Mining in Colombia

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Introduction

The purpose of this article is to provide an overview of the Colombian mining industry and to analyze the major issues affecting its successful growth. The analysis includes insights into how foreign companies and investors view the Colombian mining industry and its attractiveness as a destination for mining operations. In addition, the article addresses how the growth of the mining industry will affect the country of Colombia and what can be done by the Colombian government to ensure that both the mining corporations and the citizens of Colombia benefit from the development of the industry.

The first section gives an overview of the Colombian mining sector and its role in the country's overall economy, assessing the attractiveness of the Colombian mining industry to foreign investors and their main concerns about investing in Colombia. The second section covers the government’s regulation of the mining industry, the main issues being debated, and how these changes in regulations affect the mining corporations. The third section examines the social impact of the industry's growth and how proper regulation and guidance can lead to sustainable development.

The development of the mining sector can be a blessing to the citizens of Colombia provided that the government maintains an attractive investment environment, implements a stable mining code, improves mining-related infrastructure, decreases illegal mining operations, and promotes policies of sustainable development. Far-sighted government policies will also help avoid the pitfalls of a strong national currency and the related ills of the so-called Dutch disease. Thus, it is important that the proper regulations are in place to ensure a smooth and sustainable level of growth that allows Colombia to prosper from its natural wealth of minerals.
Mining Overview

As the fourth largest economy in South America, Colombia experienced a 4 percent GDP growth in 2010 and an even better 5.9 percent growth in 2011. One of the driving forces behind Colombia’s growth is its mining sector, especially in the areas of coal, ferronickel, gold, iron ore, emeralds, and silver. In 2010, the Colombian mining industry contributed 2.2 percent of the country’s GDP, brought in 30 percent of the foreign direct investment, and accounted for 24 percent of the country’s exports. Over the next decade, it is estimated that mining will account for over 12 percent of the country’s GDP (“Colombia: Stability . . . ,” p. 19). In addition to aiding economic growth, increases in mining development benefit job employment, income generation, and government revenues. It is estimated that legal mining operations have created 300,000 jobs for Colombians. The Colombian government also received $852 million\(^1\) from royalties and an additional $908 million from taxes (“Mining in Colombia: Exploring . . . ,” pp. 82–85). Of the produced Colombian minerals, coal and gold provide the greatest potential for the future of the Colombian mining industry based on their current levels of production and high rates of growth. For example, Table 1 indicates that both coal and gold production have grown at a rapid rate and are expected to continue growing into 2015.

Investment Environment

A major cause of the recent growth trends in the mining sector is the amount of foreign direct investment (FDI)\(^2\) in the industry. In 2002, FDI in Colombia was $466 million. In 2011, FDI had grown by over 400 percent to $2.5 billion (“Mineral Production Statistics”). This dramatic increase in foreign investment over the past decade can be attributed to high global commodity prices, improved security conditions in Colombia, and investment incentives created during the administration of President Uribe (2002–2010). The combination of these circumstances, along with Colombia’s mostly untapped mineral wealth, makes it an ideal country for mining investment. Increased investment brings with it an increase in jobs and government revenue as well as community development in the local mining communities. With the proper regulation and an emphasis on sustainable development, Colombia is ready to benefit from foreign interest in its mineral resources.

Table 1

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<td>59.7</td>
<td>69.9</td>
<td>72.8</td>
<td>85.8</td>
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<td>9.8</td>
<td>10.8</td>
<td>24.0</td>
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\(^*\)Million metric tons; \(^†\)metric tons; \(^‡\)thousand metric tons.

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\(^1\)All monetary values in the article are in U.S. dollars in 2011.

\(^2\)FDI is an investment from a source based in one country into a business in another country.

\(^3\)Behre Dolbear is a mining industry advisory firm, founded in 1911, that specializes in studies for companies and agencies in the mining industry that cover a broad range of mineral commodities.
environment. The rankings marked Colombia most highly on its political and social systems and least favorably on its tax regime. The report measures a country’s tax regime based on its fairness, stability, and predictability. The low score on Colombia’s tax regime reflects uncertainty regarding changes in the country’s mining code. On the positive side, Colombia was ranked as the third best country in the world on its handling of social issues, which include sustainable development, the level of poverty, and terrorist activity. This high ranking on social issues is a testament to how much Colombia has improved over the past decade and how mining can continue to aid in that improvement. Based on the Behre Dolbear report, the mining sector in Colombia is an attractive investment.

The Fraser Institute, a Canadian public policy and research organization, also conducts a survey of global mining companies to rate countries and regions on their mineral endowments and public policy factors, such as taxation and mining regulations. According to the 2011/2012 index (“Survey of . . .”), Colombia was ranked 64th of 93 countries/regions based on its public policy compared to its ranking of 40th of 79 countries/regions the previous year. Based on its mineral potential assuming current land use and regulations, Colombia ranked 29th of 93 countries/regions in the 2011/2012 index compared to its ranking of 16th of 79 countries/regions in the 2010/2011 index. Lastly, when Colombia was ranked on its mineral potential, assuming best practices of land use and regulations, Colombia ranked 3rd of 79 countries/regions in the 2010/2011 index but dropped to 22nd of 93 countries/regions in the 2011/2012 index. In all of these subject areas, Colombia’s rankings have fallen over the past year, which is troubling.

The drop in rankings from 3rd to 22nd in the area of mineral potential assuming best practices shows that much of the recent excitement over Colombia’s mineral resources has abated. However, the country is still considered one of the wealthiest mineral countries in the world. More worrisome is the drop in rankings in the area of public policy from 40th to 64th. The mining code is currently being revised by the Colombia government, and any changes to the mining code can affect a long-term mining investment and pose a major risk to investors. Other concerns that investors have about Colombia are its security conditions and lack of infrastructure. In the past, security conditions in Colombia were a major concern for foreign investors because guerilla groups, such as the Fuerzas Armadas Revolucionarias de Colombia (FARC) (Revolutionary Armed Forces of Colombia) and the Ejército de Liberación Nacional (ELN) (National Liberation Front) were very active, especially in remote areas where mining operations take place. Security conditions have greatly improved under the Uribe and Santos administrations, and the increase in FDI reflects these improved conditions. However, incidents still occur, such as the kidnapping of five gold miners in January 2013 by the ELN (Jamasmie, “Canadian Miner . . .”). Security conditions and stable mining regulations are two of the main issues that Colombia needs to focus on in order to improve the country’s attractiveness to foreign investors.

Lastly, the World Bank’s “Doing Business” rankings measure how well the country’s regulations promote business. The rankings currently place Colombia 45th of 185 countries and 3rd in South America, just behind Peru (43rd) and Chile (37th). In addition, the rankings rate Colombia highly in the areas of Protecting Investors (6th) and Resolving Insolvency (21st). However, Colombia is ranked poorly in the areas of Getting Electricity (134th) and Enforcing Contracts (154th). The poor ranking in the area of Getting Electricity can be attributed to Colombia’s weak infrastructure (discussed further in the article by Barry in this issue) and is cited as a weakness in the other rankings as well. Enforcing contracts is a crucial aspect to conducting business in a country, especially for mining corporations, and improvement in this area will go a long way toward raising Colombia’s current investment rating.

Based on these studies, Colombia is perceived as a worthwhile country in which to invest. The current investment environment,
combined with the high global prices of gold and coal, are good indicators for the future success of the Colombian mining industry. However, there is significant room for improvement with regard to tax policies, infrastructure, and security conditions in Colombia. Infrastructure has repeatedly appeared as a source of concern for potential investors in the Colombian mining industry. Also, the creation of a stable mining code would go a long way toward easing the concerns of worried investors.

**Licensing and Regulation**

The mining industry is unique in that the time it takes from exploration to production is very long, usually about 10 to 12 years. This means that companies must initially invest a large sum of money and probably not see any revenue for at least a decade. Changes in legislation and the global market for minerals can affect the value of the mining operation, creating high levels of investment risk. Therefore, legislative and tax stability is important to retaining high levels of investment in the mining sector.

In the mid-2000s, improved security conditions combined with high global mineral prices made Colombia an ideal place for foreign investment in mining. President Álvaro Uribe then offered tax breaks and investment incentives, causing the number of applications for mining licenses (mostly from smaller companies) to soar. In addition, mining concessions were granted on a first-come first-served basis and were not difficult to obtain. At the time, Ingeominas was the institutional authority responsible for granting and controlling mining concessions. However, the surge in activity in the Colombian mining sector overwhelmed Ingeominas. At one point, the backlog at Ingeominas was so great that it took on average 600 days to award a concession request. The result was a massive backlog of license requests, 19,629 as of February 2011. In addition, there was a widespread belief that Ingeominas officials were corrupt and were involved in selling confidential information, granting licenses in protected areas, and awarding concession requests at an expedited rate for a fee (“Mining in Colombia: Exploring . . . ,” p. 87). President Juan Manuel Santos subsequently placed a freeze on incoming license requests and ended many tax breaks and incentives. When the backlog of requests was reviewed, more than 90 percent were rejected (“Mining in Colombia: Digging Deeper”).

As a result, the National Mining Agency was created with the role of controlling all mining licenses and regulations and commenced operations in August 2012, effectively replacing Ingeominas. The goal of the new agency is to decrease the length of time to obtain a license to three months and to improve the regulation of mines. By creating the National Mining Agency, the Colombian government is charging a single agency with sole responsibility for the governance of the mining industry. This will improve the clarity of mining rules and regulations in Colombia and should eventually grant investors and stakeholders greater confidence in the legislative stability of the Colombian mining environment.

In 2001, the Colombian Mining Code (Law 685) was enacted, which is the main legislation for the Colombian mining industry. Law 685 created a standard mining concession contract issued by the government that permits the exploration and exploitation of minerals. Amendments were made in 2010 with the purpose of increasing the government’s control over mining contracts to reduce mining area speculation, to legalize illegal small mines, and to prohibit mining in national parks and other environmental areas. The law also made it mandatory for mining operations to obtain an environmental license, required in order for a company to perform mining operations in an area (“2011 Responsible Mineral Development Initiative Report,” p. 59). The amendments to the mining code were supposed to increase the support that mining gives to Colombia’s development. However, the amendments were recently ruled unconstitutional in court, and the government now has only two years to revise the code before it reverts back to the original code of 2001 (“Mining in Colombia: Exploring . . . ,” p. 85).

The government is also working on additional mining code changes to update the mining licensing system and improve restrictions on illegal mining. As part of this new mining code, the government has identified 313 new strategic mineral locations covering 2.9 Mha that will become available—60 percent of the
entire area that is currently available for mining development. The new mining area permits will be granted through a selection process that promotes greater competition than the previous first-come first-served process of granting mining permits (Jamasmie, “No More First Come . . .”). Also, the new mining code will help small-scale miners work without a license while paying a special tax rate in order to reduce the amount of illegal mining taking place in Colombia. There are more than 6,000 registered mining operations in Colombia; however, the government estimates that there are an additional 3,000 illegal operations spread throughout the country (Gravgaard). More stringent regulations on illegal mining is a necessity for Colombia and one of the most important issues that the mining industry currently faces.

Overall, the successful implementation of the new mining code will greatly benefit both mining company stakeholders and the country of Colombia.

Coal

With 7,000 Mt of proved recoverable coal reserves and an estimated 17,000 Mt of potential reserves, Colombia has the largest coal reserves in South America and is the fourth largest exporter of coal in the world (“Colombia: Stability . . .,” p. 26). Colombia’s position as a major producer of coal may improve even further, as total coal production in Colombia is expected to increase by 42 percent from 74 Mt in 2010 to 105 Mt in 2015. In addition, most of Colombia’s power generation comes from hydropower. As such, the country uses little of the coal it produces, exporting it instead. Over the past two decades, world coal consumption has grown by almost 50 percent. Many countries, especially in Asia, have experienced great economic growth in recent years, and their energy demands continue to expand.

With coal one of the cheapest sources of energy production, global demand for coal is expected to remain high. In early 2013, however, several events occurred that may have a negative impact on the future of the Colombian coal industry. One of the main producers of coal in Colombia, Drummond Ltd., had its operations suspended for a month in February 2013 after a major coal spill in the Caribbean (“Colombia Lifts Port Ban . . .”). At the same time, workers at the Cerrejón coal mine, the largest producing coal mine in Colombia, went on strike for a month as well (Hall). President Santos went so far as to say that the strike had the potential to “damage the entire world” (Tomaselli).

Gold

Colombia has a long tradition of gold mining, beginning with the pre-Columbian Muisca people who participated in rituals that spawned the myth of El Dorado, the city of gold. Prior to the twentieth century, about 30 percent of the world’s gold came from Colombia (“Mining in Colombia: Exploring . . .,” p. 90). Over the past decade, the global price for gold reached unprecedented levels. In addition, foreign interest in Colombia’s gold mines has grown tremendously as political and security conditions have stabilized. In 2011, 55,908 kg of gold were reportedly produced in Colombia, and it is estimated that this will increase to 74,600 kg produced in 2015. The actual level of gold production is much higher, because there is a large amount of unregulated mining that occurs in Colombia. Unfortunately, since the price of gold peaked at $1,896 an ounce in 2011, the price of gold has dropped significantly, to $1,440 as of April 2013. The lower price of gold could dampen the rapid growth of gold production in Colombia, but as long as the country remains stable, the gold mining industry should continue to attract foreign investment (Sivy).

The Resource Curse

The resource curse is an economic theory that suggests that countries rich in natural resources tend to be worse off economically than countries with fewer natural resources. This can be caused by factors such as weak regulatory institutions and corruption. Strong institutions are necessary to regulate mining operations and ensure that Colombia is receiving fair compensation in return for its

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6A megahectare (Mha) is a unit of measurement approximately equivalent to 2.5 million acres or 4,000 square miles.

7One million metric tons (Mt) is equivalent to 1 billion kg or 2.2 billion lb.
minerals. Strong institutions also reduce the amount of corruption in a country. Although corruption in Colombia has decreased, according to Colombia’s Comptroller General, $31 million has been diverted from the mining sector in 1,089 detected cases of diverted funds ("Colombia: Stability . . . ," p. 21). Corruption adversely affects the mining sector, government revenues, and the business reputation of Colombia. However, the main cause of the resource curse is the fact that the exploitation and export of natural resources tend to strengthen the value of the country’s currency relative to other countries and can cause a decline in the country’s other sectors, a phenomenon known as Dutch disease.

In the late 1970s, Brazil lost most of its coffee crop due to frost, causing global coffee prices to rise dramatically. What followed was a boom in the Colombian coffee sector and a significant appreciation in the real exchange rate of the Colombian peso. This in turn caused the relative prices of Colombian manufacturing goods to increase and a lower foreign demand for these goods, causing a decline in the manufacturing sector (Ebrahim-zadeh). As occurred with Colombian coffee in the late 1970s, Dutch disease is a form of the resource curse that occurs when a country experiences a sharp rise in exports of a good, especially when the exported good is a natural resource. A shrinking domestic manufacturing industry results in a decrease in employment in that sector. The country’s economy becomes more reliant on the exports of a few different goods, and, if the global prices of those goods drop suddenly, it can negatively affect the entire economy. With mining comprising about 25 percent of Colombian exports and oil a large portion as well, Colombia fits the profile of a country susceptible to Dutch disease. In June 2012, Colombia’s GDP growth slowed to 4.7 percent as the Colombian peso appreciated 9 percent against the U.S. dollar over the previous year, the highest appreciation of 170 currencies tracked by Bloomberg (Bristow and Jenkins). The appreciation of the Colombian currency could indicate that Colombia is already experiencing the effects of Dutch disease.

There are several strategies that can help reduce the impact of the resource curse. The first strategy is for a country to have strong democratic institutions that help redistribute the revenue generated from natural resource exploitation in a fair way. Currently the region in Colombia where the mining operation takes place receives most of the revenues. However, the Colombian government is attempting to revise the mining revenues redistribution system to spread revenues generated from natural resources more evenly across the nation. A second strategy is that the country should save a portion of the revenues from the natural resource in order to help keep the currency stable. As a result of a recent overhaul of the Colombian royalty redistribution system, the government is now able to save up to 30 percent of royalties from mining in order to stabilize the currency and avoid the effects of Dutch disease ("Colombia House Approves . . ."). A third strategy is that a country should spend a significant portion of its resources on a future growth sector, through research and development, investing in a different industry to generate economic growth and to prevent the country from becoming too reliant on its natural resources. As of 2012, 10 percent of mining royalties go into a research and development fund. Lastly, a country should strive to obtain a significant portion of its revenue from taxes and not just rely on the royalties generated by its natural resources. In this regard, Colombia has a large informal work population who do not contribute to the government’s tax revenues. The country must succeed in its tax reform and not rely mainly on revenues from oil and mining. Overall, however, Colombia seems well situated to avoid the effects of the resource curse and instead benefit as a nation from its abundance of minerals.

Sustainable Development

Mining involves the extraction of valuable and irreplaceable resources from the land. In order to justify the loss of its resources, Colombia should be rewarded by the mining companies in the form of responsible sustainable development in addition to royalties. Sustainable development

8Most of the information in this section on preventing the resource curse is from Dr. Mauricio Cárdenas, the Colombian Minister of Mines and Energy, and his presentation to the Lehigh Martindale Center Student Associates.
development is the integration of economic activity with environmental integrity, social concerns, and effective governance systems (“Breaking New Ground”). The implementation of successful sustainable development can be broken down into four areas: economic, social, environment, and regulation.

Local communities and indigenous groups in mining areas often complain that they do not receive the benefits of mineral wealth and only suffer the loss of their land. As a result, mining companies have increased their support to local communities by providing aid and resources in the form of education, electricity, utilities, roads, and hospitals (“Sector Licensing Studies: Mining Sector”). One effective method to provide beneficial support to the local communities is through the use of foundations, trusts, and funds (FTFs). FTFs ideally are set up with involvement from the mining companies, the government, and representatives from the local community and help allocate the resources of the mining companies to best fulfill the needs of the local communities (Wall and Palon). It has become necessary for mining companies to participate in social development, and its correct implementation can lead to a more accepting view of mining operations by the Colombian people and their government.

Colombia is also home to extraordinary climates and ecosystems, containing almost 14 percent of the world’s biodiversity (“Colombia—Overview”). Because of this, the country takes environmental protection seriously. The 2010 amendments to Law 685 aimed to better define the requirements for obtaining an environmental license and to increase protection of national parks and forests. Colombia is intent on protecting its environment, as demonstrated in August 2012 when the National Mining Agency denied Eco Oro Minerals Corporation’s proposal to extend its gold mining operation in an environmentally protected area. This prevented Eco Oro from accessing 70 percent of a 2.7 million ounce gold deposit and caused its shares to plummet over 50 percent (Jamas-mie, “Eco Oro Shares Plunge . . . ”). Most mining operations take place in rural and sparsely populated areas, and finding the right balance between environmental protection and industrial growth can be challenging. However, bio-diversity must be viewed as natural capital and its loss can be irreversible. Fortunately, Colombia’s government is focused on ensuring that it retains its diverse ecosystems.

The protection of the environment and the land rights of local communities are issues of critical importance. However, any instability or changes to the mining code have the potential to harm investor confidence. In February 2013, a judge issued a suspension on all mining and exploration activities located on about 50,000 hectares in the Alto Andágueda region in order to protect the rights of the indigenous communities living in the area (Justicia). Although it is important to protect the indigenous communities, the mining companies had previously been given licenses to operate in the area by the Colombian government. The consequences of this decision could be far reaching, and many investors might lose confidence in investing in the Colombian mining industry due to reservations about the stability of their mining claims and licenses.

Mining tends to have a negative image in Colombia due to a lack of industry standards and illegal mining practices. In 2010, 173 miners were killed in Colombia, three times the number killed in 2009 (Gravgaard). The high number of deaths reflects a lack of employee safety standards in the Colombian mining industry. In addition, much of the country continues to have little or no government presence, and the activities of guerilla groups in these regions constitute a threat to legitimate enterprises. These guerilla groups have also taken advantage of the high gold prices over the past decade, and it is estimated that revenues from gold have surpassed those of coca production for groups such as the FARC and ELN. Initially these groups mainly extorted illegal mining operations, but now they are even beginning to run their own mining operations. CITpax, a Spanish conflict-analysis organization, estimates that 86 percent of all gold in Colombia is mined illegally and that 20 percent of these gold profits go to criminal organizations (Ramsey).

Better government enforcement of mining operations could go a long way toward increasing the legitimacy, standards, and public perception of the mining industry as well as restricting a major revenue stream of criminal organizations. The creation of the
National Mining Agency as the main authority on mining regulation is certainly a step in the right direction and will hopefully increase the level of enforcement on illegal mining. In addition, other advances are being made by the Colombian government in order to deal with the illegal mining issue. For example, an executive decree grants Colombian authorities the right to destroy confiscated mining equipment. In addition, a new bill proposed to Congress by President Santos seeks to make illegal mining a punishable crime. Currently illegal miners can only be punished for causing harm to the environment (Jamasmie, “Colombia to Punish . . .”). These changes would help increase the legitimacy of the Colombian mining industry. The benefits are numerous, such as minimizing the amount of environmental damage done by illegal mining operations, reducing the funding that criminal groups obtain from illegal mining, and increasing the overall security of mining operations while improving investor confidence.

Conclusion

The growth of the mining sector can bring substantial benefits to Colombia in the form of government royalties, jobs, and aid to local communities. Colombia is rich in minerals, especially coal and gold. With the improved security and stable political conditions, foreign investors are excited about investing in Colombia’s mineral industry. As the mining industry grows, it is important that the government create strong institutions that reduce the time it takes to obtain a mining permit and enforce employee safety standards.

However, as seen in the resource curse, many countries end up worse off economically even with an increase in the export of their natural resources. To prevent this, the Colombian government needs to maintain the current real exchange rate of the Colombian peso, reduce the size of the informal work sector, and invest in other industries in order to minimize the country’s growing reliance on the mining industry. In addition, Colombia must ensure that mining companies pursue a mindset of sustainable development as they expand in Colombia. This can be accomplished by enforcing strict environmental laws and encouraging mining companies to participate in FTFs and to provide support to the local communities. Also, the growth of illegal mining in Colombia is worrisome and constitutes a major threat to the mining industry. In order to reduce the amount of illegal mining, the government must be able to penalize the illegal mining operations that do not pay government taxes yet damage the environment and generate revenues for terrorist organizations. By cracking down on these illegal mining operations, the government can increase its own revenues, protect the environment, combat the guerrilla groups, and improve its investment appeal all at once.

The potential of the Colombian mining sector has never been greater. The current political and security conditions in Colombia combined with its abundance of natural resources make it an ideal destination for mining corporations. By creating strong institutions that enforce clear and stable regulations, Colombia can reap the numerous benefits from its vast resources and become a powerful economic leader in South America.
REFERENCES


