Competence Center money trade finance and development

Berlin Working Papers on Money, Finance, Trade and Development

Working Paper No. 04/2011

Tanzania's Mining Sector and Its Implications for the Country's Development

Petro S Magai and Alejandro Márquez-Velázquez

August 2011

In cooperation with

DAAD partnership on economic development studies

htw Hochschule für Technik und Wirtschaft Berlin
University of Applied Sciences

Tanzania's Mining Sector and Its Implications for the Country's Development

Petro S Magai, Alejandro Márquez-Velázquez

*This paper analyses the factors that reduce the mineral sector's contribution to the Tanzanian government's revenue***.** *This sector accounts for nearly half of the country's exports and places it among Africa's largest exporters. Yet, ordinary Tanzanians have seen little benefit from their country's exports boom. This is partly because the government has enacted tax laws that are, as we shall see, overly favorable to multinational mining companies, and partially due to the business practices of the companies themselves. The situation is further exacerbated by these companies avoiding taxes altogether by claiming losses. Nonetheless, they continue to invest in operations. Critics argue that the government fails to capture a substantial amount of state revenue as a result of low royalty rates, unpaid corporate taxes and tax evasion major gold mine operators. This paper argues that the Tanzanian government should increase its involvement in the mining industry by entering into joint ventures with mining companies, or by increasing its shares in them. Its involvement will result in an increase in tax and royalties collection.*

1. INTRODUCTION

The first organized prospecting and mining in Tanzania took place during the German colonial period, beginning with gold discoveries in the Lake Victoria region in 1894. The first mining operation began at the Sekenke Mine, which opened in 1909. By 1930, gold production was substantial and continued to increase steadily until World War II. After the war, Tanzania's gold industry declined dramatically; it reached a point of near insignificance by 1967. It was not until 1974-75 that this began to reverse, which came as the result of a sudden increase in the world gold price. Despite this revival, however, the mining sector still failed to attract the kind of large and modern investment seen in other sectors of the Tanzanian economy throughout the late 1970s and the 1980s[1]. Consequently, the mines in operation during this time period were those established by colonists and run by the government after independence.

[1] Indeed, this was true from 1961 until the beginning of the 1990s.

Over the course of the 1980s and 1990s, the Tanzanian government undertook significant economic policy reforms, which included the National Economic Survival Program in 1981, the Structural Adjustment Program in 1983, and a donor-sponsored Economic Recovery Program (ERP) in 1986. In 1989, the ERP Program was modified to create the Economic and Social Action Program. The overall objective of these reforms was to increase the role of the private sector in the economic and social development of the country. Hence, many existing policies were reviewed so as to provide room for the private sector to make a contribution, especially through investments in production activities. This pro-business policy orientation also focused on installing modern management systems, thereby attracting investment that would bring technology transfer and needed investment to various economic sectors, including the mineral sector. With respect to the mineral sector, the government began its attempts to capture revenues from it by licensing private companies to buy, cut and export gemstones being produced by small-scale miners. However, full recognition of the potential of the country's mineral sector would not come until the next decade.

The 1990s brought with it an increasing awareness of the economic potential of Tanzania's mining industry, and it was during this time that the country began liberalizing and privatizing its minerals sector. Indeed, policymakers were not mistaken. In the late-1990s, Tanzania experienced a mineral boom that is still occurring. According to Phillips et al. (2001, p.5), a key policy decision that set off the boom was the dismantlement of the state-owned mineral monopoly, STAMICO[2], which allowed any Tanzanian individual to register claims and sell minerals. Since the onset of the boom, Tanzania has risen to a position of importance in African mineral production. In 2007, it was the third largest gold exporter in sub-Saharan Africa, behind Ghana and Mali. It is also the 32nd largest diamond exporter in the world by volume, as evidenced below in Table 1. The foreign direct investment that the mineral sector has brought in has also been substantial, as it helped the country to become the second largest non-oil recipient of foreign direct investment in Africa in 2007, when it received US%$5.94 billion[3] (UNCTAD, 2008). In addition to gold and diamonds, colored gemstones are also mined extensively in the country (ABN Newswire, 2009). More recently, significant uranium deposits have also been discovered. While Tanzania

[2] Acronym for State Mining Company which is a public corporation formed in 1972 with the aim of conducting exploration, mining, production, processing, sorting, cutting, reserving, distribution and selling of minerals in the county, among others. For several years, STAMICO has been facing a lot of challenges in the implementation of its activities due to receiving a limited amount of funds from the government budget. Changes in economic policies like privatization led to STAMICO being added in a list of public corporations for privatization.

[3] Most of this FDI went to the mineral sector.

is not yet a global heavyweight in the mineral production, the sector is very important to the country's economy.

Table 1. Gold and diamond total exports and shares (selected countries, 2007)

Country (world rank)	Gold[a] exports in US$ millions	Share of world gold[a] exports (%)	Country (world rank)	Diamond[b] exports in US$ millions	Share of world diamond[b] exports (%)
United States (1)	13,404	20.09	**Israel (1)**	18,411	23.06
Australia (2)	9,402	14.09	**Belgium (2)**	18,273	22.89
Canada (3)	6,035	9.05	**India (3)**	13,363	16.74
Peru (4)	4,179	6.26	**United Kingdom (4)**	8,490	10.63
Ghana (12)	1,459	2.19	**Botswana (6)**	3,172	3.97
Mali (13)	1,082	1.62	**South Africa (7)**	2,488	3.12
Tanzania (24)	554	0.83	**Tanzania (32)**	17	0.02
World[c]	66,708	100	**World[d]**	79,834	100

[a] SITC revision 3, code 97
[b] SITC revision 3, code 6672
[c] Sample of 115 reporter countries
[d] Sample of 76 reporter countries
Source: prepared by authors using COMTRADE data.

As pointed out in Curtis & Lissu (2008, p.13), there are six major gold mines in Tanzania. The majority of these mines are operated by foreign companies like Barrick Gold Corporation from Canada, and AngloGold Ashanti (AGA) from South Africa. According to Curtis & Lissu (2008, p.8):

> "AGA has paid taxes and royalties totaling US$144m in 2000-07 and over the same period has sold around $1.55bn worth of gold, meaning that it has paid the equivalent of around 9 per cent of its exports in remittances to the government. Barrick, meanwhile, does not state on its website how much in taxes and royalties it pays to the Tanzanian government –our calculations show that it is paying a figure equivalent to around 13 per cent of its export sales in remittances to the government"

Taking all this into consideration, and based in data and legal framework analysis of the Tanzanian mineral sector, we will make the case for the need of reforms that will allow the government revenues to increase.

The remaining sections of this paper are organized as follows: Section 2 discusses the status of mineral industry in Tanzania. It provides an overview of the country's mining sector by outlining the ownership of minerals and mineral reserves. Section 3 outlines the macroeconomic impact of the minerals sector in Tanzania, and includes data on export performance and earnings, gross domestic product (GDP) growth, and foreign direct investment (FDI); the effects of mining on the real exchange rate (RER) are also considered. Section 4 examines government policy with respect to the mineral sector, providing an overview of its policies, regulations, and activities related to mining. Additionally, it examines the advisability of the government's current involvement in mining. Section 5 draws upon the points discussed in the earlier sections to offer critiques as to why mining has contributed less to the government of Tanzania's revenues than it might otherwise have. Section 6 concludes this research with a number of policy recommendations, which are intended for use by the Tanzanian government.

2. STATUS OF MINES IN TANZANIA

Since 2000, Tanzania's mining industry has experienced a boom in mineral exploration and mining activities. Six large gold mines are responsible for much of the country's production[4].. Largely because of these six firms, Tanzanian gold production has increased dramatically in recent years. From 1998 to 2005, gold production increased from 2 tons to 50 per year (Curtis & Lissu, 2008, p. 13), making Tanzania one of the largest gold producers in Africa. Table 2 provides a summary of the mines present in Tanzania, pointing out the location, type of mineral produced, ownership type, and ownership share.

[4] Barrick Gold Mine, the world's largest gold miner (Curtis & Lissu, 2008, p. 12), runs Tanzania's Bulyanhulu mine which has an estimated 13.2 million ounces in gold reserves. Barrick also owns Buzwagi (2.6 million ounces) and North Mara (3.3 million ounces) and maintains a 70% stake in Tulawaka (0.33 million ounces). Anglo Gold Ashanti (AGA) operates in Geita (14.7 million ounces) and Resolute Mining Ltd. owns Golden Pride (2.5 million ounces) (The United Republic of Tanzania, 2008, pp. 16 ff. and Roe & Essex, 2009, p. 12).

Table 2. Ownership of mines in Tanzania

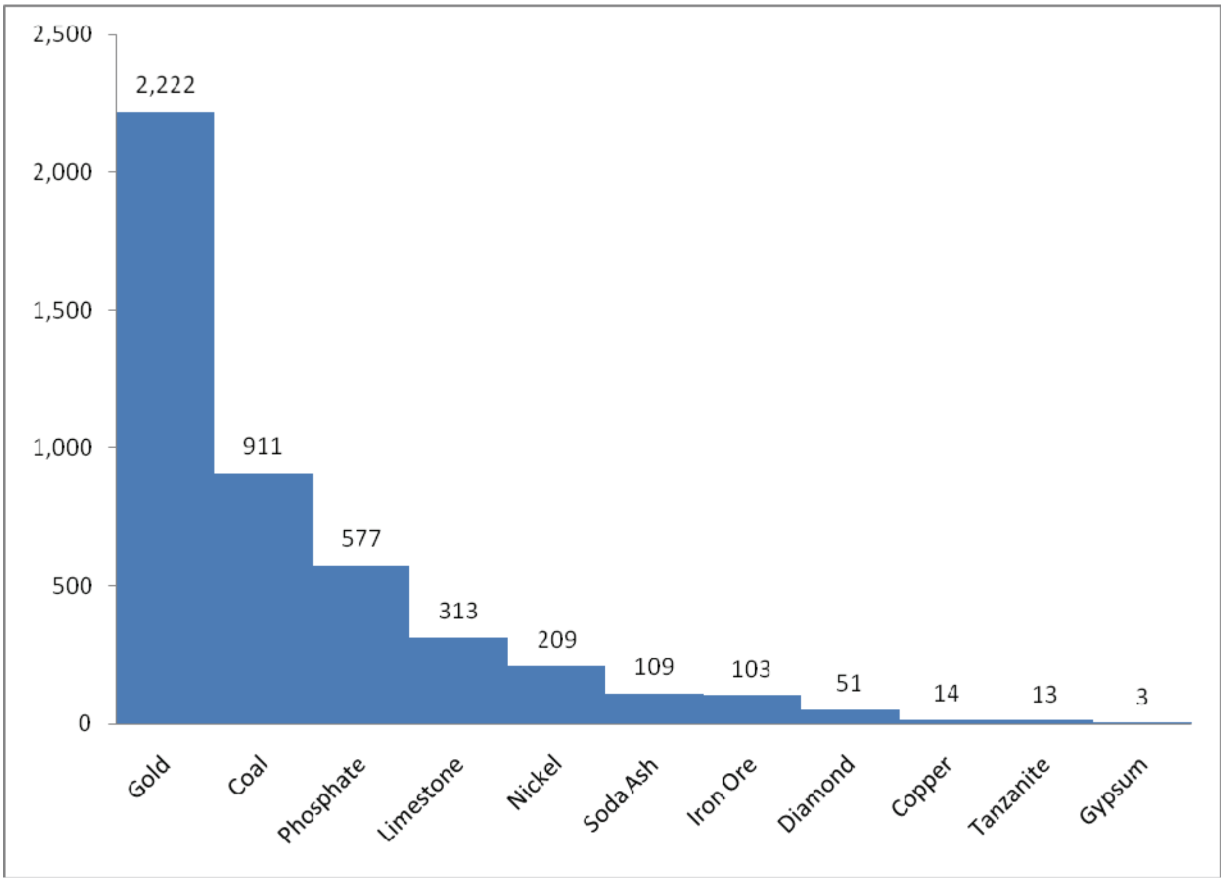
Mine or operator	Minerals	Location	Ownership (country)
Golden Pride	Gold	Nzega	Resolute Ltd (Canada)
Geita Gold Mine	Gold	Geita	AngloGold (South Africa)
Kahama Mining	Gold	Kahama	Barrick Gold Corporation (Canada)
Corporation Afrika Mashariki	Gold	Tarime	Placer Dome Inc Gold Mine (Canada)
Buhemba Gold Mine	Gold	Musoma	Government of Tanzania (50%); Meremeta Ltd (50%)
Tulawaka Gold Mine	Gold	Biharamulo	Barrick Gold Corporation (70%); Explorations Minieres du Nord (30%) (Canada)
Williamson Diamonds Ltd	Diamonds	Shinyanga	De Beers (75%) (United Kingdom); Government of Tanzania (25%)
Merelani Mining Ltd	Tanzanite	Arusha	Afgem (75%) (South Africa); Mr A. Mpungwe (25%)

Source: Compiled from The United Republic of Tanzania (2008, pp. 16 ff.).

As Table 2 shows, the Tanzanian government has only a limited numbers of shares in the mining industry. The largest share owned by the government, 50%, is in the Buhemba Gold Mine. The majority of mines are owned by foreign companies, which is largely explained by the power granted to them by the government. Curtis & Lissu (2008, p. 15) points out that “Foreign mining companies have exclusive ownership of their operations and the minerals recovered and complete power to dispose of them as they wish, including to transfer those rights to other companies, without incurring capital gains tax”.

Tanzania is a country endowed with substantial reserves of mineral resources, as is evidenced by data made available by the Ministry of Energy and Minerals. Figure 1 shows the estimated amount of all mineral reserves in Tanzania. They are classified in five groups: (i) metallic minerals group (this includes gold, iron ore, nickel, copper, cobalt and silver), (ii) gemstone groups (this includes diamond, tanzanite, ruby, garnets), (iii) industrial minerals group (limestone, soda ash, gypsum, salt and phosphate), (iv) energy-generating minerals (like coal and uranium) and (v) construction minerals (like gravel, sand and dimension stones) (The United Republic of Tanzania, 2008, p. 6).

Figure 1. Mineral reserves in Tanzania, in 2008 (millions of tons)



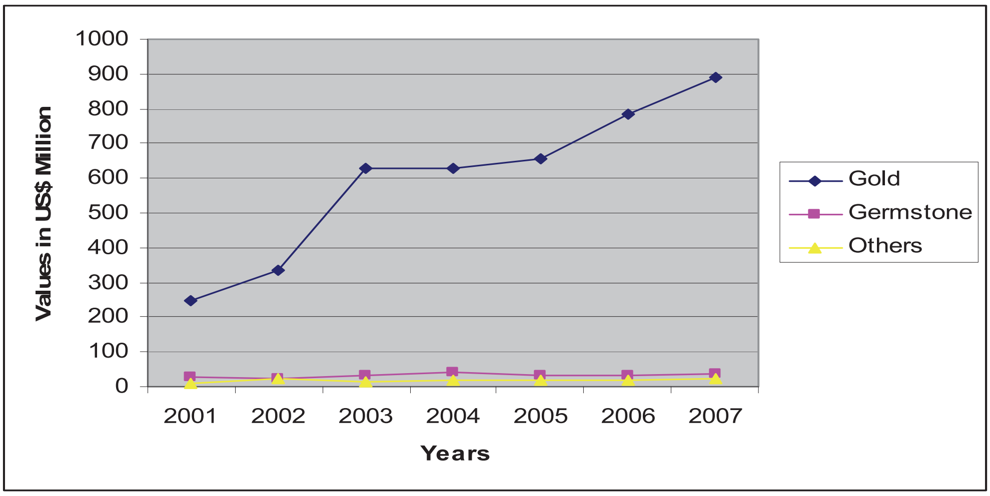
Source: Constructed from The United Republic of Tanzania (2008).

While it is virtually inarguable that natural resource reserves can offer substantial economic benefits to a country, this potential frequently goes unrealized. In fact, the mismanagement and misuse of natural resource endowments can actually severely harm the economic prospects of a country. This situation has been labeled the "resource curse" by Sachs and Warner (2001), Indeed, there is a danger of getting nothing out of mineral potentials. As pointed out by the Spanish writer Miguel de Cervantes in the sixteenth century: "the gratification of wealth is not found in mere possession or in lavish expenditure, but in its wise application" (quoted in Ebrahim-zaheh, 2003). As further sections of this research will show, the unwise management of Tanzania's wealth has become a major problem in the case of its mining sector.

2.1. Export of Minerals in Tanzania

Since the late 1990s, Tanzania's mineral output growth has increased rapidly with the introduction of modern mining technologies and practices. The growth in the value of mineral sector exports is summarized graphically in Figure 2.

Figure 2. Value of exported minerals from 2001 to 2007 (US$ million)



Source: Constructed from The United Republic of Tanzania (2008b).

The data presented in Figure 2 clearly show that Tanzania's recent mineral boom has been driven by the increase in the value of its gold exports, which rose from slightly over US$3 million in 1998 to just under US$900 million in 2007[5]. Indeed, gold production increased from less than 2,000 kg in 1990 to more than 47,000kg by 2005 (Roe & Essex, 2009, p.27). It is also worth considering how the mineral sector export trends shown in Figure 2 have impacted on other macroeconomic variables. The following section shall take up this question with the examination of such variables as FDI, general export earnings, and GDP growth.

[5] The discrepancy with the value of exports given in Table 1 may arise from the fact that the data are taken from different sources.

3. MACROECONOMIC IMPACTS OF MINERALS IN TANZANIA

3.1. Foreign Direct Investment

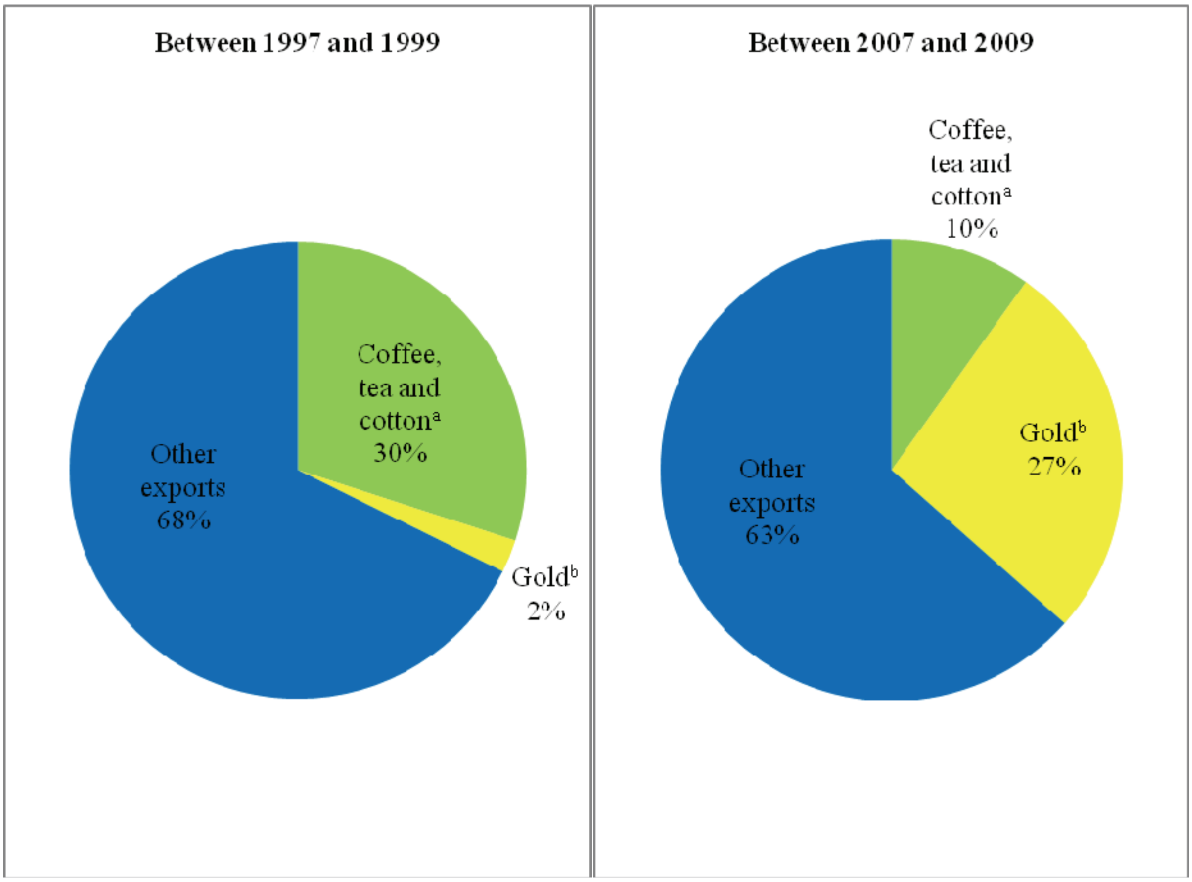
In the past decade, Tanzania has seen a tremendous increase in FDI inflows. UNCTAD data place Tanzania in the upper-middle ranking of African countries in terms of FDI, with its FDI stock rising from US$2.78 billion in 2000 to US$5.94 billion in 2007 (UNCTAD, 2008). As Roe & Essex (2009, p. 16) point out, Tanzania would have appeared at the bottom of this ranking in the early 1990s. With the exception of South Africa, all of the African countries that received more FDI than Tanzania in 2007 were oil and gas exporters (Roe & Essex, 2009, p. 16).

3.2. Contribution to National Income and Government Revenues

3.2.1. Exports' Structure

The boom in the mineral sector has dramatically changed Tanzania's export structure. In the period that spans the winning of independence in 1961 to the late 1990s, its exports mainly consisted of agricultural goods such as coffee, tea and cotton. However, the mineral boom has since displaced these goods from their prominent place (Roe & Essex, 2009, p. 17).

Figure 3. Export share averages (over total)



[a] SITC revision 3 codes : 97 for coffee, 74 for tea and 263 for cotton.
[b] SITC revision 3 code 97.

Source: prepared by authors using COMTRADE data.

Figure 3 shows how gold exports have increased as a share of Tanzania's total exports, increasing from 2% in the late 1990s to 27% in the late 2000s. This increase has also been accompanied by a decrease in traditional agricultural exports as a share of the total. Moreover, COMTRADE data confirm that the change in Tanzania's trade structure has occurred primarily because of a stark increase in gold exports and a slower increase of exports of coffee, tea and cotton.

3.2.2. Gross Domestic Product

Despite mining being one of the fastest growing sectors in the Tanzanian economy, contributions to GDP from gold production have remained low when compared to its importance to the exports sector. Data on the contribution of the mining sector to GPD following the mineral boom are presented in Table 3.

Table 3. Mining and total GDP (billion of 1992 TShs)

Year	Mining	Total GDP	Share of Mining in total GDP (%)	yoy growth of mining (%)	yoy growth of GDP
1999	15	772	1.94	-	-
2000	17	802	2.12	13.3	3.89
2001	19	843	2.25	11.76	5.11
2002	21	887	2.37	10.53	5.22
2003 (forecast)	23	923	2.49	9.52	4.06

Source: constructed from National Bureau of Statistics (2003).

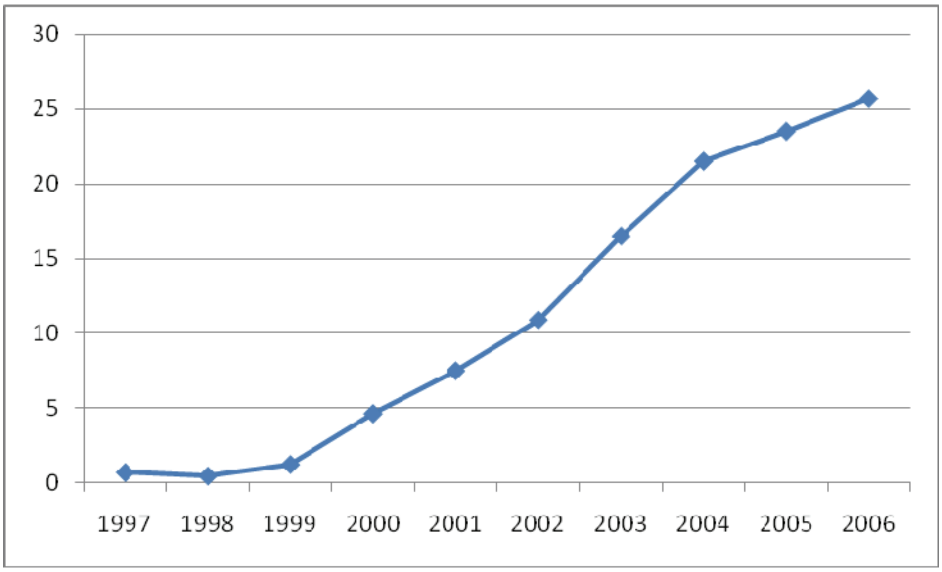
As the data presented in Table 3 indicate, mining activities grew steadily in the initial three years of the mineral boom, both in absolute terms and as a share of GDP. Total GDP during this period increased overall, as did mining's share of it.

3.2.3. Revenue Collection Through Taxes and Royalties

Tanzania's mineral resource royalty rates have recently come under scrutiny. Curtis & Lissu (2008, p. 31) argue that the current rate of 3% is low by both African and global standards. They go on to argue that the World Bank is responsible for this low rate. According to the authors, the organization has rewritten mining laws in most African countries in order to make them "internationally competitive". Tanzania's relative weakness in comparison to some other African countries with respect to royalty rates is then compared with Ghana (sliding between 3 and 12%), Mozambique (between 3 and 8%), and Botswana (royalty on gold production at 5%). In terms of precedents for higher rates, there are further examples outside of the African context that went unmentioned by Curtis & Lissu. One such example is Venezuela, which is also a developing country with a substantial mineral resource endowment, but one that has succeeded to benefit economically from its relationship with mineral sector transnational companies. In contrast to Tanzania, Venezuela has legally designated royalty rates that range between 16 and 30% (Torres, 2004).

Despite its low royalty rates, the Tanzanian government has managed to increase its revenue from mineral extraction during the recent boom. Annual revenues increased from approximately US$700,000 in 1997 to about US$26 million in 2006 (The United Republic of Tanzania, 2008). This increase is shown in Figure 4.

Figure 4. Royalties collected from 1997 to 2006 (current US$ million)



Source: The United Republic of Tanzania (2008).

Estimates of the total amount of revenue that the mineral sector has generated for the government since the end of the 1990s and onwards are difficult obtain with any degree of precision, as they vary considerably from source to source. As a point in case, Curtis & Lissu (2008, p. 18) offer an average annual revenue estimate between US$13 million and US$26 million for the 1997-2006 period. To put these numbers in perspective, another estimate states that the mineral sector accounted for only 4% of total government revenues in 2005 (UNCTAD, 2007, p. 137). The amount of revenue collected from the Tanzanian mineral sector is not only small when compared with other sectors, but it is also small in comparison to mineral revenues in similar countries. UNCTAD (2007, p. 137) reports that the Tanzanian government received only 9% of the revenue generated by mineral sector exports between 1999 and 2005, while the Peruvian government captured 14% of the revenue generated by its mineral sector exports between 2004 and 2006 in income taxes alone.

3.3. The Effect of Mining on the Real Exchange Rate

According to Rodrik (2008), an undervalued real exchange rate (RER) is a key driver for growth, especially in less developed economies. In principle, it is reasonable to assume that significant increases in gold production and export since the end of the 1990s could trigger an appreciation of the RER. Indeed, literature on both Dutch disease and the resource curse indicate that a substantial increase in the price or production levels of a natural resource can generate a shock that can result in negative consequences for a given country (Corden & Neary, 1982; Sachs & Warner, 2001).

The Dutch disease effect refers to the structural shift of the export basket of the country. A booming natural resource sector will curb all other traditional export sectors. It is argued that this happens because of two effects. The first effect is increased productivity in the natural resource sector will that leads to wage increases. Thus, workers must either attempt to migrate to this sector, or ask for higher wages in their own sectors. This would result in an appreciation of the RER, because, *ceteris paribus*, locally produced goods will be more expensive than goods produced in the rest of the world.

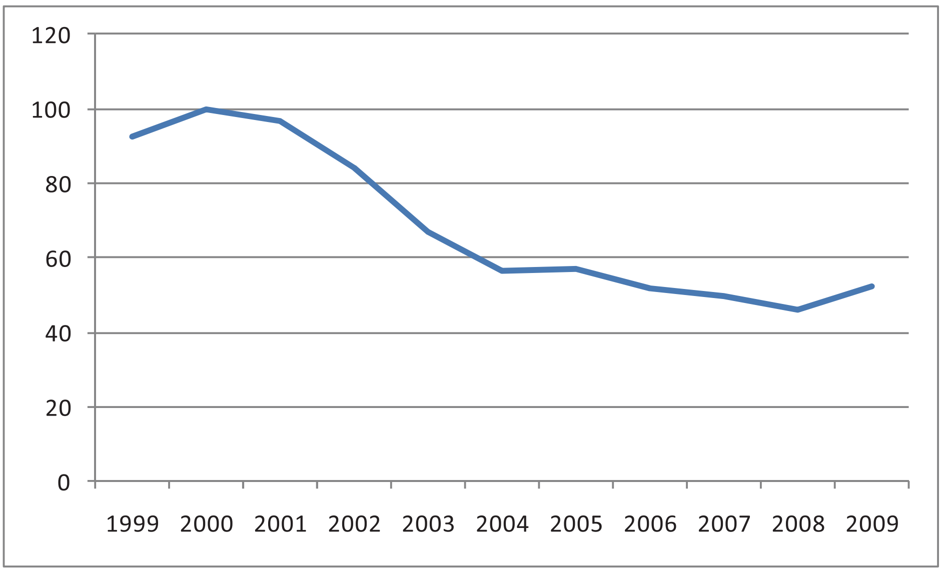
Since the natural resource sector will tend to be less labor intensive than other traditional exporting sectors, only a limited number of workers will be able to migrate. As a result, wages in the other exporting sectors will only increase if the unemployment rate is low. Therefore, the competitiveness of the traditional exporting sectors will be hurt by the boom in the natural resource sector. That is, the RER will appreciate if the economy was already close to full employment before the boom.

The second effect takes place if the increased exports translate into increased income available for expenditure in the local economy, which is unlikely to be the case in Tanzania. Since gold mining companies in this country are mostly transnational, most profits leave the country. Moreover, these companies don’t pay enough taxes, as we have previously seen and will further analyze in the following sections. Nevertheless, assuming there was an increase in local expenditure, some of the unemployed labor that is not absorbed by the exporting sectors will be employed in the nontradable sector because of the general increase in aggregate demand. However, this increased demand for nontradables will put pressure on the local price level, generating further appreciation pressure on the RER. Thus, the competitiveness of the traditional exporting sectors is again impacted upon. Once more, this adverse effect will be stronger the closer the economy was to full employment before the boom.

With respect to the Dutch disease, the resource curse refers to a longer term negative effect of the exploitation of natural resources. As has been pointed out in Sachs & Warner (2001), natural resource abundant developing countries tend to have low rates of economic growth. It has been argued that one of the causes of this could be Dutch disease, because of its negative impact on non-natural-resource intensive exporting sectors, like manufactures, which are supposed to be growth drivers. Additional transmission channels of the resource curse have also been identified, including rent seeking and neglect for education. Tanzania may already suffer from resource curse, as it has always been an exporter of natural resource intensive goods like coffee, tea and cotton prior to the gold rush.

Applying this brief discussion of Dutch disease theory to the case of Tanzania, a probable outcome of the gold boom would be the crowding out of non-gold exports and an appreciation trend in the RER. That is, if the economy were already close to full employment and rising gold production resulted in an increase in income available for expenditure at the local level. In Figure 3 we showed that the traditional leading Tanzanian export sector was agriculture, and that agricultural products have been displaced by gold in the country's export makeup during the last decade. Figure 5 offers data on the bilateral RER of the euro against the Tanzanian shilling from 1999-2009. These data will help to determine if the trend seen in Figure 3 might have been caused by an appreciation of the RER (Dutch disease).

Figure 5. Bilateral euro-Tanzanian shilling real exchange rate (2000=100)



Source: calculated by authors from IMF (2010).

Before addressing the data presented in Figure 5, it is worth noting that the bilateral RER of the euro against the Tanzanian shilling is arguably the most important bilateral RER for Tanzania. This assertion is based on data presented in Li & Rowe (2007), which indicate that the Eurozone has been Tanzania's single largest trading partner during the gold boom period. Contrary to Dutch Disease theory, however, there has been a trend of depreciation in their bilateral RER from 1999-2009. The trend presented in Figure 5 is the result of a strong nominal exchange rate devaluation combined with more stable domestic (consumer price index), as well as Eurozone (producer price index) inflation rates.

The key transmission channel of the Dutch disease, domestic inflation, has not increased during the gold boom. There are four possible explanations for this lack of inflation. The first is that mining companies have repatriated their profits, thus resulting in gold production not leading to an appreciable increase in domestic income. A second explanation comes from Nyoni (1998), whom argues that the nominal depreciation of the shilling has no impact on the CPI. This is due to the fact that a large amount of imports are financed by international aid, and thus are not distributed in the economy through a market mechanism.

A third potential explanation for why the RER has not appreciated during the gold boom is that the economy was not near a state of full employment prior to it. As a result, labor absorption has been more important than wage increases. This means that even if the increased gold production had injected some additional income into the Tanzanian economy, a rise in domestic inflation could have been prevented because the economy has not approached a state of full employment.

According to data from the Tanzanian National Bureau of Statistics' 2006 *Integrated Labor Force Survey*, the most recent labor market information available, the ILO-definition unemployment rate went from 5.1% in 2001 to 4.3% in 2006 (p. 5). However, the report also states that 84.2% of the economically active population in 2001 worked in agriculture, as opposed to 76.5% in 2006 (p. 5). If the percentage of people working in the informal sector is added, 89.5% of the population was engaged in mostly subsistence activities in 2001, and this share fell only slightly to 86.5% in 2006. Although this large percentage of the population is gradually declining, an analysis informed by Lewis (1954) suggests that there remains a virtually unlimited supply of labor in the economy. Consequently, Tanzania cannot reasonably be considered in a state of near full employment.

The gradually declining rates of unemployment and subsistence activities do indicate that some extra income has been generated in the economy. This increase is consistent with an average annual GDP growth rate of 6.08% between 1999 and 2009 (World Bank, 2010). Moreover, real income for both employed and self-employed workers increased 50% and 57%, respectively, from 2001 to 2006 (National Bureau of Statistics, 2006). As to the reason why this did not result in greater inflationary pressure, this may be due to the low percentage of workers receiving a money wage and low initial wage levels.

The fourth explanation of why the RER showed a depreciation trend during Tanzania's recent history is given in Li & Rowe (2007). They analyzed the behavior of the Bank of Tanzania, Tanzania's Central Bank, during the boom period, in which most determinants of the RER were most likely to cause appreciation pressure. On the one hand, the 2000s was a decade of increased government efforts to liberalize trade, which has caused depreciation effects on Tanzania's RER (Nyoni, 1998; Li & Rowe, 2007). On the other, there was also a boom in commodities that, *ceteris paribus*, puts appreciation pressures to the RER. Moreover, there was also a dramatic increase in Tanzania's supply of international aid. As discussed in Priewe & Herr (2005), such an increase may also result in appreciation pressure on the RER. According to Li & Rowe (2007), these appreciation trends were countered effectively by the Bank of Tanzania, which engaged in a reserve accumulation strategy coupled with sterilization to prevent a dramatic increase in money supply. Despite preventing appreciation, this strategy didn't allow Tanzania to overcome an annual average current account deficit of 6.5% of its GDP between and 1999-2009.

3.3 Mining and Development

At present, close to 80 percent of Africa's resources are primary commodities (UNCTAD, 2008). African economies have thus been relegated to being suppliers of raw commodities within the global economy. While this may imply that a surge in the mining industry is likely to impact positively on employment in Africa, the employment impact of large-scale mining is largely negligible. Because of its capital-intensity, large-scale mineral extraction generally offers limited employment opportunities, and therefore has little impact on aggregate employment.

In 1995, the number of Tanzania's artisanal miners was approximately 550,000, a figure alleged to have tripled over the following decade (Curtis & Lissu, 2008, p. 38). In 2004, 10,000 miners were employed in the gold industry by multinationals, with little in the way of collective bargaining. In 2006, the South African-based Anglo-Gold Ashanti (AGA) placed the figure of its unionized workers at 3.1 percent. Monthly payments for mine workers averaged \$120 - \$240 per month, similar to what artisanal miners could expect to earn (Curtis & Lissu, 2008, pp. 38 ff.).

Despite the fact that the Tanzanian government is currently implementing the second phase of its poverty reduction strategy, known as "National Strategy for Growth and Poverty Reduction", the linkages between mining activities and poverty reduction cannot be gauged; this is especially true with respect to local employment creation, revenue generation, and public service delivery. However, what is clear is that settlements in the vicinity of mining sector operations are extremely poor. Living conditions in these areas are manifestly substandard, lacking even the most basic necessities for human health. Social conditions are also likely to deteriorate as unemployment among artisanal miners increases. Given the lengths the government has taken to appease large-scale mining operators, the lack of government attention paid to these conditions calls into question the priorities of public policy.

Given its enormous mineral wealth reserves, there remains the question of why Tanzania has failed to benefit from the mineral sector. Lambrechts (2009) examined this question with respect to Africa in general, assigning the cause of low revenues to two factors. First, mining companies have been granted too many tax subsidies and concessions. Second, there is a high incidence of tax avoidance among companies in the minerals sector. This is regarded as a direct consequence of secret mining contracts and the efficacy of creative accounting mechanisms. Indeed, both of these problems are both present and acute in Tanzania.

As Shafire (2009) points out, Tanzania is a country "seated atop a giant, 45 million ounce pot of gold, economically valued at US$39 billion". Despite this fact, it also remains one of the poorest countries in the world. The problems discussed in this section are unacceptable under any circumstance, and their manifestation in Tanzania shall be examined in detail in the following section.

4. THE TANZANIAN MINERAL POLICY STANCE

4.1. Mineral Sector Reform

In 1997, the Tanzanian government sought to promote economic development through the passage of the Mineral Sector Law. This law was passed as a means of fully integrating the benefits of the mineral sector, as well as its links to other economic activities, into the national economy. "The policy provides the direction of the mining sector in 25 to 30 years and it has become the vision to lead and direct the development of minerals activities in the country" (The United Republic of Tanzania, 2008, p. 6). The objectives of the policy are also to stimulate exploration and mining development, to ensure that mining wealth supports sustainable economic and social development, to promote and facilitate mineral and mineral-based products marketing arrangements, to promote and develop Tanzania as the gemstone hub of Africa, and to alleviate poverty, especially for artisanal and small-scale miners (The United Republic of Tanzania, 1997a, p. 9).

4.2. Implementation of the Mining Policy

As a first step in implementing its new mineral policy, the government amended a number of existing financial laws in 1997 (The United Republic of Tanzania, 1997b). These amendments were intended to attract foreign private sector investment in the mining sector. With this same purpose, it also enacted a mining law and made changes to the *Foreign Exchange Act* (The United Republic of Tanzania, 1992).. In order to implement this policy, current taxation laws provide incentives for mining companies and their contractors. Indeed, the Bomani report correctly points out that the exemptions provided under this policy are numerous (The United Republic of Tanzania, 2008). In the following sections we will analyze the income tax, value added tax, fuel levy and customs duty. This analysis shall then be used to make our case of insufficient tax revenues in Section 5.

4.3. Tax Incentives to the Mineral Sector

4.3.1. Value Added Tax

Tanzania's value added tax (VAT) is charged on domestic and imported goods and services (The United Republic of Tanzania, 2006c). The Value Added Tax Law exempts mineral sector companies from paying VAT on some imported inputs and capital goods.

4.3.2. Customs Duty

Despite the many tax exceptions granted to mining companies and their contractors, the major taxes and fiscal incentives applicable to the mining sector in Tanzania are generally comparable to those in other natural-resource-rich African countries. The problems in Tanzania with respect to mineral taxation are, however, rooted in the existence of multiple types of "nuisance" taxes. Specifically, this means that there are numerous minor taxes and fees, such as the dealer's license, mining licenses, prospecting license, primary mining license, and primary prospecting license. Further problems arise from the complex design of these taxes, as well as the cumbersome and bureaucratic tax administration. These problems have placed Tanzania in an unfavorable position from the viewpoint of mining investors. Furthermore, this could arguably be a cause of tax avoidance on the part of the mining companies.

It can legitimately be argued that Tanzania does not benefit from mining activity to the same extent as some of its African neighbors (Roe & Essex, 2009). Even if most African mining tax regimes are a mix of secret and discretionary deals, in addition to formal tax laws, in Tanzania many of these laws allow ministers to negotiate tax deals with individual mining companies at their discretion. This often leads to lower royalties, corporate taxes, fuel levies, windfall or other taxes than those stipulated in the law (Lambrechts, 2009, p. xi) .This may be an explanation for why Tanzania does not gain its 'fair share' from mineral extraction. Furthermore, Roe & Essex (2009, p.29) warn that "there is likely to be a significant decline of mineral production that by 2023 export earnings from gold will be lower. The amount of export earnings will decline further and will be less than US$400m by 2027".

5. WHAT WENT WRONG WITH THE MINERAL SECTOR?

5.1. Policy, Regulation and Acts

The analysis of Tanzania's mining policy in the previous sections suggest that the government uses tax concessions merely as a tool to attract foreign mining investments, which are frequently employed in dubious ways and do not work towards a wider strategy for industrial development. The evidence suggests that the tax concessions provided by the government, combined with the aggressive tax avoidance strategies employed by mining companies, have resulted in a substantial loss of government revenue that might otherwise have been used to spur economic development. Thus, Tanzania remains a mineral rich country that is nevertheless dependent on foreign aid to fill the gaps in its development budget (Upton, 2009).

Economic linkages between mining and the rest of the economy, including the government budget, have been limited. This was cited in a 2002 report published by the government, entitled "Poverty and Human Development". The report also found that "foreign mining companies in Tanzania are given up to 5-year tax holiday at the beginning of production, pay to the Tanzanian government a royalty fee of only 3 percent of the value of their mineral output, and thereafter are free to take out of the country 100 percent of their profits. Most of their mining equipment is also not taxed." (quoted in Sharife, 2009)

Regarding the issue of mine ownership, current government policy prevents Tanzania from playing a larger role in the mineral sector. For example, the Mining Act allows 100 percent ownership of minerals and mines to foreign corporations, which effectively prevents the government entering into new joint ventures. These companies also have the right to employ an unlimited number of foreign workers, thus stifling potential job creation.

5.2. Mining Contracts

The Mining Act (1998) was enacted to support the implementation of the *Mining Policy* (The United Republic of Tanzania, 1997a). In 2004, a number of its sections were amended to satisfy policy needs. While these amendments were intended to improve the Act, noteworthy loopholes remain. Indeed, the Act remains extremely favorable to foreign mining companies. Such was the case in a 2007contract between the Barrick Gold mine and the government (The United Republic of Tanzania, 2008). The favorable terms given to the company in the contract are evidenced in the following passage:

> "It allows for the company to maintain current tax levels throughout the 'life of the project', placed at 25 years, with an option for Barrick to renew the same terms for a further 25 years: VAT exemption; a cap of US$200,000 in taxes per annum; the right to repatriate 100 per cent of profits; deduct 80 per cent of capital expenditure from tax payable; right of access and acquisition of water and land; and the right to pursue arbitration in London, or alternatively, via the 1998 code, the World Bank's International Centre for the Settlement of Investment Disputes, amongst other clauses. The UK is Tanzania's largest bilateral aid donor, with aid – the centre of Tanzania's political economy, supplying 40 per cent of the country's budget (2007)" (Sharife, 2009).

Therefore, contracts between the Tanzanian government and mining companies should be subject to public scrutiny – or at very least, parliamentary oversight. That way, the public interest could be better served by the government.

5.3. The Issue of Taxes and Royalties

Sharife (2009) provides evidence that mining companies have succeeded in their attempts to avoid taxation. Specifically, he shows that Barrick and AngloGold Ashanti have not paid any corporation tax, which is fixed at 30%, because they always have declared losses (Sharife, 2009). Sharife (2009) also points out that Barrick's manager has declared his company's plan to start paying this tax in 2014, when the firm projects that it will start turning a profit. However, auditing reports contracted by the Tanzanian government show that both companies overstated losses in the period between 1999 and 2003 (Sharife, 2009). Such practices cast a shadow of doubt about the companies' estimations of the time needed for their projects to start turning a profit.

The government should rectify the situation by increasing the tax and royalty rates charged on mining and related profits. This means that all current contracts should be revised.

5.4. Institutional Capacity

The institutional capacity of the Tanzanian state is low, as ministers and the parliament hold insufficient power over mining firms to effectively serve the public interest. For example, as quoted in Lambrechts (2009, p. 44), Tanzania's Commissioner for Minerals said that "we have no capacity to look at their books. [The companies] can write the books so that third world countries cannot regulate. Even the contracts are difficult. I think the mining companies exploit our weaknesses in law and capacity". Lambrechts (2009, p. x) also notes that in 2008, the Minister of Finance did not consider any of the tax increases that a presidential commission report recommended. However, it should be noted that he did introduce a new turnover tax directed at companies that consistently declare losses.

There is also substantial weakness in Tanzania's institutions of government. For example, the parliament majority made the decision to suspend an opposition parliamentarian from attending the parliament session in August 2007. This happened after he proposed a government investigation into the signing of a new mining agreement that was signed without the review of parliament. According to Curtis and Lissu (2008), parliament has also been denied access to the contracts signed by the administration. "The government's repeated refusal to make these agreements public means that elected representatives cannot influence the terms under which foreign mining companies extract the country's most lucrative resource"(Curtis & Lissu, 2008, p. 9). As of this writing, none of the six contracts signed between the administration and the mining companies has been made public.

Given these institutional limitations, it is time to consider an increase in the national ownership share of the mineral resources. This would ensure that a larger amount of the profits would stay in the Tanzanian economy. This policy path should be seriously considered, since even a country with a high institutional quality like Norway has large shares of its oil sector in the hands of Statoil, a state owned company. Moreover, the lack of government ownership in the mining industry has placed the government in a difficult situation to be able to fully supervise the production of national resources in the mining sector.

6. CONCLUSION AND POLICY RECOMMENDATIONS

Mining in Tanzania has quickly become a major part of the country's economy and can be considered responsible for the high growth rates seen recently. At the same time, the sector consistently fails to generate much-needed revenue government revenue, which eventually undermines the development opportunities of the country in general.

Policymakers, specifically those within the Ministry of Minerals and Energy and the parliament, are hereby advised and cautioned that the development impact of mining is ultimately determined by how mining royalties and other taxes are legislated, collected and redistributed to help develop other economic activities and address social problems.. The government should also assure that transnational mining companies integrate their activities into the development strategies of the country. Put simply, the government should begin by increasing its tax collection from the mining sector. Such action will only be possible if the government increases its shares in or joint ventures with the mining companies.
As this paper has shown, the government owns shares only in two companies with large-scale mining operations in Tanzania. The government should design policies and decision processes, which should be accomplished by mobilizing political support and by improving the governance of minerals. Further, it should enact policies and regulations that mining firms will be required to adhere to; enforcement of new and existing laws must also not be ignored. Indeed, this paper has shown that mining companies have failed to obey the laws and regulations, and the government has failed in its responsibility to enforce them.

Before any further mining contracts are signed, the government must take steps to ensure that agreements are made in the full light of public scrutiny, and that final agreements cannot be made without the approval of parliament. Only through such a process can the will of the public be adequately represented through a democratic process. By holding itself accountable to the public, the government can ensure that the public will be aware of how their national resources in this valuable sector are being managed. This greater democratic participation on the part of citizens will help to ensure that Tanziania's great national wealth shall be applied wisely, as Cervantes once advised.

REFERENCES

ABN NEWSWIRE, 2009: 'Resource Capital Research - March Quarter 2009 Equity Research Report on Global Uranium Companies'. http://www.abnnewswire.net/press/en/60420/Resource_Capital_Research_March_Quarter_2009_Equity_Research_Report_On_Global_Uranium_Companies. Accessed on December, 09th 2009

CAMPENHOUT, B., 2002: The Mining Industry and the Future Development of Tanzania. A research paper presented in workshop on Globalization and East Africa, Dar es Salaam Tanzania.

CHACHAGE, S., 1994: Study on Mining Operations and Socio-economic aspects from late 1930s to early 1990s.

CORDEN, W. M., & NEARY, J. P., 1982: Booming Sector and De-Industrialisation in a Small Open Economy. *The Economic Journal*, Vol. 92, No. 368, pp. 825-848.

CURTIS, M., & LISSU, T., 2008: 'A Golden Opportunity: How Tanzania is failing to Benefit from Gold Mining'. Published by the Christian Council of Tanzania and National Council of Muslims in Tanzania, Dar es Salaam, Tanzania. http://www.businesshumanrights.org/Search/SearchResults?SearchableText=Lissu+Curtis&x=0&y=0. Accessed on May, 8th 2010.

EBRAHIM-ZAHEH, C., 2003: Dutch Disease: Too much wealth managed unwisely. In: Financial & Development, Volume 40. Number. 1 March. http://www.imf.org/external/pubs/ft/fandd/2003/03/ebra.htm. Accessed on April, 28th 2010.

INTERTANIONAL MONETARY FUND, 2010: International Financial Statistics. CD-ROM. November.

LAMBRECHTS, K., (ed.) 2009: Breaking the Curse: How Transparent Taxation and Fair Taxes can Turn Africa's Mineral wealth into Development. Published by Open Society Institute of Southern Africa, Johannesburg, Third World Network Africa, Accra, Tax Justice Network Africa, Nairobi, Action Aid International, Johannesburg and Christian Aid, London. http://documents.twnafrica.org/breaking-the-curse-march2009.pdf. Accessed on May, 8th 2010.

LEWIS, W.A., 1954: Economic Development with Unlimited Supplies of Labour. *The Manchester School*, Vol. 22, Issue 2, pp. 139-191.

LI, Y. & ROWE, F., 2007: Aid Inflows and the Real Effective Exchange Rate in Tanzania. The World Bank, Poverty Reduction and Economic Management Network, Economic Policy and Debt Department. Policy Research Working Paper 4456.

NATIONAL BUREAU OF STATISTICS, 2003: Gross Domestic Product. Semi-annual (January-June) 2003. http://www.tanzania.go.tz/pdf/SR_GDP_in_Semi-annual_Nov03.pdf. Accessed on May, 8th 2010.

NATIONAL BUREAU OF STATISTCIS, 2006: Integrated Labour Force Survey. Dar Es Salaam: http://www.nbs.go.tz/nada3/index.php/catalog. Accessed on December, 22th 2010.

NYONI, T.S., 1998: Foreign Aid and Economic Performance in Tanzania. *World Development*, Vol. 26, No. 7, pp. 1235-1240.

PHILLIPS, C., SEMBOJA, H., SHUKLA, G. P., SWINGA, R., MUTAGWABA, W. and MCHWAMPAKA, B., 2001: "Tanzania's Precious Minerals Boom: Issues in Mining and Marketing", Research paper, funded by United States Agency for International Development Bureau for Africa Office of Sustainable Development Washington, DC 20523-4600. http://www.tanzaniagateway.org/docs/Tanzanias_Precious_Minerals_Boom_Issues_In_Mining_and_Marketing.pdf. Accessed November, 17th 2009.

PRIEWE, J., and HERR, H. (2005). Macroeconomics of Development and Poverty Reduction. Strategies Beyond the Washington Consensus. Baden.

REED, D. ed., 1996: Structural Adjustment: Case Study for Tanzania" in *Structural Adjustment, the Environment and Sustainable Development* (London: Earthscan, 107 - 127. http://www.colby.edu/personal/t/thtieten/macro-tan.html Accessed on May, 11th/2010.

RODRIK; D., 2008: The Real Exchange Rate and Economic Growth. Brookings Papers on Economic Activity, Fall, pp. 365-412.

ROE, A., & ESSEX, M., 2009: Mining in Tanzania – What future can we expect? The Challenge of Mineral wealth: Using resource endowments to foster sustainable development. Oxford Policy Management. London. www.opml.co.uk/document.rm?id=1360. Accessed on May, 3rd 2010.

SACHS, J.D., & WARNER, A.M, 2001: Natural Resources and Economic Development. The Curse of Natural Resources. European Economic Review, 45, pp. 827-838.

SHARIFE, K., 2009: Tanzania's pot of gold: "Not much revenue at the end of the rainbow". In Pambazuko news, issue 450, October 1. Tanzania. http://www.protestbarrick.net/article.php?id=523. Accessed May, 8th 2010.

THE UNITED REPUBLIC OF TANZANIA, 1992: The Foreign Exchange Act, http://www.bot-tz.org/BankingSupervision/ForeignExchangeActs1-1992.pdf. Accessed on September, 17th 2010.

THE UNITED REPUBLIC OF TANZANIA, 1997a: Mining Policy of 1997. www.**tanzania**.go.tz/pdf/themineral**policy**of**Tanzania**.pdf. Accessed on November, 17th 2009.

THE UNITED REPUBLIC OF TANZANIA, 1997b: The Financial Laws (Miscellaneous Amendments) Act, Government Printer, Dar es Salaam-Tanzania, http://www.tanzanet.org/downloads/laws/financial_laws_act_1997_(27_1997).pdf. Accessed on June, 6th 2010.

THE UNITED REPUBLIC OF TANZANIA, 1998, the Mining Act, Cap 123. www.parliament.go.tz/Polis/PAMS/Docs/5-1998.pdf. Accessed on November, 17th 2009.

THE UNITED REPUBLIC OF TANZANIA, 1999: Government note no. 22 of 5th February. http://www.chamberofminestz.com/newsletter/news4a33ba571d332.pdf, Accessed on September, 18th 2010.

THE UNITED REPUBLIC OF TANZANIA, 2004: Tanzania Poverty Reduction Strategy II Analysis of Proposals from Ministries, Departments and Agencies (MDAs) as inputs to PRS II Drafting Processes. Vice President's Office, Poverty Eradication Division**,** Dar es Salaam Tanzania. www.**poverty**monitoring.go.tz/**prs**p/synthesisreportforsector_submissions.pdf. Accessed on December, 12th, 2009.

THE UNITED REPUBLIC OF TANZANIA, 2006a: The Income Tax Act, Chapter 332. http://www.tra.go.tz/documents/incometax1.pdf. Accessed on September, 17th 2010.

THE UNITED REPUBLIC OF TANZANIA, 2006b: The Road and Fuel Act, Chapter 220. http://www.mof.go.tz/mofdocs/revenue/roadfuelact10.pdf.Accessed on June, 2nd 2010.

THE UNITED REPUBLIC OF TANZANIA, 2006c: The Value Added Tax Act, Chapter 148. http://www.tra.go.tz/documents/valueaddedtax2.pdf. Accessed on May, 24th 2010.

THE UNITED REPUBLIC OF TANZANIA, 2007: Ministry of Planning, Economy and Empowerment. Empowerment of Economic Actors in Tanzania. http://www.povertymonitoring.go.tz/documents/empowerment_of_economic_actors_kwayu.pdf. Accessed on May, 24th /2010.

THE UNITED REPUBLIC OF TANZANIA, 2008: Report of the Presidential Committee to Advice the Government on Oversight of the Mining Sector, Volume 2, April, headed by Judge Mark Bomani.

TORRES, I., 2004: The Mineral Industry of Venezuela. In U.S. Geological Survey Minerals Yearbook. http://minerals.er.usgs.gov/minerals/pubs/country/2004/vemyb04.pdf. Accessed on May, 8th 2010.

UNCTAD, 2007: World Investment Report: Transitional Cooperation, Extractive Industries and Development. http://www.unctad.org/Templates/Page.asp?intItemID=5162&lang=1. Accessed on May, 8th 2010.

UNCTAD, 2008: *Trade and Development Report.* United Nations publications, New York and Geneva. http://www.unctad.org/en/docs/tdr2008notes_en.pdf. Acceesed on May, 19th 2010.

UPTON, M., 2009: The Golden Building Block: Gold mining and the transformation of developing economies. With an economic life-cycle assessment of Tanzanian gold production. http://www.members.gold.org/assets/file/pub_archive/pdf/WGC_Golden_Building_Block.pdf. Accessed on November, 30th 2009.

WORLD BANK, 2010: World Development Indicators, Washington, DC: http://databank.worldbank.org/ddp/home.do?Step=2&id=4&DisplayAggregation=N&SdmxSupported=Y&CNO=2&SET_BRANDING=YES. Accessed on December, 22th, 2010.

YAGER, T. R., 2004: The mineral Industry in Tanzania, United States of America.

Publisher: Competence Center "Money, Finance, Trade and Development "
HTW-Berlin – Treskowallee 8, 10318 Berlin
Prof. Dr. Sebastian Dullien, Prof. Dr. Jan Priewe

http://finance-and-trade.htw-berlin.de

Hochschule für Technik
und Wirtschaft Berlin

University of Applied Sciences

ISSN: 2192-7790