

Opportunities and Challenges for Investors in Brazilian Mining

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Scope

- Future Roles for Brazil in China's Mineral Supply
- How is Brazilian Mining Industry Benefiting from Asian Capital Inflow?
- Business Climate
- Selected Geological Remarks

Scope

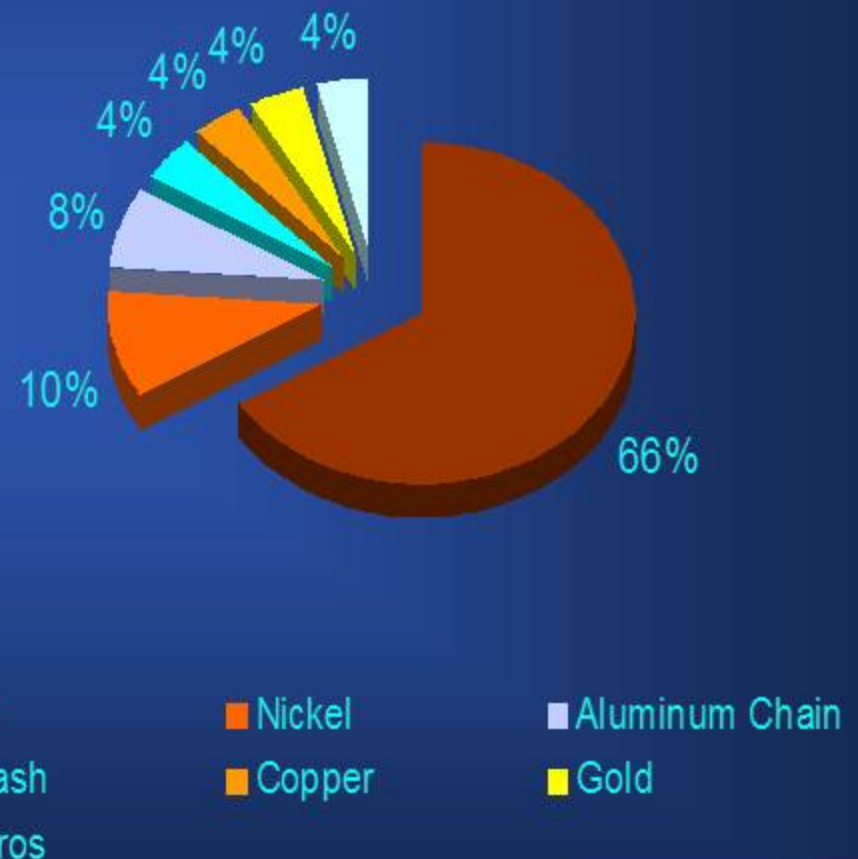
- Gaining Access to Mining Projects
- Final Remarks

Future Roles for Brazil in China's Mineral Supply

- Current mining production is believed to be remarkably below the geological potential of the country. In the forthcoming years, the Brazilian mineral sector is poised for impressive growth;
- The Value of the Brazilian Mineral Production is expected to be around US\$57 billion in 2012. This amount represents an increase above 110% when compared with 2009;

Future Roles for Brazil in China's Mineral Supply

- For the period 2012-2016 the IBRAM estimates a total mineral investment of US\$75 billion. This amount represents an increase of 9,5% in relation to projections made in 2011;
- This image shows the profile of these investments.



Future Roles for Brazil in China's Mineral Supply

- Brazil is consolidating its importance as supplier of minerals products to China. In terms of iron ore, oil and oil products, iron and steel semi-manufactured products and niobium its position is going to be ever stronger.
- On the other hand in the medium to long range Brazil is poised to increase its role as supplier of copper, nickel, chromo, dimensional stones and probably manganese.

How is Brazilian Mining Benefiting from Asian Capital Inflow?

- Abstracting the traditional Japanese investments the volume of investment as well as the number of projects conducted by Chinese and Indian companies in Brazil has been expanding very fast;
- From a level around US\$100M by 2007, Chinese FDI directed to Brazil is expected to surpass US\$52 billion by 2014;

How is Brazilian Mining Benefiting from Asian Capital Inflow?

- During the period 2003-2011, minerals & metals (58%) and oil & gas (27%) were responsible for 85% of the total announced Chinese investments in Brazil;
- For this period, the total announced Chinese investments in the Brazilian mining & metals and oil & gas sectors is estimated to be around US\$32 billion;

How is Brazilian Mining Benefiting from Asian Capital Inflow?

- For the period 2003-2011, the total announced Chinese investments in the Brazilian mineral sector was US\$17 billion. This value encompassed 8 important transactions classified as mergers and acquisitions. Most of them involving iron ore assets;
- In relation to the Brazilian oil and gas industry the estimated value is US\$15.4 billion, embracing 3 important transactions also classified as M&A;

Business Climate

General Aspects

- Political stability;
- Level of confidence in the political economy;
- Tradition as a good guest to foreign capital;
- Actual and potential size of the domestic market;
- Diversity, level of integration and sophistication of the industrial and technological base;

Business Climate

General Aspects

- Competitive advantages as a launching pad to global exports;
- A modern, strong and integrated (in course) financial market;
- A liberal legal frame regulating the different flows of foreign capital.

Business Climate

Sectoral Aspects

- Extension and diversity of geological environments of interest;
- A mining legislation that is clear and transparent in granting exploration permits and mining concessions;
- Exploration permits are granted for an initial maximum three year period, but can be extended if justified;

Business Climate

Sectoral Aspects

- It does not have a maximum period for the mining concession;
- Good flexibility in transferring exploration and exploitation rights;
- A great number of national mining companies, specialized suppliers and consulting companies composing an expressive network of potential partners, sellers, buyers and customers;

Business Climate

Sectoral Aspects

- A modern and seasoned institutional frame of specialized government agencies; and
- Despite the fact that the Brazilian taxation burden is considered relatively higher on a global scale projects located in North and Northeast regions are susceptible to obtain exemption of income tax. This regional inspired incentive grants an effective tax rate very competitive;

Business Climate

Constraints & risks faced by foreign investors

- High level of bureaucracy imposing additional costs and time delays;
- Significant level of corruption;
- Lack, bottlenecks and/or inappropriateness of infrastructure in some important mining regions;
- A general high taxation burden;

Business Climate

Constraints & risks faced by foreign investors

- Inadequate scale or limited economic geology information available; and
- Mining in areas of concern such as aboriginal lands and national borders pending specific legislation. These issues are excluding large tracks of primary metallogenetic areas to exploration and mining.

Business Climate

Constraints & risks faced by foreign investors

- Lack and high cost of logistic operations in important regions;
- A notorious trend of increasing energy costs;
- Inefficiency in the concession of environmental licenses imposing additional costs and time delays to the development of projects;

Business Climate

The New Mining Code & Taxation Issues

- The manifested objectives of the government are: increase the taxation (royalty), create the Mining Agency and introduce comprehensive changes in the Brazilian Mining Code;
- The government expects to send the new legal framework to the Lower House of the Congress by the end of this semester. Before this event it is all speculation;

Business Climate

The New Mining Code & Taxation Issues

- The increase in the specific taxation of the mining industry will aggravate the recognized high general taxation burden of the industry;
- The creation the Mining Agency is a fundamental initiative that has been put in the mineral policy agenda for more than ten years.

Business Climate

The New Mining Code & Taxation Issues

- In terms of the changes to be introduced in the mining legislation, surely the limitation of the exploitation period is considered to be the most polemic. It increases the risk as well as paves the way for legal disputes that surely will bob up;
- A trace of the new mining code seems to be the increase in discretionary power of the government;

Business Climate

The New Mining Code & Taxation Issues

- The fact that these structural changes are going to be discussed and implemented in parallel represents a real concern;
- Considering the severity of the international crisis and the high levels of risk aversion, the change in the rules-of-the-game, increase the taxation and the implementation of new procedures can compromise the legal stability and operational efficiency;

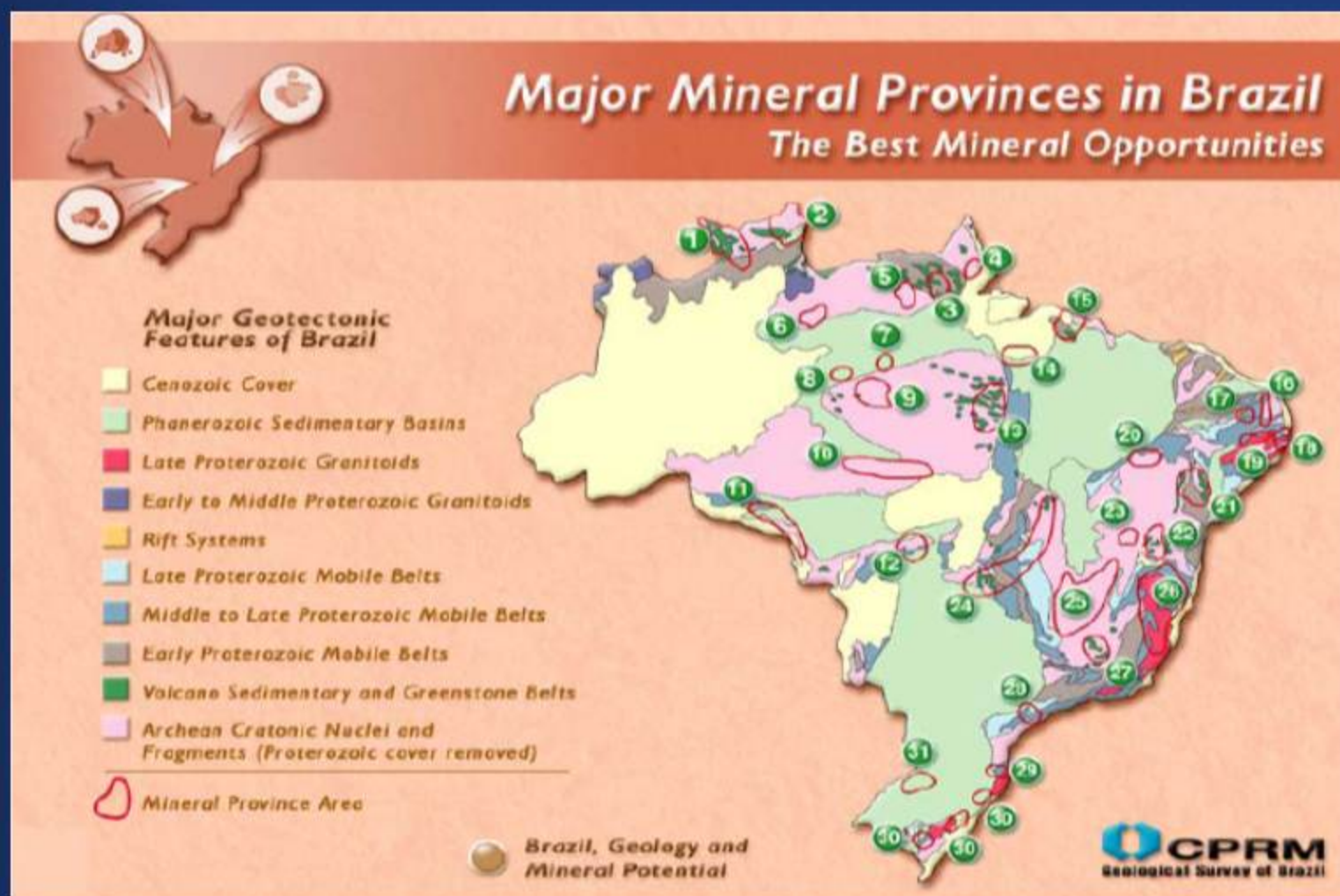
Selected Geological Remarks

- Brazil is a country with a wide range of mineral opportunities, due to its great territory and corresponding geological diversity;
- In the Amazon region, for example, where several mineral provinces have been identified most of the area is still practically unknown;
- Even considering traditional mining regions such as the State of Minas Gerais and the Tapajós Gold Province the probabilities of expressive new discoveries are high.

Selected Geological Remarks

- The lack of proper knowledge of the Brazilian subsoil suggests the enormous potential still waiting to be discovered;
- The Country's geo-diversity, continental dimension and privileged geographical conditions grant it an abundant supply of a varied suite of mineral resources;

Selected Geological Remarks



Selected Geological Remarks

- In the context of the world's known mineral resources, Brazil has expressive reserves of many minerals ranking among the top mining jurisdictions in niobium, tantalite, graphite, kaolin, vermiculite, talc, magnesite, bauxite, iron, lithium and manganese;
- Other minerals to be mentioned as portraying the Brazilian's geological vocation are: copper, tin, nickel, uranium and phosphate;

Selected Geological Remarks

- Actually, the Brazilian mineral production includes about 55 substances. Its diversity is a natural reflection of the above mentioned geological features;
- Brazil presents an important role as a supplier of the following minerals: asbestos, bauxite, cassiterite, cement, chromite, kaolin, iron ore, phosphate, graphite, feldspar, magnesite, niobium, gold, dimensional rocks, talc, tantalite and vermiculite.

Selected Geological Remarks

- Most of the huge portfolio of known mineral properties and assets were generated by past exploration works;
- This portfolio is remarkable and is available for review under the current favourable relative prices and expectations. On the other hand, the government has a comprehensive geological survey program of investments in course for the next years;

Gaining access to Exploration & Mining

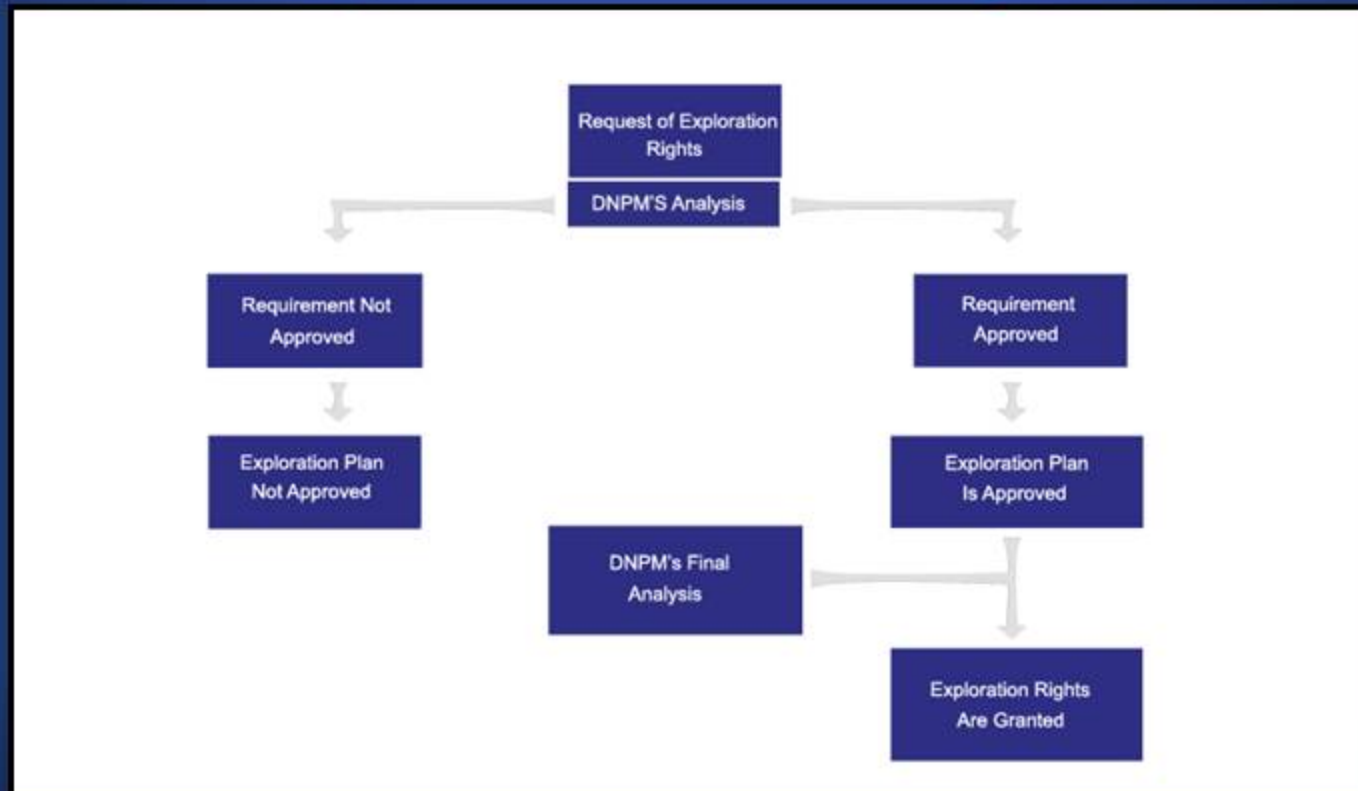
- The legal framework for the development and use of mineral resources in Brazil was established by the Federal Constitution enacted 1988 and its Constitutional Amendments (1995);
- The Constitution stated the Union domain on the mineral resources. The mineral resources, including the ones found underground, are goods of the Union;

Gaining access to Exploration & Mining

- The Mining Code (1967) governs the regimes of exploration and mining. Established the concepts of mineral deposit and mine, it defines standards, conditions of access and rights and duties of the holders of mining rights;
- The Mining Code embraces five regimes: Authorization; Concession; Licensing; Small-scale; Mining Permission and Register of Extraction;

Gaining access to Exploration & Mining

- The **Regime of Authorization** regulates the mineral exploration. See Image below;



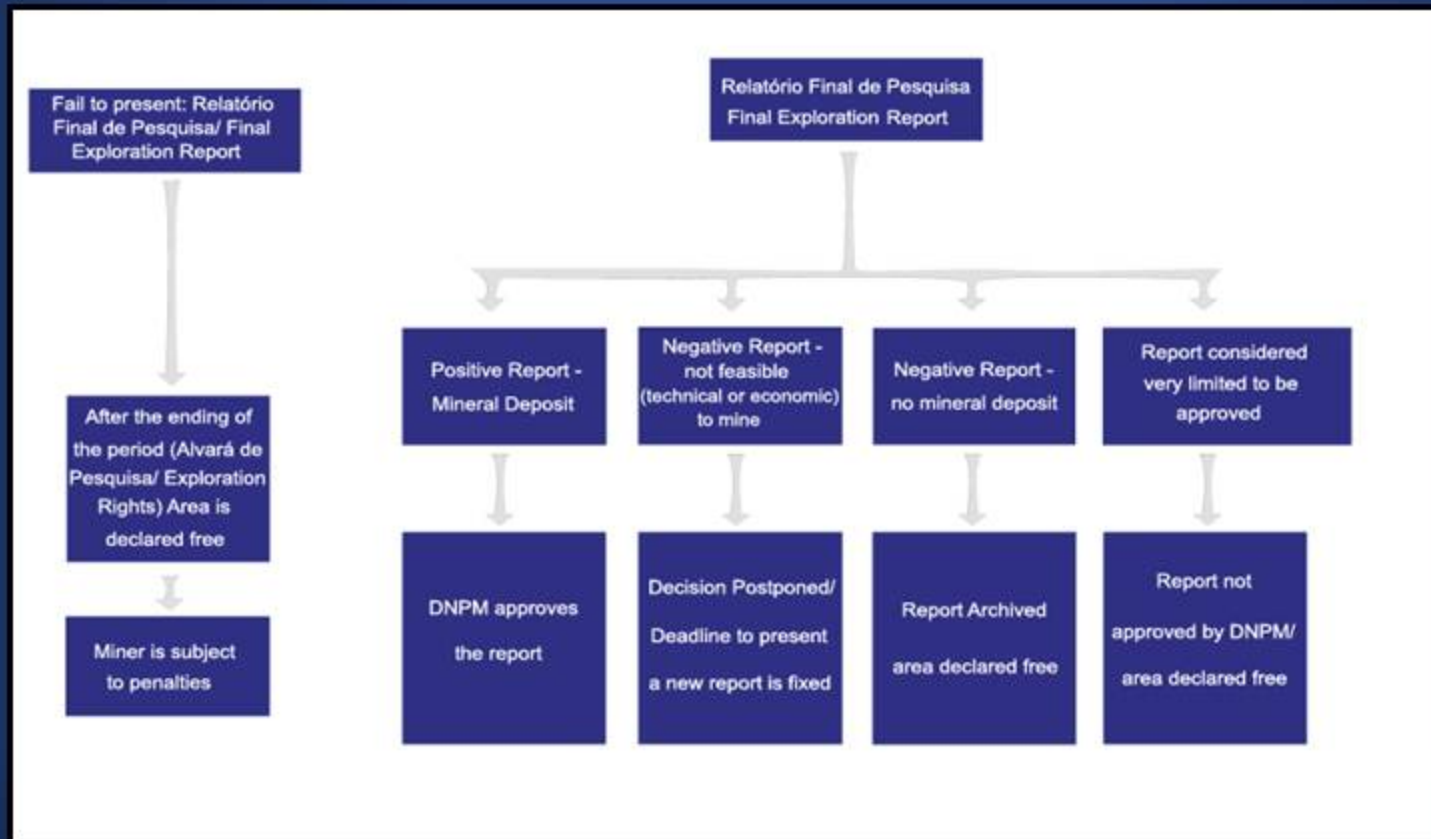
Source: DNPM – National Department of Mineral Production

Gaining access to Exploration & Mining

- It is granted by Exploration Permit. The priority is determined by the chronological order of requests. It is valid for three years, renewable, generally for an equal period;
- A Final Exploration Report is required to prove the existence of ore deposit. If DNPM approves the report, a request for mining concession can be filed within one year;
- The payment of an annual fee is demanded throughout the period of the exploration permit;

Gaining access to Exploration & Mining

- The **Regime of Concession** regulates the mining of mineral resources. See Image below;



Source: DNPM – National Department of Mineral Production

Gaining access to Exploration & Mining

- The concession is emitted by Minister of Mines and Energy as an administrative act;
- The decree of concession grants the ability to exploit the mineral deposit and grants the concessionaire the right to the product of extraction;
- Authorization and Concession are regimes of broad application. There are other regimes but of restricted application: Licensing, Artisan-Mining Extraction Permission and Register of Extraction;

Gaining access to Exploration & Mining

- **Artisan-Mining Extraction** regulates the use minerals and deposits susceptible of artisan mining activities;
- **Licensing** regulates the use of mineral substances of immediate use in civil construction;
- **Registration of Extraction** regulates the use of mineral substances of immediate use in civil construction for exclusive use in public works carried out by bodies of the government: federal, state and municipalities;

Final Remarks

- Despite important constraints and challenges in place the general robustness of the Brazilian economy, its perspectives as well as the outstanding mineral opportunities available points to an ever increasing flow of FDI;
- There isn't any magical approach to copy with the mentioned challenges and constraints. The roadmap is adopting the best practices since the beginning of the process and acquire critical knowledge to support the whole planning and decision process;

Final Remarks

- A basic guidance to a foreign investors considering investments in the Brazilian mineral sector are:
- Have an office in Brazil or at least a local representative;
- Have an adequate local advisory support (legal accounting, technical etc);
- Build up a specialist information system to support the decision process;

Final Remarks

- Adhering to private sector entities such as **ADIMB** - Agency for Technological Development of Brazilian Mineral Industry focused on exploration, and **IBRAM** – Brazilian Institute of Mining focused on mining and development, in order to reinforce its institutional links as well as professional network;

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Thank You!

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