seeking and corruption. Nevertheless, institutions and political actors exist in a complex duality and therefore the quality of the institutions cannot deterministically predict a country's economic trajectory or development pathway. Instead, the quality of institutions encourages a certain strategy over another.

8 Concluding Remarks

Sierra Leone and Botswana are two diamond-dependent Sub-Saharan countries at risk of contracting the Resource Curse. The analysis suggests that institutions are essential for determining whether resources emerge as a curse or a blessing. First, the degree of colonial rule influences the quality of the countries' institutions. Second, the timing of resource discovery matters as resource redistributive mechanisms are modelled in accordance with the diverging interests of resource owners. Such interests in turn emerge out of the institutions in place, the degree of state centralization, and the support for the government. The interaction between these factors determines whether natural resources result in becoming a curse or a blessing. Therefore, this research finds that institutions are a mediating factor determining the extent to which countries are trapped within the Resource Curse and is thus in line with the institutionalist explanation of the Resource Curse (Boschini et al., 2007; Mavrotas et al., 2011; Mehlum et al., 2006;

Sarmidi, Hook Law & Jafari, 2014; Torvik, 2009).

Alternative explanations to the Resource Curse do not sufficiency explain the diverging economic and developmental pathways of Botswana and Sierra Leone. While the Dutch Disease is expected to occur in both countries, Botswana's inclusive political and economic institutional setup has incentivized the government to invest into human capital and infrastructure. Moreover, its economic and fiscal policies mitigated the occurrence of the Dutch Disease (Cook & Sarkin, 2010; Gapa, 2016). Moreover, controlling for diamond dependence in both countries rules out price volatility explanations as both countries are vulnerable to the same international price shocks. Instead, Botswana weakened its vulnerabilities by de-linking government spending from revenue incomes, pursuing sound fiscal policies, and maintaining stable saving funds (Cook & Sarkin, 2010; Meijia & Castel, 2012). All of such measures flowed from its favorable institutional setup. Therefore, this research questions Sachs and Warner's (1995) and Brunnschweiler's (2008) findings that institutions do not matter.

The difference between kimberlite and alluvial diamonds may explain the diverging outcomes in Sierra Leone and Botswana. Alluvial diamond deposits are geographically more dispersed, while kimberlite mines "cover small areas" and require capital intensive investment (Wilson, 2013, p. 999). In theory, Sierra Leone's easily accessible alluvial diamonds should allow a broader section of the population to profit from such resources. Instead, Sierra Leone's diamonds have been subject to illegal mining and looting. Hence, the question arises whether Sierra Leone's Resource Curse occurred due to a fundamental difference of alluvial and kimberlite diamonds or because of Sierra Leone's weak institutional setup which failed to monitor and administer diamond mining. Boschini et al. (2007) provide insights into this puzzle. In particular, they find that natural resources are "politically 'appropriable' if they are (i) easily transported and concentrated in value (i.e., point resources) and (ii) if the political system does not support secure property rights" (Boschini et al. as cited in Deacon 2001, p. 171). Moreover, Boschini et al. (2007) do not find a statistically significant difference between alluvial and kimberlite diamonds. Given that both diamond types are point resources, it seems that Sierra Leone's political system must facilitate the appropriation of its diamonds. As this research has shown, Sierra Leone, like many other Sub-Saharan countries, inherited colonial institutions "whose main purpose was to extract resources or wealth from the region" (Grabowski et al., 2015, p. 155). This indicates that at independence Sierra Leone's institutional system was too weak to create a sound property rights regime, which would have allowed the population to diffusely access and profit from the country's resources. Therefore, the difference between kimberlite mining and alluvial mining does not seem to sufficiently explain the diverging outcomes in Sierra Leone and Botswana.

Having examined that Sierra Leone's extractive institutions eased the way for political predatory behaviour over natural resources, this research supports Mehlum et al.'s (2006) findings that 'grabber-friendly' institutions cause the Resource Curse. Both cases suggest that coalition formation, state centralization, and institutions matter for determining the incentive-structures fostering either development or rent-seeking, which is in line with the research of Acemoglu et al. (2003, 2014) and Poteete (2009). In particular, this research reinforces the emphasis on the importance of the institutions in place at resource discovery (Deacon, 2011; Frankel, 2010; Lane & Tornell, 1996; Mehlum et al., 2006; Robinson et al., 2006). Moreover, Acemoglu et al.'s (2001) examination of the effects of different colonizing strategies seems to likewise provide insights about a country's likelihood of being entrapped within the confines of the Resource Curse.

In light of the complexity of the problems that caused Sierra Leone to be entrapped within the Resource Curse, there are no simple policy recommendations to be drawn from this research. Considering what policies have helped Botswana to develop, Sierra Leone would benefit strongly from focussing on anti-corruption measures and a system of checks and balances to prevent power accumulation of actors interested in resource exploitation at the expense of the population. Sierra Leone's focus must lie on building institutions, and decreasing the illicit diamond sector, which requires long-term commitment and dedication to economic and human development and a good regulatory system.

Lastly, Cook and Sarkin (2010) describe Botswana's success as unique and non-replicable due to "its distinctive colonial context" (p. 466). Moreover, Botswana has been defined as an exception to the Resource Curse (Sachs & Warner, 2001). Therefore, further research must examine whether the relationship of institutions as a mediating factor of the Resource Curse also holds for more moderate examples. Moreover, given that "institutional quality is most crucial for countries rich in diamonds", further research is necessary to investigate whether institutions also act as mediating factors for other natural resources besides diamonds (Boschini et al., 2007, p. 598).

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