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UNDERSTANDING THE RESOURCE CURSE:

Why Some Get More Sick Than Others

by Karen Timmerman

Countries rich in natural resources often suffer from the “resource curse”: negative effects that high reserves of these resources have on economic, political and social institutions. Although richness in oil is presumed to bring national prosperity, at times it is detrimental to the country due to corruption and overdependence on petroleum revenues. This study seeks to understand how some countries manage this curse better than others by examining the varied experiences of three of the world’s largest oil-exporting countries: Venezuela, Nigeria and Kazakhstan.
“Ten years from now, twenty years from now, you will see: oil will bring us ruin...Oil is the Devil’s excrement.”

The Venezuelan co-creator of OPEC, Juan Pablo Pérez Alfonzo made this statement at a time when Venezuela’s economy was booming and the revenues were flowing in due to the high oil prices of 1973, and so his comment seemed out of place.

However, Alfonzo had made a startlingly accurate prediction for the future; in the many decades since the first discovery of oil in Titusville, Pennsylvania, to where so many had rushed for the chance at profiting from this new lucrative business, the world has seen the economies and institutions of some major oil-exporting countries falter and fail because of an increasing reliance on oil revenues to run the nation. This inverse relationship between dependence on natural resource exports and the economic growth rate of a region is known by many names, including the paradox of plenty, the “devil’s excrement,” and the resource curse. Though its impacts can be devastating on the economies and livelihoods of oil-exporting nations, the resource curse does not affect every oil-producing country in the world. There have been many countries throughout history, such as Australia and Norway, who depend on the export of single-point natural resources such as oil for revenues but have not been afflicted by the negative consequences of the resource curse. In this paper I shall examine the resource curse and the impact it has had on three of the world’s largest petroleum exporters: Venezuela, Nigeria and Kazakhstan. These three nations, each the largest petroleum exporter within its region, suffer from this resource curse to some extent but with vastly different causes and consequences.

I wish to compare the impact of oil revenue dependence on each country’s economy and social and political institutions, and I will attempt to explain the differences in both the severity and causes of the resource curse in each case. I will also present the steps that each country has taken, if any, in an effort to reduce and reverse the consequences of their overdependence on the substance that makes the world go round.

The Resource Curse

Before analyzing its effects, the resource curse must be defined. The increased reliance on revenues from oil exports by countries that suffer from this paradox of plenty is harming their economies and populations so much that, if not checked, it could ultimately lead to civil strife and war. I shall characterize the resource curse using the explanations posited by Terry Lynn Karl, one of the forefront scholars on the idea of the paradox of plenty. She defines the resource curse as the “inverse relationship between high natural resource dependence and economic growth rate.”

In addition to examining the economics of the resource curse, Lynn also focuses on the “social and political relations arising from [the] utilization [of oil].” The immense wealth that oil exploitation can bring may cause the political and social institutional structures to change in a way that negatively affects the economy. The focus of this paper is on the export of the point source nonrenewable natural resource that is oil: a black, sticky substance that went from being used as a lubricant, a light source and even as a weapon in medieval wars to the liquid that has pushed globalization to a new level and has opened up a vast world economy. In an age where the demand for oil is growing every day, large oil reserves are seen as enormous assets for the countries they are found in. In 2011 global consumption had increased the most since 2004, up by 3.1% to 87.4 million barrels a day, with the most rapid of growth occurring in developing countries. The reliance on fuel of nations such as China and India to connect their emerging markets around the world will only increase in the years to come, putting pressure on oil exporters to meet this demand without succumbing to the paradox of plenty.

The resource curse has several different causes and effects that each contribute in different ways to the growing dependence on oil rents, which cause poor economic growth and decreases efficiency of social and political institutions. The explanations include the change in the role of the government towards the market, especially after nationalizing part or the whole of their oil industry and the increasing power of elites and interest groups who use the oil rents to keep their positions. These changes have a number of negative effects such as the distorted economic growth characterized by Dutch Disease and the increasing difference in economic income that forces a majority of the population into poverty.

The first explanation of the resource curse is the change in the role of the state towards the market. Revenues from oil exports are received by the state in the form of royalties and rents from foreign companies or taxes and profits from state-owned companies. These revenues give the state less incentive to establish a system of taxation on their people, taking away some accountability for government spending. Because the state is receiving its money directly from the oil trade, it does not feel the need to show budget transparency for the general population, as the money belongs to the state, which leaves more room for corrupt spending. In order to pacify the people, the government will embark on massive infrastructure projects and increase social welfare, relying on oil rents to fund everything.

The elites and interest groups who are
in control will also use oil rents to reinforce their place in society in order to reap the benefits. The state begins to exhibit rent-seeking behavior in order to maintain the status quo of the regime and to accrue the short-term benefits of oil exploitation. This increased reliance on oil rents to fund projects and fuel corruption can have disastrous effects on a state’s economy, the development of other sectors of the economy. Countries that once depended upon agriculture for a large percentage of their exports may suddenly find it cheaper to import their food from another country. The government may place subsidies and taxes on these industries in a protectionist attempt, but this merely serves to continue to decrease competitiveness and also places an additional burden on the oil sector to provide funds for these policies. If not reversed, Dutch disease can become perpetuating, “provok[ing] a rapid, even distorted, growth of services, transportation, and other non-tradeables while simultaneously discouraging industrialization and agriculture,” which could eventually lead the economy to collapse.

In addition to the dominance of oil in the export sector, rent-seeking behavior causes the income gap to increase and poverty levels to rise due to the capital- and education-intensive characteristics of the oil industry. This can be explained through the rent cycling theory. This idea compares the differences between the effects of low and high oil rent revenues. In a low rent model, the incentive to create wealth is highly prevalent because the government relies less on oil rents to sustain itself and thus must invest in growing its economy by other means. Dutch Disease is not affecting the competitiveness of non-oil and labor-intensive manufactured goods, and so the government will expand these sectors, which in turn increases the diversification of the economy and decreases income inequality. There will be a higher demand for domestic skilled labor and the increase in productivity can lead to innovation for the future. By contrast, in a high rent model the profits from oil exploitation are received and dispersed of in large amounts very quickly in order to gain maximum short-term benefits. The money is spent in frivolous and corrupt ways on costly projects and to keep the elites in the political power positions they hold. With the oil industry as capital and technologically intensive as it is, few jobs are created, and poor funding for educational systems leaves a population of rural laborers watching the distance between high and low income increase as foreign workers are hired by oil companies and education is completed in foreign countries. The rent-seeking sector, by making poor investments and not bothering to correctly jumpstart the economy “corrodes the viability of the primary sector upon which it increasingly depends.” In addition, a government may also invest little back into research and innovation in the oil industry, over time decreasing production levels and efficiency.

The high level of foreign workers and low domestic employment is also a result of the presence of foreign companies since the beginnings of a nation’s oil history. Most oil-exporting countries lacked the technical skill and capital to extract and refine oil from their fields, and thus outside companies were awarded concessions and employed their own workers to extract the precious natural resource. When the oil industry took off, it caused a rise in the wages of the few employed by the oil industry which left the rest of the population out of work and watching their nation’s resources be controlled by foreigners. For these reasons, especially due to poor economic management by the government, the population of an affected country may become very disgruntled with the way oil rents are being spent, and this could lead to increased violence and even war. As the majority of the population sinks
into poverty and the per capita income of the country plummets, a small minority reaps the benefits of the nation’s oil fields. If the government does not become fully accountable for their people or provide budget and revenue transparency for their financial transactions, the population may rise up against the elites in the form of attacks on individuals and oil infrastructure, terrorism, and even civil wars and coups.

Countries that suffer from an overdependence on oil export revenues will see different levels of severity of the resource curse depending on how the country is run. I shall examine the effects of the resource curse on the countries of Venezuela, Nigeria and Kazakhstan and compare the three in order to explain the reasons for the variance in the intensity of the resource curse and its effects.

**Venezuela**

At the end of 2010, Venezuela was the largest producer of petroleum in South America and the ninth largest producer in the world, with a 15.3% share of the total proven world reserves. This country has had a long history with oil; discovered in 1914 at the Mene Grande field, the natural resource was first seen in production for export in 1917, with Royal Dutch and Standard Oil as the major players in its extraction and refinement. Oil’s share of exports rose dramatically from 1.9% to 91.2% between 1920 and 1935 and by 1929 Venezuela was the world’s largest oil exporter. In 1926, oil had surpassed the value of coffee and other agricultural commodities to become the most important export to the Venezuelan economy. This is a perfect example of Dutch Disease; with oil taking over as the major export, and a lucrative one at that, by 1940 the Venezuelan government found it cheaper to import their food rather than to rely on their once strong agricultural sector. The appreciation of the bolívar in relation to the U.S. dollar encouraged a growth in the import sector of Venezuela while neglecting traditional domestic sectors such as the agriculture industry. By 1950, agricultural exports comprised of less than one-tenth of the country’s GDP.

In 1943, the Fifty-Fifty Agreement was pushed for by Venezuela, who wanted to see royalties and taxes “raised to the point at which the government’s take would equal about equal the companies’ [Royal Dutch/ Shell and Jersey] net profits in Venezuela.” At the same time, the Hydrocarbons Act was passed, giving the government greater control over oil revenues. This Act established a new income tax on the Venezuelan government; rather than handing out concessions in return for a chunk of the profits the state could now determine how much of a cut it would take, and the fact that the money came from oil rather than from taxing the citizens meant that the state could be a bit more secretive with their spending. The foreign oil companies went from the ones in control to a position in which they had to comply with the national government, lest they risk being thrown out of the business. For the next ten years, Venezuela witnessed a surge in production while at the same time spent millions of dollars on the import of consumer goods from countries such as the United States. Pérez Jiménez, who ruled Venezuela from 1948 to 1957, used this influx of oil to his advantage. Jiménez reduced social expenditures and poured the oil revenues into projects of his own, causing the economy to drop due to unnecessary expenditures and overspending. Public outrage at his poor fiscal policies was increasingly mounting as Venezuela headed towards massive debt.

In 1958, Jiménez was overthrown in a coup and Venezuela became a democracy. Karl defines the type of democracy present in Venezuela as a “pacted democracy,” which she describes as “established through elite bargains and compromises…” [that] ensure their survival by selectively meeting demands while limiting the scope of representation in order to reassure traditional dominant classes that their vital interests will be respected.” This form of democracy impacted Venezuela’s dependence on petroleum in several ways; rigid political institutions were produced that kept barriers to admittance high, so that the elites in power positions could continue to keep their place and use oil rents for their own purposes. However, large amounts of social spending occurred in order to pacify and provide jobs for the working class. This social spending, which includes spending on education, health, and housing among other sectors, increased from 11.4% under Jiménez to a much higher 31.4% of total spending in 1973. Despite this, by 1973 there was much discontent apparent in the population. The political parties and government were highly centralized, leaving little room for newcomers and limiting representation, and the economy was balanced in the direct of the few wealthy elite.

In the mid-1950s, the rises in production in the Middle East and import controls in the United States led to a flooding of the markets, and prices plummeted, along with Venezuela’s oil revenues. Juan Pablo Pérez Alfonzo, Venezuela’s Minister of Mines and Hydrocarbons at the time, had realized the imminent dangers of the resource curse; he got together with Abdullah al-Tariki of Saudi Arabia and founded the Organization of Petroleum Exporting Countries in 1960. OPEC was an attempt by the world’s largest oil-exporting countries to, through the imposition of export quotas, coordinate policies and keep world prices stable in such a volatile and ever-changing market.

The First Oil Shock in 1973, a result of the fourth Arab-Israeli War and the Arab oil embargo, sent oil prices skyrocketing,
increasing Venezuela’s fiscal income per barrel of exported oil from $1.65 to $9.68 between 1972 and 1975. This led to massive increases in government spending.\textsuperscript{15} When Carlos Andrés Pérez of the Acción Democrática party won Presidency in 1973, he began to implement his plans for La Gran Venezuela, which consisted of income increases and job creation along with a push to diversify exports through the expansion and nationalization of other industries. However, most of the jobs created were for the national government, which doubled in the first five years of his rule, calling for an increase in petrodollars to fund their wages. Pérez also called for the nationalism of the oil industry and succeeded in 1976 when the newly created state-owned oil company known as Petróleos de Venezuela S.A. (PDVSA) took over concessions of foreign companies.\textsuperscript{16} At this time in history, Venezuela and the other OPEC and non-OPEC countries were profiting greatly from the high prices of the first oil shock. Carlos Pérez seized this moment to complete his vision of a modern and industrialized Venezuela fueled by the large amounts of incoming oil rents. There was also a rise in wages and new employment opportunities in oil-exporting countries, which increased consumption at a rate of 7% between 1970 and 1979. Despite the expulsion of most foreign workers from Venezuela’s oil industry however, only about 37,000 jobs were provided to the domestic labor force.\textsuperscript{17} By the late 1970s, on the eve of the coming oil glut, the surpluses turned into deficits. Spending has grown out of control, and during the 1980s oil glut, a result of declining consumption due to the high prices of the oil shocks and over-quota production from OPEC countries, prices dropped to $13.00 per barrel in 1986 and Venezuela’s oil revenues fell with them, putting Venezuela into massive debt, with “the ratio of debt to GNP reach[ing]... [a] high of 65.3 percent” in 1987.\textsuperscript{18}

Backlit, Gina Mason

In 1974, the Venezuelan Investment Fund was created to accumulate oil revenue and foreign exchange reserves. However, the government also saw the fund as a bank for their large public sector projects. Although the Fund did accrue a modest amount of income, rather than being used fully to improve the economy and lives of Venezuela’s citizens, the Fund was “an executor of the government’s plans and wishes,” meaning that oil was still being used for wasteful projects and corruption.\textsuperscript{19}

Between 1970 and 1994, foreign debt increased to 53% of GNP from 9% as a result of poor fiscal policies in Perez’s government.\textsuperscript{20} The increased revenues of the oil booms of the 1970s were used to fund social spending and massive infrastructure projects that had been budgeted poorly and ended up being enormous wastes of petrodollars. Wanting to increase spending come election season but faced with a lack of funds due to debt, the Pérez government relied upon floating debt, which did not have to be recorded in any official manner. This allowed for an augmentation in government spending, for which float-
ing loans accounted for $10 billion. These short-term, high-interest loans, combined with increasing interest rates and a faltering economy, catapulted Venezuela’s debt to 69.7% of GNP by 1989. In exchange for new loans, the Venezuelan government eliminated many non-tariff barriers, cut subsidies and increased the domestic price of petroleum. This caused an uprising by the people of Venezuela, who rioted in the capitol of Caracas in February of 1989. Pérez’s plan backfired; wages dropped as unemployment and inflation rose to unprecedented levels, ushering in an attempted coup in 1992.

Hugo Chávez was elected President in 1998 and three years later passed a series of laws aimed at strengthening government control over PDVSA. This was met with a great amount of resistance and in April 2002 PDVSA employee went on strike, to which Chávez responded by firing executives and cleaning house. Production levels decreased and the oil industry was producing at one-third of its normal levels. Violence struck in 2002 when an attempted forty-eight-hour coup occurred, and although Chávez quickly came back to power, protests in Miraflores left nineteen dead and many more injured, and it has since been suspected that pro-Chávez forces may be to blame.

The GINI index, which measures income inequality on a scale of 0 to 100, with 0 representing prefect equality, gave Venezuela a 41 in 2009, down from 49.5 in 1998, which is still a very negative rating.

The effects of the resource curse in Venezuela seem to be caused by rent-seeking behavior and poor government spending of oil rents. Dutch Disease is rampant, with the once flourishing agricultural sector taking a back seat to oil exports. Although the Venezuelan government seems to put a lot of revenue into public spending projects, many end up being ineffective and costly. Venezuela’s case of the resource curse needs to be cured before it spins further out of control.

Nigeria

Nigeria is a country that in this day is filled with poverty, disease and violence that upon closer inspection can point to the resource curse as a large factor in these negative aspects.

Nigeria gained independence from Britain in 1960 and the new government had the role of unifying a nation that had over 250 ethnic and linguistic groups. In 1966 a military coup put Colonel Yakubu Gowon in power, which caused Christian Ibos in the east to declare independence from Nigeria, sparking a civil war in 1967. In 1975, another coup put Army Brig. Muritala Mohammad in charge and civilian leadership was put into control in 1979, with Alhaji Shehu Shagari elected as president. Because of the variation of regimes in such a short time, the economy of Nigeria did not fare well.

Into the oil booms of the 1970s and the early 1980s, Nigeria enjoyed an improving economy and the push for more democracy. However, symptoms of Dutch Disease were beginning to present themselves as agriculture’s share of GDP dropped from 68% in 1965 to 35% in 1981 while the government invested heavily in services and manufacturing. In addition, government investment in the manufacturing sector demonstrated a waste of at least two-thirds of oil revenues, with only 35% of capacity utilization in manufacturing investment in the mid-1980s.

In 1984 a series of military coups began again, leaving the Nigerian government open to much corruption until 1999, when free presidential elections led to a victory for General Olusegun Obasanjo, who was committed to eliminating corruption and promoting democracy in Nigeria.

The Movement for the Survival of the Ogoni People, led by Nigerian activist Ken Saro-Wiwa protested against the government and Royal Dutch/Shell in the 1990s because of the lack of benefits from oil revenues given to the Ogoni people and the massive environmental damage caused by oil extraction. In 1992 the Movement demanded over $10 billion in previous royalties and damages from Shell, Chevron and the Nigerian National Petroleum Country as well as rioted in the streets, causing oil production to slow to 10,000 bbl/d as Shell removed all employees from Ogoniland. In 1994, four Ogoni chiefs were murdered and the Nigerian government placed the blame on Ken Saro-Wiwa and eight others, executing them in 1995 to the protests of the international community. In 2009, Shell reached a $15.5 million settlement with the relatives of the Ogoni nine, who claimed that the oil company had aided and collaborated with the Nigerian government in the murder of Saro-Wiwa.

The Movement for the Emancipation of the Niger Delta (MEND) is one of the largest insurgent groups in the area and in 2006 was involved in the kidnapping of foreign oil workers. The group has continued to kidnap and stage attacks on oil
pipelines in order to protest the lack of development and distribution of oil revenues to the Delta region as well as the immense environmental degradation caused by oil exploitation. A 2007 report by the Council on Foreign Relations found that “in 2003, some 70 percent of oil revenues was stolen or wasted, according to an estimate by the head of Nigeria’s anticorruption agency.” In retaliation, militant groups such as MEND engage in kidnapping and oil bunkering, in which they tap pipelines and steal crude oil to sell on the market. The group insists that the government give 50% of the oil revenues from the Niger Delta back to its people and declare they will not stop attacks until this happens.

President Goodluck Jonathan took over in 2010 after his predecessor died and won again in 2011. As Vice President in 2008, he was quoted as saying that “the over-reliance on oil has put an unpleasant bracket in [Nigeria’s] national economic freedom.” Currently, Nigeria is the largest oil producer in Africa and the tenth largest in the world, with the oil sector compromising 78% of total revenues, while the non-oil sector holds only 15%. From 1990 to 2000, Nigeria’s annual percentage growth of GDP was a mere 2.4%, worse even than Ghana, who had averaged 4.3%. The GINI index gave Nigeria a score of 43.7 in 2011, down from a high of 50.6 in 2006.

In 1999, President Obasanjo set up two agencies in order to increase transparency and reduce corruption. The first was the Independent Corrupt Practices and the Related Offences Commission, the duty of which was to receive and investigate complaints, taking legal action if necessary. The second agency was the Economic and Financial Crimes Commission, which was established with the purpose of rooting out corruption among the government and elites in Nigeria. The EFCC estimates that between 1960 and 1999 over $400 billion was stolen in oil revenues by the country’s rulers, which is equivalent to the total aid sent to Africa in this time period.

While Nigeria has had the potential to drastically improve its economy and living situation by taking advantage of revenues from petroleum exports, it instead has neglected the majority of the people. Only 36% of the Nigerian population is estimated to have access to electricity, while the rest generate it themselves or live without. Like Venezuela, Nigeria has no need for much human capital as the oil industry is very technically intensive. It is ranked 91st in Newsweek’s study of the World’s Best Countries, with a dismal grade of 65.54 in education, and also ranks around the 90s in health, quality of life, economic dynamism, and political environment.

Wikileaks released a summary on Nigeria’s governmental corruption and the health of the president as reported by Shell’s executive vice president for Africa Ann Pickard. She spoke of the increasing problems Shell had hiring oil tankers, as in 2009 there were eighty incidents of piracy in Nigeria. Piracy has become a huge problem in the Niger Delta, with an oil tanker being seized a little over a month ago so attackers could take its oil. She reported instances of oil buyers paying members of the National Petroleum Corporation and the Nigeria government bribes to lift oil.

Oil rents have had a large impact on the Nigerian economy and livelihood of its people and out of those studied in this paper, this country seems to suffer the worst from the resource curse. The government is clearly deeply involved in the oil industry, using revenues for corrupt practices and eliminating anyone that stands in their way. The suspicious execution of the Ogoni nine and Shell’s later settlement with their families shows how the Nigerian government and oil companies will take extreme measures to secure their interests in the area. The people of the Niger Delta live in extreme poverty and see none of the benefits and solely the damage from the exploitation of the oil fields in their land. The insurgent groups fighting the government and international oil companies only exacerbate the ethical and religious tensions in this diverse nation, and attacks on pipelines and workers threaten oil production. In order to reach optimal production in this world of increasing demand, the Nigerian government must realize that their citizens are in desperate need of a change. This nation can no longer run for the few at the expense of many.

Kazakhstan

Unlike the previous two countries, Kazakhstan has exhibited much more prudent behavior when it comes to the oil revenues it accrues. Kazakhstan has the both the second-largest reserves and production capacity in all of the former Soviet Republics. With the development of its three largest fields, Tengiz, Karachaganak and Kashgan, Kazakhstan has the potential to become one of the world’s top five producers. At the end of 2010, Kazakhstan had proven reserves of 38.9 thousand million barrels at 2.9% of the world total and 9th in ranking. The Tengiz, which lies along the northeast shores of the Caspian Sea, was discovered in 1979 and is Kazakhstan’s largest producing field. It produced 492,000 bbl/d of crude oil in 2009 and has been in development since 1993, when a forty-year joint venture between Chevron and the state-owned KazMunay-Gas was created that later became known as Tengizchevroil when it expanded into a four-company consortium in 1997. Its sister field, Kashagan, is an offshore field found in the north of the Caspian Sea. It is being developed by an international consortium called North Caspian Operating Company and has estimated reserves of eleven billion barrels of oil.

Before it declared its independence in 1991, Kazakhstan had spent the majority of the twentieth century as a republic of the Soviet Union. Its industrial sector con-
The new tax laws also gave the government rights to purchase shares in any energy project, allowing the state to legitimately purchase part of British Gas’s share in Kashagan production and bid for 33% of the Canadian-based PetroKazakhstan. This gave KazMunaiGaz a larger role in the participation of the state-owned company as both an investor and a partner. In 2007 President Nazarbayev amended the “Law on Subsoil and Subsoil Use,” giving the government the right to change or revoke national resource contracts if they were deemed to be a threat to national security. In 2008, Tax Codes were proposed that replaced royalties with a mineral extraction tax, rent taxes with export duties, and announced that there would be no future production-sharing agreements. However, the bulk of future oil production predicted for the future would take place in fields under production-sharing agreements, such as those in Kashagan and Karachagnak.

In 2001 the National Fund for the Republic of Kazakhstan was created with the purpose of negating the impact of volatile oil prices on the economy and to save a significant chunk of the oil revenues for future generations. It is owned by the Ministry of Finance and is managed by the National Bank of Kazakhstan, who keeps 75% of the Fund’s assets in a stabilization portfolio in the form of liquid assets and 25% in savings in the form of high return long-term securities. All revenues from oil exports first go to this fund, and from there a specified amount known as the annual guaranteed transfer is put into the state budget. In order to avoid sucking the Fund dry, it is stipulated that no more than one-third of the Fund’s total assets may be withdrawn at once and that the budget must be used for development projects. Between 2001 and 2008, the National Fund grew to $13.7 billion from $1.345 billion. In the early years of the decade, Kazakhstan was running under a very tight fiscal policy, diverting about 79% of revenues to the Fund. In the mid-2000s, Kazakhstan began using the development funds to improve infrastructure and support agricultural development in an attempt to boost the economy. Many national funds were created, including the National Innovative Fund and the Small Business Development Fund, in an attempt to diversify the economy. At this time tax reforms took place, which reduced taxes for the non-oil industries in an attempt to diversify the economy. High oil prices towards the end of the decade meant that 86% of revenues could go to the Fund with a large chunk of profits going towards investments in education and welfare. Indeed, in the 2010 study by Newsweek of the world’s best countries, Kazakhstan received a 91.35 in education, ranking 14th on earth. The National Fund of Kazakhstan is one factor in the fight against the resource curse; by saving the majority of oil revenues as public assets and using approved transfers for non-oil economic developments, Kazakhstan largely avoided the symptoms of Dutch Disease and did not suffer the large income inequality that can clearly be seen in Venezuela and Nigeria.

In 2006, the Kazyna Sustainable Development Fund was created with the aim of increasing industrial competition and diversity through innovative economic development. The Samruk State Holding Company was also created at this time in order to enhance the accountability and efficiency of asset management by the state. The two joined together in 2008 to become Samruk-Kazyna Welfare Fund, a 100% state-owned holding company that consolidates the majority of the state-owned enterprises in Kazakhstan. The creation of this Fund was required as a result of the 2007 financial crisis and its impact on the Kazakh economy. In the mid-2000s, Kazakh banks began to excessively invest abroad due to the favorable credit ratings of banks caused by high commodity prices...
The largest problem that Kazakhstan suffers from is the corruption present in both its government and the international oil companies operating in the area who in 2003 was accused of overseeing the issue of bribes from oil companies such as Exxon Mobil, BP, and ConocoPhillips to the Kazakhstan government in return for access to oil reserves. In violation of the Foreign Corrupt Practices Act of 1977, Mr. Giffen was alleged to have been paid tens of millions of dollars for negotiating deals between the American oil companies and the Kazakh government and also transmitted over $60 million in the mid-1990s to secret bank accounts managed by both President Nazarbayev and Nurlan Balgimbayev, the former prime minister and oil minister of Kazakhstan. However, Giffen’s defense claims that in his job as economic advisor the President Nazarbayev the American was working under the approval of senior officials in Washington. Although both the American government and the oil companies have denied any connection to Giffen’s illegal dealings, this case shows that the corruption in Kazakhstan is caused by oil revenues and demonstrates the possibility of corruption in foreign nations. Years later in 2007, UK banker Robert Kissin was accused of playing the part of the middleman who helped Texas oil service company Baker Hughes pay $4 million in bribes to the Kazakhstani government in exchange for an oil contract.

Kazakhstan has suffered the least from the paradox of plenty. For the most part it has had positive economic growth and the government has invested heavily in the welfare of its population. The creation of the National Fund has shown to be very effective at saving rents for the future and demonstrates long-term thinking, rather than the short-term rent seeking behavior of the previous two countries examined. The largest problem that Kazakhstan suffers from is the corruption present in both its government and the international oil companies operating in the area, with much evidence of bribes being given to officials and even President Nazarbayev for lucrative concession contracts. One reason that Kazakhstan has suffered from the resource on a lesser degree than Venezuela and Nigeria could be the country’s late arrival to the oil trade. Kazakhstan did not fully become an oil-exporting country until its independence in 1991. This means that it had the time to observe other oil exporting countries’ strategies of the previous century and perhaps avoid the same economic and political mistakes that had send others spiraling down through the paradox of plenty.

Finding an Antidote
When looking to the future, it is imperative that these countries quickly learn to better manage oil revenues with full transparency and accountability in order to keep up with increasing world demand without falling victim to the resource curse. A measure that would be effective at keeping the resource curse at bay would be managerial independence for state-owned oil companies. Today, many of the members of the oil industry are also government officials; in fact, the head of Venezuela’s PDVSA is also the Minister of Energy and Petroleum. This encourages rent-seeking behavior, as there is easier access for the government to oil revenues because of close political connections. By eliminating the clear governmental influence in the oil industry, rent-seeking behavior will decrease, as the oil rents will then be part of a private industry with commercial interests. Hiring should be merit-based and market-driven to encourage true competition for recognition in the industry.

There are also many international organizations that have been formed in order to encourage transparency and better economic management of revenues by oil-exporting countries. One such group is the Extractive Industries Transparency Initiative, or EITI, which was launched in 2002 at the World Summit for Sustainable Development and is the major international force behind the urging for transparency in revenues and government
accountability from the extractive industries.\textsuperscript{47} The principles of this organization promote the use of “natural resource wealth [as] an important engine for sustainable economic growth that contributes to sustainable development and poverty reduction.”\textsuperscript{48} One may become a candidate country by fulfilling five requirements including implementation of EITI ideals, and may become a compliant country after a validation period. Out of the nations studied in this paper, so far Nigeria is the only compliant country, but Kazakhstan is on its way, having become a candidate in 2010.

Conclusion
Venezuela, Nigeria and Kazakhstan have much to look to in the future. All three of these countries are currently among the highest world exporters and producers of oil and their output has the potential to increase in the decades to come. However, before any of these nations can reach full production capacity, they must overcome the resource curse. This will be slightly easier for Kazakhstan, who has learned from those before it and seems to suffer from elite corruption rather than the negative economic growth and inequalities seen in Venezuela and Nigeria. The latter two represent more extreme cases; Venezuela and Nigeria have both been victim to many coups and riots that have been inter-twined with the politics of the oil industry. There exist huge gaps between the living situations of the rich and the poor, which the falling economies and the intense government control over the oil industry only worsens. These countries must reconcile their aspirations to reap the benefits of oil wealth with the sensible ideals of profit maximization if they are to rid themselves of the resource curse.

*When looking to the future, it is imperative that these countries quickly learn to better manage oil revenues with full transparency and accountability in order to keep up with increasing world demand without falling victim to the resource curse.*

\textit{Striations}
Gina Mason