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La Nacional and the Huites Dam Project

It was May 3, 1992, a week before La Nacional Compañia Constructora S.A. de C.V. (La Nacional), the heavy construction company belonging to Grupo Coin, was to submit its bid to build the Huites Dam, a $600 million public works project in northwestern Mexico. Sergio Jinich had a number of concerns as he and his partners sought to develop the best strategy to capitalize on La Nacional's six years of hard work on the Huites Project.

There were many factors to consider. First of all, this project would be larger than any other La Nacional had ever done, and even though they had a proven track record in this particular type of construction. Second, Jinich realized that even though La Nacional had developed the concept for the project and introduced it to the Mexican authorities, including CNA (Comision Nacional del Agua, the National Water Resources Commission), there would be other firms submitting bids as well. Among these firms was ICA, the Mexican conglomerate whose annual revenues were nearly $1.5 billion and CBPO, the giant Brazilian construction firm. La Nacional, by comparision, had annual revenues of $75 million (see **Exhibit 1.**)

One option which Jinich was considering was to submit a joint bid with ICA for the Huites project. Jinich felt that there were advantages for both companies to be enjoyed from such an alliance. For La Nacional, there would be the obvious advantage that ICA was bigger company with the financial clout to support a project of this scale. In earlier times, companies like La Nacional and ICA acted simply as government contractors who would be awarded a project which would then be financed entirely with funds from the federal government and/or international development agencies such as the World Bank. Now, under the Salinas administration, Mexican businesses, including those which performed "public works" projects, were expected to bring private financing to the table along with their technical expertise. For La Nacional, operating in this new environment meant that they would have to learn about matters they did not have to address even a few years earlier, and a company like ICA could help them accelerate this learning process.

Jinich felt that ICA would also have much to gain from such an alliance. First, they would gain the goodwill which would come from taking on a smaller and lesser known partner but one which was, nonetheless, a competitor who had often underbid them in the past. Second, La Nacional had particular expertise in building dams—the lion's share of their previous projects had been dams. Finally, and most significantly, La Nacional had been promoting this project on and off for the past six years. They had been working with the Mexican authorities to convince them of the importance of the dam to the Sinaloa region. In fact, La Nacional had been negotiating with CNA and CFE (Comision Federal de Electricidad, the Mexican Electric Commission), and these discussions had led to the creation of a plan whereby both agencies would benefit from the dam's successful completion.

Susan Harmeling, MBA'91, prepared this case under the supervision of Professor Kenneth A. Froot as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

Under the plan the Water Authority would use the water for irrigation and the Electric Commission would lease the adjoining hydroelectric plant and then sell electricity to local clients. It was this shared use agreement which resulted in the decision by the Mexican government to go ahead with the project.

The other considerations had to do with the financial aspects of the project. La Nacional was concerned that their competitors might have lower-cost bids for the financial part. In addition, Jinich was unsure about how one of the central points upon which their bid relied, a " Date Certain Hell or Highwater" lease agreement on the part of CFE, would actually work. It was also unclear how to structure the section of the proposal which involved CNA's financial contribution. CNA had no experience in this type of project finance.

Finally, Jinich had to consider how competitors' proposals would differ from La Nacional's. Once he determined where the potential weaknesses would lie in his own bid, he could decide whether or not ICA would be an attractive partner. Sergio Jinich had much to discuss with his own partners, among them his brother Carlos with whom he had worked for over 20 years in this family company.

Background: La Nacional

La Nacional was founded in the early 1970s but had its origins in the 1920s when Miguel Jinich, a Russian teenager, emigrated to Mexico. After receiving his degree in civil engineering from U.N.A.M., Mexico's national university, Miguel Jinich went to work for the public works department of the federal government.

In the late 1940s, Jinich left his government post and began his own construction company. This company, INAR, Ingenieros y Arquitectos (Engineers and Architects), specialized in water related projects such as irrigation, canals, dams and pumping stations.

By the mid-1960s, two of Jinich's three sons, both of whom also had become civil engineers, came to work for the company. In the early 1970s, INAR won the bid for an irrigation project which was too large scale for it to build alone. While searching for an appropriate partner for the project, INAR eventually came in contact with COTA, a firm which was approximately twice their size at that time. Nicolas Fainsod and Luis Reimers, COTA's managing partners, agreed to undertake this project with INAR. The initial joint venture was managed by Sergio Jinich from INAR and Nicolas Fainsod from COTA. Carlos Jinich and Luis Reimers continued to work on projects at their respective companies. This project went well and so the partners decided to bid for more projects. The new company, begun in 1974, was named La Nacional and a few years later it was incorporated into a holding company named Grupo Coin; "CO" came from COTA and "IN" came from INAR. However, the original companies continued to function on their own and Carlos Jinich and Luis Reimers continued to oversee those operations.

By the late 1970s, the vast majority of both companies' equipment and personnel was put into the joint ventures; the two original companies continued to operate, accepting the projects which were too small for the growing joint venture, La Nacional.

Through the 1980s, La Nacional was mainly a government contractor, entering the bidding process whenever suitable projects (mostly water related) would arise. However, in the late 1980s, this changed with the economic stabilization program of the De La Madrid administration and especially with the new regime of Carlos Salinas beginning in 1988. With an increasing emphasis on private ownership and less government involvement in public works projects, the scope of the business changed dramatically.

Mexico's Economy Prior to 1993

After years of rapid growth in the Mexican economy which had followed the discovery of substantial oil reserves in the mid-1970s, Mexico experienced an extremely sharp economic downturn beginning in late 1982. At that time, declining real oil prices and falling demand in the major industrialized countries reduced the proceeds of Mexico's exports, while imports were expanding rapidly. Simultaneously, interest rates rose and the US dollar appreciated, making the dollar-denominated debts which had funded Mexico's growth far more expensive in real terms. The downturn was further exacerbated by the drying up of foreign capital. Instead of being able to borrow more than it paid in interest, Mexico suddenly was expected to repay at a rapid rate. By the end of 1982, when the administration of President Lopez Portillo turned over the reigns, Mexico's banks were nationalized and a moratorium on further interest payments on foreign debts was in effect. Real GNP declined strongly.

While there were many factors which contributed to this "debt crisis," one very important factor was the structure of Mexico's foreign obligations. Like many other developing countries at the time, most of Mexico's foreign debt was the responsibility of the public sector and only a small portion was tied to the performance of particular ventures (see **Exhibit 2**). Infrastructure projects, in particular, were typically financed through direct government borrowings. When the government's credibility fell, the possibility of financing domestic investment with external funds fell with it. As a result, domestic investment plummeted by almost one half, and imports by two thirds between 1981 and 1983 (see **Exhibit 3**). Infrastructure investment—especially that generated by the local construction industry—fell dramatically (see **Exhibit 4**).

During the presidency of Miguel De La Madrid from 1982-1988, new projects were canceled in droves, as the main goal of this administration was to stabilize the economy by lowering inflation and interest rates, and to reduce government borrowing, particularly from foreign banks. Although new borrowing was substantially reduced, Mexico had to struggle to meet barely half of the interest payments on its existing debts. Yet even this relatively low level of repayment slowed Mexico's recovery substantially, as GDP hardly grew during the De La Madrid administration. Even though De La Madrid's programs were basically successful, when the time came to elect a new president in 1988, the years of economic problems and uncertainty for the future seriously eroded the popularity of the PRI, Mexico's dominant political party; Carlos Salinas de Gotari, the winner of the 1988 election, collected barely 50% of the vote.

However, Salinas did not let this deter him from enacting new changes to stimulate Mexico's lackluster economy. In 1989, after only months in office, Salinas announced the beginning of the "Plan Nacional de Desarrollo," a five-year development plan designed to promote growth by deregulating key industries, opening up Mexico's traditionally closed borders, and controlling inflation by restricting the money supply and avoiding budget deficits. The plan also expanded De La Madrid's privatization program by calling for a greater role for the private sector in the development of Mexico's transportation infrastructure as well as other public works projects.

Furthermore, Salinas pushed ahead with De La Madrid's programs to change the size and nature of Mexico's foreign obligations. The objective was to reduce the overall amount of Mexico's near-term debt service, and at the same time, help private-sector domestic enterprises obtain access to international capital markets without direct intervention by the government. Toward these ends the Salinas administration actively pursued debt reduction under U.S. Treasury Secretary Brady's initiative. The Brady plan emphasized refinancing options which reduced debt service, improved availability of short-term financing, and encouraged stabilization and liberalization in debtor countries. Under this plan in early 1989, Mexico negotiated a comprehensive restructuring of its foreign debt to cut principal and reduce near-term debt service. In addition, approximately $5 billion in foreign debts were swapped into equities. The result was greater breathing room for growth, a healthier private sector, and opportunities for private-sector companies to tap the international capital markets directly.

How Contracts Were Awarded: The Bidding Process

Traditionally the government would first identify the need for a big infrastructure project. Then it would ask for bids from all qualified firms. Bids were reviewed and contracts awarded by the government agency to which the project pertained. The government would control virtually all aspects of the project, acting as designer, financier, and project manager.

Daniel Jinich, Carlos's son and finance director of the group, explained the problems inherent in this system:

> When a contractor agrees to build something at a fixed unit price subject to adjustments only for inflation, but the government controls the entire project, including the financing, it's extremely difficult to stay within the budget. For example, if the government diverts funds from this project for a different use or reduces the rate of investment to control inflation, construction activities would have to slow down or come to a complete stop, thereby lengthening the overall construction period. This obviously increases the costs, including hidden costs such as management time spent negotiating with the government. As contractors, we have little control over this process. Furthermore, we would look only at the civil engineering side of the project instead of seeing the entire project as a business which also includes a revenue side.

Then in the late 1980s with the beginning of Salinas' liberalization program, (which affected not only the construction industry but virtually all public service industries including water distribution, garbage collection, telephones, banks, etc.) private companies became involved in project financing and began to look not only at the cost side of the project, but the revenue side as well. In the case of the Huites project, this meant accounting for the cost of building the dam, the rental fees for power being leased by CFE, the Electric Commission, and the fees which CFE would ultimately charge to its customers. Public works projects were rapidly being privatized.

The Evolution of the Huites Dam Project

Daniel Jinich explained how projects had historically been awarded by the government:

> In the past, we as contractors had only to decide which projects to bid for and hope that we would win enough bids to keep us busy. In recent years, as the government has scaled back on its control and initiation of projects, fewer projects are bid out, forcing contractors to promote their own projects. When you promote your own project you have to come up with the economic rationale for building something and then lobby the relevant government agencies and convince them of the project's merits. In addition, you have to do your own technical studies and designs and find a way to finance the whole thing in order to ask for as little up-front government contribution as possible. In exchange, the government *might* award you your project without a bid, but there are no guarantees; you might do all the work and then see your project bid out and awarded to a competitor.

In the case of the Huites project, that is precisely what happened. La Nacional promoted the project over a period of six years to convince the government of the merits of this dam which included the supply of electrical power, water for irrigation and flood control.

The project consisted of a dam and a hydroelectric plant on the Rio Fuerte between the two states of Sinaloa and Sonora in northwestern Mexico (see **Exhibit 5**). The dam site would occupy a total land area of 26,000 square kilometers and would have a total water capacity of 4 billion cubic meters, making it one of the largest dams in Mexico. The hydroelectric plant would have a capacity of 400

megawatts and would generate a total of approximately 875 gigawatt hours per year during peak hours, bringing in a total annual revenue of approximately $75 million to the CFE.

La Nacional had conducted extensive research, hoping that this would result in the company being awarded the project without the initiation of a bid process. However, in this case, La Nacional feared that they might be too small to win the $600 million contract ($250 million of which was for the civil construction phase of the project) on their own, particularly given the trend toward private financing and given the fact that they would have to put up some percentage of their own cash as equity at the start of the project.

The Bid

Sergio Jinich explained the bidding process:

> When the federal government began to sell government owned companies in 1987 and 1988, we approached Eduardo Pesqueira, the secretary of Agriculture and Hydraulic resources and told him that we would build Huites in return for payment with equity in some of these companies. Our plan under the government's debt for equity swap program was to look for investors interested in buying these companies at a later date. We called this "Presa por Empresa" which means "Dam for Businesses." Pesqueira called Carlos Salinas who was then Secretary of Budgeting and Programming and told him about this plan. Salinas jokingly replied that it would not be good for Pesqueira because by trading government-owned companies "Empresa," for a dam, "Presa," Pesqueira would end up owing Salinas two letters, the "E" and the "M". Salinas decided not to allow the program for three reasons. First, he felt that it was too early in the government's privatization program; second it was too early in the government's concession program (which was to build public works projects with private money); and third, he didn't want to allocate funds from the sale of government companies to a specific use. He wanted the freedom to distribute the funds to wherever they were needed most.
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> Since Salinas did not approve this "Presa for Empresa" plan, we stopped the promocion for a time. By then, the privatization program was well underway, but this dam was not a priority for either agency (CNA or CFE) because the economic benefits to either agency individually did not justify the investment. However, if the investment were to be shared between the two agencies, CNA and CFE, then it became economically justifiable.
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> For CFE to have done the project on their own, they would need the dam, the power house and equipment to generate electricity. But when CNA entered the deal, they saw that they could build the dam, use it for irrigation purposes and then charge CFE for electricity. Then CFE would charge its customers for electricity and both sides would do well, sharing the costs and the benefits.
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> The tricky part was to get both sides to work together. Who would be the leader on this project when both the CFE and the CNA build dams? It was decided that CNA would be the leader because of its willingness to contribute cash up front. (See **Exhibit 6** for a brief description of the CNA and the CFE).
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> We know that there are 4-5 different groups interested in this project. We are thinking of going in by ourselves because we have studied the project for so long. But we are also considering working with ICA—it may be interesting for them to enter with us for a few reasons; first, we are well regarded by CNA. Second, it would bring a lot of political goodwill to ICA because they are often perceived as winning a

> disproportionate share of public works projects. Third, we have a lot of expertise in building dams, and fourth, we promoted this project in the first place.

Jinich had a feeling that groups which would be entering the bid could present lower-cost financing alternatives. He explained:

> In choosing a winning bid, the CNA must consider many different issues, including building expertise, costs of construction, likelihood of on-time completion, financing costs, and likelihood that the financing can be done. There are a number of ways to lower the financing costs. One might be to do a staged financing in the form of multiple bond issues during the construction period; another might involve obtaining guarantees for the bonds. Some of our competitors might actually propose these options. However, we believe that there are risks in the first option, and that it will be difficult to find a cheap guarantee in the second option.
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> What we have in mind is to do a one-time bond issue at the beginning of the project backed up by future CFE rental payments. We think this is a much more realistic approach.

Project Finance

In order to finance this deal, La Nacional's plan called for the government to create a special purpose trust to be called the Huites Trust. [1] The Trust would oversee the construction phase, and the early operations phase (during which time the construction costs were being paid off). Following that, the CNA and CFE would become operators of the dam and electric generation facilities. The Trust would be sponsored by La Nacional and backed by CNA and CFE, who would contribute to the Trust:

Upfront cash and/or certain lease payments and fees (CNA);
Lease payments (CFE);
Investment income earned on Trust assets;
Insurance proceeds;
Accounts maintained by or on behalf of the Trust (e.g., for maintenance, debt service, etc.).

Under the Trust agreement, NAFIN, the government development bank responsible for public works projects, would act as the Trustee and oversee all funds and accounts. The Trust itself would be managed by a technical committee, consisting of the construction company, CNA, CFE, Trustee, and an independent representative of the debtholders (most likely a member of a Mexican investment bank). The Trust would also establish a Debt Service Reserve Fund with a US bank acting as Fiscal Agent, to help ensure that funds borrowed in dollars would be available to service the debt. The Trust agreement specified levels of cash to be held by the Fund in reserve for the bondholders. During the construction phase, the Trust would oversee all aspects of the project.

Once construction was completed and the dam became operational (which was to occur in three years' time), operating control of the dam would be transferred to the CFE and the CNA. As operators, the CFE and CNA would have responsibility for running the facilities, collecting the revenues from the water and electricity sales, maintaining the facilities, paying employees, making weekly deposits of lease funds and payments into the Trust's General Account, and preparing operation and performance reports. Trust revenues not specifically earmarked for particular capital providers were to be withdrawn semi-annually from the Trust's General Account for the following purposes and in the following priorities:

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[1]The Trust would be a Fideicomiso, an administration and guaranty trust organized under the laws of the United Mexican States.

1. Funds are to pay the Trust's administrative and operating fees;
2. Funds are to pay holders of lines of credit, if necessary;
3. Funds are to be transferred to the Fiscal Agent and converted to dollars to maintain the Debt Service Reserve Fund to pay debtholders;
4. Funds are set aside for payment of withholding taxes for upcoming Bondholder payments;
5. Funds are to be paid to the construction company;
6. Funds are to be transferred to keep the Maintenance Account at required levels, if needed;

La Nacional's bid envisioned a scenario whereby both cash and promissory notes would be deposited in the Trust before construction began. Under the base case, there would be six sources of funds (three were to be cash and three promissory notes).

First, CNA would put approximately $100 million in cash into the Trust, $100 immediately and $100 upon completion of the dam. In return, CNA would retain the right in perpetuity to sell water from the Huites Dam to agricultural, industrial and residential users in the area. La Nacional would arrange for CNA to obtain long-term financing through Bancomer, a Mexican commercial bank (either directly or in the form of so-called "domestic infrastructure bonds"). Under an alternative scenario, funds would be raised from Probursa, a large Mexican brokerage house, in the form of "CPOAs" (Certificados de Participacion Ordinarios Amortizables). These "Certificates of Participation" would be issued by the Huites Trust and would be backed by CNA's commitment to provide to the Trust lease payments for rights to sell the water. The CPOAs were debt instruments; however, they allowed the CNA to help finance the dam without recording any additional Mexican public indebtedness (a concern of the Salinas administration). In either case, CNA would be responsible for any cost increases associated with dam construction that were not judged by the Trust to be the responsibility of the construction company.

The second source of cash, proposed by La Nacional's investment bankers, would be the proceeds of an international bond issue of approximately $250 million. This issue was to be accomplished as soon as possible, and the funds were to help pay for the civil construction costs, including labor, materials, and specialized construction equipment, in addition to providing start-up funding for the Debt Service Reserve Fund.

This bond issue was to be underwritten by a large U.S. investment bank and would consist of 15 year notes. There would be a three-year grace period on interest payments (accumulated unpaid interest was to be added to principal), followed by a market-based coupon of approximately 300 basis points over 15-year U.S. Treasury bonds. (See **Exhibit 7** for yields on a variety of Mexican and US securities.) The bonds were also subject to a 15% Mexican withholding tax and would not be callable. The placement was to be private, so that the bonds would not be registered as securities with the U.S. SEC. In the past, lack of SEC registration had prevented public sales of unregistered securities to U.S. investors. However, in 1990, the SEC adopted Rule 144A, under which securities such as the Huites bonds could be eligible for resale to US institutional buyers.[2]

The collateral for the interest and principal payments would come from a promissory note to be deposited in the Trust by CFE. This note required CFE, beginning on a certain pre-determined date, to make fixed monthly payments to the Trust for 12 years as rental of the hydroelectric plant. (After 12 years of lease payments, CFE would be able to use the hydroelectric plant free of charge.) The lease payments were to be transferred, after conversion into dollars, into the Debt Service Reserve Fund; they

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[2]The securities would be available for resale to qualified institutional buyers under Rule 144A if sellers and prospective purchasers have the right to obtain certain non-public information about the issuer. This right is usually contained in one of the security's convenants. Essentially, the issuer must make available to holders and prospective purchasers of the security financial statements for the previous two years of operations as well as a statement of the nature of the issuer's business.

were not to go to other purposes until the Fund was fully satisfied. Payment amounts would be quoted in dollars but would be payable in pesos at the prevailing exchange rate on each date of payment. In addition, lease payments would be adjusted for the U.S. rate of inflation on an annual basis for the U.S. Consumer Price Index according to a pre-determined formula.

CFE would be required to make lease payments to the Trust regardless of the electricity revenues generated by the dam. For example, if the hydroelectric plant went down, CFE would be required to continue making uninterrupted lease payments. Furthermore, the lease would contain a "Date Certain Hell or Highwater" provision, stipulating not only that payments would be made in the event that the plant stopped running, but also that payments must begin exactly in three years' time regardless of whether the plant was completed. CFE estimated that the present value of their lease payments would be approximately $400 million (see **Exhibit 8**).

The third source of cash would come from one or more Export-Import banks ("Eximbanks"). These were essentially export credit agencies which frequently provided funding (sometimes at subsidized rates) to those who purchased durable products from the exporting country. In some cases, Eximbanks lent money directly to such projects while in other cases they just guaranteed loans made to the project by commercial banks.

La Nacional planned to purchase electrical generating equipment manufactured by CEGELEC, a French company, with a loan being made to the Trust by Societe Generale, a French commercial bank. The expectation was that 85% ($93.5 million) of the loan would be guaranteed by COFACE, the French Export Credit Agency. The loan would obligate the Trust's General Account to pay interest at a dollar rate fixed by the OECD (Organization for Economic Cooperation and Development). At the time they were preparing the proposal, this rate was expected to be approximately 8.46% and the loan would be for 10 years.

The fourth source of funding for the Trust would come from La Nacional itself. The company expected to contribute about 10% of the total civil construction costs, estimated to be approximately $250 million. La Nacional was considering contributing $20 million in cash and another $5 million in the form of retentions from billings made during construction. If construction proceeded according to plan with no cost overruns attributable to the builder, then the Trust was to repay the builders funds at an annual dollar interest rate of 20%. The source of funds to repay the builder would come from the CNA, to be received approximately six months after construction was completed and the dam was turned over to CFE. However, if the builder failed to complete the project on time and within budget, repayments would be reduced. The score on a set of completion tests (which measured water and electricity output over a 60-consecutive-day testing period), would determine the payment due to La Nacional from the Trust. Tests results which showed at least 90% of prespecified output for any 30-consecutive-day period within the 60 days were to be considered "perfect." Poorer test results would lead to lower payments. The proposal would also allow for interruptions in the testing period (due, for example, to *force majeure* and certain types of infrastructure failure). These interruptions could break up the 60-consecutive-day period, and allow the builder to postpone the remainder of the completion tests for up to 1 year. At the conclusion of the operating phase of the Trust, La Nacional would split equally with CNA and CFE any surplus in Trust operating accounts. However, any remaining surpluses were expected to be small.

The fifth source of funding would come from a bridge financing facility. If construction were to begin immediately and before the bond issue could take place, bridge capital would be required. The bridge would be provided by two commercial banks, Bancomer ($60 million) and BanPais ($30 million). Under the Trust agreement, CFE would be liable for the bridge financing were the bond issue to fail.

The sixth source of funds would come from Bancomer and Probursa, which would agree to contribute to the Trust a line of credit of up to $200 million ($100 million each). The line of credit was to be used for cost overruns due to changes in volumes for the construction plan or for inflation, but not for overruns attributed to the construction company. In practice, it was often difficult to distinguish who was responsible for cost overruns; in this case, the design was not yet even finished, and all changes in

specification had to be approved by the government. The line of credit was to be made available for up to three years at a rate of LIBOR plus 150 basis points (bp). There was also a .5% commission charge to be paid to Bancomer and Probursa. CNA, which was responsible for approving the dam design details would be expected to increase payments to the Trust to offset any credit line expenses.

The following table shows the Base Case funding scenario:

Source of Financing	Amount (millions)	Source of Repayment
CNA borrowing in Pesos	US$200	CAN water sales
Bonds in dollars	US$250	CFE lease payments
Societe Generale	US$110	CFE lease payments
Construction Company	$US25	CAN contribution
Bridge Loans	$US90	Bond Issue
Line of credit: Bancomer/Probursa	US$200	CAN upon completion

Jinich wondered if he was making a mistake by not proposing a multiple-stage bond issue. This type of issue, to be made in stages as the construction phase of the project progressed, had a number of benefits. If interest rates would be going down to reflect that Mexican investments were being perceived as a better risk, then this might be a cheaper source of funds. In addition, the staged funding would not force investors to prefund construction phases. However, Jinich and his partners felt that the single up-front bond issue was less risky and a more realistic option.

Jinich had also heard that CBPO's bid might differ in several other ways. First, it was rumored that CBPO's bid would show a construction cost of $275 million, $25 million higher than La Nacional's bid.

Second, it was thought that the CBPO proposal might suggest sidestepping a bond issue altogether and utilizing bank debt instead. Jinich was not sure why CBPO would propose this, as bank debt was usually more expensive than bond issues. The bank debt was rumored to include a two-tier interest-rate structure: 100bp over LIBOR prior to completion of the dam, increasing to 275 basis points (bp) over LIBOR after the dam was completed. In addition, during the construction period, $125 million of the total $275 million construction loan would be sponsor supported, or "limited recourse," implying that the banks would have the right to look to CBPO for repayment in certain instances where the project defaulted. After satisfactory completion, the limited-recourse tranche of the loan would become non-recourse, so that any further loan repayments would have to be supported solely by the project. CBPO would also propose that if, upon completion, the project scored below a predetermined level on a set of completion tests, a portion of the limited-recourse tranche would remain as limited recourse. The size of the limited-recourse portion would increase along a sliding scale as the test score decreased. If the test scores fell below 75% of the level deemed to be satisfactory, the entire $125 million limited-recourse tranche would remain as limited-recourse after completion.

Finally, there was a possibility that the lending agreement would contain a $50 million tranche to serve as a revolving standby facility for covering debt service obligations. This tranche would be available post-completion only.

Conclusion

There were many things to consider and only a few days to make decisions. Jinich worried about the financing portion of La Nacional's bid. Was it feasible? Was it superior to other bidders' likely proposals? Would La Nacional be able to compete under the new rules of Mexican infrastructure project construction?

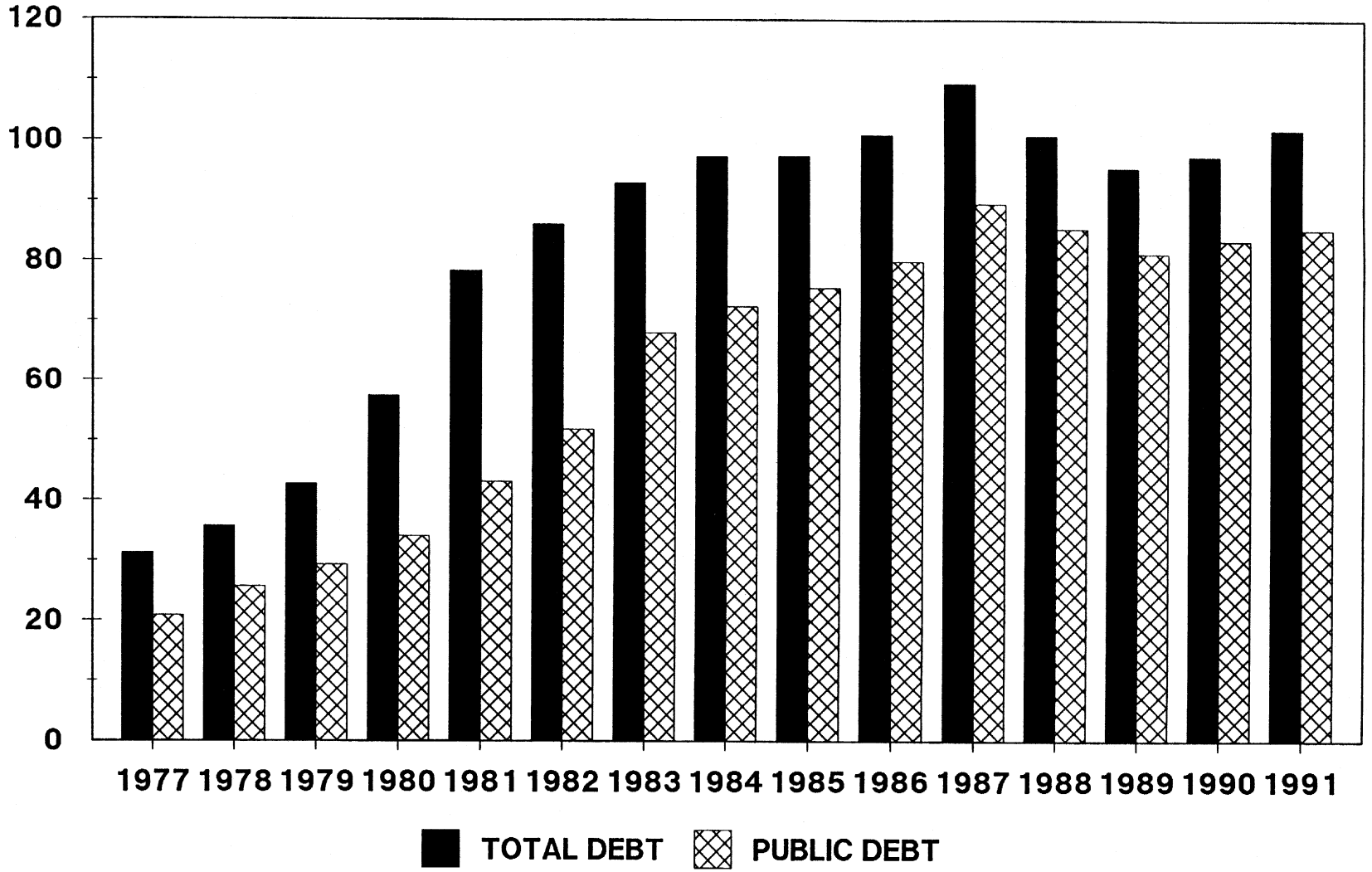
Exhibit 1 La Nacional Income Statement (thousands of US$)

	April 1988 to April 1989	April 1989 to April 1990	Dec. 1989 to Dec. 1990	Dec. 1990 to Dec. 1991	Dec. 1991 to Dec. 1992
Revenues from construction contracts	$24,639	$12,953	$20,315	$73,242	$72,678
COGS	27,154	12,248	18,889	59,789	49,511
SG&A	1,715	2,578	2,702	5,530	7,481
Total	$28,869	$14,826	$21,592	$65,320	$56,993
Operating income	(4,229)	(1,873)	(1,277)	7,921	15,684
Net interest income	28	(450)	(1,991)	(5,594)	(8,237)
Inflation adjustment to monetary assets	646	858	1,694	(85)	0
Other income	131	1,623	167	4,062	2,013
Net income from operating activities	$(3,424)	$ 157	$(1,407)	$ 6,304	$ 9,460
Asset taxes	24	51	0	495	0
Income taxes					924
Profit sharing taxes				598	309
Total taxes	24	51	0	1,094	1,234
Profit after tax	$(3,449)	$ 106	$(1,407)	$ 5,209	$ 8,226

Exhibit 1 (continued) La Nacional Balance Sheet (thousands of US$)

	April 30, 1989	April 30, 1990	December 31, 1990	December 31, 1991	December 31, 1992
Assets					
Current Assets					
Cash	$ 32	$ 360	$ 1,116	$ 4,008	$ 4,216
Accounts receivable	0	3,356	7,313	7,888	10,143
Other receivables	970	4,154	3,979	6,772	10,590
Inventory	0	800	1,917	2,750	2,308
Prepaid and other assets	66	162	693	99	74
Total	$ 1,070	$ 8,834	$15,021	$21,520	$27,334
Other assets	157	215	104	158	442
Long-term investments	-	-	-	-	21,615
Construction equipment	30,605	32,191	31,582	41,444	35,331
Total assets	$31,834	$41,242	$46,708	$63,125	$84,723
Liabilities and Equity					
Current Liabilities					
Trade accounts payable	$ 372	$ 1,097	$ 2,402	$ 2,258	$ 403
Notes payable	0	5,458	15,217	16,865	27,433
Other accounts payable	3,481	2,131	2,020	3,200	13,141
Taxes payable	62	647	1,421	3,815	2,948
Total	$ 3,916	$ 9,335	$21,062	$26,140	$43,927
Long-term debt			4,989	7,433	3,870
Total liabilities	$ 3,916	$ 9,335	$26,051	$33,573	$47,798
Shareholders' Equity					
Social capital	19,862	23,193	33,732	45,406	50,190
Accumulated losses	(43,151)	(46,598)	(51,925)	(54,031)	(51,572)
Legal reserve	119	129	140	160	176
Cumulative inflation adjustment	51,086	55,182	38,708	38,015	38,129
Total equity	$27,917	$31,906	$20,656	$29,551	$36,925
Total liabilities and equity	$31,834	$41,242	$46,708	$63,125	$84,723

Exhibit 2 Mexico's External Debt (in billions of U.S. dollars)



SOURCE: WORLD BANK

Exhibit 3 Mexico's Macroeconomic Performance Indicators (1979-1992)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Real GDP (bil. peso) 1985 prices	40,409	43,773	47,252	46,992	44,517	46,144	47,392	45,613	46,403	46,964	48,493	50,622	52,451	N/A
Prices:														
Inflation[a]	17.5	25.7	28.0	59.7	101.6	65.5	57.7	86.2	131.8	114.2	20.0	26.7	22.7	15.5
Interest rate (%)[b]	15.0	22.5	30.8	45.8	59.1	49.3	63.2	106.0	133.0	69.2	45.0	34.8	22.7	15.6
Exchange rate (peso per $)[c]	23	23	25	56	102	168	257	612	1,378	2,273	2,462	2,813	3,018	3,095
Cost of living index[d]	1.12	1.24	1.34	0.77	0.62	0.78	0.25	0.69	0.68	0.87	0.92	0.96	1.06	1.16
Annual Growth Rates:														
Real GDP (%)	9.2	8.3	7.9	-0.6	-5.3	3.7	2.7	-3.8	1.7	1.2	3.3	4.4	3.6	2.7
Change in government expenditure (%)	10	10	10	5	-1	7	2	2	-1	-1	-1	2	N/A	N/A
Gross domestic investment (%)	18	22	16	-28	-25	8	14	-12	0	6	7	13	-10	N/A
Private (%)	23	14	14	-20	-24	9	13	-14	-6	10	9	14	14	N/A
Public (%)	17	17	16	-13	-32	1	-3	-11	-12	-4	1	13	-2	N/A
Exports (merchandise) (%)	48.9	66.8	29.6	5.6	5.1	8.4	-10.5	-26.0	28.8	-0.4	10.7	17.9	1.1	N/A
Imports (merchandise) (%)	51.8	55.8	26.7	-39.7	-40.8	31.6	17.4	-13.5	6.9	54.6	23.9	33.6	22.1	N/A
Balance of Payments:														
Current account	(5,459)	(10,750)	(16,061)	(6,307)	5,403	4,194	1,130	(1,673)	3,968	(2,443)	(3,958)	(7,117)	(13,283)	N/A
Direct foreign investment	1,332	2,156	2,835	1,655	461	390	491	1,160	1,796	635	2,648	2,548	4,742	6,200
Net external financing (% of GDP)	2.4	2.5	7.5	3.7	3.4	1.3	0.1	-0.2	2.6	-0.5	-0.4	0.7	1.2	N/A
Debt and Deficits:														
Public external debt ($ mil.)	N/A	34,646	45,446	63,019	66,544	72,727	75,963	77,894	82,608	83,693	81,127	74,333	79,900	76,900
Public external debt as a % of GDP	N/A	18	18	37	45	42	40.7	61.2	61.3	49.6	39.5	33.4	28.2	26.7
Budget deficit as a % of GDP	8.0	8.0	15.0	16.9	8.6	8.5	9.6	15.9	16.1	12.5	5.6	4.0	1.5	0.0

Sources: International Monetary Fund, International Financial Statistics; Banco de México, Indicadores Económicos and Informe Anual.

Notes: N/A = not available.

[a]Percentage annual change in the Mexican consumer price index.

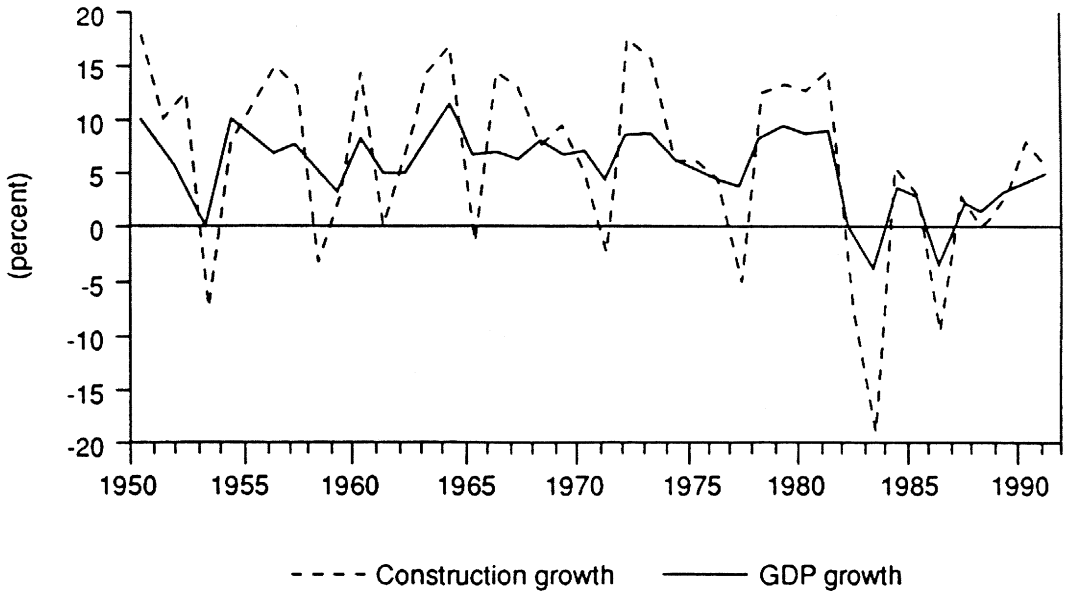
[b]Average annual interest rate on 90-day Mexican T-bill.

[c]Average month-end exchange rate.

[d]Relative cost of living in Mexico compared with the United States; average 1973-1992 = 1.00.

Exhibit 4 Mexican Construction Industry

Relationship to Macroeconomic Performance (1950-1991)



Source: Banco de México

Note: Presidential elections were held in 1952, 1958, 1964, 1970, 1976, 1982, and 1988.

Exhibit 5 Huites Dam Location

Exhibit 6 The CNA and the CFE

The CNA was an independent agency of the federal government which was authorized to sell water in bulk to municipalities or large industrial users. The head of the CNA was appointed by Mexico's president and reported to the Minister of Agriculture. Normally, they obtained their operating funds directly from the federal budget and they had never before tapped the financial markets for funding. However, with the trend toward privatization, it was expected that CNA would attempt to borrow against water revenues in the future.

However, it was difficult for CNA to predict their future revenue streams, more so than for CFE. Historically, the federal government had heavily subsidized the CNA as water was considered to be a necessity which would not be shut off even in the event that a client did not pay the bill.

The CFE was also an independent agency of the federal government whose head was appointed by the president of Mexico. The director of the CFE reported to the Minister of Energy. The CFE set electricity rates for end users and they controlled all electrical generation activities in the country. They occasionally issued bonds outside of Mexico as a source of funding guaranteed by the full faith and credit of the Mexican government. However, CFE had not previously pledged lease payments using its rate base as collateral.

CFE operated on a cost plus basis, selling electricity at a regulated rate which enabled them to cover expenses. In the past, CFE had issued bonds domestically. In the event of non-payment, CFE had the right to cut off electricity until collection was made.

Exhibit 7 Annualized Percentage Yields on Various Financial Instruments, May 1992

US Treasuries:	
1 month	3.24
30 year	7.84
US Corporate Rates (Industrials):	
AAA	8.24
AA	8.56
A	8.75
Baa	9.24
Mexican Dollar-Denominated Yields:	
Tesabono [a] (28 day)	7.21
Brady Bond [d] (maturity 2019)	9.65
Cemex [b] (2 year)	10.35
Mexican Peso-Denominated Interest Rates:	
Cetes [c] (1 month)	13.6
Cetes (3 month)	13.1
Cetes (6 month)	12.8

Notes:

[a]Dollar-denominated bills issued by Banco do Mexico, settled at maturity in pesos at the current exchange rate.

[b]Dollar-denominated corporate bond issued by Cemex, rated BA2.

[c]Peso-denominated Mexican Treasury bills.

Exhibit 8 Financial Scheme for Huites Dam Construction