Chapter 18

Petroleum Wealth Management in Emerging and Developing Countries

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Abstract

The avoidance of a natural resource curse is incumbent on the exploration process and management of the wealth that comes from the resource. This chapter examines how emerging and developing countries utilise and manage their petroleum wealth for the benefit of their citizens. The approaches and principles that have been employed in other jurisdictions to manage petroleum wealth have been discussed and analysed. Challenges of petroleum wealth management including, corruption, neglect of other critical sectors of national economies, environmental and social nuisances are examined. Transparency and accountability, a free society and stable democracy, legislation and policy direction, equitable distribution of petroleum wealth and conscious investment into equally important sectors such as agriculture, service and manufacturing are identified as key variables and strategies that must be embraced if emerging and developing countries are to maximize their petroleum resources to improve the living standards of their people.

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18.1 Introduction

Natural resources and mineral wealth are extremely important to the economic transformation of many emerging countries across the globe. Minerals (including petroleum), for instance, accounted for 68 percent of the overall merchandise exports in the Middle East in 2009, 64 percent in Africa, 62.9 percent in the Commonwealth nations, and 38.9 percent in South and Central America in 2009 (Ross, 2013). Petroleum resources have significantly contributed to the infrastructure revolution in most emerging and developing countries that are endowed with oil and gas deposits to the extent that most of them virtually depend on the proceeds of these deposits to fund their national budgets and undertake developmental initiatives. Critical infrastructure such as transport, energy, schools and hospitals, and telecommunication among others that are basic to improve the socio-economic needs of the citizens are always nonexistent in the required mix in most emerging countries. Petroleum resources have therefore afforded these countries to exploit the same to provide the needed infrastructure in these countries.

However, the exploitation of these petroleum resources by emerging countries and their quest to utilize the proceeds for the provision of the basic needs have been bedevilled with a myriad of internal and external challenges including environmental and social issues, corruption and mismanagement, neglect of other critical sectors of the national economies, price volatilities, capital flight among others. These factors have over the years rendered the management of petroleum wealth inefficient and turned the 'blessing of the resources into a curse' and counterproductive.

This chapter,, examines how petroleum wealth is managed in emerging and developing countries and the efficiency of same to the transformation of the economies. The chapter is in three parts: the first examines the overview of petroleum resources and wealth management, the second analyses the challenges of petroleum exploration and wealth management and the last part looks at the challenges and proposed solutions to maximize petroleum wealth in emerging and developing countries.

18.2 An Overview of Petroleum Exploitation and Wealth Management in Emerging and Developing Countries

Natural resource discovery and exploration have a variety of socioeconomic and environmental consequences for citizens in any country (Faria, 2020). In many emerging and developing countries, natural resources provide a solid economic foundation for long-term development (Hachay, 2017). Extraction of petroleum in various emerging and developing countries provides foreign earnings into the countries, which, if properly harnessed and managed, should enhance the living standards of the populace. Although the cost of managing natural resources in less developed economies is high as a result of inadequate infrastructure, poorly skilled labour force, over-reliance on foreign skilled professionals, managerial incompetence, and corruption, which has adversely affected and hamstrung the economic growth and development of most developing countries including that of Africa (Kalu and Ott, 2019).

The management of petroleum wealth across the globe has always been driven by a matter of policy decisions. One of such critical policy decisions is whether petroleum export earnings should be used to boost consumption, domestic capital formation, or foreign asset accumulation. Resource depletion becomes part of the larger problem of petroleum wealth management in this context. Oil exporting countries' earnings are dominated by petroleum revenue. It is, without a doubt, one of the most stable sources of income for such economies. This throws a great deal of responsibility on the governments of these economies to wisely invest oil money in development. Many prosperous oil economies have discovered the necessity of putting accumulated income into dedicated accounts to fund development projects. These specially created funds, known as Sovereign Wealth Funds, are a type of investment set up by a government for the country's macroeconomic purposes as well as investment strategies in the exporting economy, or savings accumulated by the government over a long period as a result of prudent decision-making. These policy decisions and initiatives have yielded the needed economic impact in most developed countries such as Norway, Russia and the United States of America.

However, the use and management of petroleum revenues in most emerging and developing countries has rather contributed to the continuous deprivation of the citizens of petroleum producing nations. Conflicts and insecurity have characterized the exploitation of oil resources in countries like Sudan, Somalia, Northern Nigeria, and the Middle East among others. Insurgencies and militant groups have emerged in recent times from these conflicts to become one the threats to global peace and security. Disagreements and discrimination in the use and management of the oil proceeds amongst the communities within which petroleum resources are extracted have become the norm in emerging and developing nations thereby depriving them of the needed investment climate to harness sustainable development.

The extraction process of oil and gas is characterized by few direct benefits on communities but with huge environmental and social issues and large sunk costs, making them vulnerable to extortion; and when produced in large quantities, natural resource wealth can affect a country's foreign earnings with the potential of reducing the size of the manufacturing and agricultural sectors, which can close economic opportunities for the high unemployed youth and vulnerable people. This phenomenon has created the ‘resource curse and the Dutch Disease’ in most petroleum producing countries. Corruption and mismanagement by political office holders and technocrats have been identified by literature as one of the banes that inhibit the potential benefits of petroleum wealth in emerging and developing countries. Weak institutional arrangements and low literacy rates in these resource endowed countries have accounted for this.

18.3 Principles of Petroleum Wealth Management

Poor countries that rely on natural resource revenues are frequently impeded in their efforts to achieve long-term development due to a lack of effective institutional structures and governance. Regardless of the presence of natural resource richness, such institutional flaws may exist. However, bringing petroleum wealth into such an institutional context can lead to corruption, conflict, and a rise in macro-financial inefficiencies, environmental destruction, all of which contribute to economic deterioration and pollution of the natural ecosystem. Abundant petroleum wealth is typically regarded as a burden in many emerging and developing countries for these reasons. As a result of the issues generated by natural resource wealth endowment and extraction in emerging and developing nations, experience and expertise in natural resource revenue management techniques has evolved over the years to avert the inefficiencies that come with it.

Five principles are identified as common in the management of natural resource wealth in emerging and developing countries to avoid the problems associated with utilization and to achieve sustainable development (Drysdale, 2008). Each of the proposed five principles is discussed below.

Defined Institutional Responsibility on Petroleum Revenue Management

Emerging and developing countries endowed with petroleum wealth should have a well-established institutional arrangement defined by a petroleum fund management law to clearly outline the responsibility of each institution. The institutions with defined roles from prospecting, exploitation, sales, revenue management, investment and expenditure controls and to accountability and transparency would ensure prudent and efficient use of petroleum wealth that benefits the citizenry and ensures sustainable development. The case of Timor-Leste's Petroleum Fund Law and Ghana's Petroleum Revenue Management Act, is in tandem with this principle which has clear functions for the various institutions set up in the laws and at the same time defined areas that oil revenues should be applied to and used on, contrary to which constitutes a violation of the laws and comes with spelt out sanctions and penalties to the offenders of the laws. Accountability institutions such as Parliament, Auditor General, Human Rights and Administrative Justice, and Public Interest and Accountability Committee (PIAC) in the case of Ghana are all strengthened to oversee the exploitation and utilization of petroleum proceeds to promote sustainable and equitable development.

Establishment of a Natural Resource Fund by the State

This principle assumes that all revenues from natural resources such as petroleum wealth are received and managed by the state. A natural resource fund is an entity that separates the earnings of natural resources from other types of revenue. In theory, creating a natural resource fund demonstrates a country's commitment to administer proceeds from the exploitation of its natural resources separately, and it is the first step toward accounting for such money differently. It is more difficult to determine how much revenue is obtained from the exploitation of petroleum resources or how the revenue is utilized or misallocated when there is no natural resource fund, especially where institutions are weak. The natural resource fund serves as an earmarked receipt account that allows all proceeds of petroleum revenue deposited into it and expenses have done electronically to clearly identified areas in the national budget approved by parliament. However, the constitution of petroleum revenue must be spelt out to prevent rent-seekers from exploiting the narrowness of the law to exploit the revenues as cited by Gary in the case of Chad's revenue management law.

Strategic and Prudent Investment of Petroleum Wealth

Another crucial part of prudent natural resource revenue management is how that revenue is invested financially. This principle argues that prudent and wise investment of petroleum wealth can be achieved in two ways- offshore and local investments. The offshore investment which is seen as a conservative principle requires that petroleum revenues are invested in foreign countries with low tax regimes and high returns. Offshore investments are done to achieve three main purposes: avoid creating opportunities for corruption and nepotism as is the case with other extractive resources such as gold, bauxite and timber, allay fears of bad and biased investment choices by political office holders and reduce the tendency of the domestic economy to overheat due to huge volumes of investments in a limited infrastructure that always characterize emerging and developing countries. This type of conservative investment approach is practised by Timor-Leste. The local investment approach of the prudent investment principle involves the identification of key sectors of the national economy that are seen as a national priority for both the present and future generations and, hence, allocated with percentages of the petroleum revenue for investment in the national budgets in annual basis. This principle argues that investment of oil and gas proceeds in the domestic economy ensures that essential social infrastructure such as roads, railway, electricity, educational and health infrastructure among others are provided to trigger the take-off and transformation of economic development. Investments in these social infrastructures lead to expansion of the economies, create jobs and enhance the living standards of the citizens. This investment principle is adopted and practised by Ghana since the production of commercial oil in 2010.

Transparent Management of Petroleum wealth

Without transparency, it is impossible to avoid the misappropriation of petroleum revenues. Transparency and open accounting is commonly viewed as a key to eliminating waste and corruption problems. Independent transaction reporting is now routinely sought by countries with corruption issues. Governments and Civil Society organizations have also launched a variety of efforts aimed at improving accounting processes between energy corporations and governments and therefore increasing transparency. Such measures are intended to strengthen government accountability and encourage better budgetary management. The creation of relevant information by the responsible authority, the dissemination of that information, and the cognizant observation of that information are all required for transparent petroleum revenue administration in any emerging and developing country that seeks to achieve this principle. The establishment of the Public Interest and Accountability Committee in Ghana to monitor the administration and investment of oil revenues is a clear instance of enhancing the transparent management of the petroleum wealth principle. However, the committee is bereft of the needed authority to proffer sanctions in case of misappropriation by the government. This indirectly renders such bodies with oversight responsibilities on the management of petroleum revenues in emerging and developing countries ineffective and as mere advisory bodies.

Creation of Savings Fund for Future Generations

The creation of a ‘Savings fund' which is a natural resource fund designed to assist a government in creating a store of wealth for future generations is an important principle practised in most countries where petroleum resources are extracted. The justification for saving is that nonrenewable resources such as petroleum are finite, and a state must recognize this and plan for the inevitable decrease and exhaustion of this natural resource income for future generations. For instance, Ghana’s Petroleum Revenue Management Act set up the Heritage and Stabilization funds which constitute the Ghana Petroleum Wealth Fund (30% of net revenue) to cater for future generations and as a buffer to cushion the economy in times of crisis as was the case in COVID-19 pandemic respectively. This will result in a higher level of revenue for future generations even after the depletion of the petroleum deposits. Countries such as Chile, Oman and Norway are examples with success stories of savings funds for future generations. Although data restrictions have restricted investigations in this area, the effectiveness of saving funds appears to be limited empirically. Although it is difficult to isolate the benefits of the fund from the influence of cautious expenditure practices, time-series analysis reveals that in nations with such funds, fiscal spending is less linked with fluctuations in the price of the resource (Devlin et al, 2004).

However, the extent to which these saving funds can compensate the destructions of the environment and other nuisances created by the exploitation to cater for the needs of future generations in emerging and developing countries remains bleak. This stems from the fact that the savings rate and the investment diversifications of petroleum wealth in emerging and developing economies are so insignificant and misdirected to guarantee sustainable development. As a result, it is critical to expanding other economic sectors in order to generate more revenue. Overreliance on natural resources, in this case, oil, will not always foster progress, and it is a recipe for avoidable economic difficulties as has been witnessed in Nigeria, Somalia, and Kuwait among others.

18.4 Approaches to Petroleum Wealth Management and Utilization

There are several approaches for petroleum wealth management and utilization and these include, Direct Distribution of Revenue to Citizens, Transfer of Revenues to Regional and Subnational Institutions, Use of Barter Contracts and Bundling, and Deferment of Petroleum Wealth Exploitation. These are discussed in turn.

18.4.1 Direct Distribution of Revenue to Citizens

Direct distribution of money, according to scholars, could help emerging and developing countries avoid at least some aspects of the oil curse: a fund would retain at least some of the country's petroleum revenues out of the hands of political office holders, who might otherwise embezzle them or use them for political gain; it could help citizens hedge against price volatility if citizens are better at planning ahead than governments, and it could give citizens a powerful incentive to monitor their government's use of petroleum revenues thereby mounting pressures against corrupt practices and in favor of prudent governance. This reduces the government's financing for potentially worthwhile interventions; however, the government could through fiscal policy introduce taxes to indirectly retrieve portion of the monies allocated, which also prompts citizens to demand accountability from the government.

18.4.2 Transfer of Revenues to Regional and Subnational Institutions

Provincial and district authorities should be compensated for the social, environmental, and infrastructure costs they incur as a result of hosting petroleum projects. Revenue devolution, on the other hand, goes beyond cost reduction: It entails local authorities sharing the financial rewards of resource exploitation to also provide essential services and infrastructure within their jurisdictions. Developing countries such as Ecuador, Ghana and Nigeria are a few of the countries that practice this approach of revenue sharing. There are two main approaches to this: Countries can either enable local authorities to tax the petroleum industry directly, or they can send a portion of the central government's revenues to sub-national governments based on a formula, either before or after smoothing out year-to-year revenue changes. Revenue localization can be an efficient approach to minimize the extent of the central government's arbitrary windfall, and it may even lower the risk of separatist movements in the extractive region as experienced in Sudan in recent years. The localization of petroleum wealth could better be used when various transparency mechanisms are instituted by national governments to check the use of the revenues for the provision of public goods by local authorities. The less bureaucratic nature of local governments makes them more efficient and transparent in the use of petroleum revenue.

18.4.3 Use of Barter Contracts and Bundling

Low-income countries can trade their oil directly for the public goods they eventually want instead of selling it for revenue. Several nations, notably Angola, Nigeria, Zambia, and Zimbabwe, have used barter-style deals to sell petroleum and other resource rights to Chinese-owned consortia; instead of royalties and taxes, these governments received assurances of future infrastructure and services. Petroleum firms have traditionally supported their activities in host countries by constructing additional infrastructures such as housing for workers, roads, railroads, and even ports. Barter arrangements go even farther, requiring corporations to compensate host governments in the form of unrelated projects and services rather than cash. Nigeria entered into agreements in 2006 to provide Chinese businesses exploration licenses to four offshore blocs in exchange for $4 billion in investment, which included commitments to construct a new hydropower plant, rebuild a dilapidated railway line, and create malaria and avian flu programs. Similar oil deals have been exchanged for new roads, trains, bridges, schools, hospitals, and a cyber-optic network in Angola. Ghana entered into a similar agreement with Sinohydro to build infrastructure to the tune of $3 billion in 2018 for the exchange of bauxite in the Atiwa forest reserve.

Economists are naturally cautious of arrangements like this, which include a process known as “bundling,” in which one transaction (the purchase of exploration or extraction rights) is linked to a second transaction (the sale of a product- the construction of roads and bridges). Bundling is sometimes used by businesses to obtain an advantage over competition. However, if the costs of doing the transaction sequentially are onerous, bundling can be advantageous. Barter contracts could help low-capacity countries avoid the process of collecting revenues (where leakages could occur), redistributing revenues across government agencies (where corruption is possible), and finally assigning revenues to government initiatives (where corruption, patronage, and inefficiencies are high). They may also alleviate governments of the need to smooth out revenue volatility because of revenue falls to the company; they can help attract foreign infrastructure corporations to low-income countries that might otherwise avoid for fear of not being paid to assist governments in making difficult-to-reverse commitments to long-term projects that might not otherwise be completed.

18.4.4 Deferment of Petroleum Wealth Exploitation

The first approach for low-income countries is to keep the oil underground. The exploitation of petroleum can be at a slower rate to ensure that revenues do not outpace the government's ability to spend them wisely or civil society's ability to supervise the operations of a rapidly expanding government. Because petroleum wealthis a non-renewable resource, exploiting it results in a one-time financial infusion. It can increase the living standards of future generations if judiciously invested, but it can equally be inimical to the economy if mismanaged. Deferring oil extraction for revenue has a large opportunity cost, especially in low-income countries where people desperately need basic services such as health care, education and security. Hence, petroleum wealth provides a unique opportunity for rapid economic growth in the world's poorest countries to provide these basic social services to the citizens.

18.5 Challenges of Petroleum Wealth Management

Petroleum wealth management is affected by several challenges. These include volatility of global oil prices, social and environmental problems, economic imbalances arising from excess petroleum revenue, collusion and corruption in extraction and management of petroleum wealth, over-dependence on petroleum revenue, and over-reliance on foreign labour and capital resources. These are discussed in detail.

18.5.1 Volatility of Global Oil Prices

The biggest issues with oil reliance are price volatility and the fact that oil reserves are finite. A one-standard-deviation shock to the price of oil indicates an income shock comparable to 6 percent of GDP in a country where oil accounts for around 20 percent of gross domestic product (GDP) (Hausmann and Rigobon, 2003). Oil prices fluctuate from month to month due to transient shifts in global economic and political situations that influence oil supply and demand. Political unrest between Russia and Ukraine in 2022, for example, has temporarily impacted oil supplies, pushing prices above $100 per barrel for the first time since 2014. Petroleum price volatilities produce large revenue fluctuations in petroleum wealth dependent countries which can saddle governments with revenue smoothing that emerging and developing countries are saddled with. The uncertainty of the revenue flows partly explains why oil-exporting countries in the emerging and developing world are faced with the challenge of productive investment their petroleum wealth in other critical sectors of their economies to ameliorate the sufferings of their citizens. This is one of the factors that trigger conflict and insecurity in communities where petroleum products are extracted such as the conflicts in Yemen in 1994, Sudan in 1983 and Indonesia in 1975. Again, the uncertainty about the future due to oil price instability affects the long term investment plan of the government and discourages the private sector from investing in such economies and reduces capital inflows which in the long run affect economic growth.

18.5.2 Social and Environmental Problems

The extraction process of petroleum resources such as oil and gas has limited direct benefits to the communities such as local content involvement including employment of local artisans and use of local materials due to the sophisticated nature of same. However, the process has many devastating social and environmental problems for the local communities. A significant majority of petroleum deposit host communities in emerging and developing countries suffer from poor infrastructure and social amenities. Inhabitants in surrounding communities rely on fertile farmland and fresh waterways for their socio-economic well-being, which are badly harmed by crude oil processing, exploration, and transportation. Oil leaks from crude oil drilling have left the majority of communities without access to safe drinking water (Junger 2007). The consequent effect of oil spills into water bodies poses a threat to aquatic life, exacerbating hunger and poverty. 'Due to runoffs from crude oil deposit sites, agricultural farmlands are also impacted in the process, turning once-fertile soils into wastelands'.

The economic effect is a decrease in agricultural yield and productivity (Sam et al. 2017), which has an impact on sales and, as a result, the economic output from agriculture. The discharge of hazardous gases and particulates during gas flaring can endanger both human's and animals' health. In flared gases, 'over 250 toxins have been detected, including polycyclic aromatic hydrocarbons (PAHs), hydrogen sulfide, toluene, benzene, sulfur dioxide, nitrogen dioxides, xylene, and others, some of which are responsible for acid rain, ozone depletion, global warming, cancer, and other harmful effects' (PAHs) (Junger, 2007). As a result, the widespread emission of particulate matter and precursor gases in the vicinity of oil-producing areas may be cause for concern.

18.5.3 Economic Imbalances arising from Excess Petroleum Revenue

The discovery of petroleum in emerging and developing economies which traditionally depended on rain-fed agriculture and low technology for their economic development naturally leaves them ‘flooded’ with unplanned and excess revenue from the sale and export of crude oil and gas. The excess windfall of revenue has economic implications if not managed well. Thus, it could lead to overheating of the economy, and hence, excess growth of the economy can plunge the economy into hyperinflationary pressures stemming from high government expenditure and income levels of individuals. Again, the inflows of the petroleum revenue have been identified as one of the reasons that have caused most emerging and developing countries to overly rely on petroleum wealth to the neglect of the traditional sources of revenue leading to limited diversification of the economies and high unemployment rates in Africa (Ali et al, 2013). This makes the economic structure of countries weak and imbalanced and highly susceptible to global shocks such as price volatility and food insecurity.

18.5.4 Collusion and Corruption in Extraction and Management of Petroleum Wealth

The secrecy surrounding petroleum wealth exacerbates the numerous problems associated with its management. Governments frequently work with international energy firms to hide transactions, and they use their own state-owned businesses to conceal both revenues and expenditures. Secrecy is one of the main reasons why petroleum revenues are frequently lost to corruption; why resource-fueled autocrats can stay in office by covering up evidence of their greed and mismanagement; and why insurgents are often hesitant to lay down their arms because they distrust others in the government to share their country's mineral revenues more equitably. This explains why emerging and developing countries share of negotiated percentages of oil proceeds from the exploration averaged 8 and 20 percent in Africa: the tendency of African government officials to collude with foreign firms for their personal interest and benefit is undoubtedly high (Delvin et al, 2004).

The diversion of petroleum wealth into private benefits has been attributed as one key reason why emerging and developing countries endowed with petroleum resources are still poor and undeveloped. For instance, barely one percent of Nigeria's population gets a share of the overall wealth generated from crude oil exploration (Junger 2007). It is further argued that from 1970 to 2020, given the average price of a barrel of oil for the timeframe under consideration, crude oil sales produced $669 billion in revenue. Nigeria is Africa's top crude oil producer, the world's seventh-largest oil and gas exporter, and home to the world's tenth-largest processed gas reserve (Amnesty International 2006; Donwa et al. 2015). Notwithstanding its vast oil revenues, Nigeria is one of the world's poorest and most heavily indebted countries (Agbiboa 2013). According to the corruption perception index (CPI), over 70 percent of its estimated 200 million people live on less than $2 US per day as a result of corruption, distortion and mismanagement of petroleum wealth (Hope 2017). The diversion of revenues from the national treasury to persons, as well as the awarding of oil blocks, contracts, licenses, and production rights to individuals, has hampered economic progress and resulted in the loss of jobs.

18.5.5 Over-Dependence on Petroleum Revenue

Most often than not, the discovery of crude oil and gas in most emerging and developing countries often leads to the neglect of other critical sectors of the national economy. Agriculture which is usually the mainstay of third world economies contributing nearly half of foreign earnings and employing close to 60 percent of the labour force is affected by the adverse activities of the exploration leaving the previously employed labour force jobless especially in the rural periphery where crude oil is always found. Other sectors such as manufacturing and industry, trade and commerce, service and others are abandoned once oil deposits are found and extracted creating the phenomenon of the 'Dutch disease'. This undoubtedly affects the income streams of the countries and the citizens and affects national development and standard of living.

The loss of economic diversity and total dependence on oil proceeds has been identified by many as one of the factors undermining socioeconomic development and altering the economic structures of oil-producing nations in the emerging and developing world especially due to the high volatility associated with oil prices in the global market (Ali et al, 2013). For instance, until the discovery of oil in 1959, Libya was known for its agriculture. Crude oil has been Libya's main source of wealth since its discovery forming 50 percent of GDP, 97 percent of exports, and 75 percent of government revenue and has plays a significant part in the country's socio-economic growth (El-Sharif 2005). Despite its contribution to the economic growth of the country, oil has reduced economic diversity and hampered the provision of various goods and services domestically, particularly amid the ongoing exogenous global oil price volatility (Ali and Harvie 2013).

18.5.6 Over-Reliance on foreign labour and capital Resources

Petroleum is primarily located in the rural areas. Because of the low level of education in such places, the technological competence required for its extraction and processing is frequently imported. The use of foreign expertise in the exploration of petroleum resources in emerging and developing nations of the world has largely contributed to the high deprivation and abject poverty and high urban-rural drift associated with communities of oil deposits. The income earned by these expatriates is repatriated to their home countries which affect the economic activities of host nations and ultimately impacting on the domestic currency of the countries.

The discovery, exploration, storage and management of oil and gas require a huge investment in research, machinery and technology. Emerging and developing countries endowed with petroleum resources are always bereft of the needed investment capital and would therefore rely on foreign investors to extract the oil and gas. This coupled with collusion, corruption and incompetence of government officials, leads to poorly negotiated deals and revenue sharing agreements that leave the host countries and their citizens more improvised and disadvantaged. Tax exemptions, weak regulatory and enforcement regimes among others further worsen the economic and environmental fragilities of the emerging and developing nations as profits of these foreign firms are expatriated home causing capital flight and its associated consequences and finally, a devastated environment that cannot support human existence. The sophisticated nature of the machinery and technological know-how requirements in the extraction process of petroleum resources and the fact that these are mainly absent in emerging and developing countries are contributory factors to the problems experienced by petroleum-producing countries.

18.6 Factors that Affect Petroleum Wealth Maximization in Developing Countries

The discovery of petroleum and the management of its wealth presents a major challenge to most emerging and developing countries. The excess revenue always leads to unplanned expenditure leading to structural imbalances in the economy and avenues for corrupt practices by political officeholders. The absence of legal frameworks on the management of petroleum wealth and investment policies that characterize emerging and developing countries' response to oil and gas extraction do not lead to judicious maximization of petroleum wealth. Factors suggested for the maximization of petroleum resources are discussed below.

18.6.1 Legislation and Investment Policy on Petroleum Wealth Management

Like any other sector, petroleum resources and their revenue need to be guided by legislation and policy to direct its exploration, revenue management, savings and investment as well as utilization of its proceeds. This allows for the establishment of a framework that prevents the mismanagement of the oil revenue and enhances accountability in the use of the same. Box 18.1 discusses the legislation and regulatory framework on revenue management of petroleum proceeds in the case of Ghana.

Box 18.1: Legislation and Regulatory Framework on Petroleum Revenue Management in Ghana
Following the oil exploration of oil in Ghana in 2010, Parliament enacted the Petroleum Revenue Management Act (Act 815) in 2011 to serve as the guiding mechanism for revenue management of oil. The Act is the exclusive authority on oil proceeds and offers fiscal guidelines on the allocations of the revenue to identified sectors and funds specified in the Act. The Petroleum Holdings Fund (PHF) was created to receive all revenues from the oil and through which all expenditures of the petroleum revenue shall be made from to all the specified allocations by the law. The fund cannot be used a credit source to lend to government neither can it be used as a guarantee for government debts. The PHF has the Ghana Petroleum Fund that receives all revenue in excess of the benchmark value and disburses same to the Stabilization and Heritage Funds created by the act to cater as buffer to shocks and for the use of unborne generations respectively. The Stabilisation and Heritage Funds receives 30% of net revenue after allocation to the Ghana National Petroleum Corporation responsible for oil exploration. The remaining 70% is dedicated to support the annual national budget mainly on four sectors identified by the government.

To ensure accountability and transparency on the use of oil revenue, the act 815 established the Public Interest and Accountability Committee consisting of various stakeholders from academia, traditional authority, religious bodies, Civil Society Organisations, the Media, Professional bodies, Trade Unions among others to oversee the utilization of oil revenues and ensure compliance by government. The committee has since been producing quarterly and annual reports on the use of oils revenue since 2012. The Investment advisory committee, Bank of Ghana, Ghana Revenue Authority, Ministry of Finance and the Auditor-General all have identified and specified roles in the act to carry out in a bit to promote accountability and transparency in the use of petroleum revenue in Ghana.

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18.6.2 Development of Local Human Resources and use of Domestic Capital

One fundamental challenge that bedevils emerging and developing countries extracting petroleum resources is the lack of technical expertise and know-how. The petroleum industry is a highly sophisticated one that requires the use of highly professional skilled labour such as petrochemical engineers, mechanical engineers, Geotechnical engineers and energy experts. These calibers of human resources, according to Delvin et al (2004) are limited locally in emerging and developing countries. The academic world in emerging and developing nations must invest in research development to train these skilled professionals locally so as to reduce the amount of foreign currency paid to imported labour which in the long run affects domestic spending to boost economic growth. The capital market of developing economies needs to be developed to provide the needed capital and promote financial intermediation. The development of the capital market will avail financial resources to both governments and the private sector to invest in technology, machinery and capacity building and leverage on local resources that ensure that there is enough local expertise and capital to exploit petroleum resources and retain all wages in the local economy. This also ensures that the benefits of the petroleum resources are locally controlled for the collective development of the country unlike the practice of small stakes that are always negotiated by governments from foreign investors.

18.6.3 Equitable Distribution of Petroleum Wealth

Petroleum revenue and its distribution have served as a fertile source of conflict in many oil-exporting nations across both developed and developing countries. Corruption, nepotism and patronage have characterized the ownership of oil contracts and blocs by the affluent in society to the neglect of the general wellbeing of the entire community. Patronage by political office holders squandering the wealth of petroleum resources on themselves to the disadvantage of the communal interest is a norm rather than an exception in many oil export countries. These have caused conflicts in Africa including Nigeria, Pakistan, Angola, Sudan, Chad and Lybia. To avoid conflicts and its attendant devastating effects on the economies of oil-producing countries, the stakeholders should be engaged openly and transparently on how the wealth of oil resources are used and distributed. Guidelines and legislation should be put in place that ensures that no individual can engage in financial mismanagement with the proceeds of oil and that all geographical regions of the country are given their share and allocation of the wealth as prescribed in the guideline or investment laws as it is the case in Ghana’s Petroleum Revenue Management Act.

18.6.4 Transparency and Accountability in Petroleum Wealth Utilization

In oil economies, transparency has been a major challenge. Because of the secrecy surrounding oil activities, rent-seeking, patronage, and corruption thrive. Many emerging and developing oil-exporting countries have performed petroleum exploration and monitoring without the awareness of the citizens they represent in government. Internal checks and balances among the major participants and monitoring institutions, as well as outward transparency where data is available for public consumption and investigation, constitute the main forms of transparency in petroleum wealth management. The type of political regime determines whether or not transparency is effective. Citizens will demand transparency and accountability from their government when public awareness is strong. As a result, transparent exploration procedures are entirely contingent on political will. Oil governance and revenue management, in particular, are frequently cloaked in secrecy. This is true in the majority of emerging and developing oil-exporting countries. The majority of information on the utilization of oil wealth and production capacity, as well as contractual agreements, has been unavailable to the general public. This makes it impossible to implement accountability systems, whether by the people or by institutions, which have the constitutional responsibility of establishing checks and balances.

18.6.5 Development of other Critical Sectors of the Economy

The overreliance of governments of oil-producing countries on the revenue of petroleum resources after the discovery of oil to the neglect of other revenue streams creates the 'Dutch disease' problem in most emerging and developing countries. Agriculture, trade and commerce and manufacturing sectors have traditionally formed the engine of growth of most economies. In recent times, technology and the service sector, in general, has taken over the driving seat of every economy across the globe. However, there are ineffective policies by governments in emerging and developing countries to develop these sectors to contribute to the revenue streams of the countries and create employment for the teeming youth who may not have the required skills to work in the petroleum sector. Petroleum resources are exhaustive and any reliance on the same to develop any economy cannot be sustained. Hence, the development of critical sectors such as agriculture, service and manufacturing using the proceeds of oil and gas is one surest way to guarantee a robust local economy that can stand the shocks of global economic changes and create sustainable jobs to improve the living standards of the people in oil-producing nations.

18.6.6 Political Stability

No sustainable development thrives in an environment of insecurity and unrest. In this regard, so that emerging and developing countries to maximize the resources of petroleum exploration, there must necessarily be political stability to provide the platform for various stakeholders including the media, civil society and individuals contribute to the management of petroleum wealth. Uninterrupted democratic governance ensures that the relevant state institutions and monitoring frameworks are laid and strengthened over time to hold duty bearers accountable for the use and management of petroleum revenue. This ensures that investment projects yield the needed dividends to the citizens in the long run and transparency on the use of the revenues is guaranteed.

18.7 Conclusion

Many petroleum export countries in the emerging and developing world continue to depend heavily on revenues of their petroleum resources to run their economies and governance and this will continue to linger on for some time. The contribution of petroleum wealth to the transformation of countries remains significant and a mystery. Thus, many nations have utilized petroleum wealth efficiently to remarkably improve the living conditions of their citizens whiles others mismanage the same to even retrogress in their quest to seek development. Maximisation of petroleum wealth in emerging and developing nations requires the adoption of best practices such as slow exploration of petroleum resources to cater for future needs, diversification of economic activities in critical sectors, equitable distribution of petroleum revenue, decentralization of proceeds of oil sales and instituting transparency and accountability mechanisms through legislation and policy direction to check mismanagement.

Commented [RS3]: Very long sentence! This is the last sentence in your conclusion – it is possibly the most important sentence so you need to work on it.

References

Commented [WU4]: Arrange the references very well and follow APA referencing style.

Also, make sure all the references are listed here

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