DEBATE

The CVRD privatisation a hard victory for the government

by Iran F. Machado

The discussion about the privatisation of the Brazilian mining giant CVRD started in the latest issue of Raw Materials Report. The editors hope to publish new inputs in the future, when the outcome of the CVRD deal becomes clear.

Professor I.F. Machado is with the Mineral Resources Policy and Management Department (State University of Campinas), Instituto de Geociencias - UNICAMP - 13083 - 970 Campinas, SP - Brazil. Fax: +55-19-239 1562.

When Brazil started its privatisation programme, the underlying reasons were the public debt, mismanagement, misuse of political influences and other malaises that plagued most state-owned companies. In the specific case of CVRD the fundamentals of its 55-year history do not justify the official determination to take this action. To use this privatisation as a landmark to international investors being a proof of Brazil's openness to the globalised economy would seem childish and reckless. Every maladroit step taken by the government in this issue indicated that they were strongly compromised to transfer a very valuable asset – the crown jewel – to members of the Brazilian elite in a very authoritarian way, as usual. The number of legal suits against this privatisation (over 120) was a measurement of the government's failure to obtain popular support and outright approval.

Overview

In the privatisation of CVRD – the biggest privatisation so far – the Brazilian government made a number of mistakes that could be avoided, had the government planned cautiously this operation prior to the official announcement to the interested parties and to the society as a whole. The former experience gained by privatising steel, petrochemical and fertilisers plants do not essentially apply to the peculiarities of a giant mining enterprise. From March 1990 to March 1997 the government privatised 52 state-owned companies, collecting 13 691 MUSD. For this total, 41 per cent relate to the steel sector, 20 per cent to petrochemical plants, 20 per cent to the electrical sector, 11 per cent to railways, 3 per cent to fertilisers, and 5 per cent to others.

Many sectors of the Brazilian society have been deeply disappointed with the present Cardoso Administration for several reasons, to name a few: (1) Banco do Brasil had record losses in 1995, 4 MBRE (million cruzeiros) and 7 MBRE just in the 1st semester of 1996[1]; (2) The Proer – a program designed to rescue bankrupt financial institutions – burnt 20 000 MBRE in the last 3 years; (3) The Minister of Administration complains that frequent frauds in the federal government payroll amount to 1 500 MBRE every year; (4) The endless sequence of scandals since 1992 involving corruption in a circle of politicians who escape very successfully from punishment inside and outside the Congress.[2] Brasilia is reluctant to acknowledge the growing intolerance that society is feeling, anxious for social changes that will minimise dreadful inequalities. The success of "Plano Real" is a positive accomplishment, but our citizens do not forget that it came after six other stabilisation plans that failed since 1986. Retired CVRD top executives warn that the company will rather soon augment its profitability due to: (1) end of amortisation of Carajas mine debt; and (2) start of production of several big and profitable gold mines. When this occurs, the new controllers and the government itself will certainly proclaim that this success is explained by the privatisation process, what is unfair.

Through the operation of CVRD in the last 55 years, Brazil had a pivotal role in supplying iron ore to the most important industrialised economies in the world. In 1952, CVRD exported 1.5 Mt per year, a quantity that it exports every week today. In the early 1980s, when Carajas iron project was being commissioned, the World Bank financed this project not only because of the Brazilian interest in such an endeavour, but also due to its positive impact on the reliable supply to the steel industry world-wide at fair prices, for many decades to come.

In the aluminium sector, CVRD played an important role when the government in 1974 persuaded Alcan to establish a joint venture – Mineraçao Rio do Norte – with CVRD and other companies to exploit the rich bauxite deposits in the Amazon. Such a project laid the foundations for the further establishment of

Albras and Alunorte, both with Japanese interests, to produce aluminium and alumina.

With the involvement of Japanese companies it was possible to create CVRD subsidiaries to operate in the pulp industry, not far from the ocean terminal serving the iron ore mines, located in Espirito Santo state.

The last achievements of CVRD were performed in the gold production area, where it emerged as a neophyte in the late 1970s and is now the largest producer in Latin America (18 t in 1996), surpassing the long-established Anglo American mines output in Brazil.

CVRD is a complex encompassing 54 companies, with 15 483 employees, and gross sales reaching 2 970 MBRE (2 800 MUSD) in 1996. Being responsible for 26.3 per cent of the Brazilian mineral output value (1995 figures), it is the largest exporting company in Brazil, having contributed with 1 460 MUSD in the same year. In addition, is one of the few global systems of national origin, able to establish partnerships and attract foreign investment, deserving the title of "crown jewel" among all state-owned enterprises. In 1996, CVRD funded development projects worth 26 MUSD in many municipalities in nine different states. Complete data on CVRD are available in Internet at the site: www.cvrd.com.br. Being a success story in the long list of problematic state-owned enterprises, the Brazilian rulers were in the past reluctant to put CVRD in the privatisation line. When asked about this subject in a Senate hearing in September 1991, the President of CVRD at that time, Mr. Wilson Brumer, stated that "it should not be wise to privatise CVRD". The same kind of arguments explain why Chile did not privatise Codelco (the giant copper producer), and Mexico did not privatise Pemex in the aftermath of its economic crisis. The so called "raisons d'État" are sometimes raised by responsible government authorities protecting their national interests. In Brazil, it did not work this time.

Unfortunately, during the campaign for the CVRD privatisation the government tried to explore some false beliefs and half-truths accepted by the minds of misinformed citizens and orchestrated with financially dependent media organisations. There was a disproportionate emphasis on the "low-tech" features of the mining industry as such, even knowing that CVRD is a modern company, using hi-tech equipment, devices and processes when appropriate. Thus, according to the official speech, Brazil should abandon its effort in the production of raw materials, because the modern views lead to more technology-intensive areas. However, as a developing country, Brazil fails to achieve brilliant results in high-tech goods or services simply because it lacks tradition, financial resources, and more importantly, its investments in R&D lag behind any developed country. Culturally, to some extent, Brazil has more resemblance to an Arab country, than to a European one. In other words, the leading entrepreneurs with industrialist vision are outnumbered by those characterised by a simple or primitive merchant mind. This also means that our entrepreneurs are more risk-averse than the average in the developed countries. Some state-owned companies reacted to this widespread philosophy in the past, resulting CVRD and Petrobras thereof. This cultural problem could also explain why Brazil will always be closer to obtain a Nobel prize in literature, than in physics, chemistry or medicine. Everybody in the scientific community knows that and will not be upset by this rough statement. Nowadays, the Brazilian research community is struggling to survive as individuals, and to get funding for projects in an environment where the competition with leading international institutions grows faster than ever.

An old-fashioned mining law

As a mineral producer, CVRD has to bet its future on the availability of world class mineral reserves, and has obligations to the Brazilian mining laws. It is well known that our laws have been quite lenient in favour of mining enterprises, as compared to other countries. Regarding reserves, CVRD accumulated during decades of hard work an enviable stock of reserves of iron ore, bauxite, gold, manganese, copper, potash, and kaolin (coating-grade). The figures for proven and probable reserves 31 December 1995 – presented to the Stock Exchange Commission, in the US – are: Iron ore 13 400 Mt, gold 106.4 t gold contained, bauxite 678 Mt and copper 994 Mt.[3]

Being the Amazon an untapped area for a huge number of mineral deposits, there are some unique situations. For instance, CVRD has iron ore reserves and resources sufficient for more than 400 years of continuous exploitation at present rates. This awkward point will be discussed further.

Regarding the Brazilian mining laws, the major pitfalls against the government itself are the following:

- Number of exploration permits allowed to a single company: virtually infinite, because of the possibility to create subsidiaries to apply for exploration permits; so, CVRD subsidiaries control 16 million hectares (61 776 sq. mi.) all over the country, approximately equivalent to four times the territory of Rio de Janeiro state;
- Duration of mining concessions: no limit whatsoever; as long as reserves exist, the mining company is entitled to exploit them. This privilege is against the procedures adopted by modern mining legislation in many countries, where the concessions last 25 or 30 years only. When necessary, the concession may be renewed over and over. What is the rationale of this time period? It is in tune with the length of time commonly used for economic analysis of mining projects (cash-flow analysis). After 30 years the present value of any asset, including mineral reserves, approaches to

zero. Thus, whatever exceeds 30 years is considered to be a public good, being owned or appropriated by the State, and not by the company.[4]

- Mine closure: the laws have no recommendations regarding the submittal of a project, nor the financial assurance necessary for the closure. If Brazil is committed to be modern, this should soon be inserted in our mining laws.
- Compliance with environmental laws: in spite of the fact that our Constitution imposes that a mining company should restore the mine site, it is seldom to witness an enforcement or a drastic measure against a large mining company charged with environmental degradation. Similarly, in the Brazilian way of life, white-collar crimes are not punished by the establishment.

These features raised in the past some criticism from several stakeholders. Some years ago, the World Bank criticised the Brazilian mining laws arguing that state-owned companies possessed huge reserves, while part of them could be available for private companies, if Brazil adopted a fair legislation. This would mean more competition, more benefits for the Brazilian economy and for the international market as well. Another criticism comes from new foreign mining companies eager to invest in Brazil, after the Constitution amendment. According to some sources, most of the areas with a high potential, mainly in the Amazon, are controlled by CVRD and three other big corporations, through the gimmick of a multitude of subsidiary companies aiming at exploration. To be successful in the present gold rush, a lot of foreign companies, junior or senior, desperately need open areas to do exploration work.

Face-saving approaches

When asked about the reasons why the government would privatise CVRD, the BNDES authorities, on behalf of the Brazilian Privatisation Council, always quoted that dividends paid to the Treasury in the period 1988–1995 were in average only 2 per cent a year. They never mentioned that Brazil always kept a sound business climate with Japanese and German companies, attracting investments from abroad, partly based on good contracts and relations maintained through the Board of Directors of CVRD.

To get rid of accusations that CVRD could be unbundled or change hands continuously after the bid, the government decided to use the concept of "golden shares' to protect its interests in CVRD for the coming five years. Unfortunately, the golden shares give a coverage just for the iron ore and transportation units, leaving the other business units free at discretion of the new controllers.

When the edict was being ultimated, there was a lot of criticism about the exclusion of added value to the CVRD floor price related to recent copper-gold discoveries in the Amazon. Trying to save face, the government devised a solution where debentures would be kept in BNDES hands to share future profits to be derived from these mineral reserves in a 50:50 joint venture.

The privatisation of CVRD caused an immense anger in politicians, lawyers, earth scientists, other intellectuals, military, union leaders, students and even some church authorities. This process should be subject to scrutiny and thorough debates that never occurred. In Congress, where there are always tradeoffs to approve bills and reforms hiding suspicious bargains, the discussion never got in-depth coverage. The stakeholders that oppose the government in this privatisation are aware that a substantial part of the transactions will be used to finance political campaigns in the future. It is not true anymore that leftist ideology is behind this opposition. The Brazilian society is getting more and more impatient with the neglect of ethical principles prevailing in the political game. At the eve of the privatisation, polls in São Paulo city revealed that 43 per cent of the population were against, and 38 per cent pro. Having in mind that São Paulo population is more pro-business than other regions in the country, the polls show that the reaction to the sale of CVRD was quite unpopular.

Under pressure from politicians in the Congress and some governors, the Minister of Planning created the Economic Restructuring Fund, aimed at boosting agriculture, consumer goods production, infrastructure, and so on. Half of the funds collected by CVRD privatisation will be directed to this fund. The other half will be used to minimise the public debt.

The price tag

Several estimates were made to assess the CVRD sale price, based on its assets and also on the shares prices at the time of the privatisation. Unfortunately, it was observed as a general rule that the government had in mind to act as a buyer and not as a seller. Two consortia of consultants were hired by BNDES to accomplish this task.[5] One of them – Associaçao Vale Brasil – led by Salomon Brothers, did an estimate of 11 300 MBRE, but made an individual valuation of 13 400 MBRE (12 664 MUSD) broken down to iron ore mines and transportation (railways, seaport terminals and shipping division – 1 800 km of railways and 45 ships) 7 000 MUSD, pellet plants 258 MUSD, gold mines 1 500 MUSD, steel interests 1 000 MUSD, bauxite/aluminium 1 040 MUSD, pulp & paper 801 MUSD, projects 1 000 MUSD and other assets 65 MUSD.

The other consortium, led by Merrill Lynch made an estimate of 10 170 MBRE. Other estimates were made by Morgan Stanley – 11 570 MBRE, and by Bozano Simonsen (a Brazilian bank) – 10 530 MBRE. Based on the average of share prices negotiated in the last 90 days, BNDES preferred to use the figure of 10 360 MBRE as the floor price for the auction. It should be reminded that: (1) estimates made by Japanese investors back in 1994 led to the price of 18 000 MBRE; (2) estimates disclosed by the Vice-President of CVRD at that time were in the range of 16 – 18 000 MBRE. In the first months of 1997, CVRD announced the discovery of several gold deposits, one of them considered to host 500 tonnes of metal (Alemao body). BNDES ignored cynically these facts and transferred the responsibility to the market to incorporate them or not. As the share price did not react to these facts, so was the government. However, a very peculiar point needs to be considered. Some important interested parties in the bid, such as CSN, Previ, Votorantim, Petros and Funcef were previous CVRD shareholders. This means that an increase in the share price at the eve of the bid should bring a boomerang effect on it, what would be highly undesirable for them.. This way, no recent gold discovery would be welcome for the sake of a happy end to the bid. In Brazil, the reaction of the financial market was that the floor price was a trifle, according to some sources. Trevisan Consultores Associados, a prestigious Brazilian financial consultant made a judgement that the market was expecting a value 30 per cent to 40 per cent higher. They saw no reason why CVRD value could go down from 14 400 MBRE in November 1994 to 10 360 MBRE in March 1997, after the release of new discoveries in the Amazon. Under request of a committee of Congressmen, a group of 22 researchers from the Federal University of Rio de Janeiro elaborated a report based on the data room of BNDES, complemented by a visit to the CVRD major mines. Their conclusion was that the mineral deposits were undervalued by Merrill Lynch at least for 2 050 MBRE Global Investor, from Euromoney, brings in its January 1997 issue, some revealing comments from several international analysts.

Bozano Simonsen's Pinto:"CVRD plays a strategic role in the nation. And it's different from the first privatisations in that it's a well managed company."

Gartmore Investment Management's Ehrmann: "The market has not effectively valued CVRD but most people are aware of what assets it has". His estimate is that CVRD is still 30 per cent undervalued.

Kleinwort's Kleyweg: "A large part of CVRD's possible hidden value lies in its mineral reserves. There is a huge amount of potential there in terms of development of the reserve base and what that could offer. The latest discovery is equivalent to 20 million ounces of gold. That is a lot of gold."

The most recent data released by Mr. Anastacio Fernandes, CVRD's Vice President, are very encouraging too. The 1st. quarter's gross profit in 1997 was 76 per cent higher than in 1996 (213 MUSD versus 121 million last year). The profit margin increased from 20 per cent to 29 per cent. The output of iron ore including pellets was raised 3.3 per cent, and the prices increased 6.6 per cent in Asia, a very important market. Costs raised 4.8 per cent, but lower than the revenues.[6]

Summarising, from a wide span of estimates, ranging from 18 000 to 10 170 MBRE, the government chose the modest figure of 10 360 MBRE. We might conclude that this floor price was set according to the desire of both consortia, neglecting the supposed will of the government to collect funds to be used in its social programmes related to education, health, infrastructure, and so on.

Table 1. Compositon of the Valecom and Brazil consortia. (per cent participaton in holding)

Valecom Consortium		Brazil Consortium	
Votorantim Group (Brazilian conglomerate)	41.5	Companhia Siderurgica Nacional – CSN	45
Anglo American (South Africa)	41.5	Previ (Banco do Brasil Pension Fund)	?
Caemi Group/Mitsui	8.5	Petros (Petrobras Pension Fund)	?
Japanese pool (Nippon Steel, NKK, Kawasaki, Sumitomo, Kobe, Nisshin, Nakayama, Nissho Iwai, Mitsubishi, Itochu, and Marubeni)	8.5	Funcef (Caixa Economica Federal Pension Fund)	?
Sistel (Telebras Pension Fund)	?	Funcesp (CESP Pension Fund)	?
Centrus (Central Bank Pension Fund)	?	Nations Bank	10
		Opportunity Bank	10

The contenders

Two consortia were formed to participate in the bid slated for April 29: Valecom and Brazil Consortium. In the very beginning of the negotiations to form the consortia, Votorantim and CSN were supposed to bid altogether. After some weeks though, serious conflicts appeared due to different management styles, and they were split into two consortia. The first is led by Votorantim, a Brazilian conglomerate with interests in cement & lime, aluminium, zinc, nickel, pulp & paper, steel, chemicals, banking, orange juice, fluorspar and other products. The second consortium has CSN, a former state-owned company, as its leader. While Votorantim is a traditional industrial concern dealing with natural resources, CSN controllers came from the textile industry, are less conservative and more business-driven than Votorantim. Inasmuch as this seems to be a virtue, CSN would be apparently more vulnerable to future unbundle of CVRD units or affiliates, or even take-overs.

Votorantim[7] was established in 1917, as a small company in the textile sector, owned by Antonio Pereira Ignacio, a Portuguese immigrant, who was a trader in Brazil since 1892. The company started to flourish in 1924 through the management of Jose Ermirio de Moraes, his son-in-law, a young mining engineer graduated by Colorado School of Mines. The company grew with the construction of a cement plant in Sorocaba, São Paulo, in 1933. Eight years later, they diversified into to the aluminium industry through the establishment of Companhia Brasileira de Aluminio-CBA, the major domestic privately-owned producer. Nowadays, Votorantim is still family-owned and has assets of 7 700 MUSD and sales reaching 4 200 MUSD (1995 figures).

CSN has assets of 4 200 MUSD and is now owned by: Vicunha Group – 13.69 per cent of shares; Previ – 12.72 per cent; CSN Pension Fund – 10.83 per cent; Employee's Investment Club – 9.77 per cent; CVRD – 9.55 per cent; Bradesco Bank – 9.55 per cent; ADR's – 4.06 per cent; Itau Bank – 2.55 per cent; Emesa – 1.8 per cent; and others, 26.20 per cent. As the textile sector got mature, losing profitability, they acquired the control of CSN in 1993, when its privatisation occurred. Its participation in the mining industry prior to the acquisition of CVRD was very modest, producing iron ore, manganese and limestone for internal consumption. CSN has also plans to diversify into the energy sector, according to some sources.

The composition of both consortia is shown in Table 1.

The auction

At 9:00 AM, in Rio de Janeiro Stock Exchange, the government authorities tried nervously to start the auction to sell 41.7 per cent of the voting shares of CVRD. Just few minutes later, the session was stopped due to a court injunction. Since the privatisation programme started in Brazil, for the first time one auction had a delay of eight days until it really could happen. Outside the Stock Exchange building there were over 2 000 demonstrators trying to halt the transaction in vain. The crowd had to fight against policemen, horses and dogs, while an army of 600, yes 600, lawyers employed by the federal government was ready to take actions against the legal suits filed by civil rights organisations and individuals. In addition, BNDES hired 120 well-paid lawyers to be standing by to help the government in this task. In the meantime, four executive jets were prepared to take off to remote places in Brazil where the local courts would be busy with the examination of those suits against the auction. At last, on May 6 at 5:47 PM, the auction ended with the offer of USD3 150 MUSD (32 BRE per share) by Brazil Consortium. The premium of 19.99 per cent (524 MUSD) above the floor price was considered too low by many analysts, and, surprisingly, very high by the government authorities. The evolution of the ownership of CVRD stocks is shown in Table 2. After this result, some analysts conceded that CVRD went to the wrong hands, mainly because: (1) CSN will need to contract loans which will put a burden on its balance sheet; (2) The synergy would be greater with Votorantim than with CSN; (3) The growing interests of CSN in the steel sector offer more risks of monopolistic behaviour; and (4) the plans of Votorantim and Anglo American did not anticipate the unbundle of the company, what is doubtful for CSN.

The legal suits

More than 120 legal suits were raised against the CVRD auction in the last days of April and first days of May. Some were rather bizarre, dealing with minor faults contained in the privatisation edict, but a dozen were raised by Congressmen or renowned lawyers who put the government in a difficult situation. The edict was considered by them to be against the Constitution principles and/or common laws, under several aspects [8]:

1. The reasons for privatising CVRD were not properly detailed in the edict;
2. The company was definitely undervalued;
3. The mining concessions have no time limit;
4. There are strategic minerals in the concession areas (uranium, niobium, titanium, etc.);
5. Some exploration permits lie at the border of neighbour countries, so that foreign companies are forbidden to participate in CVRD composition, according to the Brazilian laws;
6. The fair assessment of economic value of some mineral deposits turned out to be impossible, as detailed information was lacking; thus, you cannot afford to sell what you do not really know; and
7. The "golden shares" granting special voting rights to the Brazilian government right after the bid do not exist in our legislation; this will give the controller the power to render them useless in court.

Putting high pressure on court members in backstage, the government succeeded in removing the preliminary legal suits and made the auction to happen on May 6th. However, some lawyers believe that

Table 2. Stock distribution in CVRD (per cent).

	Berfore the bid	After the bid	After the sale to emplyees (Investable)
Treasury/BNDES	76	36	32
Pension funds	15	15	15
BNDESPar/FPS/INSS	5	5	5
Minor shareholders	4	2	2
Major shareholders	–	42	42
Investvale	–	–	2

in some years from now, the new controllers of CVRD might face insurmountable problems if the Supreme Court recognises the errors of BNDES, the agency in charge of the supposedly illegal auction. Unfortunately, our history has a long record of decisions taken by the Executive that were always approved by the Supreme Court some years later. In our culture, the theory of the "fait accompli" has shown to be irrevocable.

Final remarks

CVRD and Petrobras were always the most successful of all state-owned corporations established in Brazil. The most prominent foreign company interested in the CVRD privatisation was Anglo American, from South Africa. It joined forces with Votorantim Group and a Japanese pool of leading companies, but failed to achieve its goal. It is very likely that the gold mines and undeveloped deposits have a very strong appeal to the South African concern, after the transfer of the political power from the white minority to Mandela, ending the long lasting apartheid. Thus, Brazil would or will be the ideal relocation for Anglo: world class gold deposits, political climate very favourable, economic future rather promising, and environmental legislation very flexible and tolerant.

Some analysts were surprised with the absence of American and Canadian companies in this dispute. Only Alcoa entered one of the consortia (Brazil Consortium), and went away the day after. It sounded as a wise strategic move for Alcoa, taking into account that the privatisation was very unpopular, and it could affect its image in the US and abroad. Secondly, it can still negotiate the acquisition of a major chunk in the aluminium interests of CVRD after the privatisation, in a second round. In general terms, it sounds that American and Canadian companies avoided to participate in an event that raises profound nationalist reactions from many segments of the Brazilian society. Instead, they prefer to participate in other kinds of privatisation opportunities, such as telephone or energy companies. In these cases, the reaction is much milder and they will not be so exposed to undesirable criticism or hostility.

Soon after the privatisation, the major shareholders are free to unbundle the company in its different business areas: steel, manganese, aluminium, gold, copper, pulp & paper, and so on. The only restriction applies to the iron ore unit during the first five years, so until the year 2002. All the spokesmen of the winning consortium state that CVRD will keep the present profile and structure, but everybody knows that they are really getting to know all the details of the management of this giant, before they decide what to do in the coming months or years.

In the Brazilian business culture there is no easy acceptance of the concept of antitrust legislation as a positive one for the sound functioning of capitalism. For instance, some years ago Ford and Volkswagen decided to merge their interests in Brazil, giving rise to Autolatina. This outcome was considered quite normal by the government and leading Brazilian entrepreneurs. This perception should change for the sake of our economic system, assuming a more mature behaviour. In this respect, at the present stage of the privatisation program, including the steel sector, some stronger measures should be taken to protect the smaller companies and the consumers as well. CADE – the agency in charge of these issues – seems to have a too low profile for the corrective actions that will be needed.

Some scenarios could be drawn pertaining the future of CVRD. Alcoa, Alcan, Reynolds and Gencor will likely try to acquire CVRD's interests in the aluminium sector. Gold will be irresistible for Anglo American and Gencor, but also for Barrick, Placer Dome or Newmont. Copper is already tied to Anglo American in Salobo project, and supposedly will not be a star due to the burgeoning opportunities found in Chile. Kaolin deposits, a very new source of revenues to CVRD, will attract the attention of English China Clays and RTZ, both from UK. Pulp and paper interests can be transferred to Suzano, a traditional company in this sector and nowadays a partner of CVRD; another possibility would be an acquisition by North American or Scandinavian corporations. And last, but not least, the huge iron ore mines and virtually infinite deposits. Japanese consumers are now more vulnerable than before the privatisation. So far, the dialogue was between their big steel companies and the Brazilian government. This meant a high level of trust. The relation of dependence changed dramatically, shifting to business as usual. In 2002 the Japanese giants – steelmakers and trading companies – of the size of Nippon Steel and Mitsubishi, could feel the temptation to do aggressive moves to buy the iron ore business units. Why not?

Notes

1. 1 USD equalled 1.06 BRE (Brazilian cruzeiro) at the time of the privatisation.
2. Fonseca, Francisco A doação da Vale do Rio Doce Correio Braziliense, 4.03.97
3. Global Investor CVRD to test faith in Latin America Euromoney Publications, December 1996/January 1997 http://emwl.oyster.co.uk/contents/publications/globalinvest/gi.96/gi.96.12.1b.html
4. An example worth of consideration: the rail concessions for the CVRD iron ore mines have a limit of 30 years. For the sake of comparison, one of the biggest civil engineering projects of all times, the Panama Canal was defined in 1903 as a perpetual concession to the U.S. government, but in 1977 it was renegotiated until 1999.
5. Vale do Rio Doce – Caderno Especial – Folha de São Paulo, 27.04.97.
6. Ordonez, R. & Fadul, S. É dada a largada na briga pela Vale O Globo, 25.04.97
7. Fernandes, Francisco Os maiores mineradores do Brasil Brasília, CNPq / Coord. Editorial, 1982, 3v.
8. Melo, Liana A empresa vale mais Isto É, 12.03.97 ■