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Linking the Resource Curse Theory with Development: Lessons for Resource-Based Economies

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Abstract:

The article notes that the resource curse has widespread effects, even though there is no consensus of the theories. It reveals that the consumption linkages do lead to high demand for foreign goods which in turn leads to a reduction in the demand for local goods and discourages investments. The production linkages are unlikely to be fully developed by the mineral extractive industries due to lack of investments in the sector and that fiscal linkages (where extraction of oil and mineral resources enable the local economy to benefit through mineral rents), are not embodied in the governance system. The mining sector in general has an effect on national economies through employment creation and raw material inputs. The article contends that when mineral rent is put in non-productive and public ventures, this does not bring immediate benefits to society. The article also notes that there is a strong correlation between resource abundance and economic prosperity. This however needs investments in projects that have both strong forward and backward linkages.

It concludes that governments' poor economic policies, the inability to diversify the economy and the inability to select viable and productive investment ventures due to bureaucratic tendencies are some of the reasons for slow growth in resource abundant economies. The paper concludes by acknowledging the link between the existence of resource abundance and conflicts, thus emphasizing the effects of the resource curse.

Keywords: Resource curse, mining, and development

1. Introduction

The World Investment report defines extractive industries as primary activities involved in the extraction of non-renewable resources (World Investment Report 2007: 84). The report also makes a distinction between energy minerals, metallic minerals and nonmetallic minerals. Those that are marketed for productive purposes are referred to as economic minerals. Within this classification, globally traded minerals are those that are traded on the global market and have a high value per unit weight. The less globally traded minerals, for instance coal, limestone and steel, have a relatively high value per unit of weight and are traded regionally. The locally traded minerals like sand, gravel and stones have a very low value per unit of weight. The traded minerals are classified as follows:

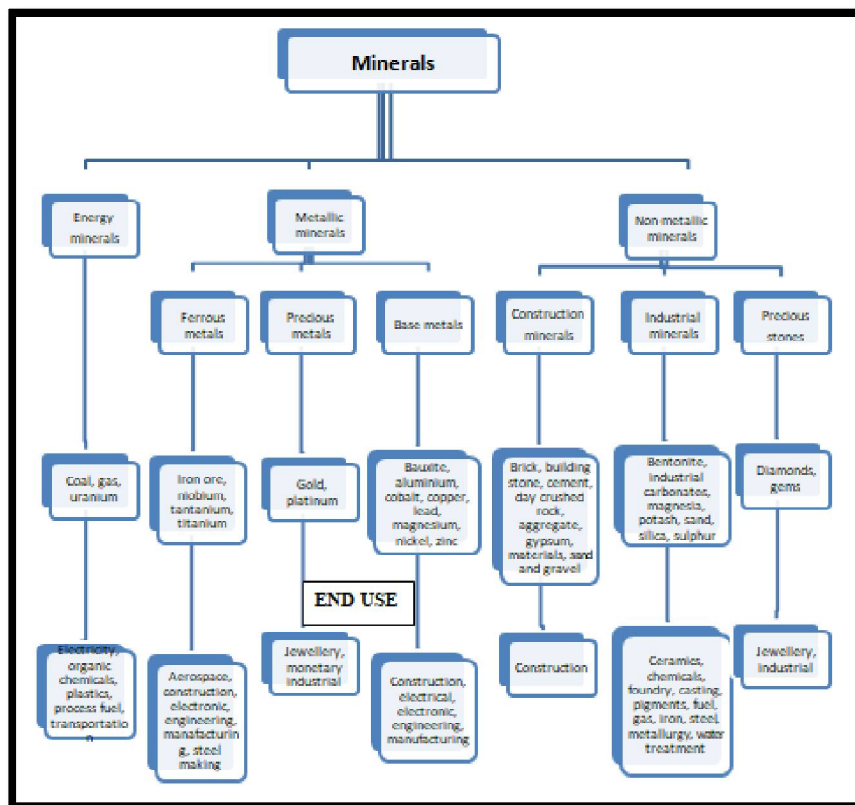


Figure 1: Minerals and Their Uses

Source: World Investment Report, 2007: 113

In the last two decades, extractive industries, especially mining, did not attract attention from policy makers worldwide. They were viewed more like a wasting asset with a limited life span. This was because prices of most minerals were on the decline. With the recent revival of the commodity prices, there has been renewed interest in the exploitation of the natural resources (WIR, 2007). The price surge is being driven by the rising demand for mineral resources from fast-growing markets in Asia. With these mineral resource inflows, analysts are still not sure whether or not the developing rich-resource economies did learn from the experiences of the 1960s-1980s, the period when the 'resource curse' terminology was developed.

Mining is the world's second oldest and most important industry after agriculture and is currently the fifth largest industry in the world (Yakovleva, 2007). *It has an effect on national economies through employment generation and raw material inputs.* This is an important link as it ties up with the linkage effect of the mining sector. Exploitation leads to a general development and has economic impact on regional and national economies. Accordingly, it has been documented that the revenue from mining has contributed to business development, technological development and export earnings. (Dorian and Humphreys, 1994; Miller, 1999).

Zambia for instance, produces both metallic metals (copper, lead, zinc) and non-metallic metals (precious stones). The value of these metals is significantly high and can contribute to job creation and increased incomes and hence sustainable development (World Bank, 2009; Teka, 2011; UN, 2012;).

2. The Resource Curse Theory

The resource curse theory is based on the notion that countries endowed with rich natural resources grow slower than those without resources. In particular, this theory is true for countries at the beginning of their development. More and more literature however seems to suggest that low and medium level countries with abundant natural resources don't benefit as much from their resources as those with high income levels (Mehlum et al. 2006; Kronberg, 2004; Auty, 2007). In fact Collier (2007) argues that the low incomes, dependency on primary commodity exports and slow economic growth makes a country prone to civil war. Empirical evidence over the years has shown that there is a negative correlation between mineral extraction and economic growth. It has however not been conclusively agreed that mining contributes to economic development, but more and more evidence seems to show that while mineral deposits provide an opportunity for developing countries, the windfalls from the mining sector has quite often not been used for development. Zambia is endowed with enormous mineral resources but has been a mono-economy, dependent on mineral production (Chanda, 2000; Coakley, 2002). It is evident that Government has not only lost benefits from minerals but has also performed worse than those without the resources. The statistics in the latter part of this study confirms this. Part of the resource curse theory tries to explain the decline in growth in many rich-resource countries by the commodity price shocks which occurred between 1974 -1985 (Auty, 2007). The resource curse phenomenon is also supported by Sali-i-Martin (1997) and Doppelhofer et al. (2000).

According to Auty (1993) the mineral resource economies are those developing countries which generate at least 8% of their GDP and earn over 40% of their export earnings from mineral resources. This is a very important definition as it classifies all the developing countries in this category. It also enables the identification of countries with high mineral resource dependency.

Van Mil et al (2007) contend that the economic, social, political and institutional forces exist that lead the mineral rich developing countries away from development progress and poverty reduction. The constraints prevent or inhibit the mineral revenues being put in areas that promote sustainable growth. Instead, mineral rent is put in non-productive and often public ventures that do not bring immediate benefits. Countries are unable to develop and thus help reduce poverty despite the enormous mineral resource. Zambia for instance, has a very high mineral dependent index and existing literature has shown that the mining sector contributes significantly to the GDP. Poor economic policies contributed to the country not being able to benefit fully from the rich mineral resources. While economic policies pursued by the Government did not permit the full exploitation of the available resources, the poor governance and unstable political situation did not work in the country's favor (Central Statistical Office, 2014).

James and Aadland (2010) in their study of Maine and Wyoming in the United States, found a strong correlation between resource abundance and economic prosperity. Wyoming's decision to specialize in natural resources extraction and production for instance, limited its potential to attain reasonable economic growth. The study showed that the resource curse is present at even disaggregated counties like Maine and Wyoming. Their study opened up new areas of research into a more disaggregated relationship between resource and growth.

Mineral based development seemed to make countries even worse in terms of income distribution, the economy more depended on the natural resources, the exports more concentrated on primary products and the growth rate on non-mineral sectors of the economy. Zambia in particular relies heavily on the export of mineral products. The non-mineral sector has largely been neglected, thus leading to high poverty levels within the country. The country's bread winner has always been the mining sector which generates the bulk of the Government revenue. Literature suggests that these could be effects of the resource curse. This assertion is supported by various authors. Studies by Sali-i-Martin (1997) and Doppelhofer et al. (2000) indicate that one of the most important variables in economic growth is natural resources. With the resources, a country is able to meet the needs of its people and thus grow. The ability of the country to use its natural resources however, depends on a number of factors, some of which are discussed in this article.

3. The Linkage Theory

Part of the focus for this article is the linkage theory which forms part of the resource curse. The theory states that growth within an economy is determined endogenously, that is, it is dependent on the type and composition of the investments made (Van Mil, 2006). *The linkages are those that affect the input suppliers, the producing companies and the buyers of the outputs. In economic terms, these are generally referred to as 'the backward and forward linkages'.* The theory states that development can only be through investments in projects that have linkages (both direct and indirect). This development will inevitably lead to improved standards of living and a reduction in poverty levels of the people. These are the same linkages that can *promote domestic enterprise upgrading, production efficiency, technological and managerial capabilities and market diversification* (Van Mil, 2006). Various economists argue that there are limited forward and backward linkages from the extraction industries. Linkages can generate economic activities between the leading industry and other sectors, giving rise to *production linkages, consumption linkages and fiscal linkages*. In the Zambian case, literature has it that the mining sector is more developed than the other sectors of the economy. However, the economic linkages created by the mining sector only benefit a small section of the economy, the mining suppliers. There are more backward than forward linkages because of the nature and type of technology used. The supply to the mining companies is limited to small items like chemicals, few spare parts, food and social services. The bulk of the suppliers like mining equipment are imported. This research has to some extent, established these linkages in the mining sector and assessed the extent to which they have been able to tackle the issue of poverty. The mining linkages are just one of the many ways to stimulating an economy so that the benefits from the sector can be used to uplift the standards of living of the people.

4. Production Linkages

According to Downing et al (2002), mining companies and their investors and supporters are very clear and specific on that which they want from their activities. The indigenous people also seek other non-mining related outcomes that influence their actions. Mining industries therefore that have both strong backward and forward linkages are preferred. The production linkages refer to the input-output relationship that exists between the different industries. It is a process where an industry will procure inputs from industries and produce outputs that will later be sold to other industries as inputs. The backward linkages are thus those that happen upstream whereas the forward linkages are those that are downstream. In the mining sector, there has been a tendency for companies to buy inputs from sources that are seen to be stable. Most local suppliers however are unable to compete on the basis of quality and price with foreign suppliers (Mine-watch Zambia report, 2006). With increased uncertainty, companies find it easier to get into contractual relationships that guarantee the continuous and uninterrupted flow of inputs from the suppliers. *But by buying from local industries, part of the mineral revenues is passed over to the local entrepreneurs.* This type of linkage ensures that not only do the mining companies but society in general benefit from the extractive industries.

The other benefits that seem to stem from the interaction between the local suppliers and the mining companies are the increase in jobs created and increase in local incomes. Zambia for instance, has a large pool of labour force from which it can choose from. Out of the total population, 75.9 percent were the total working age population in 2012 (CSO,

2012). In most cases, the people employed were either semi-skilled or manual workers with basic mining skills. Evidence has shown that foreign mining has a tendency to employ semi and skilled labor for production processes. This means that only those locals with the skills need in the production process are employed by the mining sector. Wages paid to these workers also reflect their importance to the mining operation as those with rare and vital skills are paid relatively higher than the others.

There are benefits to be derived from forward linkages. Goods from the mining industry can be used to stimulate other industries within the vicinity. The mining goods and services produced can be used for the establishment of other industries like manufacturing and processing plants. Zambia has a comparative advantage over other countries for copper-based processing industries due to the presence of mines (Mine-watch Zambia report, 2006). *Local industries can make use of both mineral products and the by-products to establish other processing industries and thus create jobs and increase incomes.* However, due to high transport costs and the lack of investments in mining industries for processing the products, literature has it that mineral extractive industries are unlikely to establish the necessary linkages. This inevitably leads to the *transfer of value added* from the local economy to foreign economies where the products are further processed. The tariff and non-tariff barriers imposed by OECD countries on processed goods have also hindered exports from the mineral-rich developing countries to the developed countries. Unprocessed extractive products are tariff free and thus are an attraction to developing countries. The issue of most value added being generated outside the mining country needs to be addressed in tackling poverty reduction. *The question that needs to be addressed in the linkage theory is: how can the mining companies together with their counterparts upgrade the production systems and improve their governance structures so as to increase the value generated from locals for poverty reduction?*

5. Consumption Linkages

The resource curse theory notes that quite often, earnings from mineral resources tend to promote the consumption of foreign goods. But when the demand for imports has developed to a large extent, it tends to push for the establishment of import-substitution industries, a phenomenon which ideally is seen as a positive step in the efforts to *create employment, raise incomes and develops entrepreneurial skills for the local.* Unfortunately when the propensity to import is too high, this state of affairs can be harmful to the local economy. It reduces the demand for the local products and discourages investments and the development of other sectors, other than the mineral-rich sector. The local industries become marginalized as demand turns to foreign goods. The so-called '*infant industries*' are the most likely to suffer for being uncompetitive, especially when there is an emergence of large foreign companies that might place a claim on skilled and experienced labour. With time, the local economy is deprived of the opportunity to diversify to non-mineral sectors. Zambia has a history of trying to promote import substitution industries. An attempt was made to replace foreign goods with locally produced goods so as to generate employment and increase incomes. Incentives were given to the local and foreign entrepreneurs to invest in the local substitution industries but the attractiveness of the mining industry did little to divert this needed thrust. Hence the non-mining sectors like agriculture in Zambia lagged behind in terms of attracting the required resources to divert the economy from being mineral dependent. These policies did not generate the required results and became spectacular failures (Mine watch Zambia Report, 2006).

6. Fiscal Linkages

The extraction of oil and minerals resources enables the local economy to benefit from the revenue accruing thereof. These minerals rents in the form of royalties, taxes, levied on the activities of the mineral operations, are then placed at the disposal of the local economy to spend.

One of the criticisms of the linkage theory is its inability to analyze political issues. Whereas the linkage theory examines the willingness and ability of the national governments to tax and participate in the extraction of the minerals, it does not deal sufficiently with the issues of (1) rent sharing with the foreign companies, (2) issue of ownership, (3) levels of production and export price setting and most importantly (4) the legal control over the extraction of the minerals. These issues are tackled during the concession agreements and are heavily influenced by the bargaining powers of the negotiating parties (Van Tulder, 2007). Zimbabwe is one country that suffered from the political crisis but may not be fully explained by the linkage theory. The country's political system influenced the resource rent sharing and spending and altered the ownership structure of the mineral companies. In his address to the nation, the President of Zimbabwe announced the taking over of 51% of all the shares in foreign owned mining companies. This led to a massive exodus of foreign investors from the country and plugged the whole economy in a pit of uncertainty. The World Investment Report (2007) does acknowledge that governments are often in a dilemma. The report points out that as government revenue is among the most important benefits from mineral extraction, it is therefore normal that policy makers devote much attention to finding a mechanism that assures the government an appropriate share in the profits from mineral extraction. This in a way forces the governments to find an appropriate balance between the right and obligations of the state and firms. However, this state of affairs may not be beneficial to the economy as those in power may abuse their authority, leading to the majority of the population being excluded from the national cake.

7. Government's Inability to Diversify the Economies

The mineral wealth accruing to the developing countries induced a false sense of security and over confidence and leads to planning inertia among policy makers. The 'get rich quick attitude' and the excessive spending habits by mineral-rich economies, low taxes, prestigious infrastructural projects and subsidies may all have contributed and blind the efforts to diversify the economy from being mineral dependent (Robinson et al. 2006; and Atkinson and Hamilton, 2003). Spending patterns and distribution of mineral revenue was seen as the primary aim of the government. Spending money

on state security to keep leaders in power while mineral revenue was substituted for authority became the order of the day (Ross, 2001). The distribution of income in this state of affairs was unequal and *reflected poverty differentials between the 'haves and the have not'*. One of the biggest challenges that Governments face is to divert the rents from the mineral rich mining sector to other sectors of the economy in order to spread the wealth. Collier (2007) recognizes the inability of resource-rich countries to diversify into manufacturing and service sectors. Collier calls this the *resource trap* where countries just close-off the opportunity to develop other sectors of the economy because of the mineral rents. The government leaders are in the short-run, blinded by the huge rents from the mining sector that they do not see the need to diversify their economies. Instead, the tendency is to invest in a few prestigious projects meant to impress foreign investors about their ability to choose viable and capital intensive projects.

According to Hirschman (1977:76) the disproportion between the accruing revenue and the inability to select viable and productive investment ventures by the government breeds enlarged bureaucracy, an increase in imports of consumer goods and a collapse of the social delivery system. Hirschman cautions that this anomaly is usually not self-correcting and may over time perpetuate unproductive public spending, disregarding the importance of stimulating entrepreneurial capabilities

Countries that have been faced in this situation have developed an appetite for the consumption of foreign goods. The Netherlands found themselves in this situation in the 1960s after the discovery of natural gas and the eventual collapse of the manufacturing sector, hence the name –'Dutch Disease' (Coined by the *Economist Journal*, in 1977). If there is an appetite for foreign goods, the local economy will suffer through lack of demand and induced investments. Zambia exhibited this high demand for foreign goods and an appreciation of the local currency in the late 60s and early 70s. The consumption patterns that were acquired during the mineral boom of the 1960 and early 1970s were difficult to control. Government consumption in GDP remained high at 25 per cent and the growth in state spending drained public funds (Auty, 1993). Sach and Warner (2001) seem to support the 'Dutch disease concept. They argue that the natural resource curse tends to 'crowd-out some activities which may be important for economic growth. The dominant natural resources sector can depress economic growth in other sectors by diverting investments mostly to the consumption sector. Instead of investing into the productive sectors, the revenue is spent to raise demand for non-tradable goods and services. *This does not contribute to the social welfare of the people.* The crowding out effect can also make countries neglect investment in *the education sector*. Since the benefits in the education sector are not too visible, governments may instead subsidize the highly capital-intensive extractive industries to realize more profits (Kronenberg, 2004). *There has been a link between the level of education, employment levels and consequently poverty.* If governments do not invest in the educational sector, the likely consequence is increased and perpetuated poverty levels due to lack of skilled manpower and technical ability.

The Dutch Disease is likely to perpetuate the mineral dependency of the country. As manufacturing and the service sector are *deprived of the investments required* making them competitive on the international market, this will reinforce the notion that the economy cannot survive without the mineral sector. Auty (1993) also acknowledges the effects of a rapidly declining agricultural sector. Auty notes that a large agricultural sector facilitates adjustments to mineral price downswings. In the event that there is a rapid collapse in the agricultural sector, mineral-rich countries will be susceptible to negative effects of export instability. This may affect income levels and lead to poverty. Even though there may be a perfect mobility of labour between the sectors, skills differences between the sectors may make it difficult to replace certain types of labour. Hence, there is likely to be unemployment in the economy, at least in the short-run.

8. Other Views on the Resource Curse

There are writers who do not believe in the resource curse theory. Wright and Czelusta (2004) believe that non-renewable resources have been extended through exploitation, technological progress and advances in appropriate technology. They argue that the resource curse pays little attention to the economic character of mineral resources. The United States was the leading world's mineral economy (between 1890 and 1910) in the period that it also became the world leader in manufacturing industry. Even though the mineral endowment was not good, the United States developed its mineral potential on the basis of large-scale investments in exploration, transportation, geological knowledge and improved the technologies of extractive industries. The resource factor therefore became an influential factor in shaping the massive economic development of the country.

9. Quality of Institutions and the Resource Curse

Mehlum et al. (2006) contends that the resource curse where countries with rich natural resources become losers is due to differences in the quality of institutions. Those economies with abundant natural resources grow slower than economies without substantial resources. Mehlum et al (2006) and Boschini, et al (2007) argue that the impact of natural resources on economic growth depends on the quality of the institutions. They contend that countries rich in minerals are only cursed if they have low-quality institutions, while this is the reverse if the institutions are good (Cabrales and Hauk, 2010). Mehlum et al in particular, identifies countries that have ended up as losers to be Nigeria, Zambia, Sierra Leone, Angola, and Venezuela. The winners have included Botswana, Canada Australia and Norway. They conclude that the grabber friendly institutions and resource abundance leads to low growth. Mehlum et al (2006) argues that the theory breaks down as to whether natural resources is indeed a curse or not. Their study seems to show that countries with weak institutions, policy and governance failure and poor legal systems, suffer more from the curse. Producer friendly institutions assist take full advantage of the natural resources. This is the situation in Zimbabwe. It would be interesting to study the link between the quality of institutions and the resource curse, especially establishing the link with poverty. It has been noted that oil and mineral wealth causes some short-sightedness or 'myopia' among policy makers. Natural wealth may induce a false sense of security leading to overconfidence and failure to rectify bad policy decisions (Cf. World

Investment Report, 2007). The easy flow of rents from these resources leads to shoddy planning and inefficient spending driven by leaders who want to get rich quickly. The urge to make money quickly through the prosperous mineral sector leads to investments in the sector at the expense of the other sectors. By doing this, the non-mineral sectors, notably agriculture and manufacturing are ignored, thus leading to their contraction, stagnation and eventually 'death'.

There are views that argue that there is a relationship between liberalization and the impact on economic growth. Fidrmuc (2001) notes that there is a relationship between liberalization and the impact on economic growth. The report recognizes the fact that the people's support for liberalization partly depends on the economic performance of the country.

Some economists do recognize the fact that the people's support for liberalization partly depends on the economic performance of the country. Essential in state-centered approaches in resource curse is the contention that the revenue a country collects, how it collects, how it spends, all define the nature of the state and the capacity and quality of its institutions. High mineral revenue makes bad governance worse; it is associated with corrosive effects on a state's political and institutional arrangements (Fidrmuc, 2001).

Ulrich (2007) argues that the mineral rents will eventually lead governments into predatory habits and discourage institutional development and transparency. The beneficiaries of the mineral rents will be the elite and those close to the government machinery. In this scenario, rent will be transferred to the non-mineral sectors where the lack of competitiveness will lead to gross inefficiencies in the usage of the resources. The Dutch disease often goes hand in hand with authoritarian tendencies (Ulrich 2007). Olson (1971) argues that in a heterogeneous society, 'privileged' individuals may be willing to bear costs of providing a collective good in return for a greater share of the returns.

10. Poor Macroeconomic Policies

Zambia is an excellent candidate for poor macroeconomic policies instituted over the years. Some scholars have shown through empirical evidence that governments in mining economies have problems in managing price changes of commodities than those from non-mineral economies. Gelb (1988) identifies a number of problems associated with the management of minerals revenues. The examples cited are with reference to oil producing countries. Gelb notes that in times of mineral revenue boom, governments have problems with savings from the revenue, ignore the competitiveness of the lagging non-mining sectors, acquire unsuitable consumption habits and adjusting when the mineral boom finishes.

During the mineral boom, Zambia did not reinvest the revenue in other sectors. There was still a preference for mineral related industries for processing. Instead, the savings were meant to cushion or protect the economy in periods when the mineral prices were low. This came too late and too little as the lagging non-mining sector could not respond immediately to this challenge.

On the macroeconomic policies there are two schools of thought. The orthodox macroeconomic approach led by the World Bank advocates for the liberalization of the market forces. They see the governments' role as only that of correcting the market failures. The structuralist on the other hand want a more expanded role for the government. They argue that international trade encourages developing countries to concentrate on primary exports even when the terms of trade for primary exports are not as good as those for manufactured goods. This trend of encouraging the export of primary products by developing countries still exists, purely because of comparative advantage. Hence, the generation of value within the chain, which could have assisted with the reduction of poverty in the host country, continues to accrue outside the boundaries of the producer economies.

On macroeconomic policies, Auty (1993) proposes the establishment of a mineral stabilizing fund. This fund would separate the mineral revenue from other government taxes. Such reserves would be used to stimulate the economy during downswing periods in mining revenues. Botswana seems to be a good example of the establishment of such a fund. The writer however, does not state how such a fund should be managed. The crowding out effect can also make countries neglect investment in the education sector. Since the benefits in the education sector are not too visible, governments may instead subsidize the highly capital-intensive extractive industries to realize more profits (Kronenberg, 2004).

Ross (2002) went further to illustrate how the resource curse has led to various civil wars all over the world. A number of the wars are being wedged where the country has enormous reserves of the natural resources in question. Some countries have fought protracted wars over the resources. The table below shows some of the areas and the resources involved. During the boom period, Auty argues that the political economy plays a part in the conflicts. A weak regime is short lived and its concerns will be dominated by political groups essential for its survival. Strong regimes are less concerned with survival, but may reward those closest to the system. Auty identifies several indicators for economic strength. One relates to the structure of the economy and includes the mineral dependence index and the Dutch disease index. Mineral dependence is measured in terms of the fraction of GDP, exports and tax revenues which each country draws from its mining sector. The mean percentage of these three criteria provides a single index of mineral dependence. This index is complemented by the Dutch disease index which compares each economy's production structure with a reference group norm. The Dutch index is therefore calculated by measuring the degree to which an actual country departs from the norm for a country of its size and level of development. A negative index indicates under development of the non mining tradable sector and as such reflects Dutch disease effects. The second set of indicators relate to macroeconomic performance like GDP growth rates and trends in both fiscal and current account gaps (Auty, 2003). A mineral index of the mining sector dependence is calculated from the mean contribution of minerals to GDP, exports and revenue.

	Bolivia	Chile	Jamaica	Peru
Mineral share of				
GDP	20.0	7.4	10.8	10.1
Exports	77.0	85.7	63.5	47.6
Revenue	44.0	6.7	10.0	6.7
Index	47.0	33.3	28.1	21.5

Table 1: Mineral Dependence Index (%)

Source: Auty (1993), page38

The Dutch disease Index uses the Syrquin and Chenery model which uses norms as the comparator group. The norms are based on the developmental experience of more than a hundred countries analysed over the period 1950 - 1983. It focuses on the relationship between per capita income and the changing structure of production and also the composition of absorption (i.e. the breakdown of GDP between consumption and investment)

11. The Resource Industries' Working Class: A Labour 'Aristocracy'

Oil and mineral mining requires a technically skilled and well managed workforce (Frynas, 2005). In most developing countries however, there are still challenges with regard to school enrolments and training. With pressure from local governments to employ the locals, the oil and mineral companies tend to get involved in both. They often employ a highly skilled expatriates and a small number of local to maintain their operations. They also spend a considerable amount on training the local work force to bring it to the required standards. Ironically however, higher technical and managerial posts tend to be reserved for the 'foreign experts'. The local workers who acquire specialized skills necessary for the oil and mining operations, get special favors through wages which are slightly above the 'normal' wage rate (Cf. Van Mil, 2006:82). Eventually, this local group constitutes an 'elite' group that will defend their privileges and 'high paying jobs'.

Workers in dominant extractive industries tend to have stronger labour unions than those in other industries. This is normally the case when the extractive industry is the main backbone of the economy. They however lack the financial and economic power to bargain with the foreign mining companies. This is partially due to the existence of large pools of labour, willing to take up the jobs and also the relatively 'higher' wages earned. According to ILO, most governments are even reluctant to ratify the core labour standards requested by the international body (ILO, 2007). The enforcement of the labour legislations in most developing countries has proved to be difficult (Cf. Van Mil, 2006).

12. Conflicts

Bannon and Collier (2002) link the existence of abundant resources to conflicts. Even though this was spread throughout the world, their study shows that most of the conflicts were in the developing countries of Africa. With resource rent, people are able to buy security from the privileged few, thus creating a recipe for conflict with those who might be left out of the equation. This is a direct consequence of the resource curse.

Country	Duration	Resource
Afghanistan	1975 - 2001	Gems, opium
Angola	1975 - 2002	Oil, diamonds
Congo Republic	1997 -	Oil
Congo Democratic Rep	1996 - 1998	Copper, diamonds, gold, colbalt
Liberia	1989 - 1996	Diamonds, oil, timber
Morocco	1975	Oil, phosphates
Sierra Leone	1991 - 2000	Diamonds
Sudan	1983 -	Oil

Table 2: Civil Wars linked to Resource Wealth: - 1990 - 2002

Source: Adapted from Bannon and Collier Ed (2002)

The theory breaks down as to whether natural resources is indeed a curse or not.

Studies by Sali-i-Martin (1997) and Doppelhofer et al (2000) show that one of the most important variables in economic growth is natural resources. For a country to develop, contemporary economic theories state that a country needs natural resources and factors of production like capital and labor. This argument of placing economic growth on the existence or non-existence of natural resources is not balanced.

Kronenberg (2004) found a negative relationship between natural resources and economic growth. In fact the early economists like Thomas Malthus and Adam Smith argued that the more resources a country had, the better its chances of development. The focus is that for a country to develop, it should reduce the role of the state and set up a private economy. This view is supported by Kronenberg. It is only when the role of the state is reduced that the curse will turn into an opportunity. Botswana and Chile have not fallen in the resource curse. In the case of Botswana, literature has acknowledged that it is one of the fastest growing economies in the world. At independence in 1966, mining was almost non-existent while agriculture accounted for almost forty percent of the GDP. By 2006, agriculture accounted for about 2% of the GDP while the contribution of mining increased to a staggering forty percent. (WIR, 2007). The mineral-led

economic growth transformed one of the world's poorest countries into an upper income developing country. The curse worked through people, incentives and institutions.

Brunnschweiler and Bulte (2008) argue that resource scarcity is more of a causer of conflicts through two mechanisms. It triggers the marginalization of the powerless group and also has a debilitating effect on the process of social and economic innovation. According to Brunnschweiler and Bulte, the resource rich economies have a higher chance of suffering from weak and unaccountable leadership due to their inability to diversify the economy and deliver demand driven public goods so as to attain peace. They argue that the economies may be affected by insufficiently compensated expropriated land, environmental degradation and inadequate job opportunities.

Their conclusion is therefore the reverse on the typical findings linking the resource abundance with low economic growth. They maintain that resource abundance minimizes the chances of conflicts.

13. Conclusion

In conclusion, this article notes that the resource curse has widespread effects, even though here is no consensus of the theory. It has reveals that the consumption linkages do lead to high demand for foreign goods, lead to a reduction in demand for local goods and discourages investments, the production linkages are unlikely to be fully developed by the mineral extractive industries due to lack of investments in the sector and that fiscal linkages (where extraction of oil and mineral resources enable the local economy to benefit through mineral rents), are not embodied in the governance system. The mining sector in general has an effect on national economies through employment creation and raw material inputs. When mineral rent is put in non-productive and public ventures, this does not bring immediate benefits to society. The paper also notes that there is a strong correlation between resource abundance and economic prosperity. This however requires investments in projects that have strong both forward and backward linkages.

The paper has also reveals that governments' poor economic policies, the inability to diversify the economy and the inability to select viable and productive investment ventures due to bureaucratic tendencies are some of the reasons for slow growth in resource abundant economies. The paper concludes by acknowledging the link between the existence of resource abundancy and conflicts.

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