Spring 12-16-2011

The Resource Curse and Peru: A Potential Threat for the Future?

Sergio Cruz
sbcruz@usfca.edu

Follow this and additional works at: https://repository.usfca.edu/thes

Part of the Agricultural and Resource Economics Commons, Economic Theory Commons, Growth and Development Commons, and the International Economics Commons

Recommended Citation
https://repository.usfca.edu/thes/4

This Thesis is brought to you for free and open access by the Theses, Dissertations, Capstones and Projects at USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. It has been accepted for inclusion in Master’s Theses by an authorized administrator of USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. For more information, please contact repository@usfca.edu.
The Resource Curse and Peru: A Potential Threat for the Future?

A Thesis Presented to The Faculty of the College of Arts and Sciences Master’s Program in International Relations

In Partial Fulfillment

Of the Requirements for the Degree

Masters of Arts in International Studies

By

Sergio Brian Cruz Egoávil

December 2011
# Table of Contents

Introduction ........................................................................................................................................... 1

Part I. The Resource Curse, Maladies and Academic Literature ......................................................... 3

  Symptoms of the Resource Curse ........................................................................................................... 4

  The Debate Surrounding the Resource Curse ....................................................................................... 12

Part II. Case Studies ................................................................................................................................. 20

  Nigeria .................................................................................................................................................. 21

  Venezuela ........................................................................................................................................... 27

  Chile .................................................................................................................................................... 32

  Botswana ........................................................................................................................................... 37

  Conclusion .......................................................................................................................................... 43

Part III. Peru: Resource Curse or Blessing? ...................................................................................... 43

  Economic Overview .............................................................................................................................. 45

  Combating Dutch Disease ..................................................................................................................... 52

  Diversifying the Economy .................................................................................................................... 55

  Tackling Corruption and other Legislative Reforms ........................................................................... 60

  Conclusion .......................................................................................................................................... 65

Final Remarks and Recommendations ................................................................................................. 66
Introduction

Peruvian society today is changing at a rapid pace that has never before been experienced in the country. Today roads unite various different regions of the country that only 20 years ago were cumbersome to reach. The poverty rate has significantly dropped in the last 10 years as new jobs have been created. The larger presence and availability of the internet, cell phones and other media devices to the public have fundamentally altered civil society and the manner that citizens interact with the state and amongst one another. In general, development seems to have finally arrived to Peru after decades of political and economic stagnation that sunk the country to its lowest points in history. These and many other advances have been possible because of the economic policies that the country undertook some 20 years ago. The Peruvian economy prior to the 1990s had been poorly managed by various populist leaders of different political ideologies. This poor handling of the economy discouraged foreign investors and even Peruvians from investing in Peru. As expected from the poor leadership that the country boasted, economic and political turmoil dominated the country. In the 1990s the Fujimori government introduced neo liberal and free market economic policies to the country, creating a new economic model and platform. These reforms were the key that opened the doors to the economic success that the country is today enjoying. Since then Fujimori’s successors have not only followed the same path he set in the early 90s, but have actually taken greater steps to liberalize the economy and integrate it with other foreign markets thus allowing for greater economic activity and growth. As previously stated, it is this economic growth that has been the impetus behind the rapid transformation of the Peruvian society.

One of the major sectors of the Peruvian economy that has been responsible for a large part of the growth in the country has been the mining industry. In fact the mining industry has
traditionally been Peru’s strongest economic sector, more so than agriculture, manufacturing or the service industry. One can argue that Peru has become too dependent on its natural resource extractive industry as its main engine behind economic growth. If this happens to be the case, then this raises serious concerns about the rest of the Peruvian economy and possibly even the political system. Countries that tend to depend highly on their natural resource extractive sector of the economy tend to suffer from the effects of what economists call the resource curse. This curse is harmful to more than just the economy of a country, it has the potential of erasing all traces of development, impoverishing millions, increasing corruption at all levels and more. The purpose of this project will be to identify to what degree has Peru contracted the resource curse and what steps have policymakers taken to lessen or control the effects of this curse.

Understanding the resource curse and the effects it can have on countries is important for a variety of reasons. For one, having a firm grasp of the implications that the resource curse can have on a country can allow policymakers to adopt measures against these. In the case of Peru, certain maladies associated with the resource curse have been identified. However, state policies have curbed many of the adverse effects that these maladies could have had on the economy and society. This is not to say that Peru is immune and free of the resource curse. In fact there are many areas in which the state must improve in order to maintain the calm between civil society, foreign firms and government authorities. Also policymakers must constantly play the game of doctor, in which they must continually diagnose the state of the economy vis-à-vis potential threats and make policy recommendations and changes to meet these threats. The Peruvian state has managed to avert much of the resource curse thanks to the macroeconomic policies and legislation designed to grow the economy and attract investment. Despite the mining sector playing a significant role in the economy that overshadows other industries with regards to total
net exports, the Peruvian state has averted most of the maladies associated with the resource curse, has grown other sectors of the economy (manufacturing, services, commerce, etc.) and has achieved other developmental goals.

This project will be divided into three parts. The first part will discuss the resource curse theory, will define key terms needed for the project and will serve as a literature review analyzing the different positions in academia related to this field of study. The second part of the project will look at four different case studies of countries that have been affected by the resource curse. This section will serve as a comparative study to observe similar patterns and the implications that certain policy decisions can have on the economy. And lastly, building on top of the information obtained in the second part of the project, part three will focus on Peru and the resource curse and most importantly what the response of the state has been.

**Part I. The Resource Curse, Maladies, and Academic Literature**

What explains the paradoxical effects that resource extraction has on the economies and societies of states endowed with oil, precious minerals, natural gas and other natural resources? Paradoxical effects such as little economic development, high levels of inflation, civil unrest usually resulting in conflict, the increase in corruption from various sectors in society especially government officials, Dutch Disease, irresponsible fiscal policies and others have contributed to little economic growth. This phenomenon has come to be known as the resource curse within academic circles. The resource curse theory aims to explain the reasons for why countries that are endowed with coveted natural resources by the markets of the world tend to have poor economic indicators as well as poor social indicators.
The resource curse affects resource endowed countries in different ways and to various degrees. An example is if country A suffers from high levels of inflation and appreciation of its currency this does not mean that country B will suffer from these same maladies. And vice versa, country B could suffer from high levels of government corruption and internal conflicts yet it may have an appropriate level of inflation. Resource curse theory does not require for resource rich countries to have all the symptoms proposed by the theory in order for them to be diagnosed with the curse.

In the following pages, an in-depth look aimed at understanding the resource curse, its symptoms, implications and effects on states will be conducted in order to better understand this theory. Also, this section will serve as a literature review since it will also elaborate on the academic discussions that have influenced the field of the resource curse theory, will define terminology important to the project, identify questions that have not been answered and controversies in this field. Given the amount of evidence that has been collected over years of research and observations, it can be said that the “resource curse theory” may no longer simply be a theory but rather an observable fact.

**Symptoms of the Resource Curse**

There are various symptoms or “maladies” pertaining to the resource curse that can affect resource rich and resource dependent states.

*Dutch Disease.* Probably the most serious of all the maladies is Dutch Disease. The term derives its name from the economic conditions that occurred in the Netherlands in the 1950s and 1960s after the energy extractive industry began providing large amounts of revenue and rent to the state following the discovery of a large natural gas field. Due to the poor management of the
reserves (money) that were accumulating in the country, the economy experienced a decline in the productivity of the traditional tradable export sector, which in this case was the manufacturing industry. Since then, the term Dutch Disease was first coined by *The Economist* in a 1977 article discussing this very event.¹

In a 1982 article, Cordon and Neary contributed to the theoretical model of the Dutch Disease by explaining how an increase in wealth can have such adverse effects on an economy. They explain how economies that undergo export booms can be divided into three sectors; the booming export sector (in this case natural resource extraction industries), the second sector is the traditional traded goods sector (manufacturing or agriculture) and the third is the service sector. When an economy develops Dutch disease, the traditional export sector of the economy tends to be outgrown and outperformed by the other two sectors.² This is due to the increase in revenue income that results from the exportation of natural resources (oil, gas, minerals, etc.) resulting in the country's coffers taking in unusually large amounts of foreign exchange or reserves. If the majority of the incoming revenue were spent on imports, there would be virtually no impact on the money supply or the demand of domestically produced goods. However, if this acquired revenue is converted into local currency and spent on domestic goods (such as services, construction, retail trade, etc), problems in the economy will begin to become evident.

The policies that the central bank of a state experiencing what has been described above, will have a key impact on the future of that economy. According to an IMF article,

“If the exchange rate is fixed, the conversion of the foreign currency into local currency would increase the country's money supply, and pressure from domestic demand would push up domestic prices. This would amount to an appreciation of the "real" exchange
rate—that is, a unit of foreign currency now buys fewer "real" goods and services in the domestic economy than it did before. If the exchange rate is flexible, the increased supply of foreign currency would drive up the value of the domestic currency, which also implies an appreciation in the real exchange rate, in this case through a rise in the nominal exchange rate rather than in domestic prices.”

Either way, whether or not the rate is fixed or flexible the real exchange rate appreciation will make goods from the traditional export sector less competitive, thus causing this sector of the economy to shrink and weaken.

What follows this scenario is what is called the “resource (capital and labor) movement effect”. Resources are allocated from the traditional export sector to the other two sectors since they have been experiencing more productivity and require more capital and labor to meet their demand. This shift can be made by both private investors and the government through subsidies. The booming export sector (for example the mining industry) will attract workers from the traditional export sector (which can be manufacturing or agriculture), and capital from investors and the government (albeit most modern resource extracting operations tend to be more capital intensive than labor intensive). This process of labor being redirected from the traditional exporting sector to the booming resource sector is called direct-deindustrialization. With a larger money supply of foreign reserves expected and greater purchasing power the services sector will also experience a dramatic increase in productivity, thus also demanding more labor and capital. The process of labor being redirected from the traditional exporting sector to the service sector is called indirect-deindustrialization. As the booming mineral sector and the service sector prosper, the traditional export sector (manufacturing or agriculture) begins to lag and produce less.
This theoretical model of Dutch Disease has been observed and studied. It is a well documented occurrence that affects various states which export a variety of natural resources including minerals, oil, natural gas, diamonds, and even coffee. An example is how a boom in coffee exports affected the Colombian economy in the 1970s and where Dutch Disease effects soon followed. Following a frost that destroyed Brazil’s coffee crops, Colombia experienced a high demand for its coffee from the international market. From 1974 to 1975 the international price of coffee soared causing an appreciation in the real exchange rate in the Colombian peso from the revenues and foreign exchange obtained from the trade of this product. The coffee industry more than doubled its production rates of 1970-1975 during the years of 1976-1981. This boom was also accompanied by a faster growth in the non-tradable goods sector such as construction and public works, services, residential rent, and government services (with more funds and resources available governments experiencing economic booms tend to adopt more lax fiscal policies that can be detrimental to them in the long run). However, as expected by the theoretical model of Dutch Disease, the traditional traded goods sector experienced a slower growth in the various industries of manufacturing. Textile production, machinery and equipment, chemicals and rubber, manufactures of metals, refined petroleum products and others experienced slower growth during 1976-1981, than they had experienced during 1970-1975. The effects that Dutch Disease had on the Colombian economy took years to overturn. Like this there are many cases of states contracting Dutch Disease that have been stuck for decades, making growth and development difficult to achieve.

Policymakers can take certain steps to prevent Dutch Disease from affecting their economy. In countries where resources discovered are to be depleted rapidly, policymakers can protect their vulnerable sectors through foreign exchange intervention. Ebrahim-Zadeh notes
that “The sale of domestic currency in exchange for foreign currency—that is, the buildup of official foreign exchange reserves—tends to keep the foreign exchange value of the domestic currency lower than it would otherwise be, helping to insulate the economy from the short-run disturbances of Dutch Disease that will soon be reversed.”

However, if opting for this strategy it is important to prevent that the buildup of such acquired reserves do not create levels of inflation that could be detrimental to other sectors of the economy. To achieve this and for proper management of any additional wealth through trust funds and other accounts, a competent and effective central bank is an imperative.

For countries in which the amount of natural resources that have been discovered are estimated to last indefinitely, a different approach to protecting their other sectors of the economy must be adopted. Steps must be taken in order to assure that the productivity of other sectors remains active and does not diminish. This can be done through privatization of state owned enterprises in order for these to run more effectively. Other forms of government restructuring are also welcomed. Tied to privatization and government restructuring, it is also important to implement some sort of worker retraining program to ensure that those laid off could find other occupations in other industries. But the most important step that should be taken is the diversification of exports, this reduces the state’s dependency on the natural resource extractive sector. This will make the economy and revenue inflows less susceptible to international decreases in commodity prices. By having the a government stimulate the weaker sectors of the economy through direct investment and other incentives such as tax breaks, the chances of these sectors continuing to be productive increases. And with that the likelihood of falling to Dutch Disease is somewhat diminished.
Revenue Volatility. Resource extractive states are constantly at the mercy of the international markets’ price fluctuations for the commodities that they produce. States that are dependent on the high prices of their commodities for development can suffer severe negative effects. In countries like Angola, where 80% of government revenue comes from the export of oil, a significant decrease in the price of this commodity can compromise government planning. In many cases, revenue volatility can cause serious political strife as well as conflict with various sectors of the population who cannot grasp the concept of price fluctuation and are more inclined to blame government officials due to an already existing lack of trust in the state’s governing institutions. Also, matters would be worse depending if the level of economic diversification among other industries (agriculture, manufacturing and services) is low.

Lack of Diversification. The presence of a lucrative natural resource extractive industry provides little incentive for investors both foreign and native to invest in other industries not related to resource extraction in developing states. Other sectors of the economy such as agriculture and manufacturing are abandoned because diverting resources to the extractive industry tends to be more profitable in the short term. However, in the long run, these states can become vulnerable to price fluctuations and the depletion of their natural resources which as already mentioned can severely hinder their development and raise serious governance issues. Those remaining industries not related to the extractive industry and its products, become uncompetitive as the national currency appreciates. This contributes further to the lack of diversification by eliminating the other potential avenues available for an effort diversifying in the future.

Excessive Spending/Borrowing, Inflation. Governments that earn considerable amounts of revenue tend to spend more on various projects and programs. Resource endowed states are no
exception to this. These states tend to adopt irresponsible fiscal policies that can make them vulnerable to falling to the resource curse. One very common behavior among these states is the excessive amount of spending and borrowing that they undertake. Confident in the continuous flow of revenue from their extractive industry these governments expand social programs and infrastructure projects that usually do little to foment development or diversification. They also incur large amounts of debt from foreign lenders (banks, international monetary institutions, other governments, etc.) in order to support much of their new spending. The problem for these governments arrives sooner or later. The first problem that is observed is currency appreciation which is a result from the new reserves that are entering the country either from new revenue or borrowed money. Excessive government spending puts more money into the local economy thus creating the possibility for currency appreciation. If the government’s central bank, treasury or whichever institution is in charge of monetary and economic policy is not competent enough to take measures against this malady, serious problems can follow. Also since these governments depend on the international demand for their commodities, when the prices for these goods fall or their resources are depleted, the ability to continue paying for their projects, social programs and incurred debts are significantly reduced. These maladies are a direct result of unsound economic planning.

**Undermines Democratic Institutions.** Resource rich countries tend to be dominated by autocratic governments. Those that have democratic governments suffer from weak institutions that are constantly at the mercy of populist leaders, dominated by corrupt politicians and bureaucrats, and face ethnic strife. Russia, Venezuela, Angola and Nigeria are clear examples of this. In each of these countries a pseudo form of democracy exists which hide autocratic leaning rulers such as Vladimir Putin, Hugo Chavez, Jose Dos Santos and others who have used
democratic means to prolong their stay in power. The lucrative rents that the resource industry can nefariously provide heads of state, politicians and other civil servants incentivizes these individuals to abandon democratic forms of government which usually requires some form of accountability and transparency in the way that these rents are allocated. Also tied to this is the issue of human rights. Authoritarian rulers behave in oppressive manners and usually dismiss and violate the human rights of their citizens. Although having democratic institutions are not necessarily requirements for economic growth, most of the world’s economically developed states have democratic forms of government. Democracies serve as a check on corrupt politicians and heads of state, they allow for greater transparency, and generally empower the masses to decide the future of their country through the election of individuals who represent their interests in the legislature and or executive.

**Corruption.** Resource rich states are often referred to as rentier states. Governments usually receive rents from resource extractive companies operating within their borders in the form of revenues, royalties, extractive fees etc. The combination of weak institutions and the presence of large sums of money can and often create nefarious activities and behavior among the different sectors of society, especially among those elected and appointed officials of the government (state). Countries that primarily rely on the revenue from foreign corporations, firms and companies that conduct extractive activities in their territory rather than revenue provided from their citizens tend to undermine their democratic institutions. An undermining of democratic institutions usually means that a loss of trust for government institutions and officials takes place. Harford argues that, “Economists believe that the difference between countries that have successfully formalized trust and those that have not is, basically, the difference between rich countries and poor ones”. Shaxson offers two ways of looking at corruption. The first is
“the abuse of wider interests by narrow interests” and second “in terms of the principle that whatever abuses the public good and undermines public faith in the integrity of rules, systems and institutions is corrupting.” Corruption is a special symptom of the resource curse for it is one of the only maladies whose dimension goes beyond the economic sphere and enters the political and social realms of any given country. Thus, special attention must be given to this malady which might be the most difficult to combat since it is engrained in the psyche of politicians, elected officials, and the citizens of affected countries. Corruption in essence becomes part of culture, this at times can be more difficult to change than macroeconomic policies.

The Debate Surrounding the Resource Curse

The academic literature on the extraction of natural resources in developing countries and resource curse examines the relationship between developing economies and the effects that extractive industries have on them and their societies. Since the term “resource curse” was first used, economists have engaged in every possible discussion imaginable related to this field. As is the case with all academia there are various perspectives, positions, theoretical frameworks, paradigms and debates on this issue. What tends to dominate the economic field of resource extraction is the notion of a “resource curse”, and many important questions are raised which lead back to the question of whether or not a curse actually exists. In order to understand how resource extraction affects the economies of various states including Peru, one must first dwell on the theoretical framework that shapes academic discussion on this subject.

Resource Curse Theory

Richard Auty was among the first to coin the term “resource curse” in the 1980s and early 1990s. He argues that natural resource extraction industries in developing countries brought negative
effects rather than the blessings (economic growth, development, etc.) that are so commonly associated with them. In a 1993 article titled *Sustainable Development in Mineral Exporting Economies*, Auty and Warhurst argue that “with reference to the ore exporters that, despite the harsh lessons of the 1970s and 1980s, few governments of mineral economies have learned that the control of Dutch disease is a prerequisite for sustainable development”.9 Auty examines various case studies of countries whose economies have been affected by the mineral extraction industry. In this book, one of the cases that Auty examines is that of Peru. Auty concludes that extraction industries should not form the backbone of developing countries’ economies; rather the mineral sector should be a bonus with which to promote economic diversification.10 Richard Auty has in essence become one of the most vociferous critics of the use of mineral extraction in developing countries for development and has become a stern proponent of the resource curse theory. 

Jeffrey Sachs follows many of Auty’s main ideas. In *The Curse of Natural Resources* (2001), Sachs examines how resource extraction limits other sectors of a given economy in developing countries. Sachs, like Auty, has been a critic of development through resource extraction, he buys well into the resource curse argument and has been one of its most important proponents. In this article, he tackles the “myth” that powerful and rich countries of today such as the United States and Great Britain, used their natural resources to their advantage over a century ago and that this model can be replicated today to help developing countries modernize.11 He also describes the negative effects that the resource curse has on developing economies. Among the most negative effects he finds is that resource extraction diverts the main economic activity that drives growth. He identifies this activity to be the manufacturing sector of the economy, which is key to export led growth. He says that countries that have abundant
natural resources tend to have small contributions from export growth in manufactures. This is probably due to a lack of active promotion of exports, as he says “the resource curse is that resource abundance tended to render the export sectors uncompetitive and that as a consequence resource-abundant countries never successfully pursued export-led growth”.12

Sachs stops short of attributing this to Dutch Disease, and explaining the effects that an overvalued currency can have on other exports. Instead he elaborates on another malady that the resource curse can bring developing countries, this is the crowding out of entrepreneurial activity and innovation. Entrepreneurs and innovators can be discouraged from pursuing pro economic growth activities if wages in the natural resource sector are more attractive than pursuing a business of their own or engaging in other productive activities. In addition, the presence of natural resources may divert government attention from stimulating entrepreneurial activities to that of rent-seeking, which can often lead to corruption.

Paul Collier dedicates an entire chapter to analyzing the maladies of the resource curse in *The Bottom Billion*. He refers to natural resources as a potential trap that stunts economic growth for underdeveloped states. In addition to discussing the problems of Dutch Disease and the failure of diversifying their economies that can be attributed to the resource curse, Collier also takes note of the political implications that resource extraction can have on underdeveloped states. He states that “resource rents are likely to induce autocracies. In ethnically diverse societies of the bottom billion such autocracies are likely to be highly detrimental for economic development”.13 Armed groups, revolutionaries and rebel groups are likely to vie for power against the government in order to gain control of resource rents that can benefit them and their clients. Usually these actors once in power become autocratic and unwilling to allow any form of democratic government to take root in the country. Eventually “the sort of democracy that the
resource rich societies of the bottom billion are likely to get (after a period of autocratic rule) is itself dysfunctional for economic development". This is because different groups in ethnically diverse societies run for election but none of them are willing to put restraints on the way resource rents are distributed or allocated, thus perpetuating the corrupt system that favors certain individuals and or groups in a society. Auty, Sachs and Collier represent one camp of the academic debate on the resource curse theory.

Representing a more centrist approach is Graham Davis who recognizes the importance of extractive industries in developing countries as well as its limitations. He looks at how extractive economies impact the poor through economic growth or lack of it. His main argument is that the poor in extractive economies are more likely to benefit than the poor in non-extractive economies; what hurts the poor is negative economic growth. In this examination he looks at two camps in academia and at the institutional level that have varying perspectives on the role that extractive industries play in economic development. The first camp is dominated by individuals such as Richard Auty, Jeffrey Sachs and institutions such as the UN. The second camp is composed of academics such as Xavier Sala I Martin, Davis himself and institutions such as the International Council on Mining and Metals (ICMM) and the International Monetary Fund (IMF). In this analysis Davis makes the claim that to truly understand how natural resource extraction industries affect the poor, two important methodological adjustments and distinctions must be made. First it is important to comprehend that there is a difference between human development and the level of human poverty. Many academics including Auty and Sachs have used the Human Development Index (HDI) to measure poverty, Davis states that HDI does not measure poverty but rather life longevity, educational attainment and standard of living. The second important point that he stresses is that when investigating trends, it is useful to separate
out impacts of extractive activity on the rate of economic growth from its impacts on the poverty reducing quality of that growth. Davis’ article is in its essence a critique of much of the existing literature regarding the field of resource extraction. Keith McPhail, Phillip Crowson, Lerdner and Maloney represent the opposite spectrum of Auty and Sachs, they believe that resource extractive industries are vital to economic development and that resource curse maladies are a result of poor and weak institutions which can be improved.

In the article titled, The Challenge of Mineral Wealth, Keith McPhail identifies factors that have allowed certain countries to avoid the resource curse. McPhail points out to the common maladies associated with the resource curse that can plague a resource rich country. These include Dutch Disease; unsustainable overconsumption; creation of volatility from the market in developing nations; poor governance, corruption, conflict and many more. In this article McPhail uses four case studies (Peru, Chile, Ghana and Tanzania) to support his claim; that government and institutional weakness lie at the root of the problems that are associated with the resource curse. He finds that these four countries have put the required formal and professional economic institutions that have helped their economies grow and avoid the dreaded resource curse. The findings in this piece do not find that resource extraction necessarily leads to poor governance, but it does find that when revenues collected at the national level from resource extraction are not trickled down to the local and regional governments, problems of poverty, corruption, instability and conflict persist. The following author I examine with regards to the resource curse theory is Phillip Crowson.

In The Resource Curse: A Modern Myth?, Phillip Crowson takes a bold stance in favor of natural resource extraction industries. Through a series of statistics the article shows that the positive contributions of mineral extraction to economic activity have been widely
underestimated by various academics. Through some historical analysis and comparative case studies of many countries he concludes that mining can have a positive impact on development in a country if institutions and policymakers are apt and willing to put their nation on a path towards development. He also recognizes that the dynamics and the process’ that went into conducting mining over 150 years ago have changed entirely. Mining has shifted from being a labor intensive activity which required thousands of workers and diverse infrastructures, to one of being mostly capital intensive in which large scale machinery and technologies have replaced these laborers. Technology and globalization have reduced multiplier effects (job creators) in host countries in today’s modern mining. Despite these adverse effects, never before have governments been able to collect as much revenue as they do today through rents. Crowson places responsibility in the hands of governments and institutions in the way these benefits (revenues or rents) are used to promote development in their states.¹⁸

_In Search of the Missing Resource Curse_, offers a serious critique of Sachs and Warner’s 1995 _Natural Resource Abundance and Economic Growth_ article which is credited by Lerdner and Maloney as having sparked the “myth” about the existence of a resource curse. They indicate that support for the resource curse is mixed and weak at best. The authors state that “some of the international econometric evidence that appears to support the curse hypothesis is based on the use of weak proxies and even on non standard manipulations on influential data points”.¹⁹ In other words that the data used by Sachs, Warner and other similar resource curse theory proponents has largely been misunderstood and incorrectly used to determine the results they achieved with little or no consideration for other sensitive factors. Another critique made by Lerdner and Maloney is of the historical facts used and ignored by resource curse proponents. They argue that proponents of the curse do not highlight examples of countries which have done
exceptionally well as a result of resource extraction such as Chile and Rwanda. Also that when measuring the quality of institutions more attention has to be paid to the history of how these institutions developed over years and not solely focus on their development after the discovery of natural resources, thus giving a more accurate depiction of the historical economic development of a certain country. Their findings are summed up as “With new data, new econometric analyses provided definitive evidence that there is no curse, not even indirectly through the political institutions that would most likely be affected by the curse-via-politics effects which has been central in the literature on the point-source nature of natural resources”. These authors offer an important critique of the resource curse theory, yet they themselves ignore the fact that there is an insurmountable amount of evidence which indicates that resource rich countries tend to suffer from Dutch disease, corruption, conflict, price volatility, poverty and have little or no economic growth. It is important to reconcile both camps in this field of study in order to find potential solutions to many of the maladies that face resource rich states.

**Sustainability**

In *Sustainable Development and Mining- An Exploratory Examination of the Roles of Government and Industry*, Waye, et al argue that mining has the potential to bring sustainable development to resource rich states. Mining can be sustainable if revenues that are derived from mining are collected and used to promote sustainable objectives both at the local and national level. The authors stress that in order to actually be able to accomplish this, a competent and efficient system dedicated to collecting taxes and implementing regulations must exist. They provide an investigation of the regulatory and taxation policies that many resource rich countries have in place and found that “there is no evidence in the data of a negative relationship between the level of taxation and mining investment climate, except where tax and legislative frameworks
are unstable and unpredictable”. This suggests that there can be increased taxation without necessarily creating an unfriendly environment for investors as long as there is political stability in the country. The extra income from revenues can then be used to promote sustainable projects in the country that can last long after minerals in the area have been exhausted. The authors however fail to address issues relating to the importance of the quality of institutions and how these shape or fail in creating sustainability, this is important to note since it is government institutions that will determine how revenues and taxes are used to promote development and create sustainability.

In *Public Policy Processes and Sustainability in the Minerals and Energy Industries*, Faircheallaigh looks at how public policy processes are geared toward creating sustainability. Minerals extractive industries are by their nature neither sustainable nor unsustainable, but they can be made into either one depending on the path policymakers choose. The article argues that “current policy-making processes in relation to the minerals and energy industries are often incompatible with the pursuit of sustainability, and that radical changes are required if public policies are to support sustainability in these industries”. This article is important because it specifically looks at the factors that go into the decision making processes in ministries, bureaucracies and other public institutions. Although the issue of sustainability is not one of the maladies related to the resource curse, it nevertheless is a serious concern that must be addressed by policymakers.

Overall, what can be said about these readings is that each contributes in its own unique way to the ongoing dialogue concerning natural resource extraction (particularly minerals). In the first part of this section I analyzed the works of various scholars ranging coming from the two major camps in the field. What was discovered in this analysis was that there is a great and
ongoing debate concerning the natural resource curse. Scholars like Auty and Sachs affirm that trends of underdevelopment in resource rich states along with econometric studies suggest that there exists such a thing as a resource curse. While others such as Crowson and McPhaigh argue that the evidence that exists can be interpreted in many ways depending on how the data is used and that natural resource extraction can reduce poverty and help development if state institutions are competent and free of corruption. The debate has certainly intensified since the 1990s as the demand for various resources has increased and countries such as the United States, China and India have scrambled to assure that they obtain important suppliers of oil, precious minerals and other resources in the developing world.

There is enough data and trends to suggest that many mineral rich countries are affected by the maladies that resource curse theory suggests can affect their economies. It is the policies that the Peruvian government has or has not put in place to combat these maladies (either knowingly or by pure chance) that will be investigated in this project. Sustainability is an important issue when dealing with mineral economies because it is presumed that such resources are exhaustible and at some point a new economic activity must be taken to replace the no longer existing extractive activity. This is a key issue that policy makers and national leaders must address while extraction of resources is still ongoing in their countries, if not it can most certainly turn into a malady by not being properly addressed.

PART II. CASE STUDIES

In order to understand and determine whether or not Peru has a resource curse it is imperative to see how the curse has affected other states that share certain similarities to this country. The following section will analyze four different case studies of countries that have experienced the
effects of the resource curse to some degree. It is important to highlight the factors that have allowed some of these states to overcome the maladies of the resource curse and to also underline the factors that have aggravated the curse for others. The purpose of this section will be to analyze the effects of the resource curse in different case studies and to observe how governments respond to its maladies in different ways.

The countries that will be examined in the section are; Nigeria, Venezuela, Chile and Botswana. During the analysis of each of these states there will be a brief look at the country’s recent economic history, problems with their resource extraction industries, responses or lack of by the government, policy decisions aimed at combating Dutch Disease and other particulars relative to each country. At the end of this section, a conclusion will follow that will tie together how this second part of the project relates and fits in with the following part which will focus on Peru.

**Nigeria**

One of the classic examples of a country that is plagued by the resource curse is Nigeria. The African country is one of the world’s largest producers of oil and has received billions in revenues since the 1970s when the oil industry began to boom. Yet despite all of the money entering the state coffers, Nigeria suffers one of the worst poverty rates in the world, civil wars and internal violence plague the Niger delta, and there seems to be no other economic alternative to the oil industry. Oil production began in Nigeria in 1956, but it was not until the 1970s when this sector gained great momentum. During the 1970s, production of oil as well as the country’s dependence on the commodity both increased significantly. In 1963 oil exports represented merely 11% of Nigeria’s total national export, seven years later this figure had risen to 58%, by
1975 the figure again increased to 93%. Today, virtually all of Nigeria’s national exports consist of oil and some by products. In addition, the rate of poverty in Nigeria since it gained its independence has also steadily risen along with oil becoming virtually the only export commodity of the state. Prior to 1970 the poverty rate stood at less than 35%, as of 2007 this rate has risen to 70%. Thus, given this data it is evident that Nigeria’s reliance over the last decades on oil as its main export has not resulted in poverty reduction. This can be due to the maladies associated with the resource curse.

The first and most detrimental malady that the country has contracted is Dutch Disease. As already stated, Nigeria’s national exports mostly consist of all oil and some by products. Other sectors of its economy (manufacturing, agriculture) have almost completely disappeared and they do not represent almost any significant percentage of national exports. The entire oil industry is estimated to employ 35,000 Nigerians directly and indirectly, in a country that has a population that nears 150 million. The virtual non existence of strong agricultural and manufacturing sectors creates high unemployment rates in the country which officially stand at 19.7%. In many ways the high level of unemployment in Nigeria is the cause of many of its deepest and most serious problems. It serves as a cause for millions of unemployed youths to be involved in harmful activities to the state and society such as joining violent guerrilla movements, engaging in criminal activities and other nefarious behavior. 72% of Nigeria’s population is below the age of 30, this means that what could be a large able bodied labor force used to the country’s advantage in order to produce a variety of goods to sell in the world market, has been left almost completely untapped and is instead more likely to take arms against the state. The dependence on the oil industry has eradicated most agricultural and manufacturing
jobs thus leaving most of the population unemployed and primed for engaging in clandestine or criminal activities.

Another serious symptom of resource curse in Nigeria is corruption at the institutional level. Mahler states that “Corruption, patrimonialism and other forms of personal enrichment have been omnipresent for decades and while there has been some slight improvement at the federal level, such improvements are not evident at the local level”. For political leaders and many civil servants who stand to gain from the status quo, there is no real incentive to create an alternative system that benefits a larger number of the population. Instead the same economic principles that have created Dutch Disease and impoverished millions are perpetuated and continue to sink the country. Tribalism or clanism has created strong patron client networks that have proven difficult to overcome. Typically leaders of certain clans or tribes (of which there are hundreds of these) which may differ ethnically, religiously or linguistically tend to compete amongst one another for the available resources that the oil industry provides. Leaders of these groups are in a manner of speaking entrusted to bring as much loot as possible from the federal level to their region and deliver them to their base. However, it is often the case that these political leaders stick their hands deep into the “cookie-jar” to embezzle large amounts of money that enriches them.

According to the New York Times, in 2008 Nigeria had $30 billion stored in an Excess Crude Account. This amount was the result of exceeded estimated revenues from the oil sector, thus the additional gains were placed in this fund for later use. By mid 2010, of the $30 billion that were stored in the account only $450 million were left. By the beginning of 2011 only $300 million were left. The problem is that of the initial $30 billion, $22 billion have gone unaccounted for. A Nigerian government official told the New York Times reporter that “Most
of the remaining $22 billion was drawn down by the state governments without any particular projects to spend it on, just on the basis of, there’s money sitting in the accounts, let’s draw it down.” Since there are virtually no existing checks and balances on what happens to the money once it is obtained by local governments, incentives to commit embezzlement and misuse funds on the part of authorities are greatly present. The remainders of the funds in this account, $5-8 billion, were used to improve the power output of the country. However this has been unfruitful since Nigeria’s power output is the equivalent of that of an average American city for a nation of over 150 million. Thus, $30 billion dollars coming from the resource extractive sector had no real positive effect in the development of the country. It is likely that this money was not used to rebuild and improve schools, hospitals, housing projects and more. Instead it is more likely to have ended in off shore bank accounts, used for bribery and political campaigns, or other unproductive purposes for which these funds were not intended.

The misuse of state money, government corruption, and the lack of development in the country have all contributed to the rise in militant groups throughout the country, most notably in the Niger Delta. Among the largest militant groups in the Niger Delta, MEND (Movement for the Emancipation of the Niger Delta) has by far captivated the attention of much of the world media for the way it portrays itself. MEND “wants a greater share of Nigeria’s oil revenues to go to the impoverished region that sits atop the oil” MEND engages in armed warfare not only with government forces of Nigeria, but is also known to attack the installations of foreign oil companies which have resulted in the disruption of the oil flow. In addition to this MEND partakes in kidnappings, bombings, sabotage, theft, property destruction and guerilla warfare. All of these contribute to the instability of the region and country. The conflict between MEND and the government seems to have gained MEND support from other criminal and militant
organizations in the area as well as the sympathy from millions of Nigerians who have been stagnated in poverty and marginalized by their state. Like MEND there are many other armed groups in Nigeria that engage in violence with the state for a variety of reasons, some are genuinely interested in improving the lives of Nigerians while others are more interested in obtaining their share of the loot found in the oil industry. What is clear is that as long as the Nigerian government continues to fail in providing its people with basic needs, the existence and proliferation of groups like MEND will continue.

**Dutch Disease in Nigeria**

Nigeria is no stranger to Dutch Disease (DD). The effects of DD have been crippling this society for decades and have impoverished millions in the country. The oil industry in the country has made other sectors of the economy uncompetitive in the world market and has attracted most of the resources (capital, investors, government assistance) available that would have been crucial for the development and modernization of other industries. Nigeria has failed to diversify its exports and consequently relies on one major commodity for its revenues, while exposing itself and remaining vulnerable to the volatility of international oil prices. In the case of Nigeria, its traditional export sector was not manufacturing but agriculture. Prior to the discovery and extraction of oil in Nigeria, the country proudly boasted one of the largest and most successful agriculture industries in the world and certainly in the African continent. Today Nigeria has to import the majority of food stuffs from the outside in order to feed its population.

Prior to 1970 agriculture accounted for roughly 50% of Nigeria’s GDP and employed 72% of the labor force. In the 1960s Nigeria was the largest exporter of groundnut, the second largest exporter of cocoa and palm produce, and was an important exporter of cotton, rubber and
For years economists had failed to see that Nigeria suffered from Dutch Disease, mainly because they tried to identify a significant decline in the productivity of the manufacturing sector, as this is the sector that is usually the most hurt by DD in developed states. However in the case of Nigeria, the country never experienced a period of heavy industrialization as seen with other DD affected countries. Albeit the presence of some manufacturing and modern day industry existed in Nigeria as continues to be the case today, agriculture was the core of economic activity in which most Nigerians engaged in. Once economists such as Olusi and Olanguju came to terms with these facts and recognized agriculture as Nigeria’s traditional export sector, the presence Dutch Disease was immediately detected and recognized by others. Ezeala-Harrison puts it this way, “the country maladjusted the structure of her economy when it abandoned its agricultural orientation in favor of an oil-based structure that sadly turned from “oil boom” to “oil doom”. This comes from an article written in 1993, since then the situation in Nigeria has worsened and the economy has become ever more dependent on the sale of oil.

There is a strong presence of a resource curse in Nigeria. The country has been affected by most if not all the other symptoms that are associated with the resource curse. Nigeria is plagued with corruption at all levels of government, it has suffered civil wars and has continuous ongoing armed conflict between the government and rebel groups, it has experienced Dutch Disease and consequently lost its traditional exporting sector and poverty levels in the country are among the highest in the world. The country’s leaders have a leviathan of a task in transforming their society and economy into institutions that work for the benefit of the majority of Nigerians and not simply local elites, politicians and those willing to use the systems for their own unfair advantage. The following case will examine the developments in Venezuela, a petro
state that in the last decade has gained notoriety for its ostentatious leader, its use of oil revenue for implementing social programs and failing economic policies.

Venezuela

Venezuela very much like Nigeria is one of the top producers and exporters of oil in the world. The discovery of oil in Venezuela dates back to the 19th century, but it was not until the 1930s when oil production and exportation began having a significant and transformative effect on Venezuelan society and politics. Venezuela became the world’s top producer and exporter of oil in the world until it was surpassed by Saudi Arabia in 1970. Oil has been both a blessing and curse for the South American country, but what has been clear is that in the last 30 years it has proven to be more of the latter. Today the country is experiencing what can probably be said to be one of the worst economic situations that it has gone through since its independence. A combination of poor economic and governmental policies along with a high dependence on oil production have made Venezuela the worst economically performing country in South America and one of the worst in the rest of Latin America. The presence of the resource curse in Venezuela is very notable, though not as overt as in other countries like Nigeria. Many of the resource curse symptoms that exist in Venezuela could have been avoided, however because of decades of excessive government intervention in the economy and in civil society (prompted by oil revenues) the curse has been aggravated in Venezuela.

Oil exports account for over 95% of Venezuela’s exports, 50% of government revenue, and 30% of GDP. Oil has become the way of life for the government, politics and society in Venezuela. The presence of Dutch Disease in this country can be traced back to decades ago when the government took clear measures to concentrate investment capital solely in the oil
sector while simultaneously taking away from other sectors especially of agriculture. An example of this took place in the 1970s when the government made the decision to cancel all agriculture related debt with the hope of eliminating this financial burden and increasing agricultural production. However the opposite effect took place, most landowners of large farms sold or closed their *latifundios* (large farm estates) and moved to urban environments where they established other businesses not related to agriculture. Consequently Venezuela like Nigeria lost much of its agricultural sector. The fall of the agricultural sector and the rise of the oil industry and other service sectors have created high levels of immigration and internal migrations from rural zones to principle cities and urban dwellings. These influxes of new arrivals over the years have created high levels of crime, violence, unemployment and poverty in these cities. Today Caracas, the capital of the country, is considered one of the most dangerous cities in the world and ranked 2\textsuperscript{nd} only to Mexico’s Ciudad Juarez in all of Latin America. Other cities in Venezuela follow the same pattern as their capital with high levels of crime, violence, kidnappings and homicides.

Ironically however, as mentioned before oil in Venezuela did serve as an initial blessing especially in the immediate decades after the 1930s. The revenue that oil provided helped to democratize and pacify the country by the 1960s. Social programs that helped reduce hunger, poverty, educated the masses and more were put in place. This brought political peace amongst various political parties and ushered in a one of the longest running and uninterrupted democracies in Latin America. Also thanks to the revenues from the oil industry Venezuelans by in large did not pay much in terms of taxes and government tributes. The lack of a proper tax structure and citizens continuing to receive benefits from their government leaders created a patron client network system that in the future would be detrimental to the economy and
democratic institutions. Mahler states that “Clientalism and corruption initially had a politically stabilizing effect, but in the long run they have deepened the delegitimization of the traditional political elite and thereby triggered conflicts”.\(^{38}\) The patronage system that emerged in Venezuela evolved into a system that became uncontrollable and unable to place checks and balances. Consequently the democratic institutions that it helped to create slowly began to erode. As citizens become accustomed to receiving benefits from their governments while not contributing to the system (in terms of taxes), they continue to elect leaders who will promise and deliver to them more of these benefits which are in their immediate advantage. This is how populists and demagogues, instead of honest civil leaders and technocrats are elected to the helm of power.

Governments like these tend to increase consumption with oil revenues rather than acquire foreign assets, and what has been seen in the last 30 years is that oil rents are no longer sufficient to finance growth of public expenditures. This has contributed to the increased public deficit in Venezuela.\(^ {39}\) This behavior often leads to excessive borrowing from international banks and international monetary organizations, actions which further aggravate the public debt. For decades prior to the 1980s Venezuela had been borrowing excessively from foreign banks, the IMF and World Bank. When the Debt Crisis of the 1980s hit, Venezuela found itself unable to pay much of the debt that it owed. The government was forced to adopt structural adjustment programs (SAPs) that put an end to many of the free social programs that Venezuelans were by then addicted to for decades.\(^ {40}\)

Resistance to SAPs was met from many sectors of the society, usually pinning the lower classes against the political and social elites. Violent demonstrations and protests, looting, and confrontations began to become a common theme of life in the country. In one of these violent
confrontations between protestors and government forces, over 200 Venezuelans were killed. This incident became known as *El Caracazo*. Certain factions of the military opposed to SAPs and neoliberal economic policies partook in these constant confrontations in the early 1990s.

Hugo Chavez, then a Lieutenant Colonel in the armed forces staged two failed coup attempts. These attempts by Chavez forever immortalized him as a populist leader, his agenda was to do away with the corruption that had permeated Venezuelan politics for decades and to stand up against the neoliberal policies that were impoverishing millions. The poor saw a champion in Chavez, someone they could relate to, because unlike most of the political elite that had come from well to do aristocratic families, he originated from a poor and disadvantaged rural family. Chavez would become the democratically elected president of Venezuela in 1999. Oil rents in Venezuela have allowed Chavez’s administration to stray away from what would be sound economic policies that could help alleviate many of the problems that the country faces. Instead his government has embraced socialist policies that have worsened the economy. Oil rents have made it possible for Chavez to use a socialist economic model approach to governing that includes the heavy hand of the government in economic planning.

The constant influxes of large revenues from any resource sector can encourage governments to adopt socialist approaches to government. Rossi states with regards to oil rents that “It made the country totally dependent on the government for all economic activity, including both public and private production since it is the state that controls foreign currency for imports of spare parts and finished goods”. Constant expropriations and nationalizations of various private enterprises both foreign and domestic have reduced the competitiveness of the country in other sectors, not to mention that they have literally scared away investors. In 2010, over 200 important companies in key sectors of the economy were taken over by the
government. Since then their productivity has fallen and are in constant need of public subsidies to continue operating. The policies that Chavez has been following have damaged virtually all sectors of the economy including the very oil industry that is in constant need of new technologies and capital which are usually fronted by outside investors. Chavez “has also presided over a collapse in the production of Venezuela’s agriculture and much of the industrial apparatus, including crude oil production and even some energy intensive sectors like steel and aluminum”. In a way, the socialist policies that the Venezuelan government has adopted over the last decade have led to Dutch Disease. Too much government interference in the economy (through state planning, artificial price setting, establishing production quotas, etc.) has made all sectors of the economy uncompetitive. This path is simply unsustainable for the future and will only continue to worsen the political and economic condition of the country.

The resource curse is present in Venezuela; this has been demonstrated through a number of symptoms that afflict the South American state. Violence through protests, military action or other means have been exacerbated since the late 1980s when the country adopted SAPs and other neoliberal policies. The causes of this violence is directly tied to the oil rents which have provided Venezuelans with government handouts and welfare programs for decades, when these programs could no longer be sustained violence ensued as a response of disapproval from the masses. Another symptom of the resource curse is the presence of Dutch Disease. Venezuela has no other major exporting sector other than the oil industry. An overvalued currency and government decisions to no longer invest in other sectors have killed manufacturing and agriculture production in the country to the point where it has to import these goods in order to feed its population. The third symptom is rent seeking which has created a patronilistic system that benefits ephemerally both the political elite and the poor masses while simultaneously
dismantling democratic institutions. An example of this is how the populist president Chavez supported by the poor masses, has altered the constitution of the country to allow him to run for president for a third term.

Up to this point in this part of the project the cases of Nigeria and Venezuela have been examined to understand how the resource curse theory and the Dutch Disease model can be applied. These two countries are examples of the pits and falls that states can fall victim to if the proper policies are not put into place. The following will examine two success cases of countries that have overcome the resource curse and Dutch disease.

**Chile**

Chile has for long been regarded as having Latin America’s best ran economy. Since the 1970s Chile has come a long way from being one of the poorest countries in the region to becoming the so called *Jewel of the Pacific*. The path taken by Chilean policymakers was not without its difficulties, which were especially seen during the Latin American debt crisis of the 1980s. However the country has managed to transform its economy into a regional powerhouse that is exporting more and more of its many products to various different markets around the world.

Mining has traditionally been Chile’s comparative advantage. It is one of the largest producers of copper (producing 1/3 of global output), lithium and other important minerals. Yet despite being a net natural resource exporter dependent economy, Chile has for the most part successfully managed to control much of the symptoms associated with the resource curse. In this section the tools, policies and decisions that Chilean policymakers have adopted over the years and have aided in diminishing the effects of the resource curse will be analyzed.
Since the mid 1970s under the leadership of Augusto Pinochet Chile has been on a path of neoliberal economic reforms and free market policies. Since then, the mining sector has received much investment from the government not only through subsidies but by the state creating a comfortable business environment that attracts foreign investors and outside capital. Nevertheless, this alone was not enough to prevent the country from falling victim to the different symptoms of Dutch Disease. As Chile began producing more from its mining sector and in turn receiving larger amounts of revenues and tributes from mining companies it faced the potential for currency appreciation and an inflation in the prices of goods. These are the first signs of Dutch Disease. Also the presence of larger rents could encourage civil servants and politicians at all levels of government to spend funds on large scale projects which provide little benefit to society, expensive welfare programs that can create political patronage or can encourage corrupt and nefarious behavior.

The general success of the Chilean economic model can be attributed to four pillars that were adopted by the government in the mid 1980s. The first of these pillars is the creation of a predictable and accountable fiscal policy made possible by a structural balance rule. The structural fiscal rule “ties the growth of fiscal spending to trend output and the expected ten year average future price of copper, among other variables, in such a way that the ex-ante structural fiscal balance is on target”. At the beginning the structural fiscal surplus target was set at 1% of GDP, but this can change depending on the price fluctuations for copper or if the government is trying to impose countercyclical measures. For example, during the recent worldwide economic crisis of 2008, the government lowered the fiscal surplus target to 0% in an effort to stimulate the economy and to prevent it from contracting. In other words, the government adopted a policy of
spending more money. Thanks in large part to measures like this one in particular Chile was able to quickly recover from the global economic crisis virtually unscathed.

The second pillar of Chile’s macroeconomic framework is monetary policy that is based on inflation targeting by the autonomous and independent central bank that is supported by a floating exchange rate system. This scheme was first implemented in 1990, when the inflation rate stood at 30%. By 2000, the central bank succeeded in reducing the annual inflation rate to 3%. Since then it has been the policy of the central bank to maintain the annual inflation rate target at 3% with a plus or minus one percent tolerance range. Also the monetary policy rate (MPR) is target for overnight interbank interest rate. This application of monetary policy has proven to be very successful in preventing major financial crises as seen in the United States and Europe and it has maintained the inflation rate between January of 2000 and December of 2006 at an average of 2.9%. Since 2007 with the major financial and economic crises facing the world, and a precipitous drop in the inflation rate this scheme has come under great stress. Yet despite the external conditions that have been creating stress on this system, “the combination of structural fiscal surplus target, an inflation-targeting scheme and a floating exchange rate, has reduced volatility of economic output in the current decade”.

The third pillar is based on increasing financial and commercial openness of the economy to new markets around the world. Even though the export of minerals especially copper has and will continue to be in the foreseeable future the dominant Chilean export, the country has focused on diversifying its other economic sectors. Through measures that it has taken both internally and externally such as establishing free trade agreements with various countries or providing government assistance in the development of other non-mineral related industries, Chile has created a basket of products that it can offer the world and it has been successful in
promoting these goods in different economic zones. Chilean exports vary from high quality wines, diverse crops, fish, paper and paper products, medical equipment, computer accessories, aircraft parts and much more. Policymakers have managed to avoid their economy and government revenues from becoming contingent on copper and other minerals. Thereby, by adopting these measures they are securing the continuation of their other sectors in an effort to avoid a dependence on the mining industry.

The fourth and final pillar is the existence and creation of a solid financial system with well-capitalized and regulated banks. According to de Gregorio “The regulation of the financial system, established initially in the Banking Act of the mid 1980s and perfected during the 1990s, prevented some of the most notorious banking excesses that were apparent in the recent financial crisis”. Credit risk is managed and regulated very tightly by the government as well as securitization practices. The central bank and the Superintendence of Banks and Financial Institutions play a vital role in establishing the specific guidelines for the magnitude and types of derivative exposures, especially in foreign exchange instruments that banks hold. These strict regulations are important in preventing large depreciations in the foreign exchange positions of the banking institutions in emerging markets’ banking institutions. Chile has succeeded in creating a system that does just that.

These four pillars together have given Chile an edge over many other resource rich states in managing the effects of the resource curse. Despite having these measures in play which have proven to be very successful, the effects of the resource curse are still felt in Chile, though not as strong or detrimental as seen in other cases. For example, there is a slight presence of Dutch Disease in Chile that is constantly requiring the attention of government policymakers. In the last years, the world has witnessed a greater demand for copper, this has contributed to a dramatic
price increase in this commodity. Since then Chile being one of the largest producers of this mineral has experienced unprecedented revenue inflows, a situation that has become alarming and potentially threatening to other economic sectors. However, there are two reasons to doubt that the copper boom will be a curse for Chile; for one the Chilean economy remains strong despite the symptoms of Dutch Disease and two; the government proposes to save much of the windfall profits in funds and other accounts overseas, thus avoiding currency appreciation.49

The government has determined how to use much of the surplus and windfalls that have resulted from the copper boom. The majority of the money will be kept in offshore accounts and in foreign currency in order to lessen any effects on the Chilean peso. Also “the government will give 0.5% of GDP a year to the Central Bank, which was lumbered with debt in a bank bail-out in 1982-83.”50 Some of these surpluses will go into the “economic and social stabilization fund” which is also held abroad. This fund will provide the government with needed money during cash strapped times rather than contract debt. Former Finance Minister Andres Velasco stated that this would strengthen Chile’s counter cyclical fiscal policy, as well as helping to restrain the peso’s rise.

Politically speaking, Chile has enjoyed its return to democracy that began in 1990 after Augusto Pinochet stepped down as president. The country suffers very little in terms of internal conflict (virtually almost non-existent) that can manifest itself through civil wars, uprisings or other forms of conflict. According to Transparency International, Chile is perceived to be a country free of corruption,51 this is a rarity amongst Latin American countries and especially one endowed with so much mineral wealth. And with regards to being vulnerable to the international demand and volatility for the minerals it produces, the Chilean government has taken many steps to promote its other exports and invest in other economic sectors in an effort to not become
economically dependent on a handful of commodities. These measures will give the economy a cushion against a decline in the price of copper, since its other industries will continue to export their products. And when it comes to Dutch Disease, despite this constantly being a potential threat and having existed in the past in Chile, the macroeconomic framework that governs the economic activities of the country has effectively curbed many of its detrimental effects that can be harmful for the rest of the economy.

Chile’s economic model should be considered by policymakers in resource curse affected countries. They should not look at this model with the purpose of replicating this framework in their states, but rather to understand the rationale for the approach taken by Chileans during the 1980s and to possibly take some of those policies and alter them to their economic circumstances. Chile is proof that policies that focus on improving the conditions of a state for the long run are more successful than policies aimed at appeasing the immediate desires of the masses. The following case will look at how Botswana has managed to avert the resource curse.

**Botswana**

In 1966, at the time of Botswana’s independence from Great Britain, the landlocked country of two million stood amongst the poorest countries in Africa. The per capita income stood at $70, there were only 3 kilometers of paved road in the entire country, only three high schools, a very basic health service and the government was entirely dependent on international aid. Today Botswana has become a middle income economy with an average growth rate of 7-8% and boasts a modern infrastructure with over 300 secondary schools, more than 5000 miles of paved roads, and has a debt free government that is able to finance its own development plans without outside assistance. Botswana’s was able to transform its society thanks to its most important
export commodity product and its close partnership with the DeBeers Corporation. The mining of diamonds in Botswana presented many potential pitfalls for the small African country. However, because of prudent and responsible policy making on the part of policymakers, Botswana has averted the symptoms of the resource curse.

Hill and Mokgethi state that, “the two main objectives that guided Botswana’s economic policies were to avoid external debt and stabilize growth on the one hand, and to encourage economic diversification on the other”.54 Two policies were set in motion to achieve these objectives. The first was to avoid excessive increases in expenditures during boom periods. Instead the government would accumulate international reserves and run up budget surpluses that were earmarked for stability spending in leaner times, in other words save up money and use them during countercyclical cycles.55 Government spending was based on long term predictions of export earnings and revenue collection. With a tight spending policy in place, during times of low revenue coming from the mining sector there would be little need for drastic cuts in the government’s budget. Though this policy was not politically popular in the beginning, given that many politicians and leaders wanted to spend revenues on improving the welfare of their people through expensive social programs and large infrastructure plans that would provide little in return, it would gain the acceptance from the majority of the population due to its success.

With a tight budget in place, government then had to decide how to appropriately distribute its resources for domestic investment. Government based its decision making process for undertaking developmental projects based on different factors. First, the government analyzed whether or not there would be sufficient revenues in the future needed to finance a particular project. Many countries that have fallen to the resource curse undergo expensive projects that take years to complete. Due to a lack of accounting and future revenue prediction
they are unable to continue with the project’s completion resulting in their abandonment when the price of their best traded commodity sinks. This measure taken by the Botswanan government assures that a project can be paid for before undertaking its construction. The government also took into account the absorptive capacity of the economy. According to Sarraf and Jiwanji, “Since the availability of skilled manpower was a large constraint in Botswana, the government felt that increasing development expenditure beyond the capacity of the country would result in a rate of return lower than what could have been earned in alternative assets”.

In other words, since the country had a very small population, the creation of large infrastructure projects that cost large sums of money might not have been worth the effort or resources, given the population’s inability to generate great economic activity that would make such venture worthwhile. In addition to this, parliament would periodically pass National Developmental Plans which determined the amount of spending that would be devoted to public projects. Parliament made it illegal to pass any additional public spending projects without requesting funding from the legislature once a National Developmental Plan was enacted. This prevented the undertaking of new projects that had no provision to cover their costs for the long run.

The second policy enacted to reach these objectives was the careful management of the exchange rate to avoid real appreciation of the local currency. This was done through the accumulation of foreign reserves with the funds acquired from the sale of diamonds. By not allowing the local currency to appreciate, other tradable goods not associated with the mining industry would retain their competitiveness. This helps to promote economic diversification. Foreign reserves were accumulated in the Bank of Botswana, only to be removed during times of financial need. Inflation was also a worry for the government, in times when the stability of the prices for domestic goods was of more importance than economic diversification, the pula
(national currency) was allowed to appreciate. In general, Botswana has averted contracting the effects of Dutch Disease. Its manufacturing and service sectors have been thriving for the past thirty years. However, agriculture has failed to take off. A very important reason for this probably has to do more with natural causes than with macroeconomic decisions. The fact is that Botswana constantly suffers from long periods of drought that are deleterious to the development of agriculture. This and a combination of other lesser factors have been the reasons for why agriculture has failed in Botswana.

In addition to these macroeconomic goals that Botswana has been pursuing, large scale environmental degradation that is typically seen in resource rich countries has generally been avoided in this case. By working closely with corporations conducting mining activities in the country and making private operators responsible for implementing protective measures Botswana has prevented many potential manmade disasters from taking place. Some examples of this are, “the incorporation of a sulfur reduction plant into the Selebi-Phikwe smelter; the installation of power lines underground to save the flamingo population near the Sua Pan soda ash company; and the suppression of coal dust by the wetting system in the coal mine of Moruplue Colliery”.\(^5^9\) Despite many of the regulations enforced by government to protect the environment there must be measures taken to address other problems such as overgrazing, deforestation, soil erosion and water contamination. But overall, the achievements in promoting sound environmental protection measures, and maintaining a strong macroeconomic framework are product of a very important factor in Botswana, which is the low level of corruption. The levels and perception of corruption in Botswana are ranked the lowest in Africa, this has given the country a significant advantage for development vis-à-vis other states.
Usually what tends to determine the degree to which natural resources can contribute to economic and social development is good governance. According to Iimi, “Good governance—specifically a strong public voice with accountability, high government effectiveness, good regulation and powerful anti corruption policies—tends to link natural resources with high economic growth”. Botswana has instituted a set of laws, institutions and practices that have come to be known as the National Integrity System (NIS). NIS is a concept developed by Transparency International that helps maintain accountability and integrity of public, private and civil society organizations. Over the years NIS has been associated with the laws and practices designated to root out corruption from the system; they work in conjunction with the legislature, executive, judiciary, media, private sector and anti-corruption agencies.

The NIS under the careful watch of Transparency International has been successful in the various aspects that make a society more or less free of corruption, this of course contribute to Botswana’s good governance. When it comes to rating the democratic accountability in the country, Botswana fares very well. Elections are held on a regular basis, elected officials are held accountable, government decisions can be subject to judicial review and more. The judiciary is autonomous from the legislature or executive branch and has even been in integral tool in the fight against corrupt officials. The media in Botswana is also free, they too have been active in the fight against corruption by exposing corrupt officials and their practices. Botswana has enjoyed a government free from corruption for the most part, those individuals involved in corruption are normally brought to trial and punished, thus setting an example for the rest of society. One of the main reasons that Botswana was able to achieve this relatively corrupt free state, is that it already counted with strong institutions prior to discovering diamonds and other natural resources in 1967.
What is clear from analyzing the case of Botswana is the importance that good institutions play in avoiding the many symptoms of the resource curse. Joseph Stiglitz argues that Dutch Disease and other resource curse maladies can be “cured”. He emphasizes that “Democratic, consensual and transparent processes- such as those in Botswana- are more likely to ensure that the fruits of a country’s wealth are equitably well spent”.62 Botswana was blessed, it had created good governing institutions before the discovery of diamonds. This prevented rent seeking, corrupt activities and other maladies from forming because by the time diamonds were discovered the political culture of Botswana had become one which championed transparency, democratic values and thriftiness. The presence of natural resources in a country can encourage political dishonesty and poor governing institutions which can usher in serious resource curse maladies.

Botswana is an excellent example of how a very poor country can use its natural resources to its advantage without contracting resource curse maladies. In a matter of 40 years, Botswana has become one of the African continent’s few successful stories. It has improved its infrastructure, education system, and economic performance while at the same time maintaining a strict budget surplus year after year. This has been possible thanks to the good governing institutions that have developed in the state. Because of these institutions Botswana has averted the maladies of Dutch Disease, corruption, revenue volatility, excessive debt and others that afflict not only African countries, but most states with resource extractive dependent economies. After examining this case, it can be argued that the presence and development of good government institutions in a country can be the remedy to the resource curse that many states are looking for.
Conclusion

The purpose of this section was to examine the different cases of four countries that have been affected by the resource curse to different degrees. The different ways that countries can fall into the resource curse and its pitfalls which include corruption, price volatility of commodities, the breakdown of democratic institutions and most importantly Dutch Disease have been demonstrated. Also discussed in this section was how some governments have been able to successfully avert the maladies of the resource curse through sound macroeconomic policies, not increasing public spending, saving revenues from their resource extractive sectors and by improving their government institutions. Building on the information obtained in this section about how the resource curse can affect states and how policymakers respond when faced with its maladies, the next section will analyze how the resource curse has affected Peru and whether or not policymakers have taken steps to avert its maladies.

Part III. Peru: Resource Curse or Blessing?

In the past 20 years, Peru has experienced strong economic growth thanks in large part to the free market and neoliberal economic policies that have been adopted by past governments. In the past Peruvian politics and its economy had been plagued by instability and volatility. Presidential coup d’états occurred at least once every decade ushering military dictators who usually did not reconcile well with the democratic institutions of the country. The failed attempt by the government to industrialize through import substitution industrialization efforts managed to impoverish millions of people and perpetuated or worsened existing economic conditions. Recently, politics in Peru and the economy seem to have stabilized, and the country now leads the region in terms of economic growth.
A major factor that has allowed Peru to grow economically is the exploitation of its mining industry in the interior (rural areas) of the country. The country has a long and proud history of mining that dates back even prior to the days of the Incas. Mining continues to play an important role in the lives of many Peruvians. Mining even plays into the ethos of the country as it is one of the world’s largest producers of gold, copper, silver, tin, lead and other minerals. However, as the nature of the mining industry has evolved in the 20th century (from being labor intensive to capital intensive), and the implications that it used to have on the economy and society have also changed, new challenges emerge that require the state’s response. Despite the advances in democracy and economic growth that the country has reached, there are serious concerns that have not been entirely addressed or resolved that can put at risk all that has been achieved.

For example, although much progress has been made in the fight against corruption at the institutional level in Peru, there is much more to be done. Weak and corrupt institutions at the local and regional levels of the country have hampered development and the trickle down of wealth to poor and marginalized communities. Large amounts of government funds are spent on projects that provide little in return to their communities or do little to improve the infrastructure of the state. Due to the failure of the state in tackling this problem effectively there has been a sharp rise in conflict throughout the interior of the country that usually ends up pinning local communities against the state and large foreign mining industry conglomerates. Also, policy makers are constantly battling against the potential threat that Dutch Disease can pose to the country. Much of the growth that has been generated in the last 20 years has been carried on the back of the mining industry. In order to avoid that other sectors of the economy become uncompetitive and that minerals become the only export of the country, steps must be taken to
bolster other major sectors of the economy. Also measures to control the macroeconomic causes of Dutch Disease (such as currency appreciation) must be employed.

This section will focus on the effects that the resource curse has had on Peru. It will analyze measures that the state has taken which have averted the resource curse’s maladies. The section will also determine how effective these macroeconomic policies have been. It is important to make an important point before proceeding, it is not being argued in this project that policymakers are directly responding or creating policies in response to the resource curse. Rather that the macroeconomic policies that they have taken have proven to have some positive effect on many of the maladies associated with the resource curse.

**Economic Overview**

Over the last 20 years there have been noticeable changes in the Peruvian economy. The following figures demonstrate a snapshot of how the Peruvian economy has evolved in the last 20 years. The data indicates that since the early 1990s there has been consistent economic growth with exception of some years in which poor global economic conditions have affected growth in Peru. Also seen in these figures is how various sectors of the economy have been performing over the past 20 years, the percent of GDP that each sector represents, and the exports of these industries as percent of GDP. These figures demonstrate that the resource industry is in many ways the dominant industrial sector, however, they also indicate that other sectors of the economy have also been productive and have not been negatively affected by Dutch Disease. Other industries have remained competitive and have even grown demonstrating that the Peruvian economy is relatively well balanced. The reforms of the 1990s have been instrumental in the economic growth and development of Peru.
Table 1: Key Economic Indicators

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP growth (annual %)</th>
<th>Unemployment, total (% of total labor force)</th>
<th>Inflation, consumer prices (annual %)</th>
<th>Gross national expenditure (% of GDP)</th>
<th>Balance of Trade (% of GDP)</th>
<th>Cash Surplus/Deficit (% of GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>2.17</td>
<td>5.80</td>
<td>409.53</td>
<td>101.84</td>
<td>27.14</td>
<td>-2.04</td>
</tr>
<tr>
<td>1992</td>
<td>-0.43</td>
<td>9.40</td>
<td>73.53</td>
<td>102.84</td>
<td>28.37</td>
<td>-3.46</td>
</tr>
<tr>
<td>1993</td>
<td>4.76</td>
<td>9.90</td>
<td>48.58</td>
<td>103.83</td>
<td>28.21</td>
<td>-2.92</td>
</tr>
<tr>
<td>1994</td>
<td>12.82</td>
<td>8.90</td>
<td>23.74</td>
<td>103.45</td>
<td>27.94</td>
<td>-1.90</td>
</tr>
<tr>
<td>1995</td>
<td>8.61</td>
<td>7.10</td>
<td>11.13</td>
<td>105.66</td>
<td>30.85</td>
<td>-1.31</td>
</tr>
<tr>
<td>1996</td>
<td>2.52</td>
<td>7.00</td>
<td>11.54</td>
<td>104.85</td>
<td>31.45</td>
<td>2.67</td>
</tr>
<tr>
<td>1997</td>
<td>6.86</td>
<td>7.70</td>
<td>8.56</td>
<td>104.22</td>
<td>32.94</td>
<td>0.48</td>
</tr>
<tr>
<td>1998</td>
<td>-0.66</td>
<td>7.80</td>
<td>7.25</td>
<td>105.40</td>
<td>31.67</td>
<td>-0.37</td>
</tr>
<tr>
<td>1999</td>
<td>0.91</td>
<td>8.00</td>
<td>3.47</td>
<td>102.42</td>
<td>32.49</td>
<td>-2.35</td>
</tr>
<tr>
<td>2000</td>
<td>2.95</td>
<td>7.40</td>
<td>3.76</td>
<td>102.15</td>
<td>34.16</td>
<td>-2.05</td>
</tr>
<tr>
<td>2001</td>
<td>0.21</td>
<td>7.90</td>
<td>1.98</td>
<td>102.14</td>
<td>33.45</td>
<td>-2.05</td>
</tr>
<tr>
<td>2002</td>
<td>5.02</td>
<td>7.70</td>
<td>0.19</td>
<td>101.23</td>
<td>33.38</td>
<td>-1.40</td>
</tr>
<tr>
<td>2003</td>
<td>4.03</td>
<td>8.40</td>
<td>2.26</td>
<td>100.08</td>
<td>35.52</td>
<td>-1.68</td>
</tr>
<tr>
<td>2004</td>
<td>4.98</td>
<td>9.00</td>
<td>3.66</td>
<td>96.36</td>
<td>39.27</td>
<td>-1.19</td>
</tr>
<tr>
<td>2005</td>
<td>6.83</td>
<td>8.70</td>
<td>1.62</td>
<td>94.08</td>
<td>44.26</td>
<td>-0.83</td>
</tr>
<tr>
<td>2006</td>
<td>7.74</td>
<td>7.40</td>
<td>2.00</td>
<td>91.33</td>
<td>48.39</td>
<td>1.82</td>
</tr>
<tr>
<td>2007</td>
<td>8.91</td>
<td>6.70</td>
<td>1.78</td>
<td>93.53</td>
<td>51.30</td>
<td>1.96</td>
</tr>
<tr>
<td>2008</td>
<td>9.80</td>
<td>6.80</td>
<td>5.79</td>
<td>99.39</td>
<td>54.52</td>
<td>2.00</td>
</tr>
<tr>
<td>2009</td>
<td>0.86</td>
<td>NA</td>
<td>2.94</td>
<td>96.07</td>
<td>44.44</td>
<td>-1.51</td>
</tr>
<tr>
<td>2010</td>
<td>8.79</td>
<td>NA</td>
<td>1.53</td>
<td>96.79</td>
<td>44.56</td>
<td>NA</td>
</tr>
</tbody>
</table>

Figure 1: Gross Domestic Product by Industry 2000-2010 (% Change)

Figure 2: Industry as a Percentage of GDP 1990-2010

Figure 3: Industry Exports in Percent of Total

Table 1 demonstrates the overall GDP growth of the Peruvian economy. The table demonstrates how since 2000, with the exception of two years (2001, 2009) the economy registered considerable growth. The 2009 dip in growth can be attributed to the global financial crisis that put a serious dent in many exporting countries’ growth rate. However by the next year, 2010, economic activity had picked up and recovered. Official unemployment figures have been well within 10% since 1991. Since 1999 the inflation rate for the most part has come under control and has been brought down close to the level that policymakers at the BCRP (Central Reserve Bank of Peru) have set as a target. Gross national expenditure has decreased over the past 20 years and since 2004 has been fewer than 100%. This means that the government is spending and borrowing less money than it had in the 1990s, thus avoiding the incurring of enormous debts. And finally the balance of trade data shows that Peru has increased its balance of trade significantly since the early 1990s meaning that the country is exporting more than it has in the past.

Figure 1 demonstrates the annual change in percentage by industry or sector of the economy since 2000. In other words it measures the growth or reduction in productivity of each industry. Since 2001 commerce has been on an upward trend, signifying that this sector of the economy is on the rise. Also, since 2000 mining and fuel reached its peak growth rate in 2004 with an over 30% growth rate. Since then the mining industry’s growth has decelerated and actually registered negative growth. In 2010, the mining sector registered its poorest annual change with a reduction in growth of negative 15%. Manufacturing seems to have grown relatively at the same rate since the 2000, although in 2009 it registered negative growth. This can very well be due to the global economic crisis which has decreased the demand for finished goods. In 2010 manufacturing grew by over 10%.
Figure 2 demonstrates the percentage of GDP that each industry represents. Throughout the 20 year period observed (1990-2010) there seems to be consistency throughout the data, in other words there is little variation in the numbers. This means that the mining sector has not eclipsed other sectors of the economy. Mining and fuel in this graph tend to represent a percentage of usually no less than 5% and no more than 10% of total GDP. Manufacturing and commerce average at around 15% a piece, which seem to be a healthy level for a developing country. It is the other services that represent a greater share of the GDP.

Figure 3 demonstrates the percent of total of industry exports. That is in other words how much is being exported from each sector. The figure shows that minerals are the strongest export of Peru. Since 2000 the export of minerals has increased by some 10-15%. Meanwhile the other industries or sectors of the economy seem to have remained the same or have slightly decreased. It is imperative to keep in mind that this figure merely measures the amount of exports of the country but does not represent the overall GDP percentage of Peruvian industries.

What can be said about these figures is that despite mining having the most significant exports, other industries represent a larger part of the economy such as commerce, manufacturing and other services. This suggests that the economy of Peru is rather well balanced. Even though minerals account for a larger part of exports in Peru, the mining industry has not marginalized or done away with other industries as seen in figure 4. In fact, figure 2 suggests that the productivity of other non mining related sectors have stayed at the same levels or slightly increased in their productivity. These figures suggest that Peru does not suffer from Dutch Disease. If it did then the productivity of other sectors of the economy would not be present and these other sectors would have disappeared years ago. Yet they remain, and it can be argued that they are growing at a healthy rate. The following section will analyze the reasons for
why Peru has not fallen to Dutch Disease. It will discuss the policies and laws adopted by the state that have averted many of the maladies associated with the resource curse.

**Combating Dutch Disease**

Manufacturing and agriculture are usually the first sectors of the economy that are affected by Dutch Disease. The manufacturing sector is what Jeffrey Sachs considers to be most important industry for growth in developing economies. The other major sector of the economy that is affected by Dutch Disease is the non-tradable sector of the economy also known as the service sector. The less competitive these sectors are relative to the rest of the economy, the more reliant the state becomes on the resource extractive industries for revenues. Thus, it is of utmost importance for policy makers to take measures to counter Dutch Disease which is possibly the most harmful malady associated with the resource curse. According to the World Bank, a state can combat Dutch Disease through the modifications of fiscal policies, spending and structural policies and exchange rate and monetary policies. The Peruvian state appears to have followed the recommendations set out by the World Bank to a certain extent, yet it has not implemented the most useful weapon against Dutch Disease which is the implementation of an export tax. Policymakers are walking a fine line between discouraging foreign mining and other natural resource extraction corporations from investing in Peru and not falling into Dutch Disease.

Fiscal policy is the most important tool when curbing the effects of Dutch Disease because “it is a tool that can make the increase in wealth permanent, it can constrain the spending effect and it can smooth expenditures to reduce volatility”. Too much government spending can cause unwanted effects, most notably inflation. To understand fiscal policy it is important to realize that if there is a desire to curb the effects of Dutch Disease, essentially a sort of
balancing act must follow. There are moments in which the government is required to spend money in order to promote business, sustainability projects, build infrastructure, fund social programs all which contribute to different types of growth. Yet there is also another side to economic planning which stresses just the opposite of the previous sentence. It is the latter of these in which I will concentrate on for this section.

It can be said that, "an adequate fiscal policy would be balanced between the need to implement development objectives and the need to constrain the spending effect". The more money that a state saves, in other words the less money it spends on public expenditures of all sorts, the better it will be set for the future due to a variety of reasons. One of the major reasons for this is that as states save capital inflows in foreign accounts or the central reserve and do not add them to the money supply, the less likely it will be for the currency to appreciate. Currency appreciation would have negative repercussions on exports given that their prices would be more expensive in other countries where they are sold. Also by spending less and working with a budget surplus the government would be less inclined to take out loans from various institutions in order to finance what would otherwise be a budget deficit. In 2009, the Peruvian government passed the PEE (Economic Stimulus Plan) which was aimed at stimulating the economy and continuing growth despite the global recession and financial crisis. This was a classic Keynesian response and approach to dealing with a financial crisis of this magnitude. Over $1.5 billion were spent to support productive activity, social protection and the continued investment in infrastructure.65

Now that the world economic situation has seemed to have stabilized, macroeconomic policies have been reassessed in Peru. The Ministry of Economics and Finances (MEF) has stated, “In this context, fiscal policy will abandon expansionary trend and adopt a countercyclical
strategy, in the face of the new dynamism of private spending”. A slower pace of public spending will help avoid inflationary pressures and the appreciation of the currency. As of 2010 the fiscal deficit stood at 1.9% of the overall GDP, it is expected that by this year 2011 the deficit will decline to 1% of GDP. According to the MEF “As a result of this reduction, the next government will receive a healthy and sustainable fiscal position, in a context of high growth, which will contribute to a further reduction of poverty”. This is another measure that has helped to avert Dutch Disease.

At the same time that the government is restricting itself from public spending, it is encouraging spending from the private sector. The reason for this is that it again wants to limit the capital inflows into the country. By encouraging demand for foreign products through the private sector much capital will directed or sent abroad, this will have a somewhat equalizing effect in relationship to the overall money supply. Foreign reserves in excess have the potential of increasing the currency exchange rate. Thus in addition to having a healthy level of exports it is also imperative to have a healthy level of imports coming into the country. In order to do this certain structural policies must be adopted. These “Policies that encourage demand for imports—for example, trade liberalization—would help reduce demand pressure on the nontradables sector and, therefore, may be part of the structural policy response to Dutch Disease”. In other words, liberalizing trade and allowing imports to enter the country at a higher rate is a healthy and effective way for an economy to get rid of the extra foreign reserves that can be detrimental to the currency rate. Later in this section the importance of creating a business friendly environment to stimulate growth will be discussed. The very same policies that are used to create such an environment and economic growth (improvements in regulations, reduction in red tape, etc.) also have the effects of encouraging the outflow of foreign reserves. Finally the last recommendation
that the World Bank makes with regards to controlling Dutch Disease has to do with monetary and exchange rate policies.

The proper manipulation of monetary policies and exchange rates are other effective ways to combat inflation that occurs as a result of vast quantities of foreign reserves flowing into the economy. As has been shown in the previous section, the BCRP has maintained interest rates relatively low in order to increase credit, loans, and the acquisition of capital throughout the country. Yet given the context in which private investments are reaching record highs, FDI is pouring into the country, and trade is bringing in vast amounts of foreign reserves, the BCRP has shown prudence by raising the interest rate to 4% in order to lessen the impact that these new capital inflows might have on the inflation rate. By slightly raising the interest rate the BCRP will make it more difficult to obtain credit from banks thus lessening the money supply in order to control inflation. This policy runs contrary to the government’s desire to make credit more affordable to businesses and individuals, but it is part of a balancing act that is required in order to maintain a healthy inflation rate which the BCRP has targeted and set between 2-3%.70

Diversifying the Economy

When discussing the contemporary Peruvian economy it is important to understand that the current economic model is a recent development. Prior to the 1990s the Peruvian state flirted with socialism, state led development, import substitution industrialization, and authoritarianism. These failed to bring about the economic changes that they were designed to usher in. In the late 1980s the Peruvian economy reached a breaking point; inflation reached 7000%, President Alan Garcia at the time defaulted on the national debt owed to the IMF, unemployment stood at an all time high, and international trade decreased significantly. The election of Alberto Fujimori in
1990 proved to be a turning point for the economy. His administration was the architect of the current economic model that his successors still abide to, which has led to growth, reduced poverty and increased state revenues.

Through the adoption of neo-liberal policies implemented during the Fujimori years Peru has been able to diversify its economy. Government administration of SOEs (state owned enterprises) was inefficient and very costly prior to 1990. It is estimated that by 1989 the state was losing some $500 million a year in operating costs of these SOEs. Given the economic crisis and the severe lack of government funds, these losses could no longer be sustained. Thus the privatization of these enterprises became a must. By 1991 a privatization law was passed to allow for the privatization of SOEs and a commission known as COPRI was created to help sell off state assets. COPRI’s goal was to sell off some $9.1 billion worth in state assets by 2000. By the end of Fujimori’s first term 72 privatizations in important sectors such as telecommunications, mining, industry, banking and others had been accomplished. Privatization of essential services brought many initial problems to the population, especially those pertaining to the lower classes. However, privatization also brought much foreign direct investment (FDI) that was urgently needed in order to update and modernize many of these failing enterprises and to manage them efficiently.

Trade liberalization was an important stepping stone in economic restructuring. Traditionally Peru had been a fierce advocate of protectionist policies, tariffs stood at an average of 32% on most items. This arrangement severely hampered economic growth and weakened the business sector. Under Fujimori by March of 1991 non tariff barriers had been brought down and tariff rates were significantly reduced. As a result of these new policies, by the mid 1990s “imports grew significantly as a consequence of the trade reforms and the increasing economic
activities, and began to exert pressure on the balance of payments”.

Since the 1990s Peru has been actively pursuing free trade agreements with various countries. In April of 2006 an important FTA (free trade agreement) between the United States and Peru was put into effect. The Peruvian Trade Promotion Agreement as it is known in the United States, “eliminates tariffs and removes barriers to U.S. services, provides a secure, predictable legal framework for investors, and strengthens protection for intellectual property, workers, and the environment.”

Since then Peru has also signed FTAs with China, Canada, Singapore, and South Korea. Currently the Peruvian government in collaboration with the Colombian government is in the final stages of finalizing a FTA with the European Union. Clearly Peruvian economic policy makers are taking significant steps to promote trade and tap into markets which were previously difficult to access. By creating markets abroad the Peruvian government is supporting local industries by providing them with new clients to whom they can sell their products to. This allows other industries apart from those related to resource extraction, to grow and contribute to the national growth.

In relation to business conducted at home, certain policies have been put in play that are currently promoting entrepreneurship and helping to diversify the economy. The most important factor in promoting entrepreneurship is determining whether or not there exists a friendly investor or business environment in the country. The World Bank puts out every year a ranking of 183 economies which measures the ease of doing business in each of these economies. In 2010 Peru was ranked 46th, a year later in 2011 it improved by 10 positions making it the 36th easiest country in which to conduct business. The report takes various factors in consideration including access to credit, ease for starting a business, investor protection, taxes, contract enforcement etc. Peru’s rank is very high relative to the region, but it is important to examine
what about Peru’s business environment has made it business friendly and to investigate its ranking a little further.

The ease for starting a business in Peru has improved over the years. For instance it takes approximately 27 days to start a firm or incorporate in Peru, the average time this would take in the rest of Latin America is 56.7 days. Also the procedures that must be taken are only 6 in Peru and 9.3 in the rest of the region. With regards to taxes, the amount that are paid a year for a business averages to 9, while OECD countries average 14.2 and the rest of Latin America averages 33.2. The total tax rate in Peru is 40.2%, in OECD states it stands at 43% and in Latin America the average is 48%. What these numbers suggest is that over the last years, Peru has significantly improved its business environment, this is key for economic diversification. Another issue with which Peru has been struggling with, however, is the availability of credit.

The impetus behind any well performing economy is the availability and access to credit at the individual level. There are approximately between 2.3 and 3.2 million small or micro businesses in Peru, less than a million of these finance themselves through the formal financial sector. It is believed that the majority of small or micro businesses in Peru are financed through informal means, this makes the owners of these businesses vulnerable to high interest rates and difficult credit conditions which limit the growth and development of these small and micro enterprises. One of the major reasons for why these enterprises choose to opt out of the formal financial sector is because they are not recognized as formal enterprises and thus have no tributary declarations, posses no registration of property, or information with regards to their operations. The first step in formalizing these enterprises is by facilitating the formalization process, in other words easing the process of starting a business. In addition the government has taken measures to make credit more affordable and available to Peruvians.
Since 1996 the Central Reserve Bank of Peru has been consistently reducing its interest rates.\textsuperscript{80} In January of 1996 the interest rate in Peru stood at nearly 15\%, since then it has been consistently decreasing except for some moments in which it rises sharply to meet certain macroeconomic needs, but then usually returns to a low level. Since January of 2002 the interest rate has been contained within 6\% except during the late 2008 to 2009 when interest rate rose to over 6\% due to the world economic recession. This year the interest rate stood at an average of 3\%, until rebellions in the North of Africa have caused a worldwide rise in the price of oil and food, consequently the Central Reserve Bank of Peru raised the interest rate from 3.75\% to 4\%.\textsuperscript{81} This measure will seek to combat inflation by increasing the pool of money through encouraging people to save their earnings in banks, this will make the currency stronger and better equipped against inflation. However, the trend towards lowering interest rates on the part of the Central Bank of Peru is designed to stimulate both individual consumption and business growth. It allows for private banks to loan at low interest rates to businesses the capital that is required for expansion projects and the hiring of more workers. Essentially with proper control of the interest rate, the Central Reserve Bank of Peru can effectively encourage private institutions to provide loans to Peruvians, this is an excellent way to make credit more accessible to a vast number of the population.

Another way in which the government has been promoting a friendly pro-business environment has been by creating an agency which is dedicated to loaning funds and credit to those small business owners that are involved in agriculture and animal husbandry. In addition to promoting these two industries, the government is investing in sectors other than those related to resource extraction. In 2002, the Agrobanco (agricultural and rancher bank) was created with the purpose of making loans and access to credit more affordable to small scale farmers and ranchers.
in the *Sierra* (rural, mountainous areas of Peru). Since 2007 the bank has helped over 27,000 small and medium size farmers and ranchers with loans.\textsuperscript{82} The objective of the Agrobanco is to achieve economies of scale, diminish costs, and optimize profits for the people that it supports.\textsuperscript{83} This is an excellent form of averting the resource curse because the government is directly promoting these small and medium size businesses by providing them with the resources that they need to become competitive in the local and international market, this way the national economy does not only have to rely largely on the mining sector for growth.

This section examines the efforts that the Peruvian state is making on all fronts to diversify its economy. Since the early 1990s the country began accepting neo-liberal policies which have allowed for privatization and trade liberalization, it has taken significant steps in creating a pro-business environment and has taken measures to make access to credit more affordable to its citizens. These are some of the important examples that depict attempts by the state to achieve a varied economy and not to simply rely on mineral extraction for growth. With a diverse economy that relies less on the mining industry, Peru will be less impacted by price volatility in the world market demand for the minerals that it produces.

**Tackling Corruption and other Legislative Reforms**

The issue of corruption tends to dominate resource rich countries. Dealing with corruption is as important to development as is building sound macroeconomic policies. For generations the Peruvian political system has been known for its instability, unfairness and corruption. These vices have had some of the worst effects on the population since they have not allowed for growth or development to reach many of the lower echelons in society. This has resulted in the stagnation of millions in a cycle of poverty and misery. The presence of a resource extractive
industry in the country has the potential of making matters even worse. Unfair redistribution of the benefits associated with the extraction of these resources has been a serious problem that still persists to this day. If Peru is to become a modern state of the 21st century it must take measures to curb these vices that can seriously curtail growth and development in the country. The government over the past 20 years has taken many initiatives to tackle corruption, lack of representation and unfair redistribution of revenues from the extraction industry. These efforts though admirable and commendable for they have begun to change political culture in Peru for better, still have long ways to go before reforming this aspect of society.

One of the most important pieces of legislation which was enacted in 2003, known as the law of decentralization (Law 27783) aimed to develop the provinces and cities outside of Lima. The capital of Peru, Lima, has traditionally been the hub for commerce, finance, capital, political power, business and all that comprises an important city. The rest of the country lacks much of the infrastructure, technology, and other aspects that are important for development. In the past plans for decentralization and the development of provincial Peru (outside of Lima) have always been used as part of political rhetoric by politicians, yet never before has there been a serious attempt to take such actions. By decentralizing Lima, there is an opportunity for development and growth to reach the various different regions of the country.

Diversifying the economy is a crucial and integral tool to combat the resource curse. When many of the important resources that make up an economy are centralized mostly in one city, the opportunities for nationwide development are reduced significantly. Each region must be afforded a chance to contribute to the economy by developing its own industries, building up its infrastructure, and by being fairly distributed revenues from the federal government. Law 27783 is the most serious attempt to this day which seeks to decentralize and develop the rest of
The law states that decentralization has as its goal the “integral development, in a harmonious and sustainable way for the country, through the separation of the competencies and functions, and the equal exercise of power through the three levels of government, in benefit to the population.” The law as well has more specific economic and administrative objectives.

The first objective at the economic level includes the developing of the competitiveness of the different regions and municipalities throughout the country based on its vocation and its productive specialization. The law also stresses that disposition of the economic infrastructure be used to promote investment in the different circumscriptions of the country. And finally, most important and pertinent to this study is the objective of equal redistribution of the state’s resources that this law stresses. These objectives are designed to empower in an economical way the regions of Peru that have been historically dependent on the leadership and micro guidance in every aspect from Lima.

The second important objective of this law has to do with the administrative affairs in the different regions and municipalities. For decades the administrative agencies of the different provinces of Peru have been outdated, inefficient and outmanned. This has increased local governments’ dependence on the capital for policy implementation, directives, manpower and other vital aspects associated with administrative affairs. The objectives in Law 27783 with regards to local administrations include the “modernization and efficiency of the processes and systems of administration that assure the adequate provision of the public services”. In addition, the law urges for the “simplification of the processes in the public, regional and local dependencies”. The language of the law here is clear in its objectives, by improving the administrative capabilities of the provincial governments, the government of Peru is trying to decentralize and diffuse power from Lima and adopt a policy of devolution.
Devolution would signify a diffusion of power to other members of society other than traditional elites who have concentrated power for generations. For a democracy this has many positive connotations, given that when political power is diffused along society, people tend to be more actively involved in the matters of the state fomenting a stronger sense of citizenship. This active participation from the population can also serve as a tool against corruption, by serving as a check on politicians who engage in nefarious activities. The state over the last ten years has taken important steps to prevent corruption in Peru both at the state level and at the business and public spheres. In 2001 the Fujimori administration was brought down largely on corruption charges, this set a precedent in the country never before seen. Bribery, embezzlement, narcotics trading and more were used by many in the executive to further their personal and administrative agendas. Since the unveiling of this incident Peruvian policymakers have been taking serious measures to clean up the country’s image and pass legislation that would prevent future corruption from taking place again.

In 2005 the Law on the Public Service Code Ethics was passed. This law is designed to monitor and control the behavior of public servants. This law forces public employees to denounce behavior that are contrary to the norms of the public service code that they ascribe to. Those found guilty of corruption now face longer sentences, 2-4 more years in addition to what was declared in previous sanctions. Also senior officials found guilty of personal enrichment face longer sentences as well 8-18 years. In 2010 the High Level Commission for Anti-Corruption was created in order to design strategies and policies aimed at promoting ethics, transparency and anti-corruption in the country’s civil service and among private citizens. Javier Villa, president of the judicial system of Peru and head of this commission said that “the fight against corruption plays an important role on the side of governance and the consolidation
of a democratic constitutional state,” and that “the collection of honorable people is not enough. It is necessary for the State as a whole to be honorable, to comply with its commitments.”\(^{91}\) According to the 2009 Corruption Perceptions Index, Peru is ranked 75\(^{th}\) most corrupt country from the 180 assessed.\(^{92}\) Though this news is not encouraging, laws like these that have been passed demonstrate that the state is taking action to combat corruption. In essence, anticorruption laws exist in the books, it is the enforcement aspect that has proven to be cumbersome.

It is for this reason that the state is taking other measures such as international collaboration with international organizations, governing bodies, and joining multilateral initiatives to combat corruption. In 2004 Peru ratified the UN Convention against Corruption which outlines broad goals. Yet the state has also joined other alliances that are more specific about implementing anti-corruption policies. For example, Peru is a member of the Extractive Industries Transparency Initiative. This initiative is a “strategic alliance between governments, private companies, civil society groups and international organizations with the objective of publicizing and accounting for revenues and expenses that come from extractive industries, such as oil, mining and other natural resource industries”.\(^{93}\) In addition, the alliance involves the assistance of local governments to partake into accounting activities in both mineral and gas producing regions of Peru. Peru is part of the G8 Anti Corruption and Transparency Initiative, membership in this initiative has allowed Peru to develop a plan to better combat corruption.

According to the US State Department this plan includes six areas in which the government is improving, “a) citizen information/internet connectivity; b) improving central government fiscal transparency; c) development of GOP procurement systems; d) improving regional/local government transparency and management; e) improvement of transparency of extractive industry revenues; and f) development of asset forfeiture systems and legislation”.\(^{94}\)
Although corruption still plagues Peru in many shapes and forms, there is no question that the state has taken a significant role in attempting to eradicate it. Corruption cannot be done away with immediately or in a matter of a few years, political culture must first change. Yet by setting a strong anti corruption tone and laws to deter individuals from engaging in nefarious activities, the state is setting the foundations for a future in which corruption plays a lesser role in the country. Corruption is a malady that affects virtually all countries, the presence of natural resources however aggravates this malady in endowed states. Peru is on the right track in tackling this issue, yet the state must continuously take a proactive role to lessen this malady.

**Conclusion**

As stressed throughout this section, controlling Dutch Disease is a challenge that most resource extractive economies face. If not properly dealt with, this malady has the potential of creating havoc in an economy by creating an appreciation in the currency and making other exports uncompetitive in the market. By reducing fiscal spending, encouraging spending in the private sector, and a slight increase in the interest rate, Peruvian policymakers have been able to meet their goals and consequently managed to prevent Dutch Disease from completely assailing the economy. As a result of these sound policies, Peru’s inflation rate was the lowest in Latin America in 2010 and among the lowest in the region.\(^9\) Dutch Disease could exist in Peru as it could in many other resource extractive economies that are considered to be economic miracles (Chile, Botswana). Like these economies Peru has managed to control this malady by having macroeconomic policies in place that have prevented it from expanding and devastating other sectors of the economy. Also much is being done to combat corruption at various levels of government by empowering local communities through devolution, passing stricter punishments for corrupt officials, and other measures. And lastly, measures taken by the state to diversify the
economy are stimulating growth in other sectors of the economy which is a vital way of ensuring sustainability for future growth. Policymakers constantly adapt to the changing domestic and international economies and adopt sound macroeconomic policies to meet the state’s goals.

**Final Remarks and Recommendations**

Unlike many countries in the developing world, Peru happens to be benefiting from neoliberal and free market policies. The reforms of the early 1990s which brought these economic models to the country have succeeded in turning the country around from once being an economic backwater to now being a dynamic and rapidly changing society. Today Peruvians are more optimistic about the future of their country and have more confidence in the economy than ever before. This transformation is in great part owed to the resource extractive industry, the mining sector. Normally, developing countries that are endowed with so much natural resource wealth tend to fall victim to many of the maladies of the resource curse. Given the amount of minerals that Peru is endowed with and its traditionally turbulent history both in the political and economic realms, it is logical to surmise that Peru would be a likely candidate for falling victim to the resource curse. Needless to say, that is not the case.

In fact Peru appears to have averted many of the disastrous maladies that are associated with the resource curse. This can be attributed in large part to the leadership of political leaders, policy makers, technocrats and others. Through a vast number of measures that these have adopted over the years they have managed to develop a political and economic system that has proven to be strong against different maladies. It is important to note that these policies and measures adopted were not necessarily designed with the intention of averting the resource curse. Instead they formed part of the sound macroeconomic policies adopted in the early 1990s and afterwards designed to lift the economy from the poor state that it was in. The policies also had
extra the benefit of defending the country against maladies such as Dutch Disease, revenue volatility, over borrowing/spending, lack of diversification and others.

Yet despite all the inroads that Peru has made there are areas in which it must improve in order to avert future potential crises. For one, more must be done on the part of the state to ensure fair redistribution of the royalties obtained from foreign and private mining companies for conducting mining operations. It is not enough to simply empower local communities or their governments especially when the problem is a lack of technical skill in managing revenues effectively. The federal state must employ watchdogs to supervise the manner in which such funds are being spent and to ensure that they are going to sustainable projects. Also it would be beneficial for the state to provide training to local government elites who probably lack any formal training in governing. Also, Peru has among the lowest tax rates for mining companies in Latin America. Increasing taxes on mining companies would provide the state with more revenue that can be used to promote other sectors of the economy and or invest in infrastructure projects for a sustainable future. And finally, if the mining sector in the future happens to detrimentally eclipse other sectors of the economy, then implementing an export tax on mining exports (minerals) would be appropriate. This move would level the playing field for all sectors of the economy by maintaining them competitive in the market.

What is clear is that the mining industry has been and will remain an integral part of the economy for the foreseeable future. The maladies that are associated with the resource curse have not had the negative effects on Peru that are usually observed in other developing countries. This is mainly due to the macroeconomic policies that have been adopted and implemented since the early 1990s. These sound macroeconomic policies have curbed excessive government spending and borrowing, maintained inflation at target levels, have avoided Dutch Disease,
increased exports, and diversified the economy. These policies were not necessarily designed to combat the maladies of the resource curse, rather they were intended to transform the economic platform of the country in the early 1990s. However they have had the positive side effect of curbing such maladies. In all, these policies have contributed to the economic growth of the country which in turn has aided development in Peru and reduced poverty over the last 10 years. Although the economic situation in Peru as of now looks positive and economists look to the country’s future development with much optimism, policymakers must constantly keep a vigilant eye on the management of the economy. For at any time if the economy is not properly managed, the maladies of the resource curse can come to haunt not only the economy but Peruvian society as a whole.

4 ibid
5 ibid
12 ibid
14 ibid
16 ibid
20 ibid 33
22 ibid
32 ibid
35 ibid
36 ibid


Atsushi limi, “Did Botswana Escape From the Resource Curse?,” International Monetary Fund June 2006:pg. 26


ibid

ibid

ibid


Bibliography


“Avoiding the Resource Curse: What can we learn from the case of Botswana?,”
*Transparency International*


Atsushi Iimi, “Did Botswana Escape From the Resource Curse?,” International Monetary Fund.


Moin Siddiqi, “Turning the Resource Curse into a Blessing,” *African Business*,


<http://www.guardian.co.uk/business/2004/aug/18/comment.oilandpetrol>. 


