



Brazilian mining industry in the age of liberalisation privatising CVRD

by Flavio Edmundo Novaes Hegenberg

The main mineral producer in Brazil is Companhia Vale do Rio Doce (CVRD), now to be privatised. In this article the main issues concerning the privatisation of this large state owned mining group are considered. Mineral production affects society in several different ways, e.g. influencing other sectors that use minerals and ores as inputs for their production. The aim of this paper is to promote a discussion about why the company is being targeted for privatisation, who are the likely winners and losers, and the role of the state as a mineral producer.

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Considerations dealing with the Brazilian privatisation program (PND "Programa Nacional de Desestatiza¹") will be addressed those affecting the mining industry. The considerations will be restricted, however, to the case of Companhia Vale do Rio Doce (CVRD), the largest state owned mining group in Brazil. The idea is to start a discussion about why the company is being targeted for privatisation, who are the likely winners and losers with the privatisation process, and the role of the state as a mineral producer.

We will start with some basic information about Brazil and CVRD, pass to the main social, economical and political considerations with regards to privatisation giving as well some information related to mineral assets, and furthering to other issues such as new discoveries and organisational structures affecting and changing the industry's environment.

Some information of the importance of mineral production to Brazil's external accounts is given together with some insight relating to business development in the country (where government, private national, and international capital may work together in accordance to a predetermined project and framework). Technology and industrial concentration will also be briefly discussed. Some conclusions are listed at the end of this paper.

Basic information about Brazil, CVRD and the Brazilian privatisation program

Brazil is a world ranking producer of metallic minerals and has very significant mineral resources. Its iron reserves are believed to be equivalent to one third of the world total, and bauxite reserves are now known to be the largest in Latin America. Other major deposits include manganese, coal, zinc, chrome, gold and tin. There are also substantial reserves of copper, beryllium, gypsum, ilmenite, limestone, rock crystal, precious and semi precious stones, thorium and uranium, and zirconium.²

Iron ore is the single most important mineral for Brazil and deposits are found in many regions. The most important are those of the "Quadrilátero Ferrífero" region (the Iron Quadrangle or Iron Quadrilateral region), in the state of Minas Gerais, and those of the "Serra dos Carajás" region, in the state of Pará in the Amazon region.

Bauxite is another one of the most important mineral resources. "Output of bauxite increased substantially after 1988 as a result of major new investment, reaching a peak of 10.4 Mt in 1991. In 1994 production was down to 8.7 Mt. The major producer, with 70 per cent of output in 1992, is Mineração Rio do Norte (MRN), a joint venture between CVRD and domestic and foreign producers".³

Brazil's gold production has been increasing significantly during the last decades (see Table 1) and more deposits are being discovered with possibilities to produce even more for the years to come. Another important mineral product is manganese. CVRD have a good position in both these sectors, with gold output being today one of the largest in Latin America and, in the case of manganese, being a main producer along with "Indústria e Comércio de Minérios" (ICOMI)

In order to provide an overview of the importance of metallic ores exports for Brazil (in relation to other key exports), see Table 2.

The careful reading of Table 2 shows that mining products (minerals and ores) are important to the Brazilian economy they represent one of the main exports. Not only they are important per se it

Table 1. Gold production in Brazil in recent decades (t)

1970	1980	1990	1995
9	35	84	67

Source: Gold Fields Mineral Services, 1996.

should be noticed that they provide the basic essential raw materials for other three main export sectors (as shown in Table 2): (i) metallurgical products, (ii) transport equipment and parts, and (iii) machines and mechanical instruments. This fact must not be ignored. The changing ownership structure of mineral production may cause significant effects over other sectors of the economy.

To quote one single important industrial sector that uses minerals and ores as its most fundamental input, we may consider Schneider⁴ explaining that "The foundation of Brazil's heavy industry is metallurgical, especially steel. Extremely well endowed with iron ore, both in Minas Gerais and the south of Pará (Carajás), Brazil has created the world's seventh largest steel industry ahead of France or the United Kingdom and gone from importer to major exporter of this basic material in a short time. With production at 9.1 Mt in 1976 (triple that for 1964), imports were still significant. As output rose to 24.2 Mt for 1987, Brazil could export 8.2 Mt despite rising domestic consumption. By 1991 Brazil accounted for 57 per cent of all Latin America's steel with capacity of 28 Mt and exports of 10.4 Mt worth 3 200 MUSD."

Comparing the amount produced and the amount exported of iron ore and of bauxite (just as an illustration for the understanding of some structural features relating Brazil within the world economy) it is evident (see Table 3) the impor-

tance of these ores for the Brazilian export sector and the large percentage of minerals that are shipped to the developed or core countries of the world. In the case of these two ores, the data referent to exports are of even greater significance (than it appears) because a large share of these ores transformed in Brazil (now reference is being made to industrialised products such as steel and aluminium) are later sold to these external markets.⁵

To understand the importance of the privatisation of CVRD it is useful to remember that between 1991 and 1993 the 24 privatised Brazilian state owned enterprises (SOE) generated nearly 6 600 MUSD in revenue⁶; and it is stated nowadays that private consultants' estimates of CVRD total worth, based on its share price, range as high as 12 000 or 15 000 MUSD. Some analysts say⁷, for instance, that because of CVRDs importance as an iron ore producer, ore-poor Japan could pay up to even 18 000 MUSD for the 51 per cent of the stock held by the federal government.⁸

Companhia Vale do Rio Doce is the largest Brazilian mining group⁹ and the third largest world-wide (only after RTZ CRA, the British Australian group, and AAC: Anglo American of South Africa). CVRD is generating a great deal of controversy concerning its privatisation.

Some analysts consider that its sell of is important while others defend the idea that it is too big a corporation to be sold,

Table 3. Production and exports of iron ore and bauxite 1991

	Iron ore	Bauxite
Total produced	150 mt	9.7 mt
Total exported	112 mt	5.0 mt

Source: Sumário Mineral (DNPM), 1992, in Scliar, 1996, p. 28.

with too many links with the Brazilian economy (including also several social and development programs), suggesting that privatisation would cause negative effects over the economy. In this approach, mineral policy must be viewed as one of the elements of a broader national policy.

The Vale do Rio Doce system is responsible for approximately 16 per cent¹⁰ of the total share of the Brazilian value of mineral production (VPM). Of its total consolidated revenues 60 per cent is generated from iron ore and steel, 13 per cent from bauxite and aluminium, 6 per cent from pulp and paper, 3 per cent from gold, 1 per cent from manganese, 11 per cent from railway and port systems, and 6 per cent is made up of other minor businesses.¹¹

CVRD is diversified and has several different businesses: it is Latin America's biggest gold producer, one of Brazil's biggest aluminium smelters, has significant stakes in Brazil's biggest steel companies, is involved in forestry management (mainly growing trees for paper pulp), and it also has interests in rail¹², port and shipping facilities (transportation) which was developed for their own use but now carry third party traffic.

Unlike most Latin American companies that have been privatised, CVRD is already considered efficient by world standards. Since 1990 it has cut its work force by about 25 per cent to less than 16 000¹³ and sales per employee are now claimed to be similar to that of RTZ-CRA (the British Australian mining group). In accordance to data of 1995

Table 2. Brazil key exports 1994, MUSD (FOB)

Product	
Metallurgical products	6 081
Transport equipment and parts	4 660
Soybeans	4 135
Machines and mechanical instruments	2 878
Chemical products	2 841
Coffee	2 558
Mining products (mainly metallic ores)	2 500
Seven main products	25 653

Source: Banco Central do Brasil, Boletim do Banco Central do Brasil.

Conceição mine, Itabira, Minas Gerais.

provided for CVRD¹⁴ and for RTZ-CRA¹⁵, the values¹⁶ for CVRD and RTZ-CRA are, respectively (considering sales per employee¹⁷), 163 500 USD and 174 500 USD. We can see that CVRD shows a good performance according to this index.

The exploitation of mineral resources is an activity that involves a high level of investment (capital intensive), and is risky and generally oriented towards (or mostly dependent on) external markets. This is the case for most metallic minerals and ores (e.g. iron ore, bauxite, aluminium and gold). It is important to remember that the supply of capital provided, the geological exploration and exploitation undertaken, and all the risks taken in the mining industry (including marketing mineral commodities) were backed by the Brazilian government. The state created CVRD and turned it into one of the most successful companies world wide.¹⁸ One important question to pose is: "Why then privatise CVRD?"

This question represents the central issue raised in this article. In what follows, a wider range of issues are raised which

are the subject of continuing debate. We have to bear in mind that some points can present contradictory alternatives, as for example, the case of breaking up companies in order to privatise. In the case of CVRD, one view is that the company needs to be held as a single structure; while another view is that the company should be divided in parts in order to increase its value and avoid oligopolisation of the industry (or of some sectors within the industry). There are arguments for and against each of the hypotheses, and it is important to understand the 'pros' and 'cons' of each argument.

The Brazilian Privatisation Program (PND) is an essential part of the structural reforms that were introduced in March 1991 by the President Collor Administration. The structural reforms aim to modernise the Brazilian economy and pave the way for the recovery of economic growth. They include: (i) opening up the economy to foreign trade and investment, (ii) a new industrial policy aimed at promoting technological progress and greater competition, and (iii) the Brazilian Privatisation Program, which is the major modernizing reform.¹⁹

The PND (the Brazilian Privatisation Program) is now dealing with the case of CVRD. The date for the auction has already been set. The selling of CVRD is scheduled to happen in three phases: phase one on the 29th of April this year, when the government plans to sell between 40 per cent and 45 per cent²⁰ of the ordinary shares for a minimum price of 3 billion Reais (the Brazilian currency: R\$). The government, after this first phase, will still have 31 per cent of the ordinary shares and 6 per cent of the preferential shares (those that allows dividends but not the right to vote). In phase two, which will extend until May the 5th (1997), the government will sell 6 per cent of the preferential shares and 4.5 per cent of the ordinary shares to the employees of CVRD. During the phase three (the date of which is yet to be settled), 26 per cent of the remaining ordinary shares will be sold.²¹

The main issues

The privatisation in Brazil of CVRD raises some difficult issues, as follows:

1. The government is keen to maintain the group's social role in opening up Bra-



Pelletizing plant, Tubarão marine terminal.

zil's more underdeveloped regions. The company's statutes also stipulate it should transfer up to 8 per cent of net profits to health, environment and infrastructure projects in areas where it operates. These are part donation, part loan, and in 1994 totalled 22 MUSD against net profits of 645 MUSD. The government wants to preserve its development role since CVRD transfers are an important source of funding in some parts of the country.²²

2. Another issue is that CVRD owns mining and exploration rights worth an estimated 40 000 MUSD, including Carajás, the world's biggest iron ore mine, with known reserves sufficient for 500 years at current rate of exploitation.

3. If the company is split in parts before privatisation, it may be possible to get a better price,²³ but it will lose many of the benefits to society because CVRD's development role would disappear. If the company is to be sold as a whole, the problem is that there is the risk that it could be bought by one of its competitors or clients. "With Japan so heavily reliant on Brazil for its supplies of fines and pellets, there is concern amongst Japanese steel producers that control of CVRD may pass into the hands of a rival iron ore producer, perhaps an Australian company. As a result, there is speculation that Nippon Steel may present itself as a candidate to purchase a stake in CVRD when it is eventually privatised".²⁴ A sale to one of its iron ore competitors, for example, in Australia, might lead to reductions in output in favour of the new owners' mines elsewhere. On the other hand, if it was bought by one of its clients, like the Japanese steel industry, they might try artificially to dampen iron ore prices. Within the iron ore sector CVRD has big clients and big competitors. Neither must be privileged since is not in CVRD's nor the country's interests.

Efforts are being made in order to avoid these possibilities if privatisation is



to be advanced. The director of Brazil's National Development Bank (BNDES), Mr. Luiz Carlos Mendonça de Barros, stated that the government would seek to ensure that CVRD fell into friendly hands, for example, non iron producing companies (such as South Africa's Anglo American Corp.). Direct competitors would be barred from bidding because of fears that they might hinder CVRD to boost their own operations (as could happen in the case of Australian iron ore producers).²⁵

4. Another complication (for privatisation) is that arguments may be developed in favour of maintaining management in the hands of the government because of the advantages of synergism amongst its component parts (the several and diverse

activities that CVRD developed and is in control of).

5. The sale faces stiff opposition from a group of politicians from the nine states in which CVRD operates, particularly those from Brazil's poor north. They fear that a privatised company will be less easy to influence when it comes to winning investment for their states.

6. Regarding the item "valuation", there are problems concerning the real value of the company: it may be sold for a cheap price, and in this way may damage the interests of the Brazilian state. CVRD has not yet prospected in many of its concession areas, so the true value of its reserves is unknown. The usual method of valuing assets such as 500 years of iron ore reserves is likely to raise politi-

cal fears that the company is being sold too cheaply. Such reserves are normally valued by how much income they can generate in the next 30 years (allowing opponents to privatisation to claim that buyers are getting 470 years of Brazil's natural resources free).

7) There are some other additional difficult issues²⁶: A new complication for CVRD privatisation is that the company has discovered a large new gold deposit in Pará state (near its Carajás iron ore mining operations). According to initial drilling indications, it could contain a resource of 150 tonnes of gold. If this is confirmed, it would increase CVRD's gold reserves by 50 per cent. In 1995 CVRD produced 17 tonnes of gold, making it the largest producer in South America.) The discovery lifted CVRD's share price by 4.3 per cent, and some analysts believe it could complicate the government's intention to sell its 51 per cent controlling stake.

8) A further development which will do little to simplify the privatisation plans, is the proposal to establish a mega metals company in Brazil in which CVRD is expected to take a 10 per cent stake. Tin producer, Paranapanema²⁷, together with copper producer, Carajás Metais, and zinc company, Paraibuna de Metais, are reported to have signed a contract in December whereby they have effectively sold control to a group of pension funds led by the Previ²⁸ fund of Banco do Brasil which will have a 25 per cent interest. Other participants are believed to include steel producer, Cia. Siderurgica Nacional (CSN), and the National Social and Economic Development Bank (BNDES) (bringing together several distinct mining/metals companies). These three mining and metallurgy companies, together with Previ, are being added to Eluma²⁹ to form the Brazilian non ferrous Metals Company, or CBMNF (Companhia Brasileira de Metais não Ferrosos).³⁰

9) It is also argued³¹ that the country cannot dispose of such an important asset at a time when globalisation makes it im-

portant to Brazil to retain a corporation the size and the quality of CVRD (competitive, integrating several businesses, efficient); it is achieving good results when competing world-wide with other leading enterprises such as RTZ CRA, AAC, and BHP (a leading Australian mining group). It is important to those that maintain this view to consider CVRD's integrity (probably maintaining the company as state owned).

10) Another important argument comes from Pinheiro³²; that in Brazil's external accounts, imports of petroleum and coal are the main factors responsible for the Brazilian deficit of the balance of commerce for minerals. This makes CVRD a very important asset the company is the main body responsible for generating revenues (mainly from the sales of iron ore) in order to pay for imports of petroleum and coal (a great part of the Brazilian import bill of petroleum and coal is paid with money generated by the exports of the CVRD group).

In fact Brazil exported 6 Mt more iron ore during 1995 than a year earlier, with 131 Mt of fines and pellets shipped overseas. As a result, Brazilian export earnings from iron ore rose by 222 MUSD to 2 500 MUSD. CVRD was responsible for most of the additional tonnage exported. The group sold 82 Mt abroad in 1995, 4.9 Mt higher than in 1994, and earnings rose by 144 MUSD to 1 580 MUSD. The Brazilian iron ore industry looks set to benefit even higher earnings this year following a 5.6 per cent increase in average prices negotiated with steel companies in Japan, Brazil's largest customer, accounting for around 40 per cent of its export sales. Furthermore, the fact that Brazil is increasing its exports of pellets, will also mean more income for the industry.³³

11) Mr. César Benjamin, a respected member of the Brazilian Engineering Labour Union³⁴, considers that it is important for Brazil to maintain in its control some basic "endogenous nucleus" of the country that is already well developed and that constitutes an asset not only to

be preserved (maintained in the control of government), but to be used for furthering its links with the local economy. These basic industries, because of their size, relevance to national integration and/or international insertion, are extremely important not only because of their future possibilities but because they possess high standards of technical knowledge and are capable organisational structures (and with strong financial capacity) not only to operate in Brazil but (if necessary) internationally³⁵. Among these companies, together with strategic industries and firms such as Petrobrás (oil), Telebrás system (telecommunications) and Eletrobrás system (electricity), was listed CVRD.

To support the idea of "endogenous nucleus", one concept that implies endogenous growth (growth based on the development of the internal market), we must quote that "[Brazil's] mining potential, and the unsatisfied demand for raw materials, are far from being fulfilled. There is already a large mining industry to be supported, which gives plenty of room for growth even when focussed only on the current domestic market. Each increase in the minimum wage, and any investment in social programmes in Brazil, will mean a great number of new consumers".³⁶

This endogenous growth hypothesis may also be applied to a "wider geographical space". Considering the new objectives for the development of mining resources in "Latin American space", one must remember the positions of Guerrero³⁷ where he quotes that "The new markets which could absorb Latin America's mining production include its own market, taken as an integrated whole and not as a set of national markets. The dynamic potential of the regional market lies both in the expansion of per capita consumption (industrial use) and in the substitution of imports of mineral based mining, metallurgical and manufactured products which together account for 40 per cent of imports from outside the region".

*Ponta da Madeira marine terminal,
São Luís, Maranhão.*

12) It could be argued that the 1988 Brazilian Constitution (by reserving the development of the mining industry to national enterprise³⁸) restricted³⁹ foreign participation of foreign owned companies (because these could only participate as minority partners with local firms); one of the traditional arguments are that "investment in mining dropped from an average of 159 MUSD per year in 1982 1988 to an average of 66 MUSD in 1989 1993".⁴⁰ However, these arguments are subject to interpretation and may be considered controversial (this pattern of reducing investment in mining may be subject to other national and/or international factors), once in the same source⁴¹ it is quoted that "output of bauxite increased substantially after 1988 as a result of major new investments".

While the 1988 Constitution caused a number of companies to leave, many companies found local partners or made other adjustments to conform to the new Constitution. RTZ Corporation and Western mining (WMC) set up refineries because, by processing mineral rather than selling them as raw materials, they could continue to operate alone. CESBRA, a wholly owned tin mining operation of BRASCAN, the Canadian holding company, remained foreign-owned because it operated a tin smelter in the state of Rondônia, producing tin-based chemicals.⁴²

13) Finally, taking in account Baer's view⁴³ considering the presence of multinationals in Brazil, it is argued that there is a trend (considering the role for multinationals in the country) of the rise of joint ventures [not "total" privatisation] between Brazilian state companies and private multinationals. A number of joint ventures were created in the 1970s for example, the petrochemical complex in Camaari, Bahia, which involves Petrobrás' subsidiary Petroquisa, and big mining projects in the Amazon region under the leadership of CVRD. There are advantages to both Brazil and the multinationals in such arrangements. Firstly, the



majority state owned company will be less exposed to nationalistic pressures than the fully owned multinational subsidiary. Secondly, Brazilians may have more of a say in the behaviour pattern of such a firm with regards to technology or transfer pricing.

Further considerations

Matters of technology are also important in the context of CVRD's privatisation. As quoted by Professor I. F. Machado⁴⁴, regarding technological research for extraction and beneficiation of minerals, the "Department for Technological Research of CVRD developed several projects, activities and patents since its creation in 1965. Its activities of research and development (R&D) are important to consider, among these there are a large number of registered patents (in most cases related with the ores of iron and titanium) that are recognised in several countries". This technological aspect is extremely delicate and must not be forgotten.

Anticipated problems resulting from privatisation are those of income distribution and industrial concentration. According to Baer and Villela⁴⁵, given the present socio economic structure within which privatisation is taking place, privatisation may worsen, rather than improve, some long-standing problems. Two major characteristics of the Brazilian economy have been the concentration in the distribution of income and the oligopolistic structure of some of the principle sectors of the economy. What impacts may be expected from privatisation? To the extent that public enterprises are sold to some of the major private groups in the country, there will certainly be an increase in the economic power and income that these groups will control. This may work to the detriment of a more equitable distribution of rent flows and benefits.⁴⁶

One important matter that has to be considered, if CVRD is to change its structure and go to local or international

private hands, is that⁴⁷ if the objective of the Brazilian government was to increase competition among privatised firms or to democratise their capital, the policy makers would have broken up the state companies into several firms and should have sold the shares throughout the banking network. What happened in fact was that not only did the government decide not to break up the companies already privatised, but it has also sold different companies of the same sector to the same entrepreneurs. The result has been the concentration of capital and companies in the hands of a small number of entrepreneurs. In the case of the steel sector, for example, the bank Bozano Simonsen is now the owner of three of the privatised steel firms: Usiminas, Cosipa, and Tubãro. Another Brazilian entrepreneur from the steel sector, Mr. Gerdau, has also been very active in buying SOEs which used to be competitors of companies of his group, such as Cimetal, Usiba, Cosinor, and Piratini.⁴⁸ Cosinor was closed down approximately one year after purchase. Nowadays, the Group Gerdau has a virtual monopoly in the sale of non flat roll products in the North and Northeast of Brazil, and is the only Brazilian producer of sponge iron.⁴⁹

Considering the Brazilian privatisation program as a whole, the government allowed some of the companies to be sold to their competitors, customers and suppliers. This permitted private groups to increase their market power and create a potential for future conflict. In practice, privatisation has been used more to highlight the commitment to market oriented reforms, than to redeem debt or increase efficiency. In a certain sense, privatisation has wound up creating its own logic, beyond its original objectives.⁵⁰

Some conclusions It is important to consider and analyse the several options available in order to understand the future moves and possibilities for CVRD, and some problems that these moves and options may cause. Firstly, if CVRD is to

be privatised, one option would be if control could pass from the government to certain state sector pension funds this way allowing the company to be privatised, and at the same time to maintain its strategic and developmental roles (in a sort of "French style" privatisation, where the state would still have considerable degree of control via "indirect ownership" by funds controlled by state banks).

Another option would be to limit the participation of foreign capital in order to avoid problems with, for example, the so called strategic and developmental roles. This would also minimise possible negative effects (social and economical) that could be caused by an oligopolisation of the mining industry via foreign domination.

Secondly, the effects of high levels of concentration of ownership may have a negative influence in the future of the mining industry and to the Brazilian economy as a whole (the acceptance of monopolies as a result of privatisation).

Thirdly, when considering mineral trade and the balance of payments participation within the mining industry in Brazil, it is possible to refer to the external account related to the Brazilian imports of petroleum and coal are the main responsible for the deficit of the country in the mineral balance of payments. It is exactly with this balance in mind that we can understand the importance of the CVRD Group (because iron ore from its mines is responsible for a large participation in this exchange process). This has to be considered when proposing to privatise the company.⁵¹

It is important now to close this paper by addressing three main questions that enable us to establish the core issues for further discussion and research:

1. Why is CVRD being targeted for privatisation ?

2. Who are the likely winners and losers with privatisation (in its many different possible forms)?⁵²

3. Does a company like CVRD have any possible future role in Brazil, if it remains in the hands of the state?

At the same time, in the case of CVRD (including the production of iron ore and other important commodities, as well as services such as transport), there are some factors that may cause a change in the conditions of supply, e.g.: in the state of technology, in market structure, in Government policy and in costs of production. Each one of these items must be examined in a more detailed analysis according to the new possibilities that will come to work if changes in the structure of ownership are to take part with CVRD.

If the objectives of the Brazilian Privatisation Program is (or was) to redefine the role of the State in the economy via the promotion of a new industrial policy this probably went wrong. The case of mining illustrates that there is the risk of promoting technological regression (instead of progress) because, for example, the patents owned by CVRD may possibly get into the hands of transnationals⁵³ (reducing or limiting the competitiveness of mineral production in the country).

The concept of "modernisation" can be discredited (or out of date) if it is not going to improve the welfare of the majority of the people from the country where their politicians promises to make "major modernising reforms". The opening up of the economy (to foreign trade and investment) per se is a positive move in this increasingly globalized world as far it does not harm the interest of the majority of the Brazilian population. Opening up just because of ideological trends or to reduce the size and importance of the state without having a proper project for not losing even more of its capacity for bargaining in the international sphere (and in this way compromising even more the autonomy of the country) is not useful and should not be a goal.

The immense neo liberal propaganda for a "lighter, more dynamic government" that at the end of the day may only

privatise decision making and give more power to already strong (national and international) minority groups is not in favour of the interests of the majority and this reduces the possibilities of the Brazilian State to cope with its ever greater social and economical demands.

The Brazilian government suspended indefinitely the auction of a controlling stake of CVRD. The suspension came after several court-ordered injunctions against the sale. A judge blocked the planned auction of shares in CVRD in the 28th of April. More than 110 legal actions have been lodged against the sale and the National Development Bank (BNDES), which is in charge of privatisation, has a team of over 100 lawyers posted around the country to deal with the court cases.

The Brazilian government intends to appeal against the decision, and is convinced that there have been no irregularities in the privatisation process. However, the planned privatisation is opposed by a wide range of groups (including trade unions), and Mr. Joao Batista Goncalves, a judge in Sao Paulo's civil court, ruled that the auction should be suspended because the government had not given a sufficient explanation of the reasons for the sale in the tender documents; also Mr. Goncalves said the privatisation rules had been broken because the government had not published the tender documents in the national press.

These legal actions provide clear evidence that the government was acting against popular perception (and expectations) regarding the functioning of the State and of its public enterprises. These legal actions are an indication of political maturity of Brazilian civil society – a society that wants more explanation and a full knowledge of the reasons motivating government decision-making and action. This indicates that the population is demanding its part in the democratic process concerning the functioning of the national economy – something that must be interpreted as good news.

Notes

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1. The PND was launched in 1990 by the Col-
lor government.

2. EIU, 1995, p. 29.

3. This shows the relevance of those busi-
nesses that are in accordance to the "triple al-
liance", that alliance or framework where
government capital, together with Brazilian
private and foreign capital, work in conjunc-
tion to develop economic activities. EIU,
1995, p. 30.

4. Schneider, 1996, p. 141.

5. Scliar, 1996, p. 28.

6. Anglo Brazilian Conference, 1995.

7. See Brazil Watch, 1995a, p. 14-15.

8. Mining Journal, 1995. LASR 1995, p.3.

9. CVRD accounting results for 1996 showed
net profits up from R\$328 to R\$517 million
according to Brazilian company law, and up
from R\$359 to R\$632 million when corrected
to take account of inflation of about 10 per
cent during the year. Wheatley, 1997, p. 38.

10. CVRD share was 16.05 per cent of the
VPM in 1993. Brasil Mineral, n. 119, 1994,
apud Barbosa, 1995, p. 34.

11. Nembr and Higgiitt, 1994.

12. CVRD operates two railway systems, the
"Estrada de Ferro Vitória-Minas" and "Estra-
da de Ferro Carajás", transporting mainly
iron-ore.

13. Foster, 1995.

14. See Expedito Filho, 1996, p. 79.

15. See RTZ-CRA, 1995, p. 2 and 56.

16. Rounded values.

17. Total groupturnover divided by the total
number of employees.

18. It was Getúlio Vargas who in the early
1940s got Brazil into mining through the
Companhia Vale do Rio Doce. R&D: Re-
search and Development.

19. BNDES, 1991, p. 4).

20. The minimum price per share will be
R\$26.67. This minimum share price values
the company at R\$10.3 billion (approx.
US\$9.85 bn), against current market capitali-
sation of about R\$12 bn. Wheatley, 1997, p.
21. Netto and Almeida and Friedlander,
1997, p. 110 and 112..

22. Foster, 1995.

23. The sell off of CVRD worth perhaps \$10
billion to \$ 12 billion if broken up first. The
Economist, 1995, p. 21.

24. Mining Journal, 1996c.

25. Mining Journal, 1996b, p. 409.

26. See Mining Journal, 1996a, "Brazilian
Surprise".

27. Parapanema: producer of tin and with
interests in heavy construction.

28. Previ, the pension fund of government
controlled Banco do Brasil.

29. Eluma, a company that manufactures cop-
per, brass and bronze products; Eluma was
bought earlier by Previ from Banco do Brasil.

30. Wheatley, 1996.

31. EMEP, 1995.

32. Pinheiro, 1995, p.12.

33. *Mining Journal*, 1996c.

34. See Benjamin and Araújo, 1995, p. 74-5.

35. Making reference to the possibility of in-
ternationalisation of the activities of Brazil-
ian companies – not only exposure to the
world economy via selling its products, but
searching opportunities for working abroad.

36. SMJ, 1996, p. 55.

37. Guerrero 1986, p. 173.

38. National Brazilian Enterprise: defined as
public sector bodies or companies controlled
by Brazilians.

39. In the mining industry sector, restrictions
to foreign investment were removed in Au-
gust 1995 through Constitutional Amend-
ment number 6. This Amendment once again
enables foreign companies to own 100% of
local mining properties.

40. EIU, 1995, p. 29.

41. EIU op cit, p. 30.

42. Brazil Watch, 1995b, p.11.

43. Baer, 1995, p. 238.

44. Machado, 1989, p. 375-7.

45. Baer and Villela1994, p. 13 4.

46. Baer & Villela,1994, p. 13, also argue that
"if a large proportion of the privatised firms
are owned by their workers and/or retirement
funds of workers in different industries, one
of the sources of uneven distribution of in-
come flows may be reduced".

47. According to Caldas, 1995.

48. See also Baer & Villela, p. 13.
 49. Production of steel in Brazil was in the past largely for domestic consumption, but by 1990 half was going into exports and the proportion rose in subsequent years as domestic demand fell. Steel companies were among the first to be privatised: Usiminas in 1991 and Piratini, Acesita and Cosinor in 1992 (EIU, 1995, p. 29).
 50. Pinheiro and Giambiagi, 1994, p. 737, 751.
 51. The point on the balance of payments really needs to be considered, but what matters is not the "balance of trade in minerals" by themselves, but rather of that in the context of an overall payments problem (not just trade it is important to consider debt repayment too); it is risky to lose control over a potential source of expanded export revenues.
 52. When studying privatisation it is important to distinguish between: 1) denationalisation, 2) liberalisation of state monopolies, 3) deregulation, and 4) contracting out of services (Fine, 1990).
 53. Transnationals are already the main owners of these technologies; this would only increase their monopoly power.

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