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WORKING PAPER FOR DISCUSSION

FDI Environment & Small Mining

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ABSTRACT

Small and artisanal mining are not, usually, the object of interest regarding foreign direct investment.

However, this might not be so, since the active role of the Canadian, and others, venture junior companies as a source of investment in mining properties outside their country of origin, promoted the sole source of venture capital in the 90's.

This working paper addresses some of the issues associated to this sort of venture capital vis-avis with the environmental and social aspects of small and artisanal mines.

INTRODUCTION

It is generally acknowledged by those in the mining sector that “mineral resources can generate substantial wealth and become a powerful catalyst for economic development”¹, whereas sectors of the society see it as “a big monster that walks and crushes quite hard”². These two very distinct visions of the same object resulted recently in the MMSD project, where stakeholders are meeting and discussing mining and society and small mining as well³.

Small and artisanal mines are always subject to definitions, which we are not going into, and differs widely world-wide; for instance, in China, mainly concerns coal and are driven via TVE⁴ approaches, in Brazil garimpeiros for gold and gems, in Africa and other parts of South America, really artisanal enterprises, etc.

Notwithstanding, whereas the case might be, environmental and social impacts are always associated to both small and artisanal mines, due their poor performance since they lack, as it is normally the case, legal status to perform better, either environmentally and technologically.

Venture capital in mining, in the form of the mining and exploration junior companies incorporated in Canada and enlisted at the Vancouver Stock Exchange⁵ and at the more conservative Toronto Stock Exchange⁶, as well.

They became very famous in middle 90's and very infamous towards the end of the decade due to the Bre-X scandal⁷. But it is still one of the rare, if not the sole, source of capital for small mining companies!

OPPORTUNITIES

The days of extremely speculative and high profits gained in DiaMet (Canada) and Arequipa (Perú), for example, are gone by now.

¹ WB-UNEP-UNCTAD-ICME : International Conference on Development Environment and Mining , Washington , DC (1994)

² Fleweger, M.E. – ‘Es un Mostruo Grande y Pisa Fuerte : La Minería en el Ecuador e el Mundo, Quito, Ecuador (1998)

³ <http://www.iiied.org/mmsd>

⁴ TVE = Township Village Enterprise runned by the municipality and local community .

⁵ VSE at <http://www.vse.ca>

⁶ TSE at <http://www.tse.ca>

⁷ Bre-X fraud , via fabricated geological samples .

However, as quoted from the Environmental Mining Council of British Columbia Website ⁸ “ Due to the high financial risk associated with mineral exploration, junior mining companies typically are unable to raise exploration funds from banks and therefore rely heavily on equity investment, through either public financing or joint ventures with larger mine companies ”.

Therefore, as in any investment strategy, minimisation of exploration risks is a must.

Within this framework, the junior companies arrived in South America, and other parts of the world. In South America they were very active in Chile, Peru (see the Arequipa case, for instance), Argentina and Brazil .

Gold , base metals and sometimes gems were the main targets . Base metals mostly in the case they were associated to large mining companies and gold and gems as investment opportunity for themselves or in association as well !

In Brazil , the big opportunities were and are with gold and gems and therefore these venture capital companies in order to minimise their risks looked after the garimpeiros following their path and filling claims !

The reasoning was quite obvious : the ones that are getting gold and/or gems out of their garimpos are our targets !

GARIMPOS ^{9,10}

Gold extraction by the garimpeiros in Brazil , although often referred to as a small or artisanal mine activity is far from true .

In reality due to the “geological fatality ” of altered and oxidized rocks that constitutes most of the geological endowment of Brazil, the laterites, the country produces such characteristic mineral wealth as iron and aluminium, of which Brazil is well known, and also laterite gold , be it alluvial or not .

They are medium to large enterprises, as some of the VTE in China are, requiring some good starting capital , which is provided by the “dono do

⁸ EMCBC at <http://www.emcbc.miningwatch.org>

⁹ Villas-Bôas, R.C. – Mercury in Brazil as Result of Garimpo Operations , Plenary Conference – 5th Intntl. Conference on Mercury as a Global Pollutant , Rio de Janeiro, 2000.

¹⁰ Barreto , M.L. – Legal Satatus of Garimpo , Speech at EPA, Washington, 2002 .

garimpo”¹¹, are normally not legal activities, operating in envious areas of the rain forest !

... and careless about environment , since they are not legal although not illegal, as well ! But always ready to negotiations !

Let me present some interesting maps that shows the locations of the several mineral claims and areas of environmental preservation as well indigenous lands .¹²

Figure 1 – Mineral resources of the Brazilian Amazon – examples

Also, let us see in FIGURE 1¹³ which shows the distribution within the Brazilian Amazon of some mineral resources and gold in particular , just as an example of the mineral wealth of the region.

The maps, not printed here but that will be seen at the presentation, show an amazing number of mineral claims, on the verge of the junior boom, on natural reserves areas and amerindians reserves, where mining is almost forbidden .

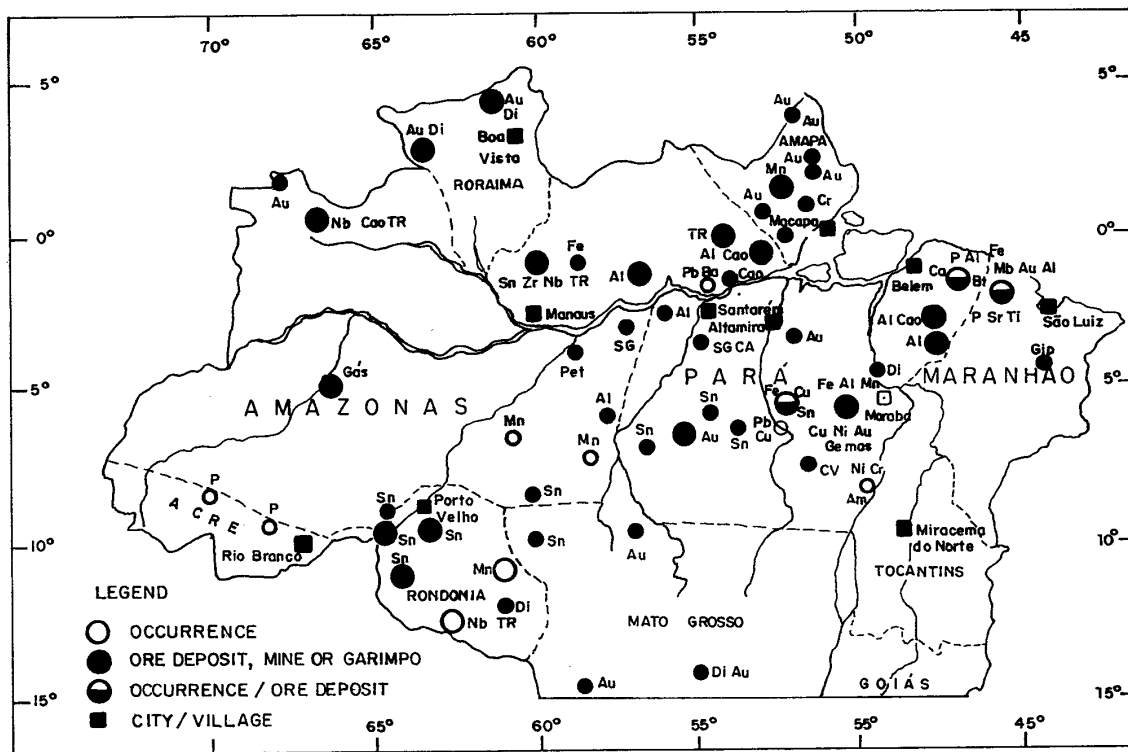
Socially, the situation has been reported elsewhere¹⁴

¹¹ donos de garimpo = garimpo owners in contrast to the workers .

¹² Barreto, M.L. – Projeto Desenvolvimento Sustentável na Amazonia Brasileira , SMM/MME-CETEM, 2002.

¹³ Marcondes, M .- Recursos Minerais da Amazonia, UFPa , Belem, Pará , 1996 .

¹⁴ da Silva, A R . _ projeto Ganga Tapajos , Belem, Para, 1996 .



FDI IN SMALL MINING

The Vancouver and Toronto Stock Exchange are the far reaching sources of mineral investment worldwide, being both responsible throughout the decades of the 80's and 90's of almost half of the world's exploration money in mining !

However, as noticed by EMCBC at the indicated site : "The relationship between financing mechanisms for mineral exploration and development, and the communities impacted by these activities has only recently begun to be examined. The growth of ethical investment funds, social investment research and shareholder activism has expanded over the last decade to the point where there are now more than fifty brokers, several research organisations and an estimated 90,000 social investors, controlling an estimated \$2.2 billion. As a major use of venture capital, the mineral industry has become a recent focus for attention in this field ... however, most of the stock exchanges, brokerage houses and industry analysts in Canada ¹⁵ have yet to register environment or social issues on their radar "

Well this being so, environment and social issues, although becoming increasingly important in decision making strategies, are not , in practice, at least for the source of venture capital represented by the junior companies, of utmost consensus, provided the ore body is of excellence !

¹⁵ and, we might add, worldwide !

Being this the case, a discussion on the so called mining company's ethics is to be raised ; the big companies announce broadly that whenever they make business , they do so within one strict "code of ethics", normally within the company's rules validated to any part of the world as BAT and BET . Lets take it as granted, at least in today's scenario , since it is simpler, easier and more economical to do that indeed !

However, the pressures on the mining venture capital represented by the juniors might be so high that they have ,in order to survive, to be much less strict on this matter , as inferred from the EMCBC's quotes above mentioned .

And , indeed, when in Brazil in the middle of the 90's the juniors that went there acted in the exploration and initial stages of mining exactly as the garimpeiros did !

A WORD OF CAUTION

The international financial system mechanisms are being reviewed after September 11th in order to trace terrorism money .

Within these revisions , other aspects of interest are being raised here and there , mostly linked to the so called " financial paradises ", on the one hand, and the "ethics of investment", on the other, since there is no way of promoting a sustainable development utilising the available financial mechanisms.

In order to promote sustainable development, following Bruntland's propositions ¹⁶ one is seeking in the minerals world ¹⁷:

- Minimise mass discards
- Minimise energy uptake
- Minimise environmental impacts
- Maximise social satisfaction

For small and artisanal mining, as mentioned, the sole source of FDI capital is via VSE or TSE, where " a long history of unethical trading deals and the financial volatility of many junior mining stocks have underscored the

¹⁶ Brundtland, G. – Our Common Future , UN ,1989 .

¹⁷ Villas-Bôas,R.C.and Fellows.L - Technological Challenges Posed by Sustainable Development , CYTED-XIII and IMAAC/UNIDO , Rio de Janeiro , 1999 .

recurrent problems with speculation and deception that are part of the history of financing mining activities ”¹⁸ !

Therefore , within this general framework of revision of the international financial activities it is a must that some international organisations, as UN, OECD, the World Bank and others , do act as promoters of the above mentioned “code of ethics”, BAT and BET, and bring a guarantee that a given investment in a small or artisanal mine activity will be so within an environmental and social concern , i.e., that such investment and the resulting enterprise are to be considered sustainable !

Lets not forget Brundtlands words of apprehension when saying that sustainable development will be just possible if adherent by the G-7 as a major political commitment .

One can not expect that a small or artisanal mine enterprise, located in a country that might be a strong candidate for a “Dutch disease” syndrome will be up to bear all the environmental and social costs of its development ; on the other hand, if this is the case, the investment should never be made !

But who will refuse a risky investment money if not backed by some strong organisation ? Of course , such an organisation has , as well, to provide for investment alternatives for a sustainable development and that is the political challenge !

These are formidable and challenging tasks, but from the point of view of the authors of this working paper , worth to stand up to !

¹⁸ EMCBC – at <http://www.emcbc.miningwatch.org>