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This research has been conducted by Clotilde Bonetto Gandolfi, Razvan Isac, Ana-Maria Miclea and Nathan Allen. Edited by Bernville Fletcher / Designed by Gonzalo Da Cunha.
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Ten years ago, the main trading partners for Brazil were the USA and Europe. Since then, Brazil has seen a diversification of its export reach, which has increased by 450%. Could you provide us with an overview of these developments?

Between 2003 and 2012, Brazil’s trade flow grew from $122 billion to $466 billion, and over the same period exports grew from $73 billion to $243 billion. Our increased presence in global trade confirms the effect of a series of measures adopted by the federal government in recent years in order to augment the level of national exports. The governmental policy for foreign trade was conceived in order to protect traditional industry sectors, much like in the USA and in the EU, while also looking out for new trade partners and opportunities, particularly in Africa and Asia.

In order to feed this industrial growth, imports were also augmented to supply the raw materials still not produced in Brazil. In 2003, imports were worth $48 billion and last year they reached the amount of $223 billion. This demonstrates the degree to which the country is open to commercial trade with other nations. In 2012, import-export activity was done with over 120 countries among which the main trade partners were China, the US, Argentina, Germany, and the Netherlands.

At the start of the international economic crisis in 2009, Brazilian exports fell by 22%. We managed to make up for this loss in the following years, with exports reaching $243 billion in 2012, the second highest value in recorded history and with an end of the year surplus of $19.4 billion. We expect a positive trade balance in 2013 as well, despite the challenges we have ahead; these include an expected growth in competition on the international market and the fall in consumption in many countries as a result of the international financial crisis. Nonetheless, we are optimistic because Brazil’s economic performance is peaking at the moment, helped by the political and economic stability that is encouraging private investment in the country.

Plano Brasil Maior underlines the Federal Government’s industrial policy for the upcoming years. Could you provide us with an overview of its most important components with regard to Brazil’s mining industry?

Plano Brasil Maior is the industrial and technological policy for services of foreign trade and this initiative brings together a series of actions and measures that have the aim of strengthening the national industry in the face of international competition. With this in mind, 19 priority sectors were chosen due to their economic importance and the competitive challenges they face due to excessive imports or a lack of innovation.

With regards to the mining sector, three main goals were set as targets for 2017, the current deadline of the Plano Brasil Maior. They are to strengthen the mining activity in the country, to promote national technological innovation and research, and to increase the value-added of the mining industry. These goals will encourage the discovery of new mineral deposits, the increase of finance opportunities levels for mining projects, and the augmentation of private and public spending in research, development, and innovation. They also aim to attract foreign technology companies and offer modernisation programmes for mining equipment and machinery.

What will be the main industrial sectors that will drive investments in Brazil over the next three years and what is Brazil’s economic outlook for the future?

In the last few years, Brazil has seen around 40 million consumers cross the poverty line to enter what we call the new middle class and this movement within the Brazilian social pyramid clearly owes a lot to the social programmes adopted by President Lula’s government. The end result of this social transformation is that Brazil now has the fifth largest consumer market in the world, for every type of product, ranging from hairpins to automobiles and aeroplanes.

This new reality has made Brazil even more attractive to global investors and recently, the federal government launched the Book of Investment Opportunities in Brazil (Catalogo de Oportunidades de Investimento no Brasil), which is a document that enlists 140 national projects that have a total estimated value of over $200 billion. These landmark projects were selected in conjunction with state authorities and they represent future large investments in infrastructure, logistics, oil and gas, and naval and automotive equipment.

In order to make Brazil more attractive, the federal government has been implementing new regulatory measures that have reduced taxes, increased access to credit and modernised labour regulations. To that end, labour costs have already diminished in 40 industrial sectors and we are also seeing a drop in the prices of electrical energy. Brazil’s current path is one of transition towards a country that produces more cheaply, with lower costs, a country that has a good grasp on its inflation levels, a strong legal system and a democratic climate. We have a lot of work ahead of us, yet we have a clear direction, as demonstrated by the levels of direct foreign investment, which reached $65 billion in 2012, the fourth highest in the world.

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**Interview with**

Dr. Fernando Pimentel

**Minister of Development**

**Industry and Foreign Trade**
BRAZIL MINING 2013

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Argentina, Germany, and the Netherlands.

- In some respects, Brazil lives up to this geo- graphical dominance and position. It is home to roughly 9,000 mining companies, pro-

Mid-West: 1,075 companies

Northeast: 1,606 companies

North: 515 companies

Southeast: 3,659 companies

South: 2,655 companies

Brazil’s 8,514,877 square km makes it the fifth largest country in the world. Perhaps more relevantly, it makes it the largest country in Latin America, arguably the most prospective mining region in the world. In 2012, Latin America attracted 25% of global non-ferrous exploration spending, more than any other region.

In some respects, Brazil lives up to this geo-

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We are just in the beginning of a length discussion process which started last June, when the President sent to the Parliament a bill of law. We have a convergent position with some aspects, specially the notion of legal security that the New Mining Code is assuring. All the previous mineral rights are totally secured, which is very welcome. We also appreciated the way that the President used to send the law proposal, through the Parliament, because we were aware the other ways she could use, by a Provisional Law, which is a tool with reduced possibility of stakeholders’ participation in the process of formulation and with immediate effects. So, the Parliament is the right address to support this strategic discussion to the Brazilian society and we are confident about the possibility of having a truly participatory process aiming to strength the proposal. We also are convergent with the proposal of creating the National Mining Counsel, linked to the President and the National Mining Agency, replacing the actual DNPM. We believe both measures will reinforce the political status of the mining sector in Brazil.

How is IBRAM advocating towards a more sustainable mining sector in Brazil?
Diverse studies and well-known sustainability publications are ranking mining sector in Brazil among those with better performance. As an example, the magazine Análise Gestão Ambiental [Environmental Management Analysis] produced a special report to Rio+20 Conference, analysing the performance of 28 sectors in the Brazilian economy, considering 1,200 indicators and interviewing 840 companies. As a result, the mining sector was ranked in first in terms of sustainability performance. But, of course, we have problems, especially in the sector of small mining companies, for those investments in sustainability are still considered as costs and not investments. We also must improve the general performance of the sector in terms of health and safety indicators. As I mentioned before, IBRAM is implementing diverse technical programs that are aiming to increase the general performance of mining here. They are complementary strategies for the mining companies, especially those related to cutting-edge issues, as climate changes and water management, which due its innovation, will demand long term process of individually absorption, being that IBRAM works as facilitator in this way. At the same time, we are operating a traditional Health and Safety Program, focused in risks management approaches, which is always bringing new ideas and pointing to new ways to the mining companies here in Brazil.

What concrete policy measures would you like to see taken to make Brazil’s mining sector more competitive?
The core issue that is strongly reducing the competitiveness of the mining sector in Brazil today is related to the delays in obtaining environmental licence from the authorities. We have developed strong internal capability to handle with environment issues, to prepare good EIA studies and to think about the measures for impact’s mitigation, but the big problem is the lack of capability in many state environmental agencies. As a result, the environmental license process in Brazil is unpredictable in terms of timing. This costs a lot of money for a mining company and exposes it to unnecessary risk. We have also to remember that mining is a global business, totally connected to the international commodities market and, sometimes, those delays could result in failure in the company’s strategies. In this sense, a concrete measure which will bring a tremendous increase in terms of the competitiveness for the mining sector in Brazil would be the adoption of a more rational environmental license process, specifically developed for the mining activity, considering its constraints and its inherent characteristics.

Another challenge is the availability of good geological information. Unfortunately, we still have in Brazil a lack of good geological information, considering that less than 30% of the Brazilian territory is duly mapped in adequate scale, which is in the minimum of 1:100,000. In this sense, a good measure would be the Government considering investments in geological studies as a core priority in terms of public policy, allocating sufficient resources for this and defining a timeline on this.

What is IBRAM’s position on the New Mining Code and what kind of amendments should be made to the current draft?
We have developed strong internal capability environment licence from the authorities. What concrete policy measures would you be made to the current draft? Code and what kind of amendments should
Brazil’s Regulatory Framework

The jury is still out

Ever since Brazil’s 17th Century gold rush, when tax disputes were a frequent occurrence between Portuguese pioneers and representatives of the Crown, the country’s legal system has maintained a complicated relationship with mining. Up until recently, the antiquated mining code (not updated since 1967) was one of the main factors deterring investment in the sector. In 2008 the possibility of a new mining code has been discussed, yet despite abundant rumours and a number of false starts nothing ever materialized.

At the beginning of this year, the anticipation increased. Experts began speculating on what a new mining code would contain. “It will be based upon two main pillars: an increase in government participation, by means of taxes and royalties, and an effort to incentivize the industry towards more development,” claims Pedro Henrique Jardim of lawyers Machado Meyer Sendacz Opice.

On the 16th of May MP 595, more commonly known as the new Port Law, was passed by the Brazilian Congress, leading many to hope that, with this out of the way, the door was now open for discussion of new mining regulation. “There is a 95% chance that the federal government will submit a bill to Congress this year,” asserts Bruno Werneck, partner at São Paulo-based law firm Mattos Filho Veiga Filho, Marrey Jr e Quiroga Advogados. Werneck was proved correct. On June 18th 2013 the long-awaited New Mining Code was released to Congress. The importance of this cannot be overstated: without being able to offer clear rules of play, the South American giant fell behind its smaller neighbours in attracting mining and exploration investment.

Now that the legislation has passed into the public domain, the response from the industry has been, perhaps unsurprisingly, rather lukewarm. As expected, the code addresses three main issues: royalties, the concessions system, and the establishment of a new independent mining agency, the ANM, but it does not offer an instant solution to all the industry’s woes. On the contrary, as is often the case in Brazil, the pace of progress is expected to be painfully slow. Now that the bill has lost the constitutional urgency proviso with which it was originally released, the forecasted timeline to pass through the political system is anywhere between one and two years.

Although opinions differ wildly, the majority of parties involved in the sector actually welcome this development, viewing it as an opportunity for the private sector to have its voice heard and exert a positive influence on those aspects of the code that are unclear or are seen to be potentially damaging to the industry.

Under the current system, royalties’ payments, officially known as the Financial
Nickel

Nickel producers have not had the best couple of years. Just over two years since prices of the base metal peaked at around $13/lb in February 2011 (which still fell short of its pre-global financial crisis heights), the price has now dropped to below $7/lb.

Global excitement surrounding nickel has led to the market supply surpassing global demand growth rates and this development, along with a weak worldwide economic performance in 2012, has pushed nickel prices down. “Global economic growth is closely tied to the consumption of stainless steel, which is produced using nickel. When the world economy is growing, steel consumption thrives, but when it is doing poorly, consumption of steel and therefore nickel declines alongside it. Although global nickel consumption grew by 6.7% and 3.9% in 2011 and 2012, respectively, and production rose by about 6% in both years, price declines meant that producers were left with year-end surpluses of 51,000 mt in 2011 and 33,000 mt in 2012. Analysts forecast that the demand and supply for nickel will balance out in 2013, leaving a surplus of only about 3,000 mt. Unfortunately, nickel prices have not yet reacted to the increase in demand. The best nickel prices usually occur at the beginning of the year, but we did not see this play out in early 2013,” explained Walter De Simoni, CEO of Anglo American Nickel.

Yet after a long wait, producers now have cause for optimism. A slight recovery in August could be the start of a far larger revival, with a supply-demand deficit pointing to a longer-term price increase. “By the end of 2014, analysts expect a deficit of 12,000 mt of nickel, which should put upward pressure on prices. Consumption is also expected to rise by 6.6% in both 2013 and 2014. Most analysts say nickel prices will start to pick up around 2015, reaching a peak at 2020,” said De Simoni.

With an output of more than 85,000 mt of nickel in 2012, ranking among the top 10 in the world, this is good news for Brazil. The country is home to all of Anglo’s nickel operations, and recent years have seen major changes occurring in the field for this global mining player. Anglo’s Venezuelan site of Loma de Niquel was refused a permit and concession renewals by the Venezuelan government in 2012, a fact which led to the permanent cease of activity at the 13,000 mt/y site. This development left Anglo Nickel with only two major operations, both in Brazil. The first is Codemin, a site in Niquelandia (Goias), where the company has been producing nickel since 1982, and the site saw 9,600 mt/y of output in 2012. However, delivered on time and on budget, Anglo American’s new rising star is its other Goias project, named Barro Alto. With a projected mine life of 26 years and with an expected average production of 36,000 mt/y, the project required investments of $1.96 billion and produced 26,000 mt in 2012. This year, after solving problems with equipment suppliers for its electric furnaces, Anglo is targeting to ramp-up production to the nominal capacity of 41,000 mt/y. Furthermore, the company has two more long-term projects in sight; Morro Sem Bone and Jacare, which would potentially add another 66,000 mt/y capacity for Anglo American Nickel.

The largest electrolytic nickel producer in Latin America, Votorantim Metals, owns three sites in Brazil that account for a total output of 44,000 mt/y. “Regarding nickel, although we are not a huge producer on the world stage, our production positions us comfortably between the seventh and 10th largest producers in the world. Votorantim was founded by experts in the metallurgical field who viewed the mine as nothing more than a supplier of raw materials to the processing facilities. However, with the exception of some of the finished products that our aluminum unit manufactures, there is much more profit to be found in the mining than in the transformation process and we are planning a shift in this direction,” said Tito Martins, CEO of Votorantim Metals.

Operations in Niquelandia (Goias) and in Sao Miguel Paulista (Sao Paulo) commenced in 1981 and these two assets today are responsible for 25,000 mt/y; Fortaleza da Minas is Votorantim Metals’ third site, and the 2003-acquired operation accounts for a further 19,000 mt/y of sulphide ore nickel.

Vale, the world’s second largest nickel producer with a total output of 237,000 mt in 2012, only has one operation of the kind in Brazil: Onca Puma, located in the state Para. A lateritic project using a pyrometallurgical process, Onca Puma is intended to have a final nominal capacity of 53,000 mt/y but problems with its furnaces led Vale to put the ramp-up of the project on hold in June 2012. Nonetheless, Onca Puma produced 6,000 mt of nickel in 2012 and the company plans to have the asset back on track in late 2013.

Furthermore, Brazil also hosts a number of juniors trying to develop nickel assets and one good example is represented by Horizonte Minerals, an AIM and TSX listed company focused on the Araguaia Nickel project in Carajas. The asset, which was acquired in 2010 from Teck Resources and consolidated with the integration of the Vila Oito and Floresta nickel laterite projects (bought from Lara Exploration), is in its prefeasibility study stage. “We will take 12 to 18 months to complete our bankable feasible study, and there will then be another 12 to 18 month construction period. Ideally Araguaia would enter production in mid-to-late 2017. Brazil has two or three nickel projects being developed, and there will be a period of two or three years of oversupply as they reach capacity, but from 2016 or 2017 underlying demand will outstrip supply here, as not many new projects will be developed after the current wave,” said Jeremy Martin, CEO of Horizonte Minerals.
China is responsible for 42% of gross nickel consumption globally, but it used to produce over 70% domestically, with the remaining 30% shared among the world’s producers. However, in terms of per capita nickel consumption, China lags behind Japan and Europe. In Europe, the largest per capita nickel consumer is Germany, and in Asia it is Japan. There is a huge opportunity to increase nickel consumption globally, and most analysts forecast a nickel deficit around 2022 to 2025.

- Walter de Simoni, CEO, Anglo American Nickel