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Mining Taxation in Sierra Leone

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A Dissertation Submitted in Fulfilment of the Requirements of the Degree of Master of Philosophy of the University of Sussex

Institute of Development Studies
University of Sussex
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Abstract

This dissertation explores why mineral revenue has been low in Sierra Leone. My approach to answering this question changed during the fieldwork, because of my interactions with key stakeholders in the mining sector. The discussions I had with the parties concerned and the documents I was able to access (some outside of the public domain) provided very useful information about the industry.

I examine how politics has affected the mining sector. In essence, governments and politicians aspiring to power try hard to gain influence over the mining sector to get control over rents. They then use it for their own interests. In a range of ways, this undermines important institutions and public revenue. I then explore, in more detail, the factors through which pervasive politicization of mining, and corruption, have undermined public revenue.

The overarching conclusion from this research is that low mining revenue is due to poor governance and corruption. I suggest that improving institutional capacity in the public sector and strengthening the role of parliament and civil society organizations must, therefore, constitute the cornerstone of the feasible reforms needed to raise revenue to the treasury. Though these proposed changes are not the entire solution, they could make a significant contribution to ensuring the right agreements are negotiated and implemented, ultimately increasing the government's share of the rents generated.
Dedication

To my mother, Kadiatu, for not being here while I complete, and to my dad, Franklin Sr. for your selflessness in educating me.
Acknowledgements

Writing this dissertation has been an emotional as well as intellectual journey. I wish to express my appreciation to my wife, Emma Tity Bendu, for being the strongest pillar of support during a very challenging period in my life. To my children, Fransess, Franklin and Francis, for their support and in their own special way, turning the tough times into good times. I will always be reminded of your love and support.

I am also very grateful to Professor Mick Moore and Dr. Stephen Spratt, who as supervisors have been supportive of me throughout my studies.

A special gratitude goes to my siblings, Francis Bendu and Fransess Jackson for their support and encouragement throughout my studies.

My wife and I are also grateful to a special person for her immense contribution towards my studies.
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<tr>
<td>ADF</td>
<td>Agricultural Development Fund</td>
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<td>ADMS</td>
<td>Alluvial Diamond Mining Scheme</td>
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<td>AfDB</td>
<td>African Development Bank</td>
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<td>AFRC</td>
<td>Armed Forces Revolutionary Council</td>
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<td>AML</td>
<td>African Minerals Limited</td>
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<td>APC</td>
<td>All Peoples Congress</td>
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<td>BEPS</td>
<td>Base Erosion and Profit Shifting</td>
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<td>CAST</td>
<td>Consolidated African Selection Trust</td>
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<tr>
<td>CRMCC</td>
<td>China Railway Materials Commercial Corporation</td>
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<tr>
<td>CSO</td>
<td>Civil Society Organization</td>
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<tr>
<td>DELCO</td>
<td>Sierra Leone Development Company</td>
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<td>ECOMOG</td>
<td>Economic Community of West African State Monitoring Group</td>
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<td>EO</td>
<td>Executive Outcome</td>
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<td>EVD</td>
<td>Ebola Viral Disease</td>
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<tr>
<td>FARI</td>
<td>Fiscal Analysis of Extractive Industries</td>
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<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GGDO</td>
<td>Government Gold and Diamond Office</td>
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<td>GST</td>
<td>Goods and Services Tax</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<td>KPCS</td>
<td>Kimberley Process Certification Scheme</td>
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<td>KPM</td>
<td>Kono Progressive Movement</td>
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<td>LMC</td>
<td>London Mining Company</td>
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<td>LSE</td>
<td>London Stock Exchange</td>
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<td>MMA</td>
<td>Mines and Minerals Act</td>
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<td>Acronym</td>
<td>Full Form</td>
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<tr>
<td>MoFED</td>
<td>Ministry of Finance and Economic Development</td>
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<td>NACE</td>
<td>National Advocacy Coalition on Extractives</td>
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<td>NDMC</td>
<td>National Diamond Mining Company</td>
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<td>NMA</td>
<td>National Minerals Agency</td>
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<td>NPRC</td>
<td>National Provisional Ruling Council</td>
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<td>NRA</td>
<td>National Revenue Agency</td>
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<td>NRC</td>
<td>National Reformation Council</td>
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<td>OAU</td>
<td>Organization of African Unity</td>
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<td>PAYE</td>
<td>Pay-As-You-Earn</td>
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<td>PSA</td>
<td>Production Sharing Agreement</td>
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<td>RRDC</td>
<td>Resource Rich Developing Country</td>
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<td>Revolutionary United Front</td>
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<td>RUFPP</td>
<td>Revolutionary United Front Party</td>
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<td>SIEROMCO</td>
<td>Sierra Leone Ore and Mining Company</td>
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<td>SISG</td>
<td>Shandong Iron and Steel Group</td>
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<td>SLPP</td>
<td>Sierra Leone Peoples Party</td>
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<td>SLST</td>
<td>Sierra Leone Selection Trust</td>
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<td>Strategy and Policy Unit</td>
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<td>SRL</td>
<td>Sierra Rutile Limited</td>
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<td>SSA</td>
<td>Sub-Saharan Africa</td>
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<td>TMC</td>
<td>Timis Mining Corporation</td>
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<td>UNSC</td>
<td>United Nations Security Council</td>
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Chapter 1

1. Introduction

This research examines the explanatory factors for low mineral revenue in Sierra Leone, drawing on the politics, economics and history of the mining sector. Most studies of mineral taxation focus heavily on quantitative data, with emphasis on the design and technical details of the tax and non-tax regimes in the mineral sector (Cleeve, 1997, Thomas, 2010, Sturmer, 2010, Conrad, 2012, Gagigo, 2012, Manley, 2013, Lundstol et al, 2013). The challenge in using a quantitative approach lies in the opaque nature of the financial operations of mining companies, which makes access to reliable date very difficult. As one government official commented, “were the negotiating discussions about mining agreement made public, many government officials, politicians and investors will be under investigation or in prison” (Government Official, Freetown, 10.08.2015). Apart from data accessibility and reliability, there are lots of very important issues that are excluded and which are critical in understanding why the revenue accruing to the treasury from the extraction of mineral resources is very low. Issues such as the nature of the State and its shadow networks, the types of mineral extracted, governance and corruption and the ways in which governance operates are often excluded from studies on the mineral sector. Because of these issues, this study utilizes a qualitative approach to understand the reasons for low mining revenue. The thesis combines political economy analysis on mining taxation, and fieldwork in Sierra Leone in order to determine which factors influence low mineral revenue. These factors (Chapter 4) provided an illuminating insight about how politics has played a pivotal role in the mineral sector. The advantage of using this approach is that, in addition to complementing the lack of available
quantitative data, it collates information on a wider range of factors and activities that, while often overlooked, also throw light on low tax revenue.

Although artisanal and small-scale mining has considerable economic impact in terms of income and employment, this research focuses on large-scale mining companies. With large-scale mining operations, the government is able to negotiate formal mineral agreements that clearly set out the applicable tax and non-tax policies. Furthermore, large-scale mining companies undertake more production than that of artisanal and small-scale miners and their mining operations can be monitored. Moreover, these large-scale mining companies’ compliances with the formal fiscal arrangements are more readily available for scrutiny.

The distinctive contribution made by this thesis and its contribution to scholarly debates lies in its analysis of politics in the mining sector; the complex interactions with high-level members of government and other informal, undocumented relationships in the mining sector. The thesis examines how this combination of factors have stymied mining revenue generation in Sierra Leone. Overall, the thesis provides insights into mining sector governance, and how it relates to and is shaped by, Sierra Leone’s political history and politics.

While Sierra Leone is rich in mineral deposits, and has witnessed almost a century of mining, fiscal revenue from mining remains low. This dissertation thus examines the context why mineral revenue accruing to the treasury has been low by addressing the following research questions:

1. What explains the low revenue from the mineral sector in Sierra Leone?
2. What are the main factors affecting policy design in the mineral sector?

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1 Artisanal and small-scale mining in Sierra Leone is undertaken in the diamond and gold sector, while the other minerals (rutile, bauxite and iron ore) can only be undertaken through large-scale mining due to the capital intensive nature of their mining operations.
3. What, if anything, can be done about this?

This chapter provides an overall introduction for this thesis. Section 1.1 presents an overview of the mining sector in Sierra Leone. The initial expectations about the research is discussed in section 1.2, while section 1.3 highlights the change in the direction of the research. Section 1.4 discusses the problem of mining taxation in Sierra Leone. Section 1.5 highlights the evolution of the research and section 1.6 discusses the new research focus. Section 1.7 explains the research methodology and section 1.8 discusses issues of triangulation. Section 1.9 discusses ethics in relation to the research and section 1.10 highlights my positionality. Section provides the limitation of the study.

1.1 Sierra Leone’s mining sector: an overview

Mining has been a significant component of the Sierra Leonean economy since the 1930s, when the commercial value of diamonds and iron ore came to be realised. Since the 1930s, the commercial exploitation of a wide range of other minerals, including rutile, bauxite, zircom, gold and magnesium, has also been undertaken. The mineral sector in Sierra Leone is comprised of two subsectors: (a) large-scale production of diamonds and bulk minerals (rutile, bauxite and iron ore); and (b) artisanal and small-scale production of diamonds and, to a much smaller extent, gold.

Sierra Leone currently has five large-scale, established mining companies, and four others that have announced plans to commence large-scale gold and iron-ore mining operations in the coming years; 217 Exploration Companies; 6
small-scale mining companies; and over 300,000 people engaged in artisanal and small-scale mining operations all around the country.²

The mining sector has long been an important part of the socio-economic and political landscape of Sierra Leone. Since the colonial period, large-scale mining operations have been dependent on foreign direct investment (FDI) and currently all of the five large-scale mining companies, are foreign owned. With the exception of the diamond sub-sector, which was under the control of De Beers until nationalisation of the mines in 1969, the other minerals have not been extracted by well-established mining companies. Unlike Liberia and Guinea, Sierra Leone had been unable to attract established mining companies. This has been attributed to the lack of proper scrutiny of mining investors, establishing an investment environment to attract established mining companies and the impact of politics in the award of exploration and extraction contracts (Chapter 4). Of the five large-scale mining companies, only two are listed on the Alternative Investment Market of the London Stock Exchange (LSE),³ one is fully listed on the LSE and the other two are subsidiaries of other companies located in different countries. These five mining companies and the nature of their mining operations are now presented in order to provide a contextual overview of the nature and scope of large-scale mining in Sierra Leone.

1.1.1 Sierra Rutile Limited (SRL)

Located in the Moyamba district in the Southern Province, Sierra Rutile Limited (SRL) is an Alternative Investment Market (AIM) listed company on the London Stock Exchange (LSE), with majority ownership held by Pala Minerals Limited. It

² National Mineral Agency report to the International Monetary Fund, September 2015.
³ AIM is the London Stock Exchange’s international market for smaller growing companies.
predominantly mines rutile, but also produces small amounts of ilmenite and zircon as by-products. Operations centre on an estimated reserve of over 900 million tons of rutile. Rutile is predominantly dredged but dry mining, has become increasingly important as dredges are unstable. The company suffered a significant financial loss when one of their dredges capsized in 2008. The company employs a workforce of 1,402 staff, of which 44 are expatriates.

1.1.2 Shandong Iron and Steel Group

The Shandong Iron and Steel Group (formerly African Minerals Limited) mine is located in the Tonkolili district in the Northern Province, and has one of the largest iron ore deposits (approximately 12.8 billion tons) in the world. Shandong Iron and Steel Group’s (SISG) concession contains four main iron ore deposits at its mining site, namely Simbili, Maronpong, Kassoponi and Simbara. In its current production phase, direct shipping ore (DSO) is mined from the Simbili deposit. This is not of particularly high quality (averaging around 53.5% iron content), yet remains valuable because it requires minimal processing due to its low moisture content. The company employs 3,900 staff including 509 expatriates.

1.1.3 Timis Mining Corporation

Located in the Port Loko district in the Northern Province, Timis Mining Corporation (formerly the London Mining Company) is an Alternative Investment Market-listed producer of iron ore. Timis Mining Corporation (TMC)

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4 Rutile, a raw form of titanium dioxide (TiO2) and is used in the production of white pigment, itself used in the global manufacture of paint, plastics and paper.

5 Estimated reserves of all minerals are provided by the National Mineral Agency

6 Dredge mining targets ore that is submerged in water, while dry mining involves the excavation of ore on dry land.

7 High grade iron ore should have 62.5% iron (Fe) content.
is currently processing the tailings\textsuperscript{8} left by the Sierra Leone Development Company (discussed further in Chapter 3) and combining this with its own mined product. Its operations centre on an estimated reserve of over 900 million tons of iron ore. The company currently employs 1,373 staff, which includes 92 expatriates.

1.1.4 Octéa Limited

The Octéa mine in located in the Kono and Kenema districts in the Eastern Province and owned by Beny Steinmetz Group Resources Limited. Unlike the other large mining companies, which exist as one corporate entity, Octéa Limited comprises several subsidiary companies, each of which exploits different geographical areas. The subsidiary companies of Octéa Limited include Octéa Mining, and Octéa Diamonds (Marketing Company). Subsidiary companies of Octéa Mining are Koidu Limited (actively engaged in large-scale diamond mining in the Kono district), Boroma Limited, and Tonguma Limited (both in exploration phases in the Kenema district). Koidu Limited has a 4.9 square kilometre mining lease area that contains high grade, high diamond value in the Kono District. The ore reserve is estimated at close to 3 million carats of diamonds. Octéa Limited employs 1,122 staff, including 144 expatriates.

1.1.5 Sierra Minerals Holding 1-Limited

Located in the Moyamba district in the Southern Province, Sierra Minerals Holding 1-Limited (SMH1-L) is a subsidiary of Vimetco. The company mines bauxite, which it exports to Romania, where ALUM, the parent company is based, and where the bauxite is processed into aluminium.

\textsuperscript{8} These are low grade iron ore left on site as it was not regarded as commercially viable at the time of extraction at that time. With improvement in technology, these tailing can be processed to increase its value.
The mine has a remaining resource base of around 30 million tons, but the company also has an exploration license in Kambia District in the Northern Province. The company currently employs 516 staff including 24 expatriates, with another 489 employed through sub-contractors.

As mentioned above, all of these companies are not established mining companies, even though they have access to huge mineral deposits. There can be no doubt that mineral resources when properly harnessed provide economic benefits to the host country – revenue, foreign exchange and employment. Since independence in 1961, mineral exports makes up over 70 percent of merchandise exports but its contribution to domestic revenue has been very low. On average, the mineral sector has contributed less that 4 percent of domestic revenue between 1961 and 2014. Given this perspective, this thesis initially aimed to focus on the design of a good fiscal regime that meets the revenue needs of both the Sierra Leonean government and the mining companies.

1.2 Initial expectations for the research

As mentioned above, my initial expectation was based on my view that the mining sector has not contributed as much to total revenue\(^9\) as one would expect, because of the type of tax and non-tax instruments in mineral agreements between the government and the mining companies.\(^{10}\) The original strategy for my research was to use the project-specific data (capital expenditure, operational expenditure, and rate of mineral extraction) of the five, above-described, large-scale mining companies in Sierra Leone and formulate an alternative fiscal regime for these mining companies. The project

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\(^{9}\) Total revenue includes tax and non-tax revenue but excludes grants.

\(^{10}\) The mineral sector in this research excludes the petroleum sector.
level data and the alternative fiscal regime for each company would then be applied to the Fiscal Analysis of Resource Industries (FARI) model to estimate the revenue that could accrue to the government. Currently, each mining company has a separate agreement with the government and therefore faces a different tax regime.

The FARI model is a diagnostic tool developed by the International Monetary Fund (IMF) to help governments estimate revenue from the mineral resource sector under different fiscal regimes (Lundgren et al., 2013). The model can also guide governments in their fiscal regime design and during concession agreements with mining companies. The model requires data about the tax system in the mineral agreements (royalty, income tax, withholding tax, resource rent tax, import duties, goods and services tax, and state equity).

The FARI model also requires project-specific data (expenditures on exploration, developing, operating, transport, decommissioning, general and administration, production rate, and the amount of debt undertaken for investment) and country-specific data (reserve deposits indicating the number of years it will take for a particular mineral to be exhausted). Finally, it requires data on the price of minerals, inflation\textsuperscript{11} and interest rates.\textsuperscript{12} The FARI model produces forecasts on the average effective tax rate (government revenue as a share of pre-tax net cash flow at various discount rates), the marginal effective tax rate (proportion of pre-tax return in tax), mineral exports, mining contribution to gross domestic product (GDP), and capital inflows and outflows. It can account for heterogeneity across projects (in fiscal terms, prices and costs) and over time (different phases of production).

\textsuperscript{11} Data on costs and prices are entered in real terms into the model but the fiscal calculations are done in nominal terms by applying an assumed inflation factor. 
\textsuperscript{12} The Interest rate is applied to calculate various financial charges relevant to the fiscal calculation. For example, the debt on capital expenditure on exploration and development.
The model can also help the government to make a comparison on the revenue generated between the mining tax regime in one country and a comparable one in another country. It was my intention to use this model, given the available project-level data and the alternative fiscal regime, to examine the composition and timing of revenue accruing to the government from these large-scale mining companies. The next section will explain how I understood the problem of mining taxation in Sierra Leone before I started the fieldwork.

1.3 Change in the direction of the research

I arrived in Freetown in June 2015 to undertake my fieldwork on ‘Mining Taxation in Sierra Leone’, and specifically to examine how the government of Sierra Leone might reform its fiscal regime to obtain more revenue from the mining sector. However, once in the field, and having access to information about developments in this area, the direction of the research changed considerably.

To understand the reasons for the change in direction, I will discuss the information that I would have needed to carry out the research as originally planned. I will explain how I initially understood the problem of mining taxation in Sierra Leone and then why I could not undertake the original research plan after arriving in Freetown. Having situated the research, I will define the new research path necessary to understand why mineral revenue has been low. I will then present the methodology and finally explain the limitations of the study.

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13 The fiscal regime is a combined system of tax and non-tax instruments used to raise revenue from natural resources. It includes: royalties, corporate income tax, windfall tax, goods and services tax, import and export duties, production sharing, withholding taxes and state equity. The fiscal regimes will also include decisions on capital depreciation, ring fencing, and the period of loss carry forward.
1.4 The problem of mining taxation in Sierra Leone

The exploitation of a country’s natural resources can generate revenue for its government in different ways, including through taxation and government equity participation in the extraction process. The issue of low tax income from the mineral sector is not peculiar to Sierra Leone; many mineral rich countries have been unable to translate mineral wealth to mineral revenue through taxation. To ensure that the government, as the owner of mineral resources, can generate a fair share of the resource rent from the extraction of its mineral wealth, it is important to design and implement good mining taxation.

The resource rent is the excess of the total project lifetime revenue arising from the exploitation of a deposit over the sum of all costs of exploitation including compensation to all factors of production (Land, 2008). Taxing mining companies heavily could lead to loss of investment and government revenue. On the other hand, low tax rates will give a greater share of the resource rent to mining companies. These tax and non-tax instruments (corporate income tax, withholding taxes, windfall profit tax, royalty, surface rents) are levied at different stages in the life cycle of a mining project (Chapter 2).

The life cycle of a mining project is divided into four main phases: (i) exploration, (ii) development, (iii) production, and (iv) mine closure or field decommissioning. As noted in the section above, my original study plan was to examine how the government can reform its fiscal regime to generate more revenue from the mining sector. This plan was based on my view that, since the government policy "A New Mining Policy for Sierra Leone - Partnership for the Future," in 1969, revenue from this sector had been declining due to the

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14 The aim of the policy was to purchase a majority ownership in each of the mining companies to give government a larger share of profits from minerals and more control over mining operations and their effect on the development of the country.
type of tax and non-tax instruments in the various agreements between the government and the mining companies.

Even after reading literature on the impact of (poor) governance on mining and mining taxation, I still felt it was of secondary importance to the thesis given that I regarded the type of tax and non-tax instruments in the mineral agreements as the main problem of mining taxation in Sierra Leone.

Since the colonial period, mining companies have benefitted from generous tax and non-tax concessions; the Sierra Leone Selection Trust (mining diamonds) was exempted from paying royalties on diamonds and the Sierra Leone Development Company (mining iron ore) only paid royalties and was exempted from paying corporate income tax (Chapter 3).

Under Present Stevens (1968-1985), Sierra Rutile Limited (mining rutile), the Sierra Leone Ore and Metals Company (mining bauxite), and the Sierra Leone Development Company benefitted from generous tax and non-tax concessions. From 1961 to 2014, mining revenue contribution to government revenue has been low (Figure 1), averaging less than 10 per cent excluding certain years (1963, 1965, 1971 and 2014). I attributed this to the type of tax and non-tax instruments that were applied to mining companies.
Figure 1.1: Mining revenue as a proportion of total government revenue, 1961-2014.

Sources: International Monetary Fund, International Centre for Tax and Development, National Revenue Authority.

With this background, I began my research to examine how the various tax and non-tax instruments can be reformed to generate more revenue from the mineral sector. However, the significance of (poor) governance for the sector became much more apparent when I arrived in Freetown and began talking with people with relevant historical knowledge.

As one former Civil Servant of the defunct National Diamond Mining Company (NDMC) told me ‘the government in the 1970s saw the NDMC as an extension of the Office of the President, and as such, officials were sent to occupy key positions in NDMC with instructions to ensure diamonds are smuggled outside official channels’ (Former Civil Servant, Freetown, 29.07.15).

These interactions gave me the opportunity to discuss with past and present employees of the government and mining companies, and other stakeholders,

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15 NDMC was the new company that came into being following the nationalization of the diamond sub-sector in 1970.
the political and economic issues from the academic literature I had read. As I began to organise my data, I realised that the problem of (poor) governance has been central to the fiscal regimes adopted by the government over the years. Given this, I felt a need to change the focus of my thesis. I discuss this in the next section.

1.5 How the research evolved (to focus more on the political economy of mineral taxation)

The focus of my research changed a great deal because of two interacting factors: the great willingness of interviewees to discuss how politics affected mining policy, and the difficulty of getting reliable project-level data for the FARI model. The knowledge gained from the literature about the political economy of mining and its taxation, and my interactions with the principal stakeholders during the fieldwork led to a change in my original research plan. It became apparent that in the 1970s and 1980s Presidents Stevens and Momoh, and those close to them, had much influence on the formulation and implementation of mining policies.

In the diamond sub-sector, which contributed the largest proportion of mining revenue, associates of President Stevens (1968-1985) took over the production and marketing of diamonds. Other associates were appointed as board members in the other mining companies. During the civil conflict from 1991 to 2002, the military regime (1992-1996), the democratically elected government (1996-2002), and the Revolutionary United Front (RUF) rebels, used diamonds to purchase arms and ammunitions. After the civil conflict, the same pattern of poor governance that affected the mining sector in the 1970s and 1980s re-emerged; political interference and corruption in the mining sector and a weak public sector.
The willingness of interviewees to discuss the impact of politics on the mining sector enabled me to identify some factors that have undermined mining revenue. However, some stakeholders were very difficult to access as my arrival coincided the presence of the Ebola Viral Disease (EVD) in the country. The EVD prevented me from meeting some of the stakeholders who are outside Freetown, and included foreign officials\(^\text{16}\) of all the five large-scale mining companies, as they were out of the country as a precautionary measure against the EVD. These officials were crucial to my original plan, as they were the most reliable source for the project-level data needed for the FARI model.

The uncertainty in commodity prices, especially iron ore, would also have affected the accuracy and validity of project-level data and consequently the analysis from the FARI model. The continuous drop in iron ore price adversely affected the cash flow of the two iron ore companies (Timis Mining or formerly the London Mining Company, and African Minerals Limited), and hence their operations.\(^\text{17}\) Furthermore, these two companies are now under new ownership.

London Mining Company (LMC) went into administration in October 2014 due to a fall in revenue, high operational cost and lack of capital for expanding production (National Mineral Agency). The LMC was taken over by Frank Timis, Executive Chairman of African Minerals Limited in December 2014.\(^\text{18}\)

In 2011, in an effort to attract capital for expanding production, African Minerals Limited (AML) signed off-take agreements with China Railway Materials Commercial Corporation (CRMCC) and Shandong Iron and Steel

\(^{16}\) The five large-scale mining companies are all foreign-owned and the top-level of management are made up of foreigners.

\(^{17}\) Iron ore prices have dropped from US$ 130 in early 2013 to less than US$ 50 in November 2015.

\(^{18}\) The new company is called Timis Mining Corporation.
Group (SISG) worth about US$1.8 billion (Steinweg and Romgens, 2015). The capital provided was to be used for AML’s proposed expansion to produce over 20 million tons per year by 2016, with these two investors as the primary beneficiaries of the output.

In exchange for its US$1.5 billion investment, SISG owned 25 per cent of AML. However, as a result of the drop in iron ore prices and its impact on revenue, AML ran into cash shortages in early 2014. By the end of the year, mining operations were closed due to insufficient working capital and its inability to service its debt to international creditors and local suppliers (Steinweg and Romgens, 2015). AML went into administration in April 2015, and SISG eventually took over its operations in a deal worth US$170 million.

At the time of the fieldwork, both TMC and SISG were struggling to inject new capital into their mining operations and were unlikely to produce in 2015 and very uncertain about 2016 production levels. They were also in negotiations to settle outstanding liabilities to domestic suppliers incurred by the previous owners.

In addition, the only large-scale diamond mining company, Octéa, has been struggling to meet its financial obligations to the government and its creditors due to insufficient cash flow. It has also been unable to attract capital for its underground kimberlite operations as it has exhausted the open pit

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22 The National Revenue Authority shut down the offices of Timis Mining Corporation In lieu of Pay As You Earn Tax obligations (Awoko Newspaper, November 22, 2015)
23 In many developing countries, diamonds are extracted by large mining companies and small-scale miners through open-pit mines (alluvial mining). When the diamond reserves of the open-pit mines become
reserves. In August 2015, the government gave notice for the cancellation of the license rights to Octéa, due to issues relating to the company's financial viability. The company reportedly has domestic liability in excess of US$15 million and is unable to service its debt with Standard Chartered Bank.

Without the necessary capital, Octéa is likely to cease to operate in the country. Consequently, the considerable reduction in production activities and changes in ownership in the iron ore sub-sector, coupled with challenges faced by the Octéa made it difficult to obtain the valid and reliable project-level data from these companies that I needed to input into the FARI model.

My new objective was to understand how policies that undermine revenue have evolved in the mineral sector. In doing so, I tried to understand the impact of poor governance in the design of policies that have affected mineral revenue, which I discuss in the next section.

1.6 The New Research Focus

As a result of these two interacting factors (willingness of interviewees to discuss politics in mining and difficulty of getting reliable project-level data for the FARI model), the focus of the thesis changed from specifically examining how the government might improve its mining fiscal regime to understanding how poor governance undermined revenue in this sector in Sierra Leone.

uneconomic, kimberlite mining is then used mainly by the large mining companies. This involves technically complex underground mining and is very capital-intensive.

24 Researcher is in possession of a report by the National Mineral Agency in which concern was expressed about the operational viability of Octéa as the company has exhausted its open pit mine reserves and will need to invest in its kimberlite operations if it is to remain viable.

25 Document on this issue in the possession of Researcher.

26 Government officials and Octéa management met in London on November 16, 2015 to discuss the future operations of the company.

27 Second, the FARI model is not a behavioural model and as such is susceptible to forecasting errors regarding cost of production and mineral prices, which are subject to business cycle trends.
Specifically, the research looked at some specific factors through which politicization of the mining sector and corruption undermined revenue from the mining sector. Thus, while my original research questions focused on how government can utilized the fiscal regime to raise revenue, I revised my overarching research question to look more specifically at the range of factors which explain Sierra Leone’s low mineral revenue, to ask what processes are affecting policy decision in the mineral sector and to consider what might be done to improve mineral revenue. The revised research questions were thus:

1. What explains the low revenue from the mineral sector in Sierra Leone?
2. What are the main factors affecting policy design in the mineral sector?
3. What, if anything, can be done about this?

The process of looking at governance issues that affect the mineral sector proved very useful as it gave me the opportunity to get views from various stakeholders. These stakeholders have differences in opinion as to the underlying governance issues that have prevented the country from gaining more mineral revenue. It is my hope that a greater understanding of these issues will help the government make better-informed decisions about the sector in the future. In the next section, I describe how I collected the information to address the revised research question.

1.7 Research Methodology

In answering the revised research questions, I used both primary and secondary data. Secondary data was collected through published and unpublished documents from relevant stakeholders. The documents that I consulted related to the history and politics of mining in Sierra Leone and included scholarly publications, government documents, mineral agreements, studies and reports by Civil Society Organisations (CSOs), reports by the
International Monetary Fund, World Bank, private sector firms and mining companies.

Primary data comprised of interviews conducted in Freetown with various stakeholders in the mineral sector: Government officials, local officials of Mining Companies, Private Consultancy Firms, Civil Society Organisations, former government Politicians/Civil Servants and Donors officials, who have had some involvement in the mining sector (See Appendix I for a full list of key interviewees). I decided to focus on these categories of people because they possess a deep understanding about the mining sector. Table 1 shows the relevance of different categories of interviewees to the research based on their willingness to engage in the research, to provide information relevant to the research and their degree of involvement in mineral policy. Civil servants dominate the sample selection mainly because there are a lot of government agencies involved in the mining sector. The Ministry of Finance and Economic Development (MoFED) deals with the fiscal aspects of mineral agreements, and the National Revenue Authority is responsible for collecting tax and non-tax revenue. The National Mineral Agency has the mandate to monitor and regulate the sector, the Ministry of Mines and Mineral Resources is responsible for the formulation of mineral policy and the Strategy and Policy Unit in the Office of the President is the lead agency for negotiating mineral agreements and coordinates all activities relating to the mineral sector. The responses from civil servants were based on their areas of expertise, though quite a few shared personal ideas and insights beyond the remit of their organisation.

Access to government officials as well as other interviewees was both absorbing and illuminating in terms of the information provided. Contacts made during my time working for the Ministry of Finance and Economic
Development between 2008 and 2013 were invaluable in terms of smoothing the way to meet various stakeholders. For CSOs and the officials of Private Consultancy Firms, I realised that they viewed this research as another forum for conveying their views on governance of the mining sector and were thus willing to meet with me.

The interviews were conducted based on informed consent. The consent form provided a detailed explanation of the research - why it was being undertaken and what would be used for. Those who contributed to the interviews for the research have been anonymised to protect their identity and confidentiality. These interviewees also raised issues that they deemed significant that I did not ask or know about. Whilst I make no claim of representative sampling, nevertheless, the views given by these interviewees were significant and help provide a deeper understanding about why mineral revenue has been low in Sierra Leone. These views were based on past and current developments in the mining sector and could not be obtained from other sources.
Table 1.1: Ranking of interviewees’ importance to the research

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Willingness to engage in the research</th>
<th>Information provided that was helpful for the research</th>
<th>Level of involvement in mineral policy formulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government officials</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Local officials of mining companies</td>
<td>Low</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td>Private consultancy firms</td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td>Former government officials and politicians</td>
<td>Medium</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Civil society organizations</td>
<td>High</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Donors</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
</tr>
</tbody>
</table>

I conducted fieldwork in Freetown from June to September 2015. I visited Government institutions, Donors, Civil Society Organizations, Private Consultancy Firms and Mining Companies. In talking and listening to my interviewees, I allowed information to flow from the other party. Given the sensitivity of the mineral sector, I believed that asking direct questions would
not provide the necessary answers I was looking for, while asking vague questions would also not elicit the appropriate response.

In some interviews, I tried to lead the interviewee to the subject I wanted to explore, and when the person touched on it or came close to it, I would finish off with a question. I used different approaches with different interviewees. For example, in speaking to government officials, I would seek to explore their views about the current fiscal regimes: Why were they formulated? Who were the key players in the design process? Who led the negotiation process? Why were “best practice” taxation policies in the mineral sector not applied to the mineral agreements? I interviewed some heads of government institutions in their homes due to time constraints during official hours.

A critical issue for me in these discussions with heads of government institutions was their role in policy formulation and who had the final say in the negotiation process. As a former government official, I knew about the high level of confidentiality surrounding the mineral sector and political considerations can be a huge challenge in getting information from people. However, my interviewees, especially government officials were quite open in their discussions about the sector.

Discussions with other government officials, mainly middle-level technical staff, were held at the office of the World Bank as it provided a secluded place to discuss issues without anyone eavesdropping. These were the most interesting people to speak to as they developed draft policies and took minutes of meetings, thus they are aware of why specific decisions were made.

Government officials in various institutions featured prominently in my interviews, as they are important stakeholders in providing information about the mining sector and were readily available. Although I expected them to be
guarded in their responses to issues relating to the mineral sector, I was surprised by the open discussion I had with those that had been involved in policy formulation and negotiation of mineral agreements.

In speaking to local officials of mining companies, I would present myself as a student on governance interested in understanding their constraints in the mineral sector and the consequences of the government changing the current mineral agreements. For development partners, my explanation was based more on issues of governance, their views on the current mineral agreements, and their role in the mineral sector. Several donors have been providing technical support to the government although they are not directly involved in mining negotiations. This support has resulted in the establishment of institutions like the National Revenue Authority in 2003, the Environmental Protection Agency in 2008 and the National Minerals Agency in 2012.

I also visited civil society organizations (CSOs) and private consultancy firms involved in the mining sector. CSOs have in recent years become much more active in scrutinizing government policies in the mining sector, with some CSOs producing reports and engaging in debates on the issues.

The private consultancy firms that I contacted have been providing technical services to large-scale mining companies in the country. My interaction with them enabled me to hear the views of professionals who have been working in the sector since the 1970s and who have relevant historical knowledge. I also gained access to a lot of documentation about the mining sector that is not in the public domain. The interviews with donors, CSOs, and private consultancy firms proved to be very effective in getting such information.

28 The International Monetary Fund, the World Bank, the African Development Bank, United Kingdom Department for International Development have all been providing technical assistance of various nature to government over the years.
I visited the Freetown offices of the five large-scale mining companies introduced earlier in this chapter: Sierra Rutile Limited (mining rutile), Sierra Minerals Holdings 1- Limited (mining bauxite), Octéa (mining diamonds), Timis Mining Corporation, and Shandong Iron and Steel Group (mining iron ore). As mentioned earlier, I was unable to speak with managers in these mining companies, as they are expatriate staff-members, who were out of the country. However, at all five companies, I was able to conduct interviews with national employees who had technical knowledge of the mining operations.

The former officials and politicians, especially those in the government in the 1970s and 1980s, provided vital information about how policies relating to the mineral sector were formulated and implemented. In total, I conducted 57 face-to-face individual interviews with stakeholders (34 Government Officials, two officials from Private Consultancy Firms, four Donor country Economists/Governance specialists, five local officials of the Mining Companies, two representatives from Civil Society Organizations and ten former Politicians/Civil Servants.

The interviews typically lasted between 20 and 30 minutes, sometimes more, and covered a broad range of issues depending on the interviewee's expertise or experience of working in the mineral sector. Most of the interviews were audiotaped, although there are some, especially with national employees of mining companies, former government officials and politicians where I took notes.

I participated in two workshops during the fieldwork. The first, in July 2015, was organised by the Ministry of Mineral Resources and attracted a range of stakeholders in the mineral sector: in government, in the private sector, in academia, and in civil society. During the workshop, I interacted with these
participants and had informal discussions with them. This workshop provided me with updates on government thinking on the mineral sector, especially on taxation and governance issues.

The second workshop I attended was organised by the Ministry of Finance and Economic Development (MoFED). The focus was on providing a macroeconomic forecast for the government. Local officials, who provided very guarded updates on current and medium-term prospects, represented the five large-scale mining companies.

1.8 Triangulation

At the end of my fieldwork, I had a wealth of information showing the diverse perspectives of interviewees. Information from these interviews has been compared and cross-referenced in a process of triangulation. In providing information on policy issues around Sierra Leone’s mining sector, these interviews confirmed, nuanced, refuted or reformulated information and debates contained in the literature on mining in Sierra Leone. When inquiring about politically sensitive issues, one cannot assume that interviewees always provide unbalanced accounts. Throughout the process of data analysis, I tried to triangulate between the views expressed by different interviewees in order to establish the validity of claims. It should be stressed that the views and perspectives gathered from one interviewee told as much about the person’s position within Sierra Leone’s political hierarchy as it did about mining policy. Yet, through these multiple views and divergent perspectives, I have sought to build up a picture of the different political processes, complex governance relationships, use of natural resources and other forms of informal negotiation.
1.9 Ethics in data collection and use

This research abided by standard ethical principles of informed consent and confidentiality, in line with University of Sussex guidelines. As explained above, during interviews with stakeholders, appropriate steps were taken to ensure that the research agenda was clearly understood and the use of information for research purposes appropriately authorised. Before the start of any interview, I explained the research purpose, and how the interview evidence was going to be used. I also sought permission for the interview to be audio-recorded. The audio data was securely stored in my laptop (which has a password) and no one except me had access to the data.

Interviewees also had the authority during interviews to stop the recording if they want to express a view that should be “off-record”. Consent to conduct the interview was obtained through a signed form, even though in some cases I had to allay the fears of some government officials. Given the sensitivity of the mineral sector, several government employees asked not to be quoted directly in the research. The output of the research is considered to involve a medium risk due to the sensitivity of some of the information that was shared with me. Some of my high-profile interviewees could be made vulnerable (for example, their employment could be compromised) through the disclosure of information attributable to them.

1.10 My Positionality

I started working for the Ministry of Finance and Economic Development in 2008, few months after the All Peoples Congress party came to power. In his inaugural address to Parliament in 2007, newly elected President Koroma promised to review all mining agreements in order to ensure the country
maximized its benefits. Existing agreements were re-negotiated with Octéa Limited, Sierra Minerals Holding-1 Limited, the London Mining Company (now Timis Mining Corporation) and the African Minerals Limited (now Shandong Iron and Steel Group), but not Sierra Rutile Limited. Working in the MoFED, I had access to revenue data from the mining sector and it was clear that the mining agreements were not bringing the expected revenue to the Treasury despite the boom in commodity prices. This, I realised was mainly due to the tax and non-tax policies in the various agreements. As stated above, it was with this view that I felt I could undertake research into mining taxation. My time at MoFED greatly expanded my network in the mining sector and I felt this was an important aspect, especially in gaining access to my interviewees. During the fieldwork, I had to explain that I was an independent researcher and that I was not undertaking the study as an official of Government. The professional and personal relationships I developed with stakeholders in the sector during my time at MoFED was an important factor in helping me to get the candid opinions of interviewees, which eventually led to a change in my research focus. As will be seen in Chapter 4, Government officials and other interviewees were very open and forthright in their views about the mineral sector.

1.11 Limitations

I encountered challenges during the fieldwork, which may impact on the analysis provided in this dissertation. The fieldwork was undertaken for two months, which is a short period to obtain data, views and perceptions of all stakeholders. A key limitation relates to the enormous uncertainty and conflicting accounts provided by interviewees on politically sensitive issues surrounding mining taxation. Political party loyalty or work related matters in
the government could affect the perception of certain interviewees, which is relayed during the interview.

Although I tried to triangulate the views expressed by the stakeholders to establish validity, using a limited number of sources to do this will not entirely solve the problem. It should be reiterated that the confirmation of an account obtained from one interviewee with that of another does not necessarily indicate that this account is true.

Another limitation was the inability to access foreign expatriate staff of mining companies to get their views about the fiscal regimes in their mineral agreements. This would have enabled me to present a more detailed account from the perspective of the mining companies.

Finally, there might have been some bias in the response from interviewees due to my position as a government official. Despite the above limitations, I strived to be reflexive as a researcher within this environment, and I think that the information collected is sufficiently reliable for the purpose of this thesis.
Chapter 2

Literature Review on Mining Taxation

2. Introduction

The objective of this dissertation is to explore why government mineral revenue has been low in Sierra Leone, specifically examining the role of (poor) governance in this outcome. The research questions developed in the preceding chapter are designed with this objective in mind. This chapter reviews the governance debate in the natural resource literature and distinctive features of the mining sector that makes the design of tax and non-tax policies very challenging. In addressing my research questions, it is important that both aspects are understood as recent literature have emphasized the significance of the characteristics of the mining sector and governance in determining the economic and political outcome in resource rich developing countries (RRDCs). For most RRDCs, the challenge appears to be in establishing a governance framework which will institutionalized transparency and reduce corruption in the management of natural resources.

The conventional wisdom about mining is that, through taxation and good governance, governments can generate substantial revenue that can promote growth and development (Otto, 2000, Hogan and Goldsworthy, 2010, Korinek, 2013, Boakye et al., 2012). Over the last decade, taxation and governance issues in the mining sector has been receiving considerable attention from researchers and governments of resource-rich low-income countries. Despite this attention, many low-income countries were unable to get a fair share of the rents from the commodity price boom between 2002 and 2010 (Sturmer, 2010, Lundstol et al., 2013, Laporte and de Quatrebarbes, 2015).
One of the objectives of mineral taxation is for a government to use its endowment to generate as much revenue as possible, while at the same time ensuring investors can get a fair return on their investment (Sarma and Naresh, 2001, Otto et al., 2006, Mitchell, 2009, Laporte and de Quatrebarbes, 2015). How to achieve this balance in practice has been a subject of much debate, as the issue of good governance is seen as fundamental for ensuring revenue from mining extraction is utilized efficiently and effectively. Countries around the world have had different outcomes from their mineral wealth; some have benefited from the extraction of their mineral resources, while for others, it has had negative economic and political consequences (International Institute for Environment and Development, 2002, World Bank, 2009).

The rest of this chapter is arranged as follows. Section 2.1 reviews the emerging literature on natural resource governance and shadow network, focusing on governance and political economy in mining in SSA. Section 2.2 reviews the distinctive characteristics of the mining sector and Section 2.3 discusses the literature on the taxation models and the tax and non-tax instruments that are applicable in the sector. Section 2.4 concludes the chapter.

2.1 Governance and the Political Economy of Mining

The issue of how to tax the mineral sector has come under scrutiny in recent years. However, focusing on taxation presents only one dimension of mining and consequently ends up putting forward only a partial reason for low mineral revenue (Akabzaa, 2013). A better understanding of the diverse factors which influence low mineral revenue can best be informed by a governance perspective which takes into account not only the technical challenges in the sector but the interplay among stakeholders in the mineral sector. In this
section, I review the literature on governance and political economy by looking at: the State and mining in SSA; governance in the mining sector in SSA; and shadow State in the mining sector in Sierra Leone.

2.1.1 The State and Mining in SSA

Sometimes when I tell people that I am from Sierra Leone, the next sentence will be “Is that the country that was depicted in the film Blood Diamonds?”, in other situations, I will be asked “Why is your country so poor despite its abundance of mineral wealth”? The answer to the first question is yes, and to the second, the answer is complicated as there are several factors that have contributed to the country not been able to get the best from its mineral endowment.

To understand the present trends in the mining sector, it is important to put into context how the mining sector has evolved in Sub-Saharan Africa (SSA) since the 1950s and 1960s, when many mineral rich SSA countries attained independence. In many of these SSA countries, the mineral extraction is an important economic activity, accounting for large share of merchandise exports (World Bank, 2002). The report by the United Nations Economic Commission for Africa (UNECA) in 2011 stated that, “Africa’s reserves and production of some minerals are significant in world terms. Examples include bauxite, chromium, cobalt, gold, manganese, phosphate, platinum group metals (PGMs) and titanium, as well as diamonds” (UNECA, 2011, p.9).

At independence, foreign ownership dominated the mining sector in Africa, with mining companies having links to the former colonial administrators. However, after independence, many African Governments took steps to increase State control of the mining sector, with the aim of ensuring a greater
share of the resource rents accrues to the Treasury (UNECA, 2011). In the 1970s, this policy of nationalization had not yielded the expected results in many SSA countries. This has been attributed to several factors – including the fall in commodity prices, lack of investment in plants and machinery, poor administration, lack of investment in exploration and the impact of politics on the operations of mining companies (World Bank, 1992, UNECA 2011, Campbell, 2013). At the start of the 1980s, the debt situation of many of these mineral rich SSA countries was spiralling out of control. With low commodity prices, the fiscal position of these countries kept deteriorating, which led the World Bank to take an active part in designing reforms for the mining sector in Africa. A report by the United Nations Economic Commission for Africa (UNECA) note that “another burden was that, revenue from mining companies became part of the national cake that had to be used to finance other priorities—another factor in the lack of investment and ultimate demise of the state mining companies” (UNECA, 2011, p.15). The World Bank’s “Strategy for African Mining” in 1992 clearly restricted the role of Government as “that of a facilitator of investment and as having a shared interest in the profitability of the private mining companies” (Jacobs, 2011, p.18). This was the prevailing paradigm throughout the 1980s and 1990s, during which time commodity prices were at an all-time low, and African countries were encouraged to provided generous fiscal concessions to multinational corporations in an effort to attract investment in the mining sector. The favourable environment in the 1980s and 1990s, couple with the commodity boom (2002 -2010) attracted additional foreign investment in the mining sector and expanded mineral production and exports (UNECA, 2011). However, the economic benefits, especially in terms of revenue accruing to various Governments have been very low (Sturmer, 2010, Lundstol et al., 2013).
State intervention in the post-independence period did not bring the anticipated benefits from the mining sector in many SSA countries. Furthermore, the contribution of the mining sector in terms of revenue accruing to the many Sub-Saharan African countries has continued to be disappointing. This has been, in part, informed by governance framework in the sector, which is discussed in the next section.

2.1.2 Governance in the mining sector in Sub-Saharan Africa

Increased revenue has been seen as the key benefit from the mineral sector (Otto et al.; 2006, Tordo, 2007), yet the last two decades have seen the publication of a large body of research and analysis on the resource curse that aims to explain the relationship between natural resource wealth and governance in Sub-Saharan Africa (McFerson, 2009, Barma et al.; 2011). There is now a broad consensus in the literature that poor governance is perhaps a key factor that mediates the social and economic development outcomes in mineral-rich SSA countries (Robinson et al.; 2001, Iimi, 2007, Sala-i-Martin and Subramanian, 2003, Barma et al., 2011). According to Campbell, “it is this factor, which is at the crux of understanding the lack of contribution of the mining sector to local development” (Campbell, 2013, p.1).

At the heart of the governance literature in SSA are the various studies on Botswana, which has been seen as a showcase of the impact of good governance in the mining sector. Robinson et al (2001) were among the first to argue that the success of Botswana is most plausibly due to its adoption of good policies that have promoted socially-efficient exploitation of resource rents. Good governance and good policies have been crucial to the success story of Botswana which has been largely free of kleptocracy and civil conflict; has maintained a transparent, law-abiding government; and has implemented
good policies, including a hyper-prudent fiscal policy, which has done much to diversify foreign exchange earnings and prevent the volatility that typifies many resource-based economies (Lewin, 2007). This fits with what limi (2007) described as the core factors of good governance: “specifically a strong public voice with accountability, high government effectiveness, good regulation, and powerful anticorruption policies— [which] tends to link natural resources with high economic growth” (limi, 2007, p. 692).

Implementing good governance in the mineral sector is not, however, straightforward and, despite good intentions, governance initiatives do not always positively improve the outcomes from the mineral sector (Maconachie, 2008, Hilson and Maconachie, 2008). Maconachie (2008) examined two governance initiatives in the diamond sector in Sierra Leone – the Kimberley Process Certification Scheme (KPCS) and the Diamond Area Community Development Fund. He concluded that, in the post-conflict period, such governance practices do not automatically yield good outcomes and will take a considerable time to develop as a result of the long period of civil conflict. He identified “human capacity challenges and the difficulty in eliminating the complex network of actors that have long sustained the corruption and lack of transparency that characterize local diamond extraction” as key elements that need to be overcome (Maconachie, 2008, p.78).

Another governance initiative, the Extractive Industries Transparency Initiative (EITI), aims to facilitate economic improvement in resource rich developing countries in SSA by improving transparency in relation to revenue from the mining sector and by enabling citizens to hold their government accountable. Hilson and Maconachie (2008) argue that these initiatives do not work, despite the mining boom, as current legislations in many SSA countries only benefit
foreign investors, and host governments are netting only a small share of the resulting profit. They concluded that “that the EITI is a policy mechanism that could prove to be effective with significant institutional change” in SSA countries but, on its own, will unlikely reduced corruption, improve governance, and increase transparency” (Hilson and Maconachie, 2008, p.92).

Several studies have presented evidence to show that corruption in mineral-rich SSA countries is a key explanatory factor in relation to governments’ inability to ensure that a fair share of the resource rent generated accrues to the Treasury (Sala-i-Martin and Subramanian, 2003, McFerson, 2009, Le Billon, 2014). From the ‘resource curse’ perspective, the substantial amount of resource rent that can be generated from the mineral sector acts as an incentive for rent seeking, clientelism, and corruption. These corrupt earnings reduce accountability on the part of government and insulate the ruling elites from the demands of citizens (Moore, 2004, Le Billon, 2014).

Sala-i-Martin and Subramanian (2003) provide a grounded analysis about why Nigeria, for example, has not benefited much from its vast endowment of oil. The authors argue that natural resources such as oil and mineral have had a detrimental impact on domestic institutions and, through this channel, on long-term growth. In the case of Nigeria, waste stemming from oil appears to be primarily responsible for Nigeria’s poor long-term economic performance (Sala-i-Martin and Subramanian 2003). Revenue from oil was invested in projects that have not yielded any benefit to the country. For example, oil revenues financed the Ajakouta steel complex in the 1970s, but the complex has to date been unable to produce any steel. Extreme corruption has also been responsible for the misappropriation of revenue from the extractive

29 Building human capacity, reducing corruption and improving transparency.
sector in Africa by the political elites. McFerson (2009) argues that “it is precisely this large revenue that allows the elite to buy control, keep the security apparatus happy, repress moves toward political participation, and preclude a minimally decent distribution of resources” (McFerson, 2009, p.1529). Le Billon (2014) offers a more nuanced explanation, contending that a number of factors that make the extractive sector prone to corruption – which include high-level of discretionary political control of the sector, limited competition, lack of capacity in government, and global integration. These factors have enabled corrupt elites to siphon their wealth into offshore bank accounts. For example, in the Democratic Republic of Congo (DRC), Global Witness (2006) reported that International companies and local elites were, instead of sharing mining revenue with local communities or spending it to reduce poverty, diverting revenues from the mining sector. According to the report, large quantities of minerals were leaving the country undeclared, representing a huge loss for the DRC’s economy – but a vast gain for a small number of powerful actors.

Political corruption in the mineral sector has, over the years, also helped to stabilise authoritarian and patrimonial regimes in SSA countries – as evidenced by the regimes of late Mabuto Sese Seko of DRC (former Zaire), Siaka Stevens of Sierra Leone, Sekou Toure of Guinea, William Tobman of Liberia and currently Eduardo Dos Santos of Angola. In Sierra Leone, a former politician said “President Stevens used proceeds from the mining sector to win over opponents and entrench his hold on power” (Former Politician, Freetown, 29.07.2015).

Political corruption in the mineral sector and amongst elites is thus a major challenge in ensuring the country gets a fair share of the resource rent. Ayee
et al. (2011: 21) argue that “mining concessions, which include exploration and exploitation licenses, may have been allocated as a reward for political support and financial kickbacks”. Corruption is, however, one of several factors and often works hand-in-hand with shadow networks. The presence of shadow networks in the mining sector was a particular feature of the mining landscape, especially in the lucrative diamond sub-sector in Sierra Leone. This issue is explored in the next section.

2.1.3 Shadow Networks in the mining sector in Sierra Leone

Various studies have emphasized the importance of the mining sector to the economy of Sierra Leone in the 1960s, 1970s and 1980s (World Bank, 1970, 1974 Cartwright, 1978, Cleeve, 1997, Reno, 1995, Davies, 2000, Frost, 2012). However, the sector’s contribution to social and economic development of the country has been far less impressive. The reality is that, the mining sector has been a conduit for the enrichment of some politicians and private businessmen, at the expense of the country. As Reno (1995) notes “politicians and a few businessmen without state office exercised significant control over the lucrative illicit diamond industry” (Reno, 1995, p.1). The State and few businessmen, mainly the Lebanese, through political patronage and pervasive corruption led to the creation of a “Shadow Network” in the midst of institutional collapse (Cartwright 1978, Hayward 1984, Luke and Riley, 1989, Reno, 1995). This shadow network dominated the diamond sub-sector and through their smuggling channel diverted hundreds of millions of dollars away from the Treasury and towards the enrichment of State elite and businessmen (Sesay 1995, Snyder, 2006, Davies, 2012). Sesay (1995) observes that, when State institutions and the national interest are subordinated to the interests of groups or individuals in society, state paralysis is inevitable. What Reno and
other scholars did not mention, however, is that this shadow network almost became a parallel government which controlled both the mining sector and other financial and economic sectors. For example, ordinary Sierra Leonean businessmen were unable to gain access to key sectors of the economy, which were under the control of Lebanese businessmen with networks to the mining sector. According to Gberie (1998) and Snyder (2006), the political elite were comfortable in dealing with the Lebanese businessmen because they were foreigners and did not pose any threat to the political status quo. However, these Lebanese businessmen continued to expand their economic base in Sierra Leone and this made them more powerful, with politicians relying on their goodwill to further the politicians’ political agendas.

In the post-conflict period, though the shadow network is not as visible as it had been in the 1970s and 1980s. However, given the large amount of rents generated from the mineral sector, access to State House has become very important for investors in the mining sector. Politicians want to control the affairs of the mining sector even where they lack the technical knowledge about the sector. An Official of the Campaign for Good Governance says “the participation of a select group of individuals to negotiate with mining companies in determining the benefits that will accrue to the country raises a lot of transparency issues” (CSO Official, Freetown, 08.08.2015). Furthermore, the official said, this select group is only answerable to the President. Development of the mineral sector is thus undermined by political patronage, clientelism, pervasive corruption and a preference for wealth accumulation. These issues have characterized the mining sector in Sierra Leonean since 1961 and continue to play a significant role in determining the revenue that accrues to the Treasury.
Establishing good governance is one challenge in ensuring countries benefit from their resource endowment. Understanding the distinctive features of the mining sector is also key as it poses challenges when mineral rich countries design their tax and non-tax policies. These characteristics are explored in the next section.

2.2 Distinctive Features of the Mining Sector

All countries face the challenge of designing taxation policies that will ensure that a fair share of the resource rent generated accrues to the treasury. While it can be argued that mining taxation policies are intended to address this basic objective of revenue generation for the government (Baunsgard, 2001), certain features of the sector make the design and implementation of these policies important but also very challenging (Boadway and Keen, 2010). Such features explain why, in practice, the sector has separate tax and non-tax provisions compared to other areas of the economy (Otto et al., 2006, Hogan and Goldsworthy, 2010, Laporte and de Quatrebarbes, 2015).

The first distinctive feature of the mining sector, which has implications for taxation, is that minerals are exhaustible resources and the exploitation period is finite (Cleeve, 1997, Mitchell, 2009, International Monetary Fund, 2012). This feature presents policy makers with the challenge of designing and implementing a fiscal regime that will provide a fair share of the resource rent to the Treasury during exploitation.

A mining project may operate through many political regimes, during which time mining taxation laws are likely to change several times, especially in low-income countries (Mitchell, 2009). Boadway and Keen (2010) notes that this point about exhaustibility should not be taken entirely literally as new resource

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30 Mining in this research project excludes oil and gas. However, many of the features of the mining sector are similar to those in the oil and gas industries.
deposits are discovered and, for some resources, stocks are so high that finiteness is not an immediate concern.

A second feature of the mining sector is that mining projects are characterized by large upfront investment and it can take several years before revenue starts to flow from production. Mining projects are likely to have long exploration and development periods (Boadway and Keen, 2010). The amount of capital required in these initial phases can be exceptionally high and can run into hundreds of millions of dollars. Most of the cost is incurred in the development stage when roads, railways, electric power and water plants, community relocation and ports have to be constructed. This is particularly the case in low-income countries with poor infrastructure and where mine sites are located in remote rural areas.

In many low-income countries, governments do not have the financial and technical resources needed to operate mining projects effectively and are often unwilling to commit monetary resources. Even where the finance is available, governments may have other priorities and will not be interested in taking the risks involved in such projects.

Given the need to attract investment in the mining sector, many low-income countries have designed taxation policies with generous provisions intended to attract investors to the sector. These tax and non-tax provisions are often not responsive to changes in market conditions. When there is a boom in commodity prices, the government has often sought to re-negotiate the terms of the agreement (Laporte and de Quatrebarbes, 2015).

The third distinctive feature of the mining sector is the change in bargaining position between the government and companies over the lifetime of a project. At the beginning of the project, mining companies hold more bargaining power
given their access to finance and technological knowledge (Stevens et al., 2013). However, the large capital outlay when sunk becomes very difficult to move or reassign to alternative use, and the balance of power shifts to the government during the production phase (International Monetary Fund, 2012, Stevens et al., 2013). The balance of bargaining power also shifts towards the government during boom period or when a new government seeks to re-negotiate the tax and non-tax provisions in a mining agreement signed by the previous government (Barma et al., 2011, International Monetary Fund, 2012).

Fourthly, the mining sector is characterized by uncertainty at all stages from exploration to mine closure (International Monetary Fund, 2012, Boadway and Keen, 2010). Uncertainty in the industry relates to geological findings, demand, price, financial implication (debt-equity ratio and foreign exchange risk) and unstable fiscal regimes.

During the exploration stage, uncertainty stems from nature of the geological findings, which might not be economically viable to exploit. During the development and extraction stage, uncertainty relating to changes in demand and prices poses serious challenges for both government and mining companies, as seen in the commodity price cycle over the last decade (Boadway and Keen, 2010, Humphreys, 2012). For many low-income countries, the uncertainty relating to price movements poses serious challenges for policy formulation. The price of iron ore since 2003 epitomizes this challenge. From around US$32 per ton in 2003, the price of iron ore reached US$169 per ton in 2011. Since 2012, the price has been on a downward trend and fell below US$40 in January 2016.

Uncertainty relating to the debt-equity ratio of the capital invested by the mining companies makes tax policy formulation challenging in the industry
(Oana and Puyo, 2015). Institutions providing finance are concerned about the timeframe before a mining project starts repaying the loaned amount plus interest. This can pose severe financial challenges for mining companies especially if mineral prices have fallen before or during production.

Different countries have different permissible debt-to-equity ratios applicable to the mining sector. Many countries try to limit the amount of debt mining companies can take, mainly to avoid the problem of thin capitalisation. When a mining company borrows from a financier, the mining company takes on the risk. Changes in the quality of resources, global demand or prices have no impact on the debt owed. Likewise, the financier does not stand to make any extra profit if the operations of the mining company turn out to be very profitable. This is not the case with equity, where the shareholders of the mining company carry the risk of such changes. Where the mining company is both the borrower and investor/shareholder, it carries the risks associated with debt or equity.

The other point to consider is the currency in which the debt is denominated can affect the investor's ability to service its debt and interest payments. If the debt is denominated in US dollars (as is often the case), a change in the exchange rate can affect the investor's foreign currency position. For example, an appreciation of the domestic currency will require the mining company to utilize more US dollars to meet its domestic currency obligations.

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31 Thin capitalization occurs when a parent company or related party in a tax haven capitalize their subsidiaries in high tax countries through provision of loans instead of equity. The interest rates charged on the loans will be high but the subsidiary in the host country will accept the conditions. The implication is that the subsidiary company will pay a huge amount of its income as interest on the loan from the parent company or related party, leaving it with losses or reduced profits, while the parent company or related party earns the interests and taxed at low rates or no tax at all.

32 This is when the domestic currency increases in value and will require less of its currency in exchange for a US$.
Another aspect of uncertainty relates to unstable fiscal regimes during boom periods, when governments seek to increase their share of revenue from the sector (Barma et al., 2011). During the last commodity super-cycle (from 2002 to 2010), many countries amended their fiscal regimes to capture a share of the windfall revenue (Laporte and de Quatrebarbes, 2015). Most countries have found it challenging to design and implement a fiscal regime that will automatically respond to market conditions.

The fifth distinctive characteristic of the mining sector is the slow response time of the industry to changes in demand for minerals (Humphreys, 2012). The mining sector follows a business cycle trend, which is very unpredictable. When prices are low, mining companies are unlikely to undertake investments that will increase output. However, when prices are high, mining companies cannot immediately respond to higher prices by producing more. Increasing output takes time, as mining companies have to put in place mechanisms, such as new equipment and building new mines to respond to the boom period. For example, the recent boom in the price and supply of iron ore, from 2002 to 2011, was predicated on the assumption that demand from China will continue to grow. The time lag between when the boom period starts and when mining companies can supply the market will vary according to the type of mineral and where it is extracted. Over time, supply surpasses demand in the market, as existing and new companies supply the market with minerals. This excess supply, in turn, leads to a fall in the price of minerals (Humphreys, 2012).

The mining sector’s potential to generate substantial amounts of economic rent\textsuperscript{33} (International Monetary Fund, 2012), especially during boom periods, is the sixth distinctive feature associated with mining taxation. Favourable

\footnotetext{33}{Economic rent is the amount by which the payment received in return for some action – bringing for example, iron ore to the market – exceeds the minimum cost required for extracting the ore.}
geological features in some countries mean that the cost of extracting the mineral can be significantly less than the market price of the mineral (Collier and Venables, 2011, Barma et al., 2011).

Economic theory suggests that such rents can be taxed at very high rates (up to 100 per cent) without changing the behaviour of the mining companies (Otto et al., 2006, Boadway and Keen, 2010). For example, a mining company with a production cost of US$100 million might reasonably look for a return of 20 per cent on production cost (that is US$20 million). Where the mining company earns revenue of say US$240 million a year, the government can tax US$120 million at 100 per cent, without altering the behaviour of the mining company, because the mining company is still willing to operate as long as it can earn US$120 million.

Asymmetric information between government and investors is the seventh feature of the mining sector (International Monetary Fund, 2012, Boadway and Keen, 2010). Mining companies or ‘juniors’[^34] undertaking exploration activities are likely to be better informed than the host government on the geological and commercial aspects of the mineral (Boadway and Keen, 2010, Stevens et al., 2013). These information asymmetries make tax policy formulation very challenging, as mining companies are not keen to share their information with the host government (Boadway and Keen, 2010).

Mining extraction in many low-income countries is undertaken by multinational corporations who have better knowledge than the government of their income flow, operation costs, and tax liabilities. These multinational

[^34]: Juniors are small companies in the mining sector with an appetite for risk, that may take on projects in low-income countries with little appeal to major investors. In the event of success, juniors can metamorphose into an extraction company or will look for their reward through transfers or sales of their interest to established multinationals in the mining sector with the financial and technical muscle to exploit the discovery.
corporations are likely to overstate the difficulty in the extraction process and use a range of actions, such as base erosion and profit shifting (BEPS)\textsuperscript{35}, to understate their profits in the host country. Durst (2014) notes, ‘The prevalence of BEPS has resulted in substantial nullification of corporate income tax in countries around the world, especially on income that is connected with companies’ international operations’.

The eighth feature of the mining sector is that the tax accruing to the treasury from mining extraction can be sizable and can make a huge contribution to total revenue (Boadway and Keen, 2010, International Monetary Fund, 2012).

Thus far, this section has explored the distinctive features of the mining sector that makes taxation very challenging. These features are not unique to the mining sector. However, their impact on taxation is much more profound in the mining sector, especially in low-income countries. In particular, exhaustibility of mineral resources, the presence of asymmetric information, the pervasive uncertainty in the sector, and the potential for substantial economic rents are all-critical in the way mining taxation policies are formulated.

This potential for sizable revenue accruing to the government has attracted increasing level of political interference in the mining sector in low-income countries. Mining companies and politicians are often involved in making private deals that rob the treasury of much-needed revenue (Reno, 1995, Smillie et al., 2000, Davies 2000, Lundstol et al., 2013). Gberie (2010) argues that the diamond sub-sector in Sierra Leone provides an important clandestine circuit for the massive enrichment of politicians.

\textsuperscript{35} According to the Organization for Economic Cooperation and Development, BEPS refers to "tax planning strategies that exploit gaps and mismatches in the tax rules to artificially shift profits to low or no tax locations where there is little economic activity, resulting in little or no corporate tax being paid."
2.3 Taxation Schemes and Tax and Non-Tax Instruments in the Mining Sector

This section discusses the taxation schemes and instruments in practice in the mining sector in low-income countries. Governments, as custodians of countries’ mineral resources, can choose a variety of ways to extract the benefits of mineral exploitation. A government can decide on ‘going it alone’, where a national company is set up to mine the minerals. In this case, the design of tax and non-tax provisions becomes almost irrelevant, as the government is the sole recipient of the mining enterprise and its profits. This approach has raised concerns about whether revenue from the extraction of minerals will go to the government-owned mining company or the treasury. The government can also invite private sector participation in the extraction of its mineral resources where the government takes up the role of a regulator.

2.3.1 Taxation Schemes

There are four main taxation schemes in the mining sector: the Production Sharing Agreement (PSA) scheme, Royalty scheme, Operator/Service scheme, and Income Tax scheme. In practice, the royalty scheme, the income tax scheme or a hybrid of the two are very common in the mining sector. Each of these will be discussed below.

*The Production Sharing Agreement (PSA) Scheme*

This is a binding commercial agreement between an investor and a government giving the investor the right to exploit the mineral and defining how much of the extracted mineral each party will receive (Nakhle, 2010, Guj et al., 2013). The investor agrees to finance the exploration and development of the extractive infrastructure in return for the permission to extract the mineral resource. The investor is given a certain percentage of the output to
recover costs and the remaining output is shared between the investor and the government at a predetermined percentage. In addition, the investor pays royalty on its output share and corporate income tax on its profit.

The advantages of this scheme are that all the risks of exploration and development are with the mining company and the government starts getting revenue as soon as production commences. However, the more generous the cost recovery limit, the longer it will take government to realise its take.

*The Royalty Scheme*

The royalty scheme assumes that the mining company takes full control over the production process and all of the extracted resources belong to the company, which is then responsible for marketing the product (Otto, 2000). The mining company pays royalty on the extracted minerals in addition to other taxes, such as corporate income tax, goods and services tax, windfall profit tax and other levies. The advantage of this scheme is that the government starts getting revenue as soon as production starts.

*The Operator/Service Scheme*

The operator/service scheme is less common, and involves payment by the government to the contractor rather than payments by the contractor to the government (Nakhle, 2010). Under the operator/service scheme, the contractor agrees to serve as a service provider, undertaking the geological research, developing the mine infrastructure and extracting the minerals (Nakhle, 2010).

The government owns the output extracted, and the revenue earned from the sale of the mineral is used to pay the contractor for the services provided. The advantage of this scheme is that the government gets all the revenue from the
operations. However, the government takes on all the risks for the extraction of the minerals.

*The Income Tax Scheme*

This scheme relies on taxes connected to profit as the main fiscal instruments, such as profit-based royalties, corporate income tax, progressive profit tax, and windfall profit tax (Hogan and Goldsworthy, 2010, Nakhle, 2010). However, mining companies can manipulate their tax liabilities, for example, by under-pricing mineral products sold to affiliates and making excessive payments to a parent company (for loans, supplies and services). It is also very difficult to ensure that the government gets the appropriate revenue payment if institutions are weak or politicians are corrupted by mining companies.

The choice of the extractive taxation scheme may trigger different types of tax administration considerations. A key challenge for most countries is to choose the scheme that best serves their objectives. There is no perfect taxation scheme that is applicable to all countries. As Nakhle (2010) notes, ‘the complexities and uncertainties of the real world are probably greater than any theoretical economic prescription’.

The type of scheme chosen brings its own challenges for tax administrators. It is now common for governments to adopt a mixed system; a combination of royalty and income tax schemes to ensure that governments are able to get revenue when production starts and when the mining companies are making abnormal profits during boom period. The table below presents advantages and disadvantages of the four different types of taxation schemes discussed above.
<table>
<thead>
<tr>
<th>Production Sharing Agreement (PSA) Model</th>
<th>Royalty Model</th>
<th>Income Tax Model</th>
<th>Revenue Sharing Model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages for the government</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The mining company pays all of the cost of exploration and development.</td>
<td>It wants to attract investment, asymmetric information is for the government. The bargaining position of the government starts from a weak position.</td>
<td>The mining company pays all of the cost of exploration and development. Economic rent generated accrues to the government.</td>
<td>The government shares in the economic rent generated through the sale of its own share of output.</td>
</tr>
<tr>
<td>Low-income countries in most cases in development.</td>
<td>Asymmetric information is for the government. The bargaining position of the government starts from a weak position.</td>
<td>In most cases in low-income countries, the economic rent generated accrues to the government.</td>
<td></td>
</tr>
</tbody>
</table>

Table 2.1: The advantages and disadvantages of each taxation scheme.
<table>
<thead>
<tr>
<th>Disadvantages for the Government</th>
</tr>
</thead>
<tbody>
<tr>
<td>The more generous the cost recovery limit, the longer it will take the government to realise its take.</td>
</tr>
<tr>
<td>There might be uncertainty relating to the debt profile of the mining company.</td>
</tr>
<tr>
<td>Taxes and royalties paid all over the world are now being stretched more and more.</td>
</tr>
<tr>
<td>The goods sold to affiliates provided by the mining company through manipulation of pricing practices underarm the government's bargaining position.</td>
</tr>
<tr>
<td>Weak institutional capacity can hinder revenue collection.</td>
</tr>
<tr>
<td>Pervasiveness of asymmetric information, especially in low-income, particularly in low-income countries, especially in low-income countries.</td>
</tr>
<tr>
<td>The government pays all the cost of exploration and development.</td>
</tr>
<tr>
<td>Manipulation of tax base by mining companies through base erosion and profit shifting practices.</td>
</tr>
</tbody>
</table>
2.3.1 Fiscal Instruments

In the last section, I discussed the main channels through which the government might get revenue from the mining sector. In this section, I will go into more detail by examining the tax and non-tax instruments that are applicable in the mining sector.

Numerous tax instruments are found in the mining sector in different countries. Some are specific to the sector, such as signature bonuses, surface rent tax, mining royalties, and windfall profit tax (Baunsgard, 2001, Boadway and Keen, 2010, International Monetary Fund, 2012). Some are common to all sectors of the economy, such as corporate income tax (CIT), goods and services tax (GST), and import duties. I have grouped the tax and non-tax instruments into two categories: those that are applicable in phase one (the exploration and development, and phase two (production). Each instrument has its own advantages and disadvantages (Table 2.2).

**Exploration and development Phases**

The key fiscal instruments applicable during the exploration and development phases are signature bonuses, goods and services tax, withholding taxes, import duties and surface rents. (Otto, 2000, Baunsgard, 2001, Otto et al., 2006, Hogan and Goldsworthy, 2010).

Signature bonuses are one-off payments that mining companies sometimes make to the government upon the signing of exploration and production agreements, or the discovery of a commercial quantity of minerals (Tordo, 2007, Barma et al., 2011). Signature bonuses are easy to collect and are received early in the mining life cycle, often even before production
commences (Nakhle, 2010). It is therefore an attractive form of revenue collection for governments.

The goods and services tax (GST) is a tax on domestic consumption and in principle has little impact on mining operations, which are export-oriented (Boadway and Keen, 2010). This is because during the exploration and development phases, large amounts of equipment are imported into the host country for the extraction process. In principle, the GST paid on inputs should be credited against GST paid on domestic sales.

Given the export-oriented nature of mining activities in most low-income countries, mining companies have no domestic output against which to credit their GST payments on inputs (Baunsgaard, 2001). As a result of this, mining companies will be in constant refund position when reclaiming GST paid on imported inputs.

Providing refunds in a timely manner to mining companies can prove very challenging for weak revenue administration. As such, the input GST raises input cost and serves as an implicit export tax (Boadway and Keen, 2010). In practice, faced with such potential challenges, many countries choose to zero-rate\textsuperscript{36} mineral exports and exempt mining companies from GST on imported inputs (Baunsgard, 2001).

Surface rents are generally paid annually by the mining companies on the basis of the size of the land area under lease and is usually a fixed nominal amount (Tordo, 2007).

\textsuperscript{36} Zero-rated means that the imported goods are still GST taxable, but the rate of GST paid by mining companies is zero %. This is because export duties on the other hand add to the price of exports and are normally not levied on minerals that are exported. TORDO, S. 2007. Fiscal Systems for Hydrocarbons: Design Issues. Working Paper No 123. Wahington, D.C: The World Bank.
**Production phase**

The key fiscal instruments applicable during the production phase are royalties, corporate income tax, windfall profit tax and capital gains tax (Baunsgard, 2001, Broadway and Keen, 2010).

Royalties can be defined as charges levied directly on the extraction of minerals to generate revenue for governments (Otto, 2000, Baunsgard, 2001, Broadway and Keen, 2010). Royalties are levied in a variety of forms: based on the volume (unit or specific royalty), the value (*ad valorem* royalty), or the variable rate.

A unit-based royalty is most often applied using a fixed monetary rate to minerals that are more or less homogeneous or sold in bulk (Otto et al., 2006). It may be assessed based on measurement (weight or volume) at the mine mouth, before significant treatment or processing takes place, or on the final mineral content (Otto et al., 2006, Barma et al., 2011).

An *Ad valorem* royalty is a fixed percentage of the value of the mineral produced by the mining company (Otto et al., 2006, Guj, 2012). Under *ad valorem* royalties, the basis of mineral valuation may be the market price, or some specified reference price (Otto et al., 2006).

A variable rate royalty\(^{37}\) takes into account the selling price of the mineral product. Unlike the unit-based royalty or *ad valorem* royalty, the variable royalty is levied on the net cash flow or gross sales value, or some measure of the profit of a mining project (Otto et al., 2006, Hogan 2008, Guj, 2012). Under variable royalty, the royalty rate is applied as a sliding scale. In some cases, no

\(^{37}\) Also known as windfall tax.
tax applies if the income from mining falls below some threshold level (Hogan, 2008).

As a fiscal instrument, royalties (unit and *ad valorem*) are quite attractive to governments as they are easy to administer and also ensure an early revenue stream from the commencement of production (International Monetary Fund, 2012). However, these same royalties can affect extraction decisions, by increasing the risk of mining companies leaving marginal quality resources in the ground, thereby exacerbating the practice of high grading (Otto et al., 2006, Nakhle, 2010). *Ad valorem* and variable royalties also create challenges in calculation, especially where the tax administration lacks the capacity to assess the price at which the mineral is sold (Baunsgard, 2001).

In general, mining companies should be subject to the same corporate income tax rate as that paid by other economic entities within a country to ensure that the normal return to equity is taxed at the same level (Conrad, 2012, International Monetary Fund, 2012). In some countries, mining companies are subject to higher income tax rates due to their potential to generate abnormal profits during period of high price for minerals (Otto et al., 2006).

In the mining sector, another instrument used to capture revenue for government is the windfall profit tax. This tax is introduced in anticipation of a boom period and that mineral extraction will become profitable, and thus ensures that respective governments get a fair share from the gains (Barma et al., 2011). The windfall profit tax is intended to capture economic rent for the government during an upswing in commodity prices.

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38 High grading is where mining companies cease to operate when the price of the mineral is no longer able to cover extraction cost plus royalty (Boadway and Keen, 2010).
Withholding tax also forms a significant component of mining companies’ tax payments to the government. This is normally levied on the dividends of shareholders, on interest payments, on debt taken by mining companies, and on services provided by sub-contractors (Conrad, 2012, Guj et al., 2013). Beyond revenue generation, withholding taxes have the additional advantage of discouraging excessive payments to non-residents as a means of shifting profits to lower tax jurisdictions or tax havens.

Mining leases or concession interests often change ownership in low-income countries when a ‘junior’ sometimes sells its mining lease or concession interests to an established mining company. The objective of the ‘junior’ is to build the value of the mines and sell to an established mining company. In many low-income countries, ‘juniors’ are involved in exploration activities. When exploration is successful, these ‘juniors’ with their limited capital to move into the development phase will sell their mining lease or concession interests to established mining companies. Such transactions can offer a potential source of revenue for governments through the tax on capital gains.

Capital gains is the difference in the value of an asset between the time it was acquired and the time it was sold (Guj et al., 2013). These transactions can generate substantial amounts of revenue for the ‘junior’. However, since in most cases such transfer of ownership often takes place outside the jurisdiction of the host government, it has proved challenging for developing countries to effectively tax such gains.  

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39 In 2011, African Mineral Limited in Sierra Leone sold 25 per cent of its shares to China State-owned Shandong Iron and Steel Group (Financial Times, August 2011) without appropriate tax contributions to the Sierra Leonean government. Similarly, the government of Uganda is locked in a legal battle with Tullow Oil Company on taxing gains made for the sale of their ownership to another company (Centre for Public Integrity, 2014).
The formulation of tax and non-tax instruments for the mining sector is essentially a delicate balancing act between the need to attract investors and the need for the government to obtain a fair share of the economic rent generated. This balancing act is made even more challenging by the distinctive features of the mining sector. The table below provides the advantages and disadvantages of these various fiscal instruments.
Table 2.2: Advantages and disadvantages of the various fiscal instruments.
<table>
<thead>
<tr>
<th>Fiscal Instruments</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature bonuses</td>
<td>Generate substantial revenue for government.</td>
<td>Lack of knowledge about geological reserves can affect a country's bargaining position, which can result in lower signature bonus payments.</td>
</tr>
<tr>
<td>Surface rents</td>
<td>Generate revenue for government.</td>
<td>Lack of capacity makes it challenging to apply to the mining sector in low-income countries.</td>
</tr>
<tr>
<td>Goods and services tax (GST)</td>
<td>The GST can be a source of revenue for the government.</td>
<td>In low-income countries, government will find it challenging to provide refunds when needed.</td>
</tr>
<tr>
<td>Corporate income tax (CIT)</td>
<td>The CIT is a good source of revenue for the government.</td>
<td>Estimating tax-deductible expenditure for income tax purposes can be very challenging for low-income countries with little knowledge about costs.</td>
</tr>
</tbody>
</table>

**Fiscal Instruments**

- **Signature bonuses**
  - Advantages: Generate substantial revenue for government.
  - Disadvantages: Lack of knowledge about geological reserves can affect a country's bargaining position, which can result in lower signature bonus payments.

- **Surface rents**
  - Advantages: Generate revenue for government.
  - Disadvantages: Lack of capacity makes it challenging to apply to the mining sector in low-income countries.

- **Goods and services tax (GST)**
  - Advantages: The GST can be a source of revenue for the government.
  - Disadvantages: In low-income countries, government will find it challenging to provide refunds when needed.

- **Corporate income tax (CIT)**
  - Advantages: The CIT is a good source of revenue for the government.
  - Disadvantages: Estimating tax-deductible expenditure for income tax purposes can be very challenging for low-income countries with little knowledge about costs. Requires capacity to assess the deductions and tax liability of mining companies.
Windfall profit tax provides the government with additional revenue when profits are high. Asymmetry in information makes calculating the windfall profit tax very complex. Only provides income to the government when a certain threshold is generated.

Ad valorem royalty is a good source of revenue for the government. Not sensitive to increase in price, even when a large amount of economic rent is generated.

Specific royalty is a good source of revenue for the government. Not sensitive to increase in price, even when a large amount of economic rent is generated.

Tends to accelerate the extraction of high-quality minerals, leaving lower grades on the ground. When there is inflation, a constant unit tax lowers the value of payments in the future.

Tends to accelerate the extraction of high-quality minerals, leaving lower grades on the ground.

When a certain threshold is attained, government provides income to the government. Only provides income to the government.
<table>
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<th><strong>Variable Royalty</strong></th>
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<td>Revenue to government will be higher at a time of high company profits and high commodity prices.</td>
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<td>The presence of information asymmetry as government will need to understand developments in the market for minerals.</td>
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<td>Import duties provide revenue for government even before production begins.</td>
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<td>Import duties may cap withholding rates in some cases. Case: withholding rates in some countries of mining companies and tax treaties between host country and home country of mining companies.</td>
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<td>Tax treaties between host country and home country of mining companies may cap withholding rates in some cases. Case: withholding rates in some countries of mining companies and tax treaties between host country and home country of mining companies.</td>
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<td>Import duties. Normal duties on non-deductible payments can deter negative foreign investments.</td>
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<td>Enables government to generate income from dividends, interest payments and services. Discourages excessive payments to tax havens. Residents as a means of profit shifting to tax havens.</td>
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<td>Discourages excessive payments to non-commodity prices. Revenue to government will be higher at a time of high company profits and high commodity prices.</td>
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<td>Reduction of corporate income tax payment.</td>
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Capital gains tax can provide substantial revenue to the government. In the absence of tax legislation or regulations addressing capital gains interests change hands, the host country will be unable to benefit when licenses or concession tax legislation or regulations address capital gains. Sources: Baunsgaard, 2001, Tordo, 2007, Sturmer, 2010, Manley, 2012.
The taxation of the mining sector poses complex design problems, given the distinctive features of the sector. In practice, there is no optimal mode of taxation that countries can adopt to address diverse and complex issues in the mining sector. In sum, the design and implementation of tax and non-tax instruments in the mining sector are influenced by political, practical and administrative considerations (Daniel et al., 2010; Otto et al., 2006; Lund, 2009; Baunsgaard, 2001; Land, 2008). This concludes my literature review of the distinctive characteristics of the mining sector, of taxation models and the tax and non-tax instruments that are applicable in the sector.

2.4 Conclusion

In this review of the literature, I have examined three main issues: governance and political economy of mining; the distinctive features of the mining sector; and the various taxation models and the fiscal instruments that are applicable in the mining sector. Given the change in the focus of my research, I have examined the governance and political economy of mining in SSA. While good governance has enabled countries like Botswana to benefit from its mineral wealth, the same cannot be said of many other mineral-rich SSA countries. In particular, state intervention in the mining sector in Sierra Leone has led to high level of discretionary political control of the mineral sector and has enabled a few politicians and business to amass massive wealth at the expense of the majority. Corruption in the mining sector became the conduit that enabled politicians and their associates to divert much needed revenue from the treasury. The distinctive features of the mining sector, though not unique to the sector, can have a profound impact on how tax and non-tax policies are designed and hence can seriously affect the amount of revenue a government
can generate from the mining sector. The way that these issues mentioned above have play out in Sierra Leone is explored in the next chapter.
3. Introduction

This dissertation examines why mineral revenue has been so low in Sierra Leone. As highlighted in Chapter 2, the distinctive features of the mining sector pose challenges for tax policy formulation and implementation. These challenges relate to not only the lack of technical capacity within government institutions or the presence of asymmetric information, but of the increasing role of politics in the mining sector.

In order to explore the reasons why governments have obtained little revenue from the mining sector, it is useful to explore the relevant political and economic developments in Sierra Leone since the 1930s, when minerals were discovered. I argue that diamond mining, in particular, has attracted a lot of attention from politicians. This shows that, because of the ease with which diamonds can be extracted by alluvial mining, control of the sub-sector attracted political attention, and that smuggling and corruption reduced the amount of revenue collected by the public treasury.

3.1 Colonial period, 1896-1961

Sierra Leone,\textsuperscript{40} as this country is now known, came into existence in 1787 when hundreds of freed slaves were settled in the peninsula area (Fyfe, 1962, Collier, 1970). In 1896, the country became a British Crown Colony and Protectorate

\textsuperscript{40}In the fifteenth century, Pedro da Centra, a Portuguese voyager named the Peninsular Serra Lyoa due to its mountainous terrain. Over the years, as noted by Christopher Fyfe (1962), the name was 'corrupted ... into many variants: Serra Lyonne, Sierra Leone, Serre-Lions, Sierreleon and Serillioon. The form Sierra Leone has eventually prevailed'. 
(Harrell-Bond et al., 1978, Cartwright, 1978), before becoming an independent state within the Commonwealth in 1961 (Fyfe, 1962). Before independence, the Mineral Ordinance of 1927 gave the British Crown ownership over the mineral deposits in the country (Laan, 1965, Bangura and Dumbuya, 1993). As a result, when diamonds and iron ore were discovered in Sierra Leone in the 1930s, two British companies, the Sierra Leone Selection Trust (SLST) and the Sierra Leone Development Company (DELCO) were given exclusive rights to mine diamonds and iron ore respectively (Laan, 1965).

These discoveries greatly enhanced the fiscal position of the colonial government as the budget moved from persistent deficit to surplus in the early 1940s (Laan, 1965). The colonial government used this revenue for infrastructural development, building roads, rail services, airports in all 12 districts, and investing in education and health services.

In the late 1940s, concerns were being raised about the benefits the country was getting from the extraction of its minerals. Very little information was available about the profitability of SLST and DELCO (Laan, 1965). Notably, Siaka Stevens, Secretary General of the United Mines Workers Union in the late 1940s, urged the Protectorate Assembly to get better terms from these mining companies (Laan, 1965).

Two important developments in the 1950s marked the start of the decline of British control over the mining sector in Sierra Leone. Firstly, there were

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41 The colony was on the Freetown Peninsular and was occupied by diasporan freed African slaves. The Protectorate was the interior of the country and was occupied by 15 other tribes.
42 The SLST was the only company allowed to mine diamonds and was given a 99-year lease to explore for and extract diamonds, with the exception of the mining areas of DELCO.
43 In the 1940s, Siaka Stevens was Secretary General of the United Mine Workers’ Union (comprising local staff of DELCO and SLST). He became Minister of Mines under the SLPP government from 1952 to 1956 and later on became Prime Minister in 1968. He became the first Executive President of Sierra Leone in 1971 and was in power for 17 years.
44 The Legislative Assembly was the colonial administrative authority.
discoveries of diamonds in other parts of the country. This led to mass migration of Sierra Leoneans to these areas, especially as it became known that diamonds could be extracted without the need for capital equipment or specialist skills (Harrell-Bond et al., 1978, Bangura and Dumbuya, 1993).45 The SLST, which had a 99-year lease to mine diamonds, saw this as a threat to its operations.

Secondly, the constitutional change in 1951 saw Sierra Leoneans taking control over the affairs of government in preparation for political independence. The Sierra Leone Peoples’ Party,46 won the elections in 1951 and was the governing party in the Legislative Council (Laan, 1965).47

In 1952, Reverend Paul Dumbar, a member for Kono District in the Legislative Council, tabled a motion asking the government to review the mining agreements with SLST and DELCO (Laan, 1965). The motion attracted the attention of the Secretary of State of the colonies, who in a correspondence to the Acting Governor, acknowledged the need to re-negotiate the agreements on account of the large profits being made by SLST and DELCO (Frost, 2012). As can be seen in figure 1, in real terms (1987 prices), the price of iron ore increased by 47 per cent from the time DELCO started production in 1933, to the end of colonial period in 1960.48

45 Alluvial diamond mining is the term used to describe the process through which diamonds are recovered from deposits of sand, gravel and clay. Large concentrations of alluvial diamond deposits are mined on an industrial basis. However, most alluvial diamond deposits are spread across huge geographic areas that cannot be easily isolated and therefore are not mined industrially. These deposits are mined informally, in a non-regulated way. This is (commonly) known as artisanal or small-scale alluvial diamond digging (World Diamond Council).
46 The Sierra Leone Peoples Party (SLPP) was formed in 1951, as a party to promote the interest of the protectorate.
47 The Legislative Council came into being after the 1951 constitutional review process that gave Sierra Leoneans administrative control over the affairs of government.
48 Getting a reliable price series on diamonds is difficult. This is because diamonds are all priced per carat, and importantly, price per carat increases exponentially with weight category.
The Legislative Council decided to negotiate first with SLST and later with DELCO (Laan, 1965). The negotiations with SLST in 1953 were led by Siaka Stevens, who had become Minister of Mines. It resulted in the reduction of the SLST’s lease area from all of Sierra Leone to around 450m² in the Kono and Kenema districts and a compensation payment of £1.6 million to SLST (Laan, 1965). The negotiations with DELCO were completed in 1955.

The discovery of diamonds in other parts of the country led to an increase in diamond mining. This development attracted other nationalities, especially Lebanese, Syrians and Gambians, into the mining sector (Laan, 1965, Frost, 2012). In an effort to regulate the mining sector and to protect the lease area of SLST, the SLPP government formulated the Alluvial Diamond Mining Scheme (ADMS) in 1955. The ADMS was designed to regulate the migration to mining...
areas and facilitate the provision of licenses and legalise mining activities by artisanal and small-scale miners (Laan, 1965).

The ADMS allowed indigenous miners to buy mining and dealer licenses. The mining licenses were priced at £9 a year and £5 for six months. In addition, license holders paid a surface rent charge of 4 shillings to the Paramount Chiefs.\(^\text{49}\) Within a month of the introduction of the ADMS, the Ministry of Mines had issued over 1,500 licenses. Dealer licenses cost £25 a year and could be obtained by Sierra Leoneans and foreigners. Though the ADMS only made a small contribution to domestic revenue,\(^\text{50}\) it greatly improved the income of miners in the mining areas (Cartwright, 1978).

The agreement between the government and SLST was not well received by the local communities in the Kono district, as the lease area under SLST control was regarded as the most productive. In 1957, a local pharmacist in the Kono district, Tamba Songu M'briwa formed the Kono Progressive Movement (KPM), to promote the interests of the people of the Kono district to access productive land for alluvial mining (Cartwright, 1978). KPM’s political success was restricted to the Kono district where it won all the seats in the 1957 Legislative Council elections. At the national level, its level of influence was minimal.

In 1959, Siaka Stevens left the SLPP party and formed a new party, the All People's Congress (APC), as a direct opposition to the SLPP. Stevens, from the Northern Province, cited the political domination of the Mende\(^\text{51}\) within the SLPP party as the main reason for forming the APC (Cartwright, 1978). His APC party led the campaign for total government control of the diamond sub-sector even though he was the Minister of Mines who had led the re-negotiations

\(^{49}\) In Sierra Leone, there are 149 chiefdoms, and a Paramount Chief heads each Chiefdom. The Paramount chief is the administrative and political head of the Chiefdom.

\(^{50}\) Revenue from ADMC licenses averaged £405,000 from 1956 to 1961.

\(^{51}\) The Mende is the largest ethnic group in Sierra Leone accounting for about a third of the population.
with SLST. Reflecting back on this era, the Dean of the Faculty of Arts, Fourah Bay College, noted that Siaka Stevens was able to understand the power of controlling the mining sector, especially the diamond sub-sector.

The period between 1930 and 1960 were formative years for the mining sector in Sierra Leone. Questions about whether the country was getting a fair share of benefits from the mining sector and how much control the government should exercise were central to the country’s political debates. A key challenge for the Legislative Council was how to control diamond mining given the ease with which it can be extracted. Diamonds could be mined with locally made equipment and could be picked by hand from riverbeds.


At independence in 1961, despite the simmering political divisions and ethnic tensions between the SLPP and the APC, there was a competitive political culture, good civil service, free press, and a renowned educational system (Migdal, 1988, Fisher, 1969, Hayward and Kandeh, 1987). Sir Milton Margai of the Sierra Leone Peoples’ Party (SLPP) became the first Prime Minister. Ethnic tensions between his Mende-centred SLPP and the Temne-based APC continued. It soon became apparent that ethnic tensions were going to set the tone for subsequent political developments in the country (Keen, 2005).

The first post-independence election was held in 1962, and the SLPP won 28 of the 62 parliamentary seats (Fisher, 1969). A significant political development during this election was the failure of the SLPP to win a single parliamentary seat in the diamond-rich Kono district, mainly as a result of the impact of the KPM, which had, in 1957, campaigned for a larger share of Kono’s wealth (diamonds) for the Kono people (Cartwright, 1978, Reno, 1995). In 1964, Sir
Milton Margai died and was succeeded by his brother, Sir Albert Margai as Prime Minister and party leader. According to a retired politician, Siaka Stevens saw this as an opportunity to ascend to power, and the diamond sub-sector was to be one at the forefront of his campaign.

After independence, there was no change in government policy in relation to the large-scale mining, which was dominated by SLST (mining diamonds) and DELCO (mining iron ore). The tax and non-tax provisions negotiated in the 1950s were kept in place; SLST was exempt from paying royalty on diamonds and DELCO was exempt from paying corporate income tax (Cartwright, 1978).

Exploration for bauxite started in 1961, when Swiss Aluminium Industries (Alusuisse) began prospecting in southern Sierra Leone (Cleeve, 1997). The extraction of bauxite commenced in 1963 and was undertaken by the Sierra Leone Ore and Metal Company (SIEROMCO), which was a wholly owned subsidiary of Alusuisse (World Bank, 1966). In 1967, rutile operations commenced with Sherbro Minerals Limited (World Bank, 1966).

Unlike diamonds, the extraction of rutile, bauxite and iron ore did not create any mass migration to the mining areas or the formation of political parties like the KPM. This is because of the limited employment opportunities for unskilled people as these minerals are extracted by capital-intensive methods.

The elections in 1967 changed the political landscape of the country. The SLPP and the opposition APC each won 28 parliamentary seats. However, four of the six independent parliamentary winners declared that they would support the APC party, thus giving the APC party 32 seats, and a majority in Parliament. By virtue of this, the APC party declared itself the winner of the elections (Fisher, 1969, Cartwright, 1978).
The results of the elections exposed the ethnic voting patterns for the two main parties, with the SLPP dominating in the Southern province and two of the three districts in the Eastern province. The APC dominated in Northern province and Western Area (Collier, 1970).

Reno (1995) notes that mining issues also played an important role in these elections, especially in the diamond-rich Kono district in the Eastern province. The APC won all the seats in the Kono district, as Siaka Stevens had promised his support for alluvial mining expansion if elected into office (Smillie et al., 2000, Davies, 2000).

Due to the tense political environment after the elections, the Governor General proposed the formation of a coalition government between the SLPP and the APC (Cartwright, 1978).52 The APC party rejected this proposal because it had the majority of parliamentary seats (32 out of 68 seats) and should therefore form the next government. As a result of this development, the Governor General invited Siaka Stevens as the majority leader to form the new government (Fisher, 1969, Collier, 1970).

The process of forming a new APC-led government was interrupted by the first military coup in the country. The Army Commander, Brigadier David Lansana, took control over the affairs of the state and declared martial law (Cartwright, 1978). This move was seen as an attempt to reinstate Sir Albert and the SLPP party, and to continue the south-eastern dominance in the government. However, within 48 hours, junior military officers staged a counter-coup and formed the National Reformation Council (NRC), led by Colonel Andrew T. Juxon-Smith (Cartwright, 1978).

52See also Tucker, P. (former Secretary to the Prime Minister, Sir Albert Margai), submission to the Truth and Reconciliation Commission, November 2003.
In 1968, after 13 months of military rule, a group of Non Commissioned Officers (NCOs) overthrew the NRC. These NCOs then invited Siaka Stevens, who was in exile in Guinea, to return and handed over power to the APC party (Cartwright, 1978). The NCOs stipulated that Siaka Stevens had to form a coalition government in an effort to promote national dialogue and that members of the SLPP were to be part of the coalition government.

Although foreign companies dominated the mining sector, neither the 1961-1967 SLPP government nor the 1967-1968 NRC government did anything to adversely affect their operations. Neither government regarded nationalizing the mining sector as necessary or viable (Cartwright, 1978, Frost, 2012). This was mainly because both governments felt the country lacked the administrative and technical capacity to efficiently run the affairs of a nationalized mining company. Furthermore, there were concerns about the negative impact nationalization would have on foreign investment (Cartwright, 1978, Greenhalgh, 1985). There was, however, a strong impetus for change when the APC came to power in 1968.

3.3 The APC government, 1968-1992

The longevity of the APC government (24 years), coupled with the fact that Siaka Stevens had been actively involved in the mining sector in the 1940s and 1950s, meant this government had a major influence on policies for the mining sector in the 1970s and 1980s. Upon assuming office as Prime Minister in 1968, Siaka Stevens formed a coalition government incorporating some members of the SLPP party. However, this coalition lasted only a year, as in 1969, Stevens relieved the SLPP members of their ministerial duties. From then on, Prime Minister Stevens set about establishing total personal control of the mining sector and the country. A former Civil Servant reflected during an interview
that at this point in time “the office of the President became so powerful that all decisions relating to the mineral sector had to be taken at State House, and in some cases, President Stevens will himself make major announcements on the sector” (Former Civil Servant, Freetown, 22.07.16).

The first major political decision relating to mining was made in 1969. In a policy statement called ‘A New Mining Policy for Sierra Leone - Partnership for the Future’, the APC government announced its intention to purchase majority ownership in all the mining companies (Sierra Leone Selection Trust, Sierra Leone Development Company, Sierra Leone Ore and Metal Company and Sherbro Minerals Limited). The aim was for the government to secure a larger share of profits from minerals and have more control over mining operations, especially in relation to the smuggling of diamonds (World Bank, 1970, World Bank, 1974, Williams, 1975).

The first nationalisation was finalised in 1970 when the government and the SLST signed an agreement, giving the government 51 per cent control. Under this agreement, the SLST was responsible for providing funds for investment in the new company (Reno, 1995). The new company, the National Diamond Mining Company (NDMC), had the responsibility to mine and market diamonds (Reno, 1995).

Further nationalisation in the mining sector was delayed by developments in the industry. At the start of the 1970s, the sector was not performing well. Diamond production started to decline. Sherbro Minerals Limited went into liquidation in 1971 and Sierra Rutile Limited (SRL), a subsidiary of Nord Resource Corporation (Nords), acquired its interest. SRL suspended operations
between 1972 and 1979 in order to develop a new mining method\textsuperscript{53} and conduct further exploration activities. DELCO was also experiencing falling revenues due to the lack of investment and high operating costs (The Courier, 1989).

Negotiations to nationalize DELCO began in 1972 but were never finalised. According to an Official of CEMMATS,\textsuperscript{54} this was because ‘the Managing Director of DELCO, William Baird, was able to speak the language of politicians’. This suggests that he was able to bribe members of the government to abandon the planned nationalization (Private Consultancy Firm official, Freetown, 10.07.2015). Cartwright (1978) argues that the limited financial potential of the other mining companies led the government to abandon its plans for nationalization.

Nationalization plans for the other mining companies were never finalized. Instead, the government negotiated bilateral mining agreements with DELCO, SRL and SIEROMCO. The agreement with SRL was negotiated in 1972 and then re-negotiated in 1975. The 1975 rutile agreement gave the company generous fiscal concessions and suspended the payment of royalties and corporate income tax until 1989.

In 1975, DELCO went into voluntary liquidation as its iron ore operation was unprofitable (Bangura and Dumbuya, 1993, The Courier, 1989). The government finalised the mining agreement with SIEROMCO in 1976. Reno (1995) argues that both SIEROMCO and SRL were able to get significant tax and non-tax concessions from the government because they had the backing of

\textsuperscript{53} When rutile extraction started in 1967, Sherbro Minerals Limited was using the suction quarter dredge to extract rutile. This method was not deemed suitable for rutile extraction. When operations restarted in 1980, the bucket line dredge replaced the suction quarter dredge.

\textsuperscript{54} CEMMATS GROUP Ltd (CEMMATS) is a leading Multidisciplinary Engineering and Project Management consultancy in Sierra Leone, concentrating on mechanical, electrical and mining engineering services.
President Stevens whose attention was no longer focused on generating mining revenue to accrue directly to the treasury.

Another setback in the government's negotiation strategy was that the rates of taxes and royalties were fixed in the domestic currency, the Leone. The subsequent devaluation of the Leone drastically reduced the value of the government’s take from the mining companies (International Monetary Fund, 1986).

It is significant to note that while these companies (especially SRL and DELCO) were facing challenges, the price of minerals was very favourable during this period (figure 2). There were also concerns within the government about the price being paid for minerals, especially bauxite being exported from Sierra Leone (Cleeve, 1997).

There were substantial differences between the actual world market prices for minerals and the prices that the mining companies reported in their financial statements to government. For example, in 1970, the average world market price for bauxite was US$12.2 per metric ton, yet SIEROMCO reported a price per ton of US$4 per metric ton (Cleeve, 1997). In 1980, while the average world market price for rutile was US$1,200 per metric ton, SRL reported a price per ton of US$250 (Cleeve, 1997). A retired Civil Servant who worked at the Ministry of Mines in the 1970s noted, during an interview, that “it was not the case that the government was unaware about world prices of minerals, the simple fact was that these companies were filling the bank accounts of Stevens and his allies and as a result they care less about revenue accruing to the treasury”.

During the Stevens’ administration, diamonds generated more revenue for the government than any other mineral. When interviewed, a former politician claimed that the entire policy of nationalization had been designed to gain control over the diamond sub-sector, and that the government had not intended to nationalize the other mining companies.

Under President Stevens, diamonds became more explicitly embroiled in the politics of the country (Reno, 1995, Frost, 2012). Lucrative diamond export licenses were given to close associates of President Stevens, with the aim of enriching them (Reno, 1995, Snyder, 2006). For example, one interviewee pointed out that one such associate, Jamil Sahid Mohamed, had tremendous influence which extended beyond the diamond sector. With President Stevens’ backing, Mohamed had vital stakes in all sectors of the Sierra Leonean economy (Former Politician, Freetown, 12.08.15). Kandeh (1990) notes that
Mohamed was so influential, and so closely connected with President Stevens, that he had a well-armed personal security force made up of 500 Palestinians.

In 1976, Jamil Sahid Mohamed was allowed to buy 12 per cent of the government’s stake of the NDMC. To many observers, Jamil Sahid Mohamed was just a front for the President to maintain control of the mining sector. In 1977, Jamil Sahid Mohamed became Managing Director of NDMC. By the end of 1979, Jamil Sahid Mohamed and Tony Yazbeck had effectively taken control of the export of diamonds in the country (Cleeve, 1997, Reno, 1995).

The fall in diamond production by NDMC has been attributed to a lack of investment, theft at the operations site, and under-declaration of production by the NDMC management (Cleeve, 1997, Frost, 2012). The system of client-patron relationship between President Stevens and his business associates meant that the rent generated from the diamond sub-sector enriched individuals rather than accruing to the treasury. By 1979, the personal wealth of President Stevens was estimated at US$500 million (Frost, 2012), which was more than half of the country’s gross domestic product (US$891.7 million)

The declining fortunes of the mining sector mirrored the performance of the economy in the 1970s. The country experienced negative economic growth in 1976 (-0.4 per cent), no growth in 1977, and a growth of 2.4 per cent per year between 1970 and 1979. This compared to 4.1 per cent for Sub-Saharan Africa (World Development Indicators, 2015). In 1975, for the first time, inflation reached double figures at 19.9 per cent. It averaged 10.8 per cent per year in the 1970s.

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55 The irony is that the country had to borrow over US$ 200 million to finance the hosting of the Organization of African Union meeting in Sierra Leone in 1980.
The increased smuggling of diamonds deprived the treasury of large amounts of revenue and exacerbated the budget deficit (World Bank, 1974, Cleeve, 1997, Reno, 1995). The Leone depreciated by an average of 26.8 per cent against the US dollar. Total government debt increased to US$420 million by 1979 from US$61.4 million in 1969. The deteriorating economic performance in the 1970s led to political instability and social unrest, culminating in the student protest in 1977 (Bangura and Dumbuya, 1993).

It was surprising that the President of a country facing mounting economic challenges decided to host the annual meeting of the Organization of Africa Union (OAU) in 1980. Some observers believed that the aim was to mask the country's economic problems and promote the ego of President Stevens. The cost of hosting the OAU meeting significantly increased the country's foreign debt and depleted its foreign reserves, which came mainly from diamond exports. The Governor of the Central Bank, Sam Bangura was reportedly assassinated because of his objection to the hosting of the OAU, given the precarious financial position of the country (Hirsch, 2001).

In the early 1980s, increased smuggling, a fall in the price of diamonds, and lack of investment in the proposed Kimberlite mining accentuated the decline in the diamond sub-sector. The reserves of NDMC from its alluvial operations were declining and the only way to increase output was to explore its Kimberlite reserves. This required a substantial injection of capital.

SLST, which had a 49 per cent stake in NDMC, was unwilling to provide this given the prevailing environment where President Stevens and his associates were in control of the proceeds of diamond sales. In 1980, SLST sold its interest in NDMC to British Petroleum to become part of BP Minerals International Ltd.

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56 This mining method is normally used when open-pit mining becomes uneconomic and an underground mine needs to be constructed to reach the diamond deposits.
(“BP Minerals”). However, with the declining market for diamonds in the early 1980s, BP Minerals also pulled out, causing a halt to the proposed kimberlite operation.

The first half of the 1980s was a period of severe macroeconomic instability: declining economic growth, rising inflation, widening budget deficit, and a deteriorating exchange rate. During these years, reliable data on mining revenue accruing to the treasury is not available. By 1985, official diamond production had fallen to 321 thousand carats (16 per cent of the 1969 volume).

Later that year, there was a smooth transition of power as President Stevens retired from office and nominated the then head of the armed forces, Major General Joseph Saidu Momoh to succeed him as President. A former politician who served under Presidents Stevens and Momoh interviewed for this research noted that “as if the country had not suffered enough from bad governance, President Stevens selected an individual who was so inept and sometimes come to office looking worse for wear” (Former Politician, Freetown, 25.08.16). Later that year, General Momoh received 99.9 per cent of the vote in a general election in which he was the sole candidate. He inherited an economy that was on the decline and a diamond sub-sector where smuggling and corruption were rampant. President Momoh knew that having control of the diamond sub-sector offered him the best chance of generating revenue.

In an effort to tackle the declining state of the diamond sub-sector, the government, with support from the International Monetary Fund and the World Bank, developed new mining regulations to encourage investment into

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57 The military occupied one of the three unelected seats in Parliament under the APC. The others been the Polics and the Media. Major General Joseph Saidu Momoh as Head of the Army since 1971 was the military representative in Parliament.
the sector. To improve the foreign reserve position of the government, the new policy required that part of the foreign exchange generated from the sale of diamonds would be deposited in the Central Bank.

These policies were intended to ensure the government was able to generate more revenue from the mining sector and regain control over the production and export of diamonds from the Lebanese businessmen (Bangura and Dumbuya, 1993, Reno, 1995). The government also established the Government Gold and Diamond Office (GGDO) to oversee the export of gold and diamonds.

Furthermore, President Momoh found new allies in Israeli businesspersons, who managed the affairs of the GGDO. In 1986, Shaptai Kammanowitch took over the affairs of GGDO and his leadership had an immediate impact. Diamond exports in 1986/87 were 280 per cent of the 1985/86 figure (Reno, 1995). However, in May 1987, Kammanowitch was arrested in London on charges of fraud and cheque forgery committed in North Carolina, United States of America. According to an interviewee, President Momoh failed to grasp the extent to which the Lebanese and Jamil Sahid Mohamed in particular had entrenched bribery and corruption in the public sector. This he opined, significantly affected his effort to curb smuggling in the diamond sub-sector.

In 1988, another Israeli, Nir Guaz was given control of GGDO. This did not stop smuggling and corruption in the diamond sector. In 1988, while official diamond exports were only US$22,000, the Lebanese syndicates exported approximately US$250 million worth of diamonds (Synder, 2006).

As in the 1970s, the deteriorating performance in the diamond sub-sector in the 1980s mirrored the performance of the economy. Economic growth averaged 1 per cent annually between 1981 and 1989, inflation increased from
23.4 per cent to 110.9 per cent, while revenue as a percentage of GDP declined from 17.1 per cent to 5.1 per cent. By the end of December 1990, total public debt stood at US$939.8 million (92 per cent of GDP).

Even though rutile mining had resumed in 1980 and there had been a rapid increase in bauxite production (over one million metric tons by 1985), the fiscal regimes in place for these two mining activities meant very little revenue was accruing to the treasury from their operations.

When the SRL agreement of 1975 ended in 1989, the government negotiated a new agreement, which had better tax provisions. In negotiating the agreement with SRL, the government solicited technical support from the World Bank. This contributed significantly to an increase in mining revenue from US$2.9 million in 1989 to US$7 million in 1990 and then to US$8.1 million in 1991.

Figure 3.3: Mining revenue as a percentage of total government revenue (1969-1991)

Sources: Bank of Sierra Leone (Economic Trends and Economic Reviews, various years), World Bank, and International Centre for Tax and Development.
The availability of substantial rents from the mining sector, especially the diamond sub-sector, interested politicians during the Stevens administration. Diamonds became embroiled in the political affairs of the country during the tenure of the APC government (1968-1991) and during the civil conflict (1991-2002), which will be discussed in the next section.


There is a sizeable scholarly literature on the civil conflict in Sierra Leone, with most publications arguing that the large rents available from mining intensified competition between the government and the Revolutionary United Front (RUF) rebels and prolonged the civil conflict (Richards, 1996, Abdullah and Bangura, 1997, Davies, 2000, Smillie et al., 2000, Keen, 2005, Abdullah, 2004). The declining economy in the 1970s and 1980s created an unstable political environment, leading to the start of the civil conflict in 1991.

At the time of the Revolutionary United Front (RUF) invasion in 1991, the military was ill equipped, lacking in manpower and military hardware, and thus unable to effectively fight the RUF rebels (Reno, 1995). By early 1992, the RUF controlled significant parts of the diamond-rich Eastern province and corruption, which was prevalent in the APC government, soon grew in the army. Clientelism and administrative inefficiency meant that soldiers fighting the rebels received very little support (Fithen, 1999, Keen, 2005).

In April 1992, a group of junior army officers headed by Captain Valentine Strasser ended the APC’s 24-year hold on power with a military coup. This coup d’état received massive support from citizens. Street celebrations greeted the announcement of the overthrow of the APC government. These officers
claimed that they had overthrown the government because of its inability to effectively fight the war with the RUF rebels and the rampant corruption in government (Reno, 1995, Hirsch, 2001). They formed the National Provisional Ruling Council (NPRC), promising to end the civil conflict, and committed the NPRC regime to the IMF conditionalities that the Momoh administration had found so difficult to implement.

Diamonds became very important during this decade (1991-2002), as the NPRC regime, the SLPP government and the RUF rebels all needed funds to fight the civil conflict. The RUF’s strategy was to occupy and control the diamond mining areas. This not only deprived the government of potential diamond revenue, but also provided the RUF with funds to procure arms and ammunition (Reno, 1995, Smillie et al., 2000, Keen, 2005).

The members of the NPRC, having been on the frontline and aware of the constraints faced by soldiers, concentrated on gaining control of the diamond rich Kono district. By 1993, the NPRC regime was actively engaged in diamond mining and exchanged diamonds for weapons, negotiating with weapons traders in Belgium and Romania (Reno, 1995).

In 1994, the NPRC formulated the Mines and Mineral decree, which was the first comprehensive legal framework for the mining sector since independence. This decree established the tax and non-tax provisions that were to regulate the mining sector. However, implementing this decree was impossible, as the RUF made significant territorial gains, including attacking the rutile and bauxite mines. The attacks on these two mines were seen as a strategy to cut off the NPRC regime’s remaining sources of mining revenue.

Towards the end of 1994, with the RUF rebels closing in on the capital, Freetown, the military regime sought the help of the South African-based
mercenary outfit, Executive Outcomes (EO). The intervention of EO, with their superior military firepower, led to a reversal in the RUF’s territorial gains. However, this came at a price for the country; US$35 million over 21 months, and diamond mining concessions to Branch Energy, a South African mining company and business affiliate of EO (Harding, 1997).

In January 1996, an internal coup ousted Captain Strasser. His deputy, Brigadier Bio, replaced him. The new government announced that elections would proceed as scheduled. On February 26, 1996, 13 political parties contested the general elections. The elections were not without incident, as the RUF launched attacks in the Bo district killing a number of civilians. The SLPP won the election and had 51 of the 80 seats in the legislature in line with the proportional representation system.

After a year of democratic rule, events took a dramatic turn on May 25th, 1997, when a group of non-commissioned officers led by Corporal Tamba Gborie carried out a coup d’état. These non-commissioned officers then installed Major Johnny Paul Koroma as the head of the new military government and formed the Armed Forces Revolutionary Council (AFRC). To boost their support, the AFRC invited the RUF to form a government. This had devastating consequences for the country as it led to the displacement of over a quarter of a million people who fled from the atrocities committed by the AFRC and RUF. They mainly moved to Guinea and The Gambia.

The political power associated with mining again manifested itself when the SLPP government, which was then based in neighbouring Guinea but...
recognised by the international community as the legitimate government, sold US$10 million diamond futures to Rakesh Saxena, a banker from Thailand in December 1997 (Ross, 2003), in exchange for the services of Sandline, a London-based mercenary firm.

In early 1998, Sandline and Nigerian forces that were operating under the authority of the Economic Community of West African States Monitoring Group (ECOMOG), launched a military offensive that soon forced the military junta from power.61 This proved to be only a temporary reprieve. The AFRC/RUF alliance launched a devastating attack on Freetown on January 6th, 1999 and caused widespread destruction, burning of houses, hacking of limbs and dismemberment.

Once again, ECOMOG, with reluctant support from the new Nigerian government,62 and a local militia group63 fought off the AFRC/RUF attack with widespread human rights violations occurring on both sides. In July 1999, the government and the RUF rebels signed a peace deal in Lomé, Togo, that saw Foday Sankoh, the leader of the RUF, given protocol status of Vice President and the highly significant and powerful post of Chairman of the Mineral Resource Commission (Keen, 2005).64 The RUF was then registered as a political party under the name of Revolutionary United Front Party (RUFP).

In order to consolidate the peace, the United Nations Security Council established a peacekeeping mission. The United Nations Armed Mission in Sierra Leone (UNAMSIL) agreed in 1999 to cooperate with the Government and

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62 General Sani Abacha had showed huge military commitment to Sierra Leone until his death in 1998. The new Head of State, General Abdulsalam Abubakarr was keen to reduce the role of Nigerian armed forces in Sierra Leone.
63 The Kamajors were a local militia group, mainly dominated by the Mende ethnic group formed to fight the RUF from controlling districts in the Southern Province.
64 Foday Sankoh was later arrested in 2000 and put on trial for war crimes.
the other parties in implementing the Lomé Peace Agreement. In 2000, in an effort to stop the RUF from using diamonds as a source of unregulated finance, the United Nations Security Council (UNSC) imposed an embargo prohibiting the direct or indirect import of rough diamonds from Sierra Leone.65

The notoriety of diamonds as a means of funding civil conflicts in Africa led to the establishment of the Kimberley Process Certification Scheme (KPCS), which was an international control system to regularize the flow of diamonds through official channels and eliminate the trade in illegal "blood" diamonds.66

The civil conflict had an adverse impact on the mining sector in particular and the economy in general. As shown in figure 3.4, mining exports fell in the years when government was not in control of mineral producing areas: 1995 when the RUF attacked the rutile and bauxite mines, 1997-98 during the AFRC regime and 1999, when the RUF controlled large swathes of the country.

Between 1991 and 1999, official trade statistics show that the country exported 1.6 million carats of diamonds to Belgium. This is a very small amount when compared to the 42.2 million carats imported by Belgium from Liberia over the same period (International Monetary Fund, 2001). This reflects the political instability in the country and the increased smuggling of diamonds through Liberia, mainly by the RUF.

Figure 3.4: Value of mineral exports, 1992-2002 (current US$)

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65 See UNSC resolution 1306, adopted July 5, 2000
66 The KPCS was a joint government, mining industry and civil society initiative to stem the flow of conflict diamonds used by rebel movements to finance wars against legitimate governments.
In terms of revenue contribution, figure 3.5 shows the percentage contribution of mining revenue from 1992 to 2002. The salient point to note from figure 3.5 is that, even though the RUF controlled the diamond producing areas in the early years of the civil conflict, the government was still getting revenue from rutile and bauxite operations. The closure of the rutile and bauxite mines in 1995 significantly affected mining revenue.

The graph also shows that mining revenue, as a proportion of total revenue, was high in 1997 (when the SLPP government was overthrown) and 1999 (when the RUF was in control of most parts of the country). This is because total revenue fell by US$49 million in 1997 (from US$94.9 million in 1996 to US$46.2 million in 1997), while mining revenue fell by only US$0.2 million (from US$3.4 million in 1996 to US$3.2 million in 1997). Similarly, total revenue fell by US$17 million in 1999 (from US$49.3 in 1998 to US$32.3 million in 1999), while mining revenue increased by US$0.2 million (from US$1.8 million in 1998 to US$2 million in 1999).
Figure 3.5: Mining revenue as a percentage of total government revenue (1992-2002)

Throughout this period of civil conflict, neither the NPRC regime nor the SLPP government were able to get a firm hold of the diamond producing areas. Proceeds from diamonds provided the RUF with significant funds to purchase arms and ammunitions.

Despite several setbacks in the peace process, the civil conflict was officially declared to have ended in 2002. The SLPP easily won the 2002 general elections, which was seen as a sign of popular support for the government in ending the conflict. With the government now in control of the country’s mineral resources, the prospects for generating more revenue from the sector seemed good.

3.5 The Post-conflict Period; The SLPP Government (2003-2007) and the APC Government (2007-2014)
With the end of the civil conflict in 2002, attention was focused on the development of the mining sector to boost post-conflict development initiatives. An official of Campaign for Good Governance notes that in the aftermath of the civil conflict, government should have recognised the devastating consequence minerals have had on the country. As such, the failed policies of the 1970s and 1980s, where mining companies were given generous incentive and politicians concentrating on enriching themselves should not be the norm. The Official reflects that “government still operate the mineral sector as if it is their private investment”. Since the end of the conflict, successive Ministers of Mines are extremely wealth individuals (CSO official, Freetown, 22.07.2016). The government negotiated an agreement with Sierra Rutile Limited\(^{67}\) in 2002 to resume operations. This agreement also gave Sierra Rutile Limited control over bauxite mines formerly operated by SIEROMCO.

In 2003, a new mining policy\(^{68}\) was formulated to create an internationally competitive and investor-friendly business environment in the mining sector. Also in 2003, the United Nations lifted the embargo on the export of rough diamonds out of Sierra Leone. Large-scale diamond mining resumed in 2003, when Octéa purchased the mining rights from Branch Energy (Davies and Dessy, 2012).

In 2004, the government re-negotiated the SRL agreement of 2002, and signed an agreement for the mining of bauxite with Sierra Minerals Holding-1 Limited.\(^{69}\) Despite the signing of the re-negotiated agreement with SRL in 2004, the company faced difficulties in raising sufficient capital to commence

\(^{67}\) SRL was now a subsidiary of Titanium Resource Group, which had taken over Nord Resources

\(^{68}\) This policy was called the Core Mining Policy.

\(^{69}\) A subsidiary of US Titanium Resource Group, which also owned Sierra Rutile Limited.
operations. Later in 2004, Sierra Rutile Limited received targeted support from government to help restart its operations.

The European Union provided a €25 million loan to the government, which was subsequently lent to SRL. According to the agreement between the EU and the government, repayments from the loan were to be utilised for mineral sector development programmes and growth strategies. Sierra Mineral Holding-1 Limited (mining bauxite) and Sierra Rutile Limited (mining rutile) started production in 2006.

Some of the interviewees for this research were of the opinion that, given the upward trend in the price of minerals (figure 3.6), it was surprising that the government was unable to negotiate agreements to significantly contribute revenue.

Figure 3.6: Price trend of rutile and bauxite, 2003-2014 (current US$/metric ton).

![Rutile and bauxite prices, 2003 - 2014](image)

Source: United States Geological Survey
For example, the re-negotiated agreement with SRL in 2004 contained extremely generous fiscal concessions. This included, for the period up to 2014, waiving corporate income taxes, reducing the royalty rate from 3.5 per cent to 0.5 per cent, reducing the turnover tax rate from 3.5 per cent to 0.5 per cent, and import duty from 12 per cent to 1 per cent. The government also gave up its rights to Pay-As-You-Earn (PAYE) taxes on employees, in exchange for a 30 per cent equity in the company.\(^{70}\)

Changes in the political landscape in 2007, when the opposition APC won the Presidential and parliamentary elections, led to further variations in the policies covering mining companies or in their financial obligations to the government. The control of mining became even more centralised in the Strategy and Policy Unit (SPU), located within the office of the President. This reflected the strategic and political importance of minerals.

In his inaugural address to Parliament in 2007, President Koroma signalled the need to reform the mining sector. The issuing of mining licenses and negotiation of mining agreements were to be coordinated by the SPU.\(^{71}\)

In 2010, the government completed negotiations with two iron ore companies; London Mining Company (LMC) and African Minerals Limited (AML). London Mining Company had obtained extraction licenses from the government in 2008 to mine iron ore in the area that was under the lease of DELCO. Sierra Leone Diamond Corporation became African Minerals Limited in 2005, following an aeromagnetic survey that discovered huge quantities of iron ore in the Tonkolili district. In 2008, AML acquired lease to develop the mine.

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70 In 2014, the government received US$ 12 million from SRL, in lieu of this arrangement.
71 A Presidential Task Force was formed within the SPU and reports directly to the President.
A former senior staff-member in the Strategy and Policy Unit in the Office of the President said that the details of these agreements were negotiated at the political level. These agreements have also been criticised by CSOs, which have highlighted irregularities in the negotiation process and have publicised some estimates of how much revenue government is losing from fiscal concessions. The SLPP government (2002-2007) and the APC government (2007-present) have defended these agreements on the grounds that Sierra Leone is a post-conflict country, and investors need incentives to attract them.

Gberie (2010) notes that the close relationship between the Executive Chairman of African Minerals Limited, Frank Timis and the former Minister of Mines played a part in African Minerals Limited getting tax and non-tax concessions (corporate income tax was reduced to 25 per cent instead of the mandatory 37.5 per cent in the Income Tax Act of 2000). Officials of CSOs and private consultancy firms interviewed for this research saw the removal of the then Minister of Mines in December 2010, after these agreements had been signed, as a ploy to divert public attention from the deals the government had struck with African Minerals Limited and London Mining Company.

Also in 2010, the government started re-negotiating the mining agreements with Octéa and Sierra Mineral Holdings-1 Limited, which had been taken over by Netherlands-based Vimetco. Despite the promise made by the President to get more revenue from the mining sector, mining companies were able to secure generous fiscal concessions in the re-negotiated agreements, subsequently lowering mining revenue accruing to the treasury.

For example, Sierra Minerals Holding-1 Limited is exempted from all forms of withholding taxes (contractor, interest and dividend withholding taxes). London Mining Company has a sliding scale corporate income tax rate (years 1-
3 - 6%, years 4-10 - 25%, and year 11 onwards - 30% or as in law if lower). Furthermore, nominated suppliers of mining companies are exempted from paying the goods and services tax.

Since the end of the civil conflict, there has been an upward trend in the contribution of mining to total revenue, albeit from very low levels. Much of this is explained by the resumption of iron ore production in 2011. Mining revenue increased from US$2.3 million in 2003 to US$7.5 million in 2010. However, when iron ore production resumed in 2011, revenue jumped to US$26.6 million in 2012, and reached US$51.8 million in 2014.

Some interviewees for this research believe that mining revenue accruing to the treasury would have been higher if companies had not benefitted from generous fiscal provisions and had been paying royalties based on the market price for minerals.

The Mines and Minerals Act of 2009 requires royalties to be paid based on the current market value of minerals. An analysis of recent royalty payments on iron ore shows that the price on which payments were made was far below the prevailing market price at the time. For example, in 2012, while the international price for iron ore was US$135 per metric ton, royalty payments by AML and LMC were based on a price of US$85 per metric ton.

The impact of the tax concessions and failure of the government to effective enforce royalty payment provisions in the MMA 2009 is reflected in the amount of mining revenue that accrued to the government in the post-conflict period. From 2003 to 2014, official statistics show that the total value of mineral exports was US$4.9 billion, while the government’s mining revenue amounted to US$190 million (Economic Policy and Research Unit Bulletin, 2014).

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72 This includes tax and non-tax revenues but excludes grants.
The mining contribution to total revenue increased from 2 per cent in 2002 to 4.1 per cent in 2005. When it comes to pilfering of mineral revenues, one CSO official commented wryly that “there seems to be no difference between the APC government from 1968 – 1992, and the current one from 2007 to present”. This particular interviewee went on to say that the failure of the present government to involve Civil Society Organisations was indicative of the government’s lack of sincerity in negotiating the best deals for the country (CSO official, Freetown, 22.07.15).

3.6 Conclusion

This chapter has examined the interconnections between the political developments in Sierra Leone and the developments in the mining sector, focusing in particular on the contribution of mining revenue to total government revenue since independence.

Since the discovery of minerals in the colonial period, Sierra Leone has struggled to deal with its mineral wealth in ways that benefit the country as a whole. This is particularly evident in relation to alluvial diamonds which are relatively easy to mine, do not require large financial investments in infrastructure, and can yield substantial rents.

Diamonds have fuelled the conflicts in Sierra Leone, and there is no doubt that this powerful combination of diamonds and politics has played a crucial role in the performance of the mining sector and has severely affected the revenue to the treasury.

Mining companies with close connections to the various governments have been able to secure generous tax and non-tax concessions in their mining agreements. The following chapter will examine how, even though the mining
sector has been characterised by uncertainty and unpredictability, it is poor governance and corruption that has reduced revenue from the sector.
Chapter 4

The factors that have contributed to low mining revenue in Sierra Leone

4. Introduction

The preceding chapter examined the broad political and economic processes associated with mining in Sierra Leone. It highlighted the impact that politics has had on the mining sector, especially the diamond sub-sector. It demonstrated that mining revenue has been low in Sierra Leone since independence, with the exception of certain years (1963, 1965, 1971 and 2014) when mining revenue contributed more than 10 per cent of domestic revenue.

The aim of this chapter is to examine the more specific explanatory factors through which the politicisation of mining has reduced revenue from the mining sector. The explanations presented here are based on the discussions I have had with stakeholders and the written materials I was able to access during the fieldwork in Sierra Leone. They concern formal government and governance processes. With the benefit of understanding the country context, I was able to talk to key stakeholders who are otherwise difficult to access.

These discussions gave me a more grounded understanding about how the mining sector operated and enabled me to access information that is not available to the public. These explanatory factors relate mostly to the ways in which governments and politicians (aspiring to power and when in power) try hard to gain influence over the mining sector in order to get control over rents.

These factors include: (a) thriving corruption and lack of transparency, (b) absence of an enabling environment in the mining sector, (c) the absence of a model fiscal regime (tax and non-tax instruments specific to the sector), (d) the low levels of political inclusiveness, (e) the discretionary allocation of
prospecting and extracting rights in the mining sector, (f) the presence of a fragmented process of revenue collection, (g) the low level of technical capacity in government institutions, and finally (h) the political culture which shaped policy decision making. This chapter will examine each of these key explanatory factors in turn. The last section will conclude the chapter.

4.1 Thriving corruption and lack of transparency

Humphreys et al., (2011) argues that higher levels of corruption present the most obvious political risk stemming from the endowment of natural resources. The issue of corruption and lack of transparency has been evident in the mining sector and has been one of the enduring challenges in Sierra Leone since 1968, when the APC party came to power (Reno, 1995, Smillie et al., 2000, Davies, 2000, Luke and Riley, 1989).

As explained in Chapter 3, when President Stevens took over the reins of the government in 1968, the APC government immediately moved to assert control over the diamond sub-sector, as this was considered the most productive sector in terms of revenue. President Stevens was able to establish what Reno (1995) refers to as a “shadow state”, comprising of certain Lebanese businessmen (Jamil Sahid Mohamed, Tony Yazbeck and Mohamed Jaward) and close aides, who were responsible for generating income from diamond extraction. This relationship significantly strengthened his grip on power by allowing him to control diamond exportation and revenue (Reno, 1995, Snyder, 2006). When interviewed, key stakeholders from civil society organisations reflected that President Stevens used this revenue to buy political support in mining areas and to reduce opposition. With this revenue, President Stevens was able to manipulate traditional political institutions in
mining areas\textsuperscript{73} by buying support through the distribution of patronage and jobs (CSO official, Freetown, 15.07.15).

Stevens and his associates further institutionalized corruption in the mining sector through the allocation of rights to his close aides. Reno (1995) and Davies (2000) note that this resulted in competitive and coordinated smuggling of diamonds from the country. It seems that there were no limits to the unscrupulous use of Stevens' political authority for his and his associates' gain.

Within a year of assuming office in 1968, a monthly diamond haul of SLST, valued at US$10 million, was stolen from the airport in Freetown (Smillie et al., 2000). The robbers were never apprehended, but it is alleged that the robbery was done with the acquiescence of Stevens (Smillie et al., 2000, Davies, 2000). President Stevens ensured that diamond dealer licenses, which were needed for the export of diamonds, were awarded to these Lebanese businessmen. This gave them significant control in the buying of diamonds from alluvial mining.

With no established institution to tackle graft, revenue from the diamond sub-sector induced patronage behaviour\textsuperscript{74} and this permeated the public sector. Proceeds from the sale of SLST's diamonds were held in an overseas bank account rather than transferred to the treasury. According to Cleeve (1997), money from this account was used to entertain top government officials and provide loans to the treasury.

The presence of corruption and of how substantial proceeds from the sale of diamonds never accrued to the treasury can be illustrated by the 1972 mining revenue performance. Total diamond production was 1.8 million carats,

\textsuperscript{73} In Sierra Leone, this refers to how politicians control power by ensuring that favours/positions are distributed in exchange for political support.

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among which was the largest diamond ever found in Sierra Leone, dubbed ‘the star of Sierra Leone’, weighing 968.9 carats and selling for US$2.5 million (New York Times, 1972).

With the diamond sub-sector nationalised and no fiscal regime in place, it is impossible to establish the amount of royalty that was paid on this diamond alone. What is known is that total mining revenue accrued to the treasury in 1972 was US$2 million. Taking into consideration the total export value of minerals (US$72 million), one can deduce that more revenue should have accrued to the treasury.

I was informed during interviews with retired government staff, that it was quite common, during the 1970s and 1980s, for Lebanese businessmen to board private planes from Sierra Leone, with instructions from State House for airport staff to facilitate their departure. This meant no screening of passenger luggage. Some interviewees reckoned this was how diamonds were taken out of the country. A former Civil Servant, claimed that President Stevens had an ability to corrupt the technocrats he appointed as Ministers. He was rumoured to, for example, appoint a Minister of Mines and then one of his contacts would give the Minister a large brown envelop full of money. President Stevens would then wait for months and then ask the Minister for his share of the money knowing fully well that the money had been spent. As such, the Minister’s position would have been compromised and would then be obliged to support the President’s policies in the mineral sector (Former Civil Servant, Freetown, 15.07.2015).

By the time President Momoh came to power in 1985, corruption and smuggling in the mining sector had become endemic. As Snyder (2006:16)
notes, ‘the network of rogue state officials and Lebanese traders inherited from the Stevens era posed a formidable challenge to Momoh’s efforts’.

In 1988, official diamond exports plunged, and only US$2 million was recorded for the sale of diamonds, while it is estimated that the Lebanese businessmen smuggled diamonds valued at approximately US$250 million (Reno, 1995, Snyder, 2006). The substantial rent generated from the diamond sub-sector through smuggling and the government’s inability to breakdown the “shadow state” significantly affected its ability to enforce political control.

During the civil conflict (1991-2002), it was well known that members of the National Provisional Ruling Council (NPRC) were actively involved in diamond mining; soldiers would clear villages and towns in the Kono district to mine for diamonds (Reno, 1995). The proceeds from these mining activities never accrued to the treasury but instead went to members of the NPRC regime. In 1993, the Head of the NPRC regime, Captain Valentine Strasser was reportedly seen in Sweden on a personal mission to sell diamonds (Fithen, 1999).

A former politician interviewed for this research reflected that the low mining revenue in the country is a result of weak governance that allows politicians and government officials to engage in graft and other corrupt practices. He noted that, while there has been public criticism of the mining agreements that awarded such generous fiscal provisions to companies, there has not been any investigation by the Anti-Corruption Commission.

Perhaps because corruption and graft have never been tackled, Sierra Leone has also experienced substantial challenges in introducing transparency in the area of tax incentives granted to mining companies. For example, in 2011, the World Bank provided technical assistance in the development of a revenue management bill, the aim of which was to ensure that the Minister of Finance
and Economic Development provides quarterly updates of revenue proceeds from the mining sector and tax expenditures relating to mining companies. Despite the relevance of this bill in ensuring the government is made accountable, it has never passed the pre-legislative phase, which is required before the bill is tabled for discussion in Parliament.

A member of the Parliamentary Oversight Committee on mines said, ‘Given the benefits that the country gets from the mining sector, it is important that the government protects these benefits’. Releasing evidence of wide-scale corruption may however make the public resentful of both mining companies and the government and may lead to renewed political instability. Thus, while corruption and transparency may, as Humphreys et al.,(2011) argues, present significant political risk, processes for tackling them are not easy given the combination of political and economic resources available to such persons and the risks to the government.

4.2 Absence of an enabling environment in the mining sector

Although the mining sector is seen as an important sector of the economy, it is striking to note that there has been an absence of a development strategy for the sector. Such a strategy would have helped fulfil the objectives of the government and investors. When a government does not establish an enabling environment and a strategy for attracting mining investors, then decisions on the type of investors coming into the sector will be made on a discretionary basis.

The policies in the early years after independence (1961-1968) did not deviate from those under colonialism. Investment in the mining sector continued to be dominated by foreign mining companies; those that operated before independence (SLST and DELCO) and the new mining companies after
independence (SIEROMCO and Sherbro Minerals Limited). However, as we saw in Chapter three, under President Stevens, the government became much more involved in the activities of the sector (Reno, 1995, Frost, 2012).

The failure to develop a strategy for the mining sector during the Stevens era (1968 – 1985) has been seen by some observers as a deliberate policy to centralize control over the mining sector (Gberie, 2010, Mcleod, 2012). Some writers argue that it is therefore not surprising that the country has been unable to attract established multinationals in the mining sector given the government’s desire for control and the prevailing political environment (Cleeve, 1997, Mcleod, 2012).

Despite its mineral potential, investors in Sierra Leone's mining sector have, to date, been those with little or no experience in large-scale mining. With the exception of SLST, which was a subsidiary of Consolidated African Selection Trust (CAST), the entrants into the mining sector have all been ‘juniors’, who prospect for mineral deposits and then, upon discovery, convert into extraction companies or sell their stake to established mining companies.

A government official in the Strategy and Policy Unit in the Office of the President, alluded to the fact that the current challenges of the two iron ore companies (discussed in Chapter 1) are a result of the lack of a mining development strategy. Such a strategy should have provided established criteria for scrutinising potential investors into the mining sector and would perhaps not have allowed these companies to proceed with their activities.

A private sector consultant with Business, Engineering, Science and Technology (BEST)75, also noted that the government should have done more to scrutinise investors applying for prospecting and extraction licenses. He said there should

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75 BEST is another engineering firm providing services to mining companies.
be pre-qualification assessment criteria to ensure investors have the requisite capacity for large-scale mining (Private Consultancy Firm official, Freetown, 05.07.2015).

By not having a strategy for the mining sector, the country has attracted investors who have often lacked the technical and financial capacity to engage in large-scale mining. A former politician observed, “the mineral sector has proven to be resilient in continuing with the same failed policies of the 1970s and 1980s” (Former Politician, Freetown, 21.07.2015).

Given their lack of access to substantial capital resources, it is not surprising that they have sought tax and non-tax concessions from the government as a basis for reducing their costs. These concessions have often been granted, as seen in the various fiscal provisions discussed in Chapter 3, which ultimately has a negative impact on the revenue accruing to the treasury. One interviewee argued that there has been a mismatch between the financial resources that flow into the mineral sector and the mineral revenue and related benefits that flow to the country (Private Consultant Firm official, Freetown, 10.07.2015). Support for this notion also comes from the work of Mcleod (2010), who notes that mining companies have never declared profit on their operations. Linked to the failure to create an enabling environment for mining, as I will explore in the following section, the Sierra Leone government has also failed to develop appropriate fiscal regimes for mining.
4.3 The Absence of a Model Fiscal Regime between 1961 and 1994 and the Non-implementation of the Fiscal Regime Post-1994

The design of a set of tax and non-tax instruments specifically for the mining sector, when implemented and monitored effectively, should enable a government to capture a fair share of the economic rent from mineral exploitation. Interviewees I talked to for this research noted that such a regime will eliminate the scenario whereby mining companies extracting the same mineral (such as AML and LMC, which are both mining iron ore) have different fiscal regimes.

As explained in Chapter 3, the political and economic significance of the mining sector has increased government attention and involvement. However, even after the announcement of the nationalisation policy, the government failed to develop a model fiscal regime, which would have outlined the tax and non-tax instruments applicable to the mining sector.

A model fiscal regime that is enforceable, transparent and comprehensive could have a significant impact on how much revenue a government generates from the mining sector. Such a regime would also address issues relating to arms-length pricing,76 the permissible debt level for a mining project, and limits for tax-deductible payments for mining companies among others.

The longevity of the APC regime from 1968 to 1992 gave the opportunity to develop and implement a model fiscal regime that would have improved mining revenue contribution to the treasury. Instead, there was an emphasis

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76 Arm’s length pricing in the mining sector is where a mining company sells its output to a buyer with which it has not relationship and both the mining company and buyer are acting independently. This is to ensure that both parties in the deal are acting in their own self-interest and are not subject to any pressure from the other party.
on negotiating bilateral mining agreements on a case-by-case basis with the various mining companies.

Furthermore, in deciding on a case-by-case basis, the Sierra Leone government failed to recognize that it did not have the same kind of leverage over different mining companies. It was able to put pressure on SLST to nationalise due to the threat of uncontrolled alluvial mining. The same pressure did not apply to the extraction of bauxite, iron ore and rutile, where technology and capital intensive methods are required.

Mining agreements negotiated during the Stevens era were formulated in such a way that they could only be re-negotiated when the agreements lapsed. And, given that Stevens was still in power, there was no possibility of revisiting or changing the details of these agreements.

The first comprehensive fiscal regime (the Mines and Mineral decree) for the mining sector was formulated under the NPRC regime in 1994. This decree, enacted by the SLPP government in 1996, resulted in the Mines and Minerals Act, 1996 (MMA 1996). However, the civil conflict affected the implementation of this legislation.

The 2000 Income Tax Act included specific tax provisions for the mining sector (as detailed in Schedule VI of the Act). Despite the existence of these two Acts, mining agreements negotiated in the post-conflict period (from 2002 onwards), have been enacted into law by Parliament, and have legal provisions that supersede these existing legislations.

When the APC party came to power in 2007, reforming the mining sector was seen as a priority to ensure more revenue for the treasury. In 2008, the government set up a taskforce to review mining legislation and all mining
agreements. This review culminated led to the enactment of the Mines and Minerals Act of 2009 (MMA 2009), which replaced the MMA 1996. However, even as it was being enacted, the MMA 2009 was being undermined.

The government signed an agreement with London Mining Company (LMC) in December 2009, just days before the MMA 2009 was enacted by Parliament. Gberie (2010) notes that this was a 'deal', a compensation to LMC for conceding an exploration area of disputed ownership. Specifically, the agreement gave the company generous fiscal provisions that the MMA 2009 would not affect retroactively. A CEMMAT official said, he was surprised by the generous fiscal concession given to LMC. CEMMATS, he said were the local firm that undertook engineering studies about the cost of extraction. He explained that even with the falling price of iron ore, an efficient management should have been able to keep the company afloat. The fiscal concession should have made it far more easier to operate and accommodate the fall in iron ore prices (Private Consultancy Firm official, Freetown, 01.07.2016).

Given my knowledge of the workings of the government, a minister will never act alone on such issues without the approval of the Executive Office. It would appear that other mining companies took this as a precedent because, in 2010, the government also concluded bilateral agreements with African Minerals Limited, Octéa and Sierra Minerals Holding-1 Limited.

Ideally, bilateral agreements should be made to clarify any ambiguity in the applicable legislation and to promote safeguards for the government and mining company around issues that may not be adequately covered in the legislation. However, in Sierra Leone, negotiating bilateral agreements has become the norm. Dieckmann, (2011:12), quotes the former Minister of Finance and Economic Development, Dr. Samura Kamara, who defends the
generous provisions, ‘It has to be a win-win situation for the government on the one hand and for the investor in the other hand because mineral exploitation is highly capital intensive’.

These bilateral agreements are incredibly powerful. For example, in early 2016, the Mayor of the Kono district took the mining company Octéa (mining diamonds) to court for failing to pay local taxes. An Appeal Court Judge ruled that Octéa had not broken any law as the bilateral agreement it had signed with government is itself law having been ratified by Parliament.

The iron ore royalty payments made to the government from 2012 to 2014 also illustrate the non-implementation of provisions in the MMA 2009. The analysis below shows that the royalty payments (Table 4.1) would have been higher if the prevailing market price had been used to calculate royalty payments. This analysis is undertaken for iron ore because of the availability of reliable price data.

Table 4.1: Analysis of iron ore royalty payments, 2012-2014.

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales value (’000 $)</td>
<td>468,930</td>
<td>967,118</td>
<td>736,863</td>
</tr>
<tr>
<td>Export volume (’000 of metric tons)</td>
<td>5,500</td>
<td>14,200</td>
<td>16,930</td>
</tr>
<tr>
<td>Actual Royalty payments at 3% of sales value (’000)</td>
<td>14,068</td>
<td>29,014</td>
<td>22,106</td>
</tr>
<tr>
<td>Estimated Price ($)</td>
<td>85</td>
<td>68</td>
<td>44</td>
</tr>
<tr>
<td>Market Price ($)</td>
<td>135</td>
<td>97</td>
<td>75</td>
</tr>
<tr>
<td>Estimated market value (’000 $)</td>
<td>742,500</td>
<td>1,377,400</td>
<td>1,269,750</td>
</tr>
<tr>
<td>Estimated royalty (’000 $)</td>
<td>22,275</td>
<td>41,322</td>
<td>38,093</td>
</tr>
</tbody>
</table>

Sources: Ministry of Finance and Economic Development, National Revenue Authority, World Bank and author’s calculation.

Based on the royalty payments made for iron ore, the total sales value was calculated by dividing the royalty payment by the royalty rate for iron ore (3 per cent). The estimated price per ton of iron ore is calculated by dividing the sales value by export volume. However, when prices from the World Bank
commodity database are used from 2012 to 2014, the royalty payment should have amounted to US$101.7 million, as compared to the US$65.2 million received by the government. Even allowing for some adjustment in the World Bank’s prices, correct implementation of the provisions of the MMA 2009 would have resulted in higher royalty payments. Royalty payments are, however, influenced by many other factors, one of which is the level of political and policy inclusiveness. This will be discussed in the next section.

4.4 Low-level of political and policy inclusiveness

Low-level political inclusiveness has meant that decisions relating to the mining sector are taken by a small group of individuals and this affects the link between the government and citizens. Barma et al., (2011) argues that political inclusiveness increases accountability and channels rents towards collective welfare through the provision of public goods and investment for sustainable development. Over the years, the main government stakeholder and negotiator in the mining sector has been the Executive Office,\(^{77}\) despite the fact that other stakeholders like Parliament, CSOs, the media, and local communities all have, in theory, important roles to play in the sector. In practice, their involvement in decision-making has been minimal. A former politician reflected on this in an interview, saying “President Stevens hated dissent so much that he will have the police arrest dissidents in mining areas who have dissenting views on government’s mining policies on a trumped-up charge. There was little scope for the inclusion of people who were regarded as having a contrary view of mineral policy” (Former Politician, Freetown, 18.08.2015)

\(^{77}\) In Sierra Leone, the President acts as both the Head of State and Head of Government.
This low level of political inclusiveness, which relates to the colonial era but became much more prevalent in the Stevens era, has meant that society has been unable to hold various governments to account for the policies that have been pursued in relation to mining. The concentration of power in the Executive Office affects how oversight bodies like Parliament regulate the mining sector.

The civil society organisations I interviewed tend to see Parliament as an appendage of the Executive. For example, in Sierra Leone, within the party structure, the President is the leader of his party and has significant influence over the parliamentary members belonging to his party. Parliament has never rejected a mining agreement even when it was apparent that the fiscal provisions in these agreements meant the government would potentially lose a substantial amount of revenue.

In the post-conflict period, all the agreements sent to Parliament for ratification have been passed without amendment. I was told that the reason behind this was that parliamentary members know the agreement being presented has Executive approval, and as a party, it will reflect very badly on their President if the agreement is not enacted.

Furthermore, members of Parliament belonging to the same party as the President know that their chances of returning to parliament depend on how supportive they have been regarding policies of the government. The President, as leader of his party, has major influence in choosing parliamentary candidates to contest constituency elections. Some government officials I interviewed said this has made it very difficult for parliamentarians to deviate from policies supported by the government.
Media and civil society organizations, who have an important role to perform in disseminating information and holding government accountable, have had very little involvement in the formulation of mining sector policies. According to a newspaper editor, the media has often struggled to get accurate information on the mining sector due to the reluctance of government officials to provide it. This has been a major constraint for the media and has limited its ability to scrutinize any aspect of mining, including revenue to the treasury over the years.

Civil society organizations (CSOs) came to the fore after the end of the civil conflict in 2002, when they were engaged in reconstruction, resettlement and rehabilitation activities. However, over the past seven years, CSOs have been scrutinizing mining agreements and providing a platform to hold the government accountable in relation to treasury revenue. To date, however, they have had little success.

An official of the National Advocacy Coalition on Extractives (NACE) explained that ‘civil society organisations have requested that they are involved in the negotiation of mining agreements in an observatory role but the government has so far not responded to this proposal’ (CSO Official, Freetown, 22.08.2015). A report by the National Coalition on Extractives (NACE) in 2009 notes that the government's reluctance to provide information about mining revenue creates mistrust about the intention of the government and mining companies.

Mining agreements, the report argues, should be negotiated in a transparent manner, so that the concerns of all relevant stakeholders are taken into consideration and the public is aware of the potential revenue that will accrue to the treasury. This will help eliminate doubts about deals between government and mining companies. It was only in 2012, following the
establishment of the National Mineral Agency, that mining agreements were made public following public discontent and pressure from civil society groups to disclose the tax and non-tax provisions in them.

To date, civil society's attention has been on the benefits of mining and on the amount of revenue accruing to the government and the country. They are not focused on other areas of mining that also affect revenue, and which are discussed below, such as allocation of exploration and extraction rights.

4.5 Discretion in the allocation of exploration and extraction rights

The way in which exploration and extraction rights are awarded has a significant bearing on the type of investors that are attracted to the mining sector and on the amounts of mining revenue accruing to the treasury. Barma et al., (2011) explains that in allocating these rights, countries choose between two main systems; direct negotiation between the government and investors through solicited or unsolicited channels, or a first-come, first-serve principle for the mining sector.

Before independence, all negotiations for the award of exploration and extraction rights were undertaken by the colonial administration. Under the SLPP government (1961 to 1967), the award of rights was not systematic but carried out on an ad-hoc basis. Cleeve (1997) attributes this to the lack of negotiating skills and the presence of asymmetric information (see Chapter 2 for more discussion on this).

Under the APC government (1968-1992), extraction rights were granted on a discretionary basis with significant political influence. For example, according to a former government official, when Sherbro Minerals Limited went into liquidation in 1971, other investors were interested in taking over rutile mining
but the government was only interested in giving Sierra Rutile Limited the rights.

The absence of mining legislation meant there was no prescribed policy detailing how rights were to be awarded, and this introduced discretion in the process. In addition, the lack of transparency in the allocation of exploration and extraction rights reduced competition and did not reveal the true potential of the mineral deposits.

Smillie et al., (2000) provides a detailed analysis on how the NPRC regime (1992-1996) awarded extraction rights on a discretionary basis to three "juniors" from Canada in 1994. The details of how these rights were awarded and the revenue benefits that would have accrued to the government were never placed in the public domain.

In the post-conflict period, the discretionary allocation of exploration and extraction has continued to be a feature of the mining sector. The SLPP and APC governments have, over the years, defended this policy on the basis that investors were unwilling to invest in a post-conflict country and the government wanted to encourage the few that took the risk to invest.

In 2005, the SLPP government gave exploration rights to the Sierra Leone Diamond Company, which had been operating in alluvial diamond mining since 1996, to explore over 70 per cent of the country's land mass. This exploration led to the discovery of large amount of iron ore in the Tonkolili district and the company metamorphosed into African Minerals Limited (AML) in 2005.

In 2008, the APC government awarded extraction rights to AML, despite the company having no experience in large-scale mining. In 2008, London Mining Company (LMC), another company with no experience in large-scale mining,
also secured exploration and extraction rights to the area formerly mined by the Sierra Leone Development Company (DELCO).

The influence of politics and how it affected the allocation of exploration rights can be seen in the way the dispute between the two iron ore mining companies was settled. Between 2008 and 2009, African Minerals Limited and London Mining Company were engaged in a dispute over a lease area over which both companies claimed ownership. Even though the geological maps produced in 2007 showed LMC as the licensed owner of the disputed area, this version of events changed a few months later when the APC government came to power (Gberie, 2010).

In 2008, the APC government, with whom the Executive Chairman of African Minerals Limited now had close ties, announced a review of the Mines and Minerals Act of 1996, under which the exploration and extraction rights were granted to London Mining Company. In November 2008, London Mining Company announced that it was withdrawing the legal claim, and the disputed area was given to AML.

According to a Ministry of Mines official, LMC had to give up its legal challenge due to pressure from the government, but also as a means of retaining its licenses in its main area of operation. As a form of compensation for dropping the legal proceedings, LMC was given generous fiscal concessions in its mining agreement in 2009 (Gberie, 2010).

In a country where there is political interference in the mining sector and which is beset with rumours of corruption, mining companies can use unorthodox methods to secure rights. The MMA (2009) gives the Minister of Mines a lot of discretionary power in the approval or refusal of exploration or extraction rights. The Minister gives approval in the granting of exploration and
extraction rights, following the recommendation of the Mineral Advisory Board. There is no open tendering or bidding process to acquire exploration or extraction rights. Rather, individuals or companies are awarded licenses through an application process and the details are kept confidential.

Furthermore, the MMA 2009 makes no provision for legislative oversight on how rights are awarded. This, according to some observers is surprising, as Parliament should have ensured it has oversight responsibility of the process before the enactment of the MMA 2009. However, as discussed above, even if Parliament were to have oversight, there is no guarantee that it would challenge any decisions related to mining. The following section will explore the fragmented process of revenue collection, a situation that stems in part from the ways in which exploration and extraction rights have been allocated.

4.6 The presence of a fragmented process of revenue collection

Although the literature on mining taxation highlights the importance of the design of a good fiscal regime (Baunsgard, 2001, Otto et al., 2006, Boadway and Keen, 2010, International Monetary Fund, 2012), of equal importance is how mining revenues are collected. In Sierra Leone, economic rent, especially from the diamond sub-sector, has fostered greed and corruption and has affected the amount of revenue accruing to the treasury. The way mining revenue has been collected has significantly affected the amount that has accrued to the Treasury.

In the absence of a centralized revenue authority, different government departments collect various components of mining revenue. The Customs Department is responsible for collecting import duties, the Income Tax Department collects royalty and income tax payments, and the Ministry of Mines collects license fees. These various agencies deposit revenue proceeds
from the mining sector into their separate bank accounts. There is no structured policy as to how and when these funds should be transferred to the treasury.

In an interview with a former mines official, I was told that in the 1980s, officials from the Ministry of Mines and Customs Department were instructed from ‘above’\textsuperscript{78} to under-report the volume of minerals exported. The lower volume of exports meant that the mining companies paid lower royalty payments. According to this official, the understanding was that politicians would in turn receive payments from mining companies.

Before the establishment of the national revenue authority (NRA) in 2003, the amount of revenue transferred to the treasury from various institutions was dependent on the political influence of the Minister of Finance. Given that the political system was built around a patronage network fuelled by mining revenue (Luke and Riley, 1989, Reno, 1995), political appointees to these agencies were never inclined to support the establishment of a central revenue authority.

Even when the NRA was established, it faced challenges in taking control over the collection responsibilities of the Ministry of Mines. This is, as I will discuss in the next section, influenced in part by the technical capacity of relevant government institutions.

4.7 Low level of technical capacity in government institutions.

The technical capacity of government institutions responsible for regulating and monitoring the mining sector is weak. This has been the case since the Stevens era. The low rents from the mining sector are believed to have indirect

\textsuperscript{78} Meaning from the political head of the Ministry or Agency.
impacts, including a lack of incentive to strengthen institutions and establish a well-functioning tax administration. Indeed questions have been asked as to whether there is a correlation between rents from the mining sector and low institutional capacity in the government.

While research on this is limited, some of my interviewees were of the opinion that the political strategy of patrimonialism, shrewdly perfected by President Stevens and continuing at present has affected the capacity of government institutions. One of the consequences of patrimonialism is that public sector workers are insecure in their positions. It is common for a top government official, who has said the wrong thing, to be sent on indefinite leave (and sometimes s/he may never return to work).

In a similar manner, there is little incentive to follow up on breaches of legislation or fiscal payment. An official of the Centre for Accountability and Rule of Law (CARL) argues that Sierra Leone’s institutional arrangements in the mineral sector are often not enforced due to the clientelist nature of government operations. The Income Tax Act 2000 and the Mines and Minerals Act 2009 have several loopholes that could have been identified and addressed if sector institutions had the inclination to do so and the required capacity. For example, both legislations did not address the issue of transfer pricing and capital gains tax, two issues which are crucial for ensuring a government gets a fair share of the resource rent generated (CSO official, Freetown, 10.08.2015). The reasons for these oversights are not simply linked to the fiscal capacity and regulatory prowess of the Sierra Leonean state. They are also intimately connected to the lack of State desire to control and manage mineral revenues and to allow revenue to be diverted for personal gains.

79 This is a patron-client relationship where politicians control the affairs of government through the distribution of favours in exchange for support.
As Luke (1988) argues, Stevens developed a finely-honed sense of the power and intricacies of patronage as a trade unionist in the 1940s, a member of the Legislative Council and Cabinet Minister in the 1950s and in opposition in the early years after independence. Upon taking the reins of power in 1968, Stevens was in a better position to understand the effect of having control over government institutions, and that a stronger civil service was a source of political opposition. As such, heads of key government institutions came to know that they occupied such positions because the system (or Stevens) allowed them to have it, but that such positions were always conditional and could be withdrawn.

For example, a key position within the Ministry of Mines, the Director of Mines, is often held in an 'acting' capacity instead of having a substantive holder. A former Ministry of Mines official noted that this 'acting capacity' ensures that the holder of the office is permanently insecure and will ultimately follow the directives of the Minister of Mines.

Some former politicians and government officials I interviewed alluded to the fact that government institutions were kept weak to ensure that their cronies in the political system occupied top positions. Furthermore, as conditions in the civil service deteriorated in the 1970s and 1980, qualified personnel left and those who remained became open to corruption in order to make ends meet. Stevens will often quote that 'where a cow is tethered there it will graze'. This in a way became an unofficial mantra within the Civil Service, as government officials knew they could engage in corruption as long as they had a political patron to protect them.

The role of institutions in the post-conflict period seem particularly important since the APC party, now in power, was the party that also ruled the country
during the long decline of the country's mining sector and government institutions. Development partners have been providing financial and technical support to the government in an effort to attract and retain qualified personnel within the civil service.

However, the implementation of such support in some institutions has been hampered or delayed by political interference. For example, one of the recommendations in a study funded by the World Bank in 2008 was the establishment of the National Mineral Agency to oversee and monitor the mining sector. The creation of this entity became bogged down with political interference as subsequent Ministers (three since 2007) wanted the agency to be under the supervision of the Ministry. This happened to the extent that when the organogram of the National Mineral Agency was set up, it had positions that were in conflict with statutory positions in the Ministry of Mines.80

At the time of my research, a functional review of the roles between the Ministry of Mines and the National Mineral Agency was being undertaken. However, the Minister had not approved the recommendations from the review by the time I completed my fieldwork. These included having directorates of mines and geological surveys under the NMA and the award of licenses to be under the purview of the Board of the NMA.

The recruitment process within the NMA has also been hampered by political interference. For example, a board member of the NMA narrated the recruitment process for the Director General in 2011. During the interview process, State House had a candidate (A) of their choice for the position.

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80 There were two directors of mines and two directors of geological surveys (one each at the Ministry of Mines and the National Mineral Agency).
However, it turned out that another candidate (B) was more suited for the position and performed very well during the interview.

The board recommended candidate B to the President.\(^{81}\) However, it was thought that candidate B had allegiance with the opposition SLPP party given that he was not a registered member of the APC party. It took over three months before the President could approve his employment.

Furthermore, a new position of Deputy Director General, which is not in the Act establishing the NMA, was created for candidate A, the ‘favoured’ candidate from State House. The board member commented ‘in an environment where institutions are mindful of the policy direction of the government, it will be very challenging to design policies that will actually ensure more revenue to the treasury’.

The institutional set-up to regulate and monitor the mineral sector still creates confusion in terms of roles and responsibilities. The Ministry of Mines has the responsibility for policy formulation but has no policy Directorate. Instead, the Strategy and Policy Unit in the Office of the President leads policy issues on the mineral sector. There is also confusion as to the roles of the two Directors of Mines – one in the Ministry of Mines and one in the National Mineral Agency. There is no single entity responsibility for negotiating mining agreements. The Ministry of Finance and Economic Development is responsible for negotiating fiscal terms, the Ministry of Mines is responsible for negotiating the technical side of the mining operation, and the Environmental Protection Agency is responsible for the environmental aspects of the agreement. The Strategy and

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\(^{81}\) Appointments to top government positions in government institutions have to be approved by the President. The interview panel will send the names of the top three candidates to the President, who will then make the final selection.
Policy Unit\textsuperscript{82} in the office of the President, puts together the various components of the agreement for review.

Not surprisingly, government institutions have been unable to conduct due diligence on potential investors in the mining sector due to the fact that some investors recruit highly-placed local fixers\textsuperscript{83} with political connections to facilitate their entry into the sector. During negotiations, while the mining companies will be thoroughly prepared with technical expertise (lawyers, economists, tax experts and engineers), the government side will be led by a politician and a few technical staff-members who may not be abreast with current developments in the sector.

In order to establish a correct tax base on which to apply the taxation instruments, it is essential to ensure that the production and export volumes and the market price reflect the realistic situation for the minerals extracted. Where there is a lack of capacity to assess these parameters, mining companies will have the tendency to provide information that grossly underestimates volumes and prices, removes any potential for profit, and substantially reduces the revenue that would accrue to the treasury.

An official of the National Revenue Authority explained that the NRA currently lacks the capacity to undertake any forensic audit of the accounts of mining companies. The extractive industry unit is understaffed and so does not have the capacity to understand the financial transactions of the mining companies. As a result, there is little or no verification on the mining revenue payments made by companies. The government has also been losing technical personnel

\textsuperscript{82} Under the previous SLPP government (1996-2007), the National Policy Advisory Council led mining negotiations.

\textsuperscript{83} These are private businessmen who are known to be connected with the government.
like tax officers and engineers to the mining companies, as they offer extremely good remuneration.

This strategy of patrimonialism, political interference and poor working conditions of the civil service has had an adverse effect on the effectiveness of public sector institutions. Even though technical capacity is still weak in government institutions, some institutions have been strengthened. One such institution is the Ministry of Finance and Economic Development.

Two factors seem to be responsible for this: first, as the Ministry responsible for country's fiscal policy, the government has been willing to let donors provide financial and technical support to strengthen capacity, and second, the Ministry has been lucky to have Ministers who have allowed programmes to be implemented without hindrance. Despite this, decisions relating to the fiscal regime of the mining sector are still made at the political level.

4.8 The political culture that shaped policy decision making

Sierra Leone's policy formulation in the mining sector has always attracted the attention of the Executive Office. The knowledge that decisions relating to mining are made at State House reduces the significance of government officials in discussions with mining companies. Mining companies are known to have direct access to key political authorities in the government, and can finalize the contents of the mineral agreement with them. This creates the opportunity for mining companies to get favourable fiscal concessions in their mining agreements. A government official alluded to the fact that, although technocrats make recommendations, the final decision is made at the political level.
Politics has always played a significant role in policy formulation in the mining sector. In my interview with a former civil servant, he explained that the staff working in Ministry of Mines in the 1970s and 1980s responded to the ideas of the Minister rather than providing technical advice as required of them.

An official of the African Development Bank (AfDB) similarly explained that, when discussing policies about the mining sector, civil servants would always refer to their Ministers before taking any decision. The Minister would in turn have to seek the view from State House. This process, he laments, would sometimes take weeks or months before a definitive decision was reached.

An official of the Ministry of Finance and Economic Development also narrated a scenario where he was left embarrassed in a meeting between the government and a mining company in 2010. He explained ‘I was asked to provide a response to the exemptions and incentives that a mining company requested in their proposed agreement. In my submission, I mentioned that the exemptions would lead to substantial revenue loss for the government. What I did not know was that these exemptions had already been approved at the political level. On presenting the submission, I was asked by an official of the Ministry of Mines whether I knew what I was talking about’ (Government official, Freetown, 15.08.15).

He also pointed to a recently concluded mining agreement with a gold mining company, where the final agreement signed was different to the proposed agreement that had been circulating in the Ministry of Finance and Economic Development.
4.9 Conclusion

This chapter has laid out the more specific factors that have undermined mining revenue in Sierra Leone. All these factors affect the amount of revenue accrued to the government and they all work to influence each other, creating a 'perfect storm' in which very little taxation can be secured. Juxtaposing all of the above, the core issues that affect these factors are poor governance and corruption in the mining sector. A clear lesson that emerges is the importance of good governance in the mining sector if the country is to benefit from its mineral endowment. In the next chapter, I will provide a summary of the main findings, some politically feasible policy reforms, and recommendations for further research.
Chapter 5

Conclusion

5.1 Introduction

This thesis examines why mining revenue has been consistently low in Sierra Leone. This research started with the initial expectation of exploring how tax and non-tax policies relating to mining can be improved upon in order to ensure government gets a fair share of the resource rent generated. The challenge to undertaking such a studies became apparent when I embarked upon my fieldwork. There were issues relating to the validity and reliability of data - the outbreak of the Ebola Viral disease in Sierra Leone, Liberia and Guinea meant the key management staff of mining companies were out of the country and the significant drop in the prices of iron ore and diamonds had significantly impacted on the operations of three mining companies. Furthermore, from my discussions with key stakeholders, I was able to understand that there were other important factors, in particular the impact of politics, that have had an adverse impact of generating revenue from the mining sector. This led to a change in direction of the research, with a focus on examining why mining revenue has been low in Sierra Leone. The willingness of interviewees to discuss the impact of politics on the mining sector enabled me to identify some factors that have undermined mining revenue. The mining sector has been an important part of the country’s economy since the 1930s. Revenue generated from the mining sector enable colonial authorities to run a surplus budget, expand infrastructure and the provision of services throughout the country. However, in the post-independence governments did not institute major reforms of the country’s mining sector. By the end of the fist decade after independence, a policy to nationalize the mining sector was partially
implemented and the government sought to maintain highly centralised control (around the Office of the President) of mining operations.

Under the Presidency of Siaka Stevens, a “shadow State” consisting of politicians and few Lebanese businessmen emerged to take control over the mining sector. This small elite group controlled the activities of the diamond sub-sector, which had the potential to become an important source of revenue for the Treasury. Despite the substantial export of minerals in the 1960s and 1970s, the government lost hundreds of millions of dollars, which should have accrued to the treasury, mainly due to smuggling that permeated the diamond sub-sector and the generous fiscal concessions given to mining companies. Indeed, mining revenue as a percentage of total government revenue has been low or very low in most of Sierra Leone’s post-independence period.

The original proposed focus of the thesis was to scrutinise the tax and non-tax instruments in mineral agreements as an explanation of why revenue streams have been so low. However, the focus shifted to understanding the political economy of the mining sector and the roles of weak governance and corruption to understand why official revenue streams have been low. Thus, the thesis poses these questions:

1. What explains the low revenue from the mineral sector in Sierra Leone?
2. What are the main factors affecting policy design in the mineral sector?
3. What, if anything, can be done about this?

The literature review in Chapter 2 examines the distinctive features of the mining sector, the taxation schemes and non-tax instruments deployed in the mining sector, as well as governance issues in the mining sector. I developed two simple typologies to (a) understand the advantages and disadvantages for
government of different taxation schemes (Production Sharing; Royalty; Operation/Service; Income Tax) and (b) advantages and disadvantages of different fiscal instruments (see pages 28-30). In relation to governance and the political economy in the mineral sector, I discussed the State’s involvement in the mining sector, how it evolved after independence and how the commodity boom led to a re-evaluation of mineral agreements. I also discuss the impact of governance on the mining sector and how shadowy network became the conduit for diverting revenue going into the treasury.

Chapter 3 then examines the interconnection between politics and developments in the mining sector through different periods of the country’s political history, from the colonial period through to the post-independence period (1960s-1992), during the country’s civil war (1992-2002), and more recently during the post-conflict period. Since independence in 1961, the country has struggled to deal with its mineral wealth in ways that benefit the country as a whole. This is particularly evident in relation to alluvial diamonds which are relatively easy to mine, do not require large financial investments in infrastructure, and can yield substantial rents.

I was able to make clear that the powerful combination of politics and wealth coming from the mineral sector played a crucial role in the performance of the mining sector and has severely affected the revenue to the treasury. Even in the post-conflict period, mining companies with close connections to the various governments have been able to secure generous tax and non-tax concessions in their mining agreements.

In Chapter 4, I developed a framework around eight inter-related factors establishing a causal link between poor governance and low mining revenue.
Thus, the central argument of the thesis is that the problem of (poor) governance has been central to the fiscal regimes adopted by the government, which has ultimately resulted in low mining revenue.

In concluding, my research has shown that poor governance in the mining sector has resulted in very low revenue accruing to the treasury. The research provides valuable insights into mining sector governance and how it relates to and is shaped by Sierra Leone’s political history and politics.

5.3 Policy implications

Why have mineral revenues been low in Sierra Leone? In the previous chapters, I discussed some of the explanatory factors that have contributed to low mineral revenues. I have stressed that while there are important insights to be gained from analysis of the distinctive characteristics of the mining sector, and from an understanding of taxation models and the applicable tax and non-tax, ultimately issues of governance and political economy are deeply implicated in determining the degree of mineral revenue which is returned to the Sierra Leonean government.

How could a political economy analysis such as that I have advanced in this thesis help in the design of policies that will strengthen governance in the mineral sector and ensure a fair share of the resource rent accrues to the treasury?

I propose that developing the capacity of key institutions would to some extent help to improve the governance framework in the mineral sector. The government cannot generate more revenue from the mineral sector if the overall governance framework is poor and politicians and civil servants are unable to meet their livelihood needs through their general (and often
intermittent) salaries and thus find themselves in a position where they are exposed to offer incentives to mining companies in return for financial gains. Indeed, this is one of the sad lessons for many mineral-rich developing countries in SSA which Reno (1995), Sala-i-Martin and Subramanian (2003), and Ayee et al (2011) have made so much of. Specifically, Reno (1995), Cleeve (1997) and Frost (2012) have examined how poor governance has continually undermined mineral revenue in Sierra Leone. The obvious conclusion from the discussion so far is that improvement in governance will lay the foundation for the country to benefit more from its mineral endowment. I discuss three proposed reforms here, which could deepen and improve the governance framework for the mineral sector, namely strengthening the role of Parliament, enhancing Civil Society Organizations’ role and building technical capacity in sector institutions.

Critical partners in this process are Sierra Leone’s development partners,\textsuperscript{84} who contribute financial and technical resources to various sectors of the economy. One key leverage point that could be used is to have policy reforms as part of a budget support programme to the government. Since the end of the conflict in 2002, the multi-donor budget support partners,\textsuperscript{85} through their budget support have been contributing more than a third of government budget.

\textsuperscript{84} International Monetary Fund, World Bank, African Development Bank, European Union, and the United Kingdom Department for International Development.

\textsuperscript{85} European Union, World Bank, African Development Bank and Department for International Development.
5.3.1 Strengthening the Role of Parliament, of Civil Society Organisations and Building Technical Capacity in Sector Institutions.

Weak governance and low technical capacity have been the primary challenges for Sierra Leone, which are a legacy from the 1970s under President Stevens. The political strategy of patrimonialism went a long way to weaken governance, concentrate power in the presidency, and weaken the role of parliament. Undoing this legacy is a significant challenge.

According to a former politician, the role of Parliament in holding the government accountable has been compromised since the APC came to power in 1968. President Stevens ensured that power was concentrated in the Executive and successive governments have maintained this status quo (Former Politician, Freetown, 25.08.2016). As discussed in Chapter 4, Parliamentary members rarely vote against a mining agreement negotiated by the government. This is due, in part, to party pressure, but also because most parliamentary members lack the capacity to understand the impact of the tax and non-tax provisions on government revenue. How can Parliamentary capacity be strengthened? And how can this impact positively on the mining sector? I suggest a two-track approach. Most obviously, as the first track, Parliamentary capacity, especially the sub-committee on mining, needs to be strengthened if better mineral agreements are to be enacted as law. Strengthening capacity should focus on ensuring Parliamentarians understand the essence of having laws that establishes the conducive investment environment that will attract established mining companies. Emphasis should also be place on educating Parliamentarians on the tax and non-tax policies that are being implemented in other countries with similar minerals. For

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86 Parliamentary Sub-committees usually discuss policy issues and it's only after a policy is approved that it will be discussed in full by the entire Parliament.
example, Liberia and Guinea have similar minerals\textsuperscript{87} that are being extracted but both countries have far better tax and non-tax policies than Sierra Leone. It is also important that the local community engages Parliament before mineral agreements are enacted into law. In 2009, the Mayor in Kono District where Octéa Limited is mining diamonds, made a submission to the Parliamentary sub-committee on mining about the need of setting aside a fund from the proceeds of Octéa Limited to support developmental programmes in the district. This submission was taken into account when the mineral agreement between government and Octéa Limited was finalised. Development partners can play an important role in this process by providing technical support to parliament and by making this a performance indicator for budget support. The current parliament seems to be massively under-resourced and, as I discovered while undertaking fieldwork, some parliamentarians cannot operate a computer. This makes it difficult for them to seek independent information on particular topics, such as the taxation of mining sector and its challenges. Moreover, they currently have no incentive or desire to question what is happening with mineral resources and state fiscal arrangements. Establishing clearer understandings of the work of Parliament – perhaps through creating networks and alliances with proactive Parliaments in other developing countries.

The second approach is to specifically target Parliamentary members from mining areas in building their capacity to understand the technicalities in mining agreements (economic, social and environmental issues in mining agreements). Although this is not a solution to addressing the challenge of enacting bad mining agreements, it will provide some measure of scrutiny on key issues in mineral sector governance. In the rutile mining area,\textsuperscript{87} Bauxite and iron ore are mined in Sierra Leone, Guinea and Liberia.
Parliamentarians from the area have formed a committee that examines the environmental and social impact assessment of any further expansion of rutile operations. These issues are discussed with the local community and the final decision depends on the outcome of several meetings between the mining company (Sierra Rutile Limited) and the local community.

The other obvious area of reform is that of civil society organizations (CSOs). CSOs have an important role to play in mining sector governance as they can offer an independent voice on how the mining sector is managed by the government. Policies relating to strengthening the capacity of CSOs are outside the control of the government and here the development partners can provide considerable support without any pressure from the government. However, CSOs require strong support in capacity building, which is crucial in navigating a highly politicized environment.

The third area of capacity strengthening is with respect to government institutions. The patrimonial system of government introduced under President Stevens is still pervasive in government and impacts on government institutions. Reno (1995) and Snyder (2006) provide insights into how the Executive has dominated the formulation of policies relating to the mining sector. Since the 1970s and 1980s, the government's lack of commitment to strengthen capacity in the civil service has created shortcomings, both in terms of quality and quantity of human resources.

Currently, there are significant capacity issues in key government institutions that are involved in the formulation, regulation and monitoring of the mining sector. Technical capacity in institutions such as the Ministry of Mines, National Mineral Agency and the National Revenue Authority should be strengthened and working conditions improved. For example, periods of
exchange with other mining countries like Botswana and Chile, support to pursue additional educational qualification specific to the sector, and internships for smart young scientists from other countries. As one interviewee explained “the newly established National Mineral Agency (NMA) whose mandate is to supervise the mining companies lacks the scientific instruments to undertake quality assurance on the minerals exploited” (Government Official, Freetown, 02.08.2015). According to the interviewee, the NMA accepts the reports of the mining companies are they lack the capacity to verify its content. Currently, there is an over reliance on the International Monetary Fund and the World Bank to provide technical support to government on tax and non-tax policies relating to the mineral sector.

The government should also ensure that sector institutions are provided with an adequate budget to enable them to regulate and monitor the sector. Recent budgetary data shows that the Ministry of Mines and Mineral Resources and the National Mineral Agency received less that 50 percent of their budgeted allocations between 2012 and 2014 (Budget Bureau, 2015). Development partners can also leverage budget support to the government on the basis of undertaking certain reforms in key sector institutions. For example, rewarding the government when timely action is taken to process legislation, implement recommendations or improve efficacy within the government.

All Sierra Leoneans are concerned about the generation of more revenue from the mining sector and this is a topic frequently raised around dinner tables, in letters to the newspapers, amongst university students, and on the streets of Freetown. However, the responsibility of making this happen rests with politicians, who are either kept in a vulnerable and insecure position or who put their personal interests before those of the country.
Weak governance, politics and the pursuit of power, has led to high-level corruption and has undermined revenue from the mining sector. One of the extraordinary things about Sierra Leone is how the political strategy of patrimonialism is still pervasive in government. Ultimately, the hope of generating more revenue from the mining sector depends on governance reform and the political will to implement these reforms.

5.4 Limitations and area of future research

The fieldwork was undertaken over a period of two months, which is a short time to get the views and perceptions of all stakeholders. The research was also undertaken at a time of heightened uncertainty in the country, caused by the outbreak of the Ebola Viral Disease and the fall in commodity prices. Both had an adverse effect on mining operations.

While significant effort was made to interview as many stakeholders as possible, it was impossible to meet all the relevant individuals. Furthermore, the perspectives of the foreign owners of the mining companies, especially on the mining agreements and their immediate plans were not captured in the research. I was also limited in terms of physical movement, given the Ebola outbreak, and could not travel to local mining communities to get their views. These findings are thus not exhaustive and do not preclude other factors that may have contributed to low mining revenue.

There are many other stories to be explored and told about why mining sector's revenue remains low in Sierra Leone. Yet, what this study has done, is demonstrate the profound significance of politics, political power and poor governance in the mining sector and in the accrual of its revenue. This research has focused on the impact of politics on the mining sector and has shown how crucial governance and political economy issues are to mining revenue. Further
comparative analysis of Sierra Leone and other post-conflict environments in Africa, such as Liberia, that also operate on patronage politics would offer further insight into the significance of governance issues in relation to state control of mineral revenue. Another area requiring further research concerns the contribution of indigenous artisanal/small scale mining sector to economic growth and development, such as tracing revenue flow, governance, employment and poverty alleviation – to gain greater insights into the role of mining at this level level and to begin to make comparisons between artisanal/small-scale mining and large scale mining.
Appendix I

List of key interviews

Government Officials

Edmund Koroma, Financial Secretary, MoFED
Victor Strasser-King, Director, Strategy and Policy, Office of the President
Mohamed A. Salisu, Senior Economist, MoFED
Peter Bangura, Deputy Director of Mines, National Mineral Agency
Tom Scurfield, Tax Analyst, MoFED
Abu Bakarr Jalloh, Director of Mines, National Mineral Agency
Alimamy Bangura, Director, Economic Policy and Research Unit, MoFED
Sillah Massaquoi, Senior Assistant Secretary, Ministry of Mineral Resources
Bunting Caulker, Deputy Director of Geological Survey, NMA
Sillah Bangura, Principal Economist, National Revenue Authority
Sahr Wondah, Director General, National Mineral Agency
Fatmata Mustapha, Permanent Secretary, Ministry of Mineral Resources
Abdul Rahman Conteh, Budget Analyst, MoFED
Idrissa Kanu, Director, Revenue and Tax Policy Division, MoFED
Abu Bakarr Conteh, Economist, Revenue and Tax Policy Division, MoFED
Herbert Mcleod, Member, Presidential Task Force on mining
Mohamed Alpha, Principal Economist, NRA
Malon Bockarie, Policy Analyst, Strategy and Policy Unit
Sidratu Koroma, Director, Public Sector Reform Unit
Morie Momoh, Deputy Development Secretary, MoFED
Philip Kargbo, Director of Research, National Revenue Authority
Horace Nina, Head, Extractive Industries Transparency Initiative Secretariat
Samuel Momoh, Senior Assistant Secretary, MoFED
Ibrahim Sorie Kamara, Commissioner, Domestic Tax Department, NRA
Moseray Fofana, Policy Analyst, EITI Secretariat
Alfred Akibo-Betts, Deputy Commissioner, Domestic Tax Department, NRA
Donald Nggeba, Deputy Development Secretary, MoFED
Abu Timbo, Mines Officer, National Revenue Authority
Mohamed Bah, Mines Officer, National Mineral Agency
Karim Turay, Assistant Secretary, Ministry of Mineral Resources
Sheikh Karbgo, Policy Analyst, SPU
Ibrahim Kamara, Head, Extractive Industry Unit, NRA
Morlai Bangura, Deputy Director, Research Department, Bank of Sierra Leone
Abu Bakarr Turay, Director, Economic Statistics Department, Statistics Sierra Leone

Private Consultancy Firms
Andrew Keili, Executive Director, CEMMATS Group
Sullay Kamara, Director, Business, Engineering, Science and Technology

Former Politician and Civil Servants
Ibrahim Bundu, former Permanent Secretary, Ministry of Mines
SAT Koroma, former Secretary to the President
Konah Koroma, former Development Secretary
Ali Kongoba, former Deputy Minister of Mines
Jim Roberts, former Deputy Director of Geological Survey
Sorie Bailley, former Commissioner, Customs and Excise Department, NRA
Osman Boie, former Director of Mines
Amara Sahr, for Member of Parliament for Kono District
Joseph Kargbo, former Deputy Director of Mines
Prince Harding, former Minister of Mines
Civil Society Organizations

Valnora Edwin  Campaign for Good Governance
Charles Mambu  Network Movement for Justice and Development
Tommy Ibrahim  Centre for Accountability and Rule of Law
Fatoma Joseph  Budget Advocacy Network
Bailley Mohamed  Society for Democratic Initiatives

Local staff of mining companies

Musa Konneh  London Mining Company/Engineer
Alimamy Mansaray  Sierra Rutile Limited/Engineer
Komba Gborie  Octéa/Site Supervisor
Abu Ansumana  African Minerals Limited/Tax Advisor
Sorie Fofana  Sierra Minerals Holding-1 Limited/Engineer

Donors

Yusuf Bob Foday, Country Economist, World Bank
Sheikh Sesay, Governance Adviser, World Bank
Matthew Sandy, Economist, International Monetary Fund
Ansu Bangura, Senior Economist, African Development Bank
References


CAMPBELL, BONNIE (2013). Modes of governance and revenue flows of African mining. International political economy series (Palgrave Macmillan (Firm)).


FITTHEN, C. 1999. 'Diamonds and War in Sierra Leone: Cultural strategies for commercial adaption to endemic low-intensity conflict'. PhD, University College London.


NATIONAL ADVOCACY COALITION ON EXTRACTIVES 2009. Sierra Leone at a crossroads: Seizing the chance to benefit from mining. Freetown: National Advocacy Coalition on Extractives.


