

The World Bank Loan to the Brazil's Carajas Iron Ore Project: Great Lakes Concerns

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THE WORLD BANK LOAN TO THE BRAZIL'S CARAJAS

IRON ORE PROJECT: GREAT LAKES CONCERNS

Introduction

The Great Lakes Commission at its annual meeting in Pittsburgh (October 1982) requested that the staff investigate the World Bank's loan application procedures and project appraisal process, with particular attention to the Brazilian Carajas iron ore mining project. The recently approved Bank loan of $305 million will be used to help finance the massive undertaking which is expected to cost $5 billion and begin production in 1985. The resulting staff effort explores the concerns expressed during Commission discussion of the project loan. Issues such as the extent of U.S. government financial contributions to the project through World Bank participation and questions regarding loan subsidization are addressed. Another matter investigated by the staff was the feasibility of an "early warning" system by which proposed loans could be identified early enough in the application process for coordinating a timely response if necessary and practical. The paper includes an overview of World Bank structure and loan approval procedures, a discussion of the Carajas project and loan arrangements, comment on an early warning system, a list of summary questions pertinent to the topic, and a list of references.

World Bank Overview

The International Bank for Reconstruction and Development (IBRD), commonly known as the World Bank, was established during the United Nations Monetary and Financial Conference, convened at Bretton Woods, New Hampshire, in July 1944. The International Monetary Fund (IMF), the IBRD's sister institution, was created during the same conference. The Bank's Articles of Agreement were ratified in December 1945 by all participants involved in the conference except the Soviet Union, and the Bank began operations during June 1946. Bank headquarters were established in Washington, D.C.

The Bank was created as a new type of international investment institution to make or guarantee loans for productive reconstruction or development projects. It was to do so by using its own capital (provided initially by member governments) and by mobilizing private capital. The Bank's share capital was structured so that risk was shared by all member governments, but in proportion to their economic strength. Although the World Bank is authorized to call upon member governments for capital funds, the Bank instead has relied mainly on the world's private capital markets for the bulk of its financial resources.

The World Bank has established two affiliates to oversee areas of financial activity not deemed to be within the mainstream of the IBRD's purview. The first of these affiliates, the International Finance Corporation (IFC), became operational in 1956; its primary responsibility is lending to private businessmen in developing nations. The second, the International Development Association (IDA), became operational in 1960; the IDA is the Bank's "soft loan" window, providing low interest, long term "credits" to the extremely poor developing countries. Together these three institutions, along with the International Centre for Settlement of Investment Disputes (ICSID) which they

sponsor, are known as The World Bank Group. It is important, however, when discussing actions of "The World Bank," to specify clearly which institution actually undertook the action. While united under one banner, the IRBD, IFC, and IDA are operationally independent and raise their financial resources separately.

For a nation to become a member of the World Bank, it must join the IMF. Then consultations between the prospective member and the Bank fix the size of the country's subscription--which is linked to the member's financial participation in the IMF. Upon joining the World Bank, the country must pay ten percent of its subcription into the Bank: one percent in gold or U.S. dollars, nine percent in its own currency. The remaining ninety percent of the member's subcription is "on call" to meet Bank emergency needs (e.g., a loan default). This reserve has never been utilized, but rather, serves as a guarantee to investors of the World Bank's financial creditworthiness and integrity. Currently, 144 countries are Bank members, subscribing $43.165 billion--of which only $4.317 billion is actually paid in.

Voting within the World Bank is linked to the size of the member's subscription. Each member receives 250 votes plus one vote per $100,000 (1944 U.S. dollars) of subscription. For example, Afghanistan's subscription is $30 million; thus it controls 550 votes, 250 plus 300. Measures are carried by simple majority--there is no "veto power." Obviously though, the world's major economic powers control the majority of votes within the World Bank--the United States alone holds some 23 percent of the total votes--so that a few developed nations acting together can exercise a sort of defacto veto on any matter.

Actual voting power is invested in the World Bank's Board of Governors. Each member appoints one governor, and he votes that country's votes as a block--vote blocks can never be split. The Board of Governors meets once each year in Washington, D.C. to decide overall Bank policy; important interim votes are taken by mail or cable.

With the exception of certain powers specifically reserved to them by the World Bank's Articles of Agreement (e.g., decisions on membership, allocation of net income, changes in the Bank's capital stock), the Board of Governors delegates authority for daily operations to the World Bank's Board of Executive Directors. Directorship is a full-time position, and the Directors meet together at least once a week to monitor Bank operations. There are twenty Executive Directors; five permanent boardmembers appointed by the five largest Bank members, with the remaining fifteen positions filled at large by other Bank members.

Voting by the Executive Directors is weighted in the same manner as in the case of the Board of Governors, except that each of the fifteen at large positions may represent more than one country. Again, no vote-block may be split. The Executive Directors vote to elect the president of the World Bank, who is responsible for conducting Bank business. Only the president may propose loans, although the Executive Directors (and the Governors) set the general Bank policies within which the president must operate. Although the Bank president has been an American since the Bank's inception, there is no formal requirement in this regard.

World Bank Operations

The IBRD, the largest affiliate of the World Bank Group, raises its funds on world capital markets by selling World Bank Bonds. The Bank's bonds are rated AAA in U.S. bond markets, and carry either similar ratings in foreign markets or are equivalent to bonds of that nation's government or central bank. The Bank sells these bonds both on the open market through private financial intermediaries or directly to central banks. The bonds are guaranteed by the Bank; however, they are general obligations and not secured by the pledge of specific assets. Those bonds sold publicly generally carry a ten to thirty-year maturity; those offered privately to central banks generally mature in two to seven years. Interest paid on Bank bonds is equivalent to the market rate on similar securities.

The World Bank (IBRD) does not, as is often maintained, raise its funds by member-nation contributions. The frequently held notion that the U.S. gives money to the World Bank for loans to developing nations is largely unfounded. Members do make voluntary contributions to the Bank from time-to-time; however, these contributions are not the Bank's primary source of funds. Part of the confusion over this issue probably stems from the fact that the affiliated IDA does raise most of its loan funds through member contributions. These contributions, termed "replenishments," are quite separate from World Bank operating funds, and vice versa, and the Bank's Articles of Agreement prohibit any comingling of funds.

The World Bank has built up its liquidity position over the years by borrowing (selling bonds) substantially in excess of current requirements at times when funds were available at reasonable costs and terms to maturity. The general procedure has been to borrow funds, when available, in anticipation of future requirements. Bank issues are currently held by ninety-one countries, and the Bank is a major factor in world capital markets. It is the largest non-resident borrower in virtually all nations where its issues are held. Presently, the Bank of Japan is the largest single holder of World Bank securites.

The World Bank's lending rate is variable, reflecting the Bank's average cost of borrowing money, but is uniform for all countries. This is because the Bank wishes to avoid inferences about political stability or economic soundness of loan recipients. The Bank charges interest only on that part of the loan which is disbursed, although it does apply a small commitment charge on committed but undisbursed funds. The Bank tailors the terms of the loan to the specific borrower's ability to repay. Additionally, the Bank may capitalize interest charges on the loan during the period of the project's construction, including the interest cost during this period in the amount of the loan. Altogether, these practices are not much different from terms offered to borrowers by private banks.

Project Appraisal Procedure

The Bank lends to developing countries for a variety of projects. Loans help finance: agricultural improvements, including irrigation and drainage projects, the provision of agricultural credit, livestock programs, forestry, fisheries, agricultural research and crop development; industrial development;

or infrastructure, including transportaion and public utilities. Other types of lending include loans for education, family and population planning, and tourism.

Since the World Bank's ability to raise funds in international capital markets depends largely on the soundness of its investments, it places great emphasis on maintaining a sound financial position. (It should be noted that no borrower has ever defaulted and that the Bank has earned a healthy profit each full year of operation.) To facilitate this aim, the Bank has instituted a six-step "project cycle" oversight process: identification, preparation, appraisal, negotiation, implementation-and-supervision, evaluation.

The Bank maintains an extensive and ongoing relationship with most developing countries. It is thus in a position to help identify and prepare potentially sound and beneficial projects. In other cases, the individual developing country may bring a potential project to the Bank's attention. In such cases the Bank prefers to engage in a series of informal exploratory discussions with the country before a formal loan request is made. During the cycles of discussion throughout the process of identification and preparation, the project may undergo significant revisions in scope and detail as the Bank staff brings its technical expertise to bear. Providing ongoing technical assistance is an integral part of the Bank's work.

Once a project has been identified and prepared, the World Bank staff begins its actual appraisal. First, it establishes the prospective borrower's creditworthiness. The Bank defines this as the borrowing nation's ability to service external debt without imposing an undue strain on its internal finances or its external balance of payments. If the Bank feels that the limit of creditworthiness has been reached, it will refuse the loan. However, it may recommend that the nation apply to the IDA for a "soft loan" to finance the project.

The Bank then considers the selection of the project. Since development funds are in short supply, the Bank applies available funds to the most productive uses. It selects projects that promise to make a maximum contribution to growth and development of the recipient country. Toward this end, the Bank insists on a balance between economic or productive projects and social projects.

The Bank arrives at a decision about project selection by means of a project appraisal. Its appraisal process focuses on six principal areas. The first is the project's economic aspects. The Bank performs market and feasibility studies to discover whether the project will earn a reasonable rate of return. It also estimates and considers both the project's direct and indirect benefits. A project is considered on its economic merit from the point of view of the applicant country only, although the Bank may encourage economic integration between countries where feasible. But to avoid infringing on the priority of national sovereignty, the Bank does not insist on such integration.

In assessing the project's economic aspects, the appraisal process focuses on the project's technical aspects. These include the scale of operations, the availability of different factors of production, the project's location in relation both to markets and sources of supply, and the proposed

construction schedule. Cost estimates are thoroughly investigated. Further focus centers on the project's managerial aspects. The Bank considers the quality of management and whether it will be private or public (government). It also takes management flexiblity into account. In this area also, the Bank evaluates the project's organizational aspects, such as the adequacy of internal controls and procedures.

The Bank then analyzes the project's commercial aspects. These include the arrangements for construction and the procurement of raw materials, labor, and power. The object is to assure that the project returns the best value for the money spent. To this end, the Bank often insists on competitive bidding for construction contracts.

Finally, the Bank appraises the financial aspects of the project. It estimates the amount and sources of funds necessary to bring the project to fruition. It evaluates the prospects for reinvestment and maintenance and requirements for working capital. The Bank's objective is to prevent unforeseen shortages which would imperil the project's overall chances for success.

With the results of these exhaustive evaluations in hand, the World Bank staff then decides on the merit of the loan application. One critisism of the Bank has been that by the time it has completed the lengthy project investigation it is essentially committed to the project, having invested too much time, effort, and financial resources to withdraw. As one author reports:

> "...the close and prolonged relationship between the staff of the Bank and representatives of the borrowers through the various stages of the project cycle means that by the time a project has met the tests of appraisal, the Bank is all but committed. A project loan recommended by the president and staff of the Bank has never been rejected [by the Executive Directors]."

However, the nature of the IBRD's relationship described is not unlike any usual long-term "banking relationship."

The project cycle then enters the negotiation stage. Here the Bank and the recipient country determine and define the legal conditions of the loan contract. After these matters are settled, the loan can be disbursed.

The implementation-and-supervision stage takes place after the loans are approved and while the project is underway. At this point the Bank makes a decision concerning its participation in the project. Usually, the Bank will merely insist on a resident representative. In others cases, the Bank will require much more intimate involvement in the project's day-to-day operations. Ideally, the Bank attempts to strike a balance between becoming too involved in the project's management versus too detached to safeguard its investment properly.

Finally, the project is evaluated. This takes place after the project is completed and the funds disbursed. It serves as a check on World Bank appraisal procedures and may help identify additional projects for consideration. The latter is one part of the Bank's ongoing relationship with its clients.

Issues in the Carajas Project

This section of the paper discusses the World Bank's involvement with the Carajas iron ore project in Brazil. It is an analysis of some of the issues surrounding the Great Lakes Commission's discussion of the matter at the Pittsburgh annual meeting.

Project Description

The Carajas iron ore project, operated by Companhia do Vale do Rio Doce (CVRD), consists of the development of an iron ore mining complex, a deep water port near the city of Sao Luis in the Northeastern State of Maranhao, and a connecting railroad approximately 890 kilometers long. It also includes the development of a town at Carajas to accommodate an initial population of about 10,000, new housing and supporting facilities along the railway line, environmental and Amerindian protection components, and a staff training program. Total cost is estimated at $5 billion.

Financing for the project is from both domestic and foreign sources. Domestic sources include CVRD internal cash generation ($1.4 billion), new capital subscriptions ($382 million), and local loans ($1.2 billion). Total Brazilian commitment is approximately $3 billion. Foreign financing is from Japan ($500 million), European Coal and Steel Community ($600 million), the German development aid agency Kreditanstalt fur Wiederaufbau (KfW) ($200 million), The World Bank ($305 million), European and Japanese export credits ($73 million), and the U.S. Export-Import Bank ($58 million). Commercial bank loans make up the balance of the total foreign commitment of $2 billion.

The project is expected to begin production in 1985, at a level near 15 million tons per year. It is expected to reach its planned maximum production level of 35 million tons of iron ore annually by 1987, and to maintain that level of production for at least thirty years. At full production, the Carajas project will account for 7.5 percent of the total potential volume of iron ore traded in the world. Most of the ore will be sold under long-term contracts (to Japan and West Germany) at a price nearly 25 percent below current world prices. Even so, the project is expected to contribute over $20 billion to Brazil's foreign exchange earnings over the 30-year life of the project.

The project will provide direct employment for about 6,000 workers at full operation, and about 2,500 construction workers up through 1988. The project is expected to have a major impact on the development of the Greater Carajas region, providing basic transportation infrastructure and thereby spurring the growth of towns and rural areas into commercial, industrial, and agricultural centers.

Brazilian Government

Questions were raised about the propriety of Brazilain government subsidies to the project on the grounds that this represented an "unfair" advantage to Companhia do Vale do Rio Doce, the project's actual operator. Investigation into this question showed that such objections may be overstated. While government subsidies to the project are large, they are similar to many external subsidies available to private industry in the U.S.

Principally, the Brazilian government is subsidizing the provision of basic public services: roads, sewers, power, water, etc. This is similar to domestic practice. In evaluating the nature and effect of these subsidies, it is important to recognize that Brazil--as a developing country--has a largely underdeveloped infrastructure, especially in the poor and remote regions of the country. Industrial development would be unfairly hampered if forced to bear the entire burden of developing needed infrastructure. During a similar period in U.S. history, recognizing the inhibiting effect of such burdens, the U.S. and state governments funded a variety of programs subsidizing these same essential services. Consider, for example, domestic subsidization of canals, railroads, roads, irrigation and flood control, water supply, hydro-electric power, and so forth.

Moreover, there are often external diseconomies particular to less developed countries that may require government intervention to redress if a project is to be undertaken profitably. First, most developing countries, like Brazil, have insufficient private investment capital avaliable. There are many reasons for this. For instance, high rates of domestic inflation preclude the development of long-term private capital markets necessary for efficient private investment. Also, the general savings rate in most developing nations is low. This reflects the extreme poverty of most households--potential savers. Other reasons center on government control of interest rates and lending. Collectively, these problems make it nearly impossible for businesses to raise long-term equity capital domestically. Thus it may be necessary for the central government to intercede in the marketplace by making public savings (tax revenues) available to firms if beneficial private investmemt is to occur.

Secondly, there may be a lack of domestic entreprenuership and secondary markets necessary to externalize certain costs. An example of this would be housing construction. In most areas of the U.S., if a private firm were to undertake construction of a new production facility, it could assume that private markets would respond and provide needed new housing efficiently. But in most developing countries, the skills and entreprenuership that underlie efficient supporting markets are not present (or not in sufficient supply). Thus any potential project would have to bear these expenses internally--an obvious obstacle to industrial development.

In the case of the Carajas project, such externalities are present. Brazilian long-term equity capital markets are poorly co-ordinated, hampered by high rates of inflation, and generally inefficient. Government saving represents the principal domestic source of investment funds. Furthermore, in Brazil most large domestic banks have been nationalized or are strictly controlled, and so the government is essentially the only avaliable lender. Also, supporting markets are inadequate to provide some services for the project efficiently.

Finally, it is important to recognize that CVRD is a quasi-public corporation (70 percent of it owned by the Brazilian government). Yet while largely publicly owned, CVRD is managed much like any private firm, and earns a healthy profit, of which the Brazilian government receives a large majority. Thus some financial involvement by the Brazilian government simply represents further investment in the profitable expansion of a firm's activities by an owner.

World Bank Funding

Other questions raised about the Carajas project centered on the World Bank's direct involvement, specifically, the idea that the U.S. was contributing funds to the World Bank which were used to provide a subsidized loan to Brazilian iron ore producers. These concerns are largely unfounded.

As indicated above in the first part of this paper, the World Bank does not raise its loan funds through annual member-nation contributions. Rather, it raises funds on the world's private capital markets much as any large private international bank might. It does benefit from the fact that it is an intergovernmental organization in so far as its own creditworthiness is concerned. However, it does not sell its securities under any special privileges and experiences a cost of funds similar to any other AAA-rated institution. So there appears to be little subsidy here.

More importantly, it is not clear that the actual loan to CVRD is subsidized in any way. The Bank's agreement with the company for the 15-year, $305 million loan, specifies an interest rate of 11.6 percent and a onetime 1.2 percent guarantee charge. Noting that the agreement also provides a three-year grace period before repayment begins, the resulting effective interest rate on the loan is approximately 12.1 percent. This is comparable to the cost of long-term funds experienced by other similarly-rated major borrowers at the time.

Nevertheless, it should be noted here that even if there was evidence of subsidy, there is not necessarily a clear case for disapproval. The World Bank and similar institutions were created essentially to help speed the development process throughout the Third World. In this mission a measure of subsidy is implied. This is well understood by U.S. policy-makers, and they have generally held that some subsidization of Third World development is in U.S. national interests, both economically and politically.

Economic benefits are realized primarily through increased demand for domestically produced goods as income in developing countries rises. One half of the new jobs created domestically over the past decade have been in export-related industries, and trade with less developed countries has accounted for a significant portion of this growth. By increasing markets for U.S. goods, development aid pays significant economic dividends.

Development also pays political dividends. Third World poverty is a fertile breeding-ground for political turmoil and revolution. As long as the gap between rich and poor countries exists, there is likely to be continuing political instability in Third World regions. Economic development which reduces poverty and improves the well-being of millions worldwide represents the only peaceful alternative to these problems.

Competitive Effects

Finally, there are those questions concerning the effect of the project on domestic production and employment, especially as it affects the U.S. iron ore mining and steel industries. Unfortunately, the answers are not as clear and direct as those suggested above.

Most of the output of the Carajas project appears to be destined for use in Japan and West Germany, neither of which are traditional markets for domestically-produced ore. Currently existing contracts provide for delivery of most of the project's output until at least 2000. At this time, no ore is contracted to U.S. or Canadian steel producers. It is not inconceivable, however, that at some future date U.S. or Canadian steel producers could import iron ore from the Carajas project. The possible impact of this action on ore and steel producers in the Great Lakes region is uncertain.

At this time, little South American iron ore is used by lake-based steel mills. Occasional test shipments have been brought in from the East Coast by rail. Even though South American ore is lower-priced than Canadian or U.S. ore, rail and average all-barge or barge-rail rates to Great Lakes region plants (Pittsburgh a possible exception) or the cost of transshipping ore to smaller vessels capable of passing through the St. Lawrence Seaway make it unlikely that Brazilian ore will make significant inroads into this market for some time. Also, very little Minnesota and Michigan ore is moved outside of the Great Lakes region. For this reason it is also probable that competitive pressure in non-lake markets will not result in serious problems for U.S. Great Lakes ore producers. On the other hand, Canadian operations in Quebec and Labrador do ship to the U.S. East Coast, and enhanced Brazilian competition in tidewater areas could upset the present market situation by diverting additional supplies of Canadian ore into the lakes area. While the addition of new supplies to the world iron ore market may reduce world ore prices somewhat, there appear to be few direct competitive effects for producers in the region.

On the other hand, there do appear to be significant indirect competitive effects. U.S. and Canadian ore producers are dependent on North American markets, and cyclical demand for steel has resulted in major fluctuations in ore production. The thrust of current efforts to raise domestic steel production is focused primarily on stemming the flow of imported steel and reviving durable goods consumption. Success in these endeavors would benefit domestic ore producers correspondingly. Japan and West Germany, the principal future importers of Carajas ore, represent the greatest share of foreign competition for the U.S. steel industry. It is generally recognized by most industry analysts that both of these nations currently possess significant cost advantages in relation to domestic producers. Access to plentiful supplies of low-cost, high-grade iron ore would enhance their competitive position in relation to domestic producers. By exacerbating the problems faced by U.S. steel producers in their efforts to regain a measure of international competitiveness, ore from the Carajas project could indirectly harm domestic ore producers.

But the long-term prospects for Great Lakes ore and taconite production are tied less to present industry problems and the potential threat of Brazilian imports than to the fact that economical regional production is endangered by rising high recovery and processing costs. Labor and energy costs are high. Replacement and maintenance of obsolete plant and equipment, although an on-going process, requires substantial capital outlays in taconite processing operations. About 85 percent of Great Lakes production is processed low-grade ore (taconite) which has a final product content of 65 percent iron. Ore from the Carajas project (hematite), on the other hand, is 67 percent pure iron as it is dug from the ground and does not require intensive and costly processing--obviously a significant cost advantage. Data provided by the U.S.

Bureau of Mines indicate that Lake Superior District low-grade ore reserves are adequate to sustain production at current average levels for at least another one hundred years. However, the commercial viability of long-term ore production remains in question particularly after the turn of the century. Quasi-protectionist measures may assist short-term domestic ore and steel production, but may lead to greater transitional costs at a later date, as well as inviting retaliation by affected countries in other trade categories. Longer range measures aimed at mitigating some of the difficulties in the U.S. ore/taconite industry will require initiatives which recognize the possible decline of economical ore production and work to ameliorate localized unemployment caused by the eventual restructuring of these sectors of U.S. industrial production.

An Early Warning System

The Commission instructed the staff to explore the feasibility of a system for identifying development projects sponsored by the World Bank such as Carajas which potentially affect the Great Lakes region. The World Bank will make copies of their Monthly Operational Summary available to the Commission staff for a fee. These summaries describe in detail and well in advance (as much as 2 years) projects and loans which the Bank has under consideration. The Commission staff could screen the Monthly Operational Summary for projects with potential impact on regional interests. Depending on the detail, comprehensiveness and timeliness of these summaries, the Commission staff could possibly glean from them information which would aid regional export promotion by identifying potential foreign customers for regionally-produced goods.

Summary

Discussion of the Carajas project by the GLC at its annual meeting in Pittsburgh centered on four essential themes. There were questions regarding subsidy of the actual World Bank loan, questions regarding the involvement of the Brazilian government, and questions about the impact of the project on U.S. steel and ore producers. Finally, the Commission wondered whether it was feasible to set up some sort of "early warning" system to keep projects like Carajas from catching the region by surprise. The staff investigated these four areas in turn.

1. World Bank Financing. The Bank raises funds by selling bonds on private capital markets, not through contributions, and lends at a rate reflecting its average cost of borrowing funds. Thus the loan is not subsidized either directly by the Bank or indirectly by contributions from the U.S. government.

2. Brazilian Government. Most Brazilian government subsidies went to provide essential public services in the chronically underdeveloped Carajas region, an action comparable to U.S. practices, both current and historical. Other Brazilian government investment was proprietary in nature, as it owns 70 percent of CVRD.

3. Competitive Effects. The Carajas project will probably not have direct competitive effects on Great Lakes ore producers but will probably have in-

direct effects if cheaper Brazilian ore significantly enhances the competitive position of foreign steel producers. Such an event would further devastate U.S. steel producers, correspondingly reducing their demand for regionally-produced ore.

The project's competitiveness appears to reflect actual cost advantage - not artificial advantages due to subsidies. Because of both the quality and quantity of the ore reserves, Brazil will likely become the largest world producer over the next century. The Carajas project simply reflects Brazil's real economic advantages and presages the future of world trade in iron ore.

4. Early Warning. The staff investigated the feasibility of an "early warning" system and concluded that it was feasible to monitor World Bank loans, up to two years in advance, by subscribing to the Bank's Monthly Operational Summary.

SUMMARY QUESTIONS

1. What are the basic considerations used to evaluate a World Bank loan application?

   The Bank evaluates the potential borrower's creditworthiness and the appropriateness of the project's selection in relation to the country's development needs. The Bank then appraises the project's economic, technical, managerial, organizational, commercial, and financial aspects.

2. Does the World Bank project appraisal process consider the impact of the proposed project on member nation economies?

   No. To avoid problems of conflicting national politics and issues of national sovereignty, the Bank considers projects on its merits from the point of view of the applicant country only, although it does encourage international cooperation whenever possible.

3. Is it feasible to establish an "early warning" mechanism that would identify particular project loan applications early in the process that may have an impact on the Great Lakes region?

   Yes. The Commission staff could screen the World Bank Monthly Operational Summary to identify projects which have potential impacts on the region up to two years in advance of loan approval.

4. What effect would Great Lakes Congressional opposition have on a proposed World Bank loan?

   Since the World Bank raises most of its loan funds on private world credit markets and its structural organization provides a great deal of "insulation" from political interference sponsored by a single country, Congressional opposition, while certainly focusing U.S. public attention, would probably have little effect on the Bank in regard to a proposed loan.

5. Is the U.S. subsidizying the Carajas project through its involvement in the World Bank?

   Not apparently. The funds for the loan were raised in the world's private credit markets, and not through member-nation contributions. Also, the loan's effective interest rate is 12.08 percent--equivalent to the cost of funds experienced at the time by most large, well-rated (AAA) borrowers.

6. What is the principal potential impact for U.S. Great Lakes ore producers of the Carajas project?

   There will be few direct competitive effects. The Carajas ore will make marginal if any inroads into traditional markets for iron ore/taconite

produced in the U.S. Great Lakes region. However, there may be indirect effects if access to lower-cost Brazilian ore further enhances foreign steel producer's competitive positions. This would further depress the U.S. steel industry, and, correspondingly, U.S. ore producers.

7. What is the principal potential impact for U.S. Great Lakes steel producers of the Carajas project?

   As indicated in the previous question, access to low-cost Brazilian ore could increase the intensity of foreign steel competition in domestic markets.

8. What information is available about Export-Import Bank activity related to the Carajas project?

   The U.S. EX-IM Bank authorized $58 million in export credits for the project. These credits will be used by Brazil to import project components manufactured in the U.S., and will therefore benefit U.S. industry materially.

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