

COFINANCING OF WORLD BANK PROJECTS: PROBLEMS AND PROSPECTS

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SUBMITTED TO THE ALFRED P. SLOAN
SCHOOL OF MANAGEMENT
IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE
DEGREE OF

MASTER OF SCIENCE

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

June 1983

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Submitted to the Sloan School of Management
on May 13, 1983 in partial fulfillment of the requirements
for the Degree of Master of Science in Management

ABSTRACT

In this thesis we examine the cofinancing of World Bank projects with commercial banks in the context of the current international debt crisis. After describing the institutions involved, with particular emphasis on the World Bank, we review the history of cofinancing with commercial banks. We then describe the controversy that has existed between the World Bank and commercial banks and present the World Bank's proposal for resolving it. We take a critical look at what commercial lenders and the World Bank perceive to be the benefits of cofinancing, including its impact on the borrower countries.

There are two critical factors that have contributed to the development of the current debt crisis: the volatility of debt repayment structures and the high incidence of full-recourse lending. We evaluate cofinancing, as it has been practiced and as it has recently been revised by the World Bank, in light of these factors. We introduce possible enhancements to the proposed cofinancing mechanisms, through alternative financial instruments and project financing arrangements. We then simulate the effect of four hypothetical instruments: the standard commercial bank loan, one of the World Bank's options, and two options we propose.

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ACKNOWLEDGEMENTS

We would like to thank our adviser Professor Donald R. Lessard for the invaluable guidance he provided throughout the preparation of this thesis. Our brainstorming sessions with him were a constant source of ideas and ensured that this effort was a constant learning process.

We would also like to thank our reader Professor Gordon B.M. Walker for his interest and unique perspective on the subject of this thesis.

Furthermore, we owe a great deal to those staff members at the World Bank and commercial banks who provided us with their impressions and ideas. Without them our research could never have been as rewarding.

Our thanks go to our friends, especially to Cindy for her help and patience. Most importantly, we thank our parents who have always supported our endeavors.

Lest we forget: thank you, Miren; thank you, Brian. And thank you, Paine Webber.

INTRODUCTION

There is much concern currently about the international debt situation. In fact, some describe it as in a state of crisis. Many developing countries face debt service obligations that they cannot currently meet. As a result, commercial loans are being rescheduled and the international lending community is in a frenzy.

This situation has arisen only in the last decade. Until the 1970's, developing countries had only limited access to funds from the developed world -- mainly through official sources, such as governments and the World Bank. The first oil price shock marked a sudden increase in bank lending to developing countries from 1974 to 1975. The developed economies were entering a period of slower growth, and, consequently, their demand for imports declined. This decline in demand was translated into a decrease in export earnings for the developing countries, which, together with the higher price of imported oil, resulted in their large current account deficits. At the same time, commercial banks in the developed economies were accumulating excess deposits as a result of O.P.E.C. surpluses. The slowdown in the developed economies brought a decreased demand for lending, and commercial banks turned to the developing countries as potential customers. The increased lending was followed by expansion in the developing economies, which resulted in expanded markets for

the products of the developed economies.

The second oil price shock of the late 1970's has had more severe consequences for the developing countries. Whereas real interest rates in the 1970's had been very low, at times even negative, both nominal and real interest rates reached their highest point in 1979. This was a result of tight monetary policies aimed at combating high inflation in the developed countries. In addition, lending to developing countries shifted to more short-term maturities, because commercial lenders felt that this would decrease the risk of their loans. Ironically, on an individual basis this might have been the case. However, in the aggregate, this shortening of maturities significantly increased the current liquidity problem, thereby increasing the aggregate risk faced by the banks. Countries, facing volatile short-term interest rates and variable interest payments, required more frequent refinancings of their loans. At the same time as their debt was increasing and shifting to shorter maturities, the recession in the developed countries, combined with the fallen commodity prices, resulted in larger current account deficits in the developing countries. This resulted in large increases in debt-service ratios and, hence, in the current liquidity crisis.

This growing debt burden is, in our opinion, the major

problem facing developing countries today. Two factors contribute significantly to this dilemma: full-recourse lending and volatile loan repayment structures. In essence, much of what is considered "project financing" in the developing countries is really full-recourse (and not non-recourse) lending. Because commercial banks perceive high levels of risk, they demand government guarantees on their loans, thus converting project finance into full-recourse lending. These loans then become part of the general debt obligation of the country and increase its debt burden. In addition, the repayment structures of these loans exacerbate the problem in that they are sensitive to volatile interest rates. Therefore, any attempt to alleviate the debt problem must somehow address these two factors.

It seems logical that the solution to the debt problem would lie with the commercial banks. Ideally, one would want them to adjust their lending practices. However, in a case such as this, it is impossible for one bank to take the initiative and alter its lending policies. It is a gaming situation in which the individual bank would find it difficult to break away from the "herd" in order to pursue its innovative policies. Thus, it would appear that a collaborative mechanism must be found in order to facilitate the solution process.

One form of cooperation, which has existed since 1975, is the cofinancing of projects by commercial banks and the World Bank. The purpose of this thesis is to determine whether or not the current and proposed mechanisms for cofinancing sufficiently address the debt problem in developing countries. In essence, the cooperative action should provide greater benefits to the parties involved than could be attained through individual action. Through extensive interviews with commercial bankers and World Bank staff, we have gained an understanding of the perceived problems and benefits of cofinancing. While several of these are real, many are illusory. We will attempt to determine the extent to which cofinancing methods actually address the issues of full-recourse lending and the repayment structures, and, ultimately, the debt problem in developing countries.

Chapter I describes the various institutions involved in cofinancing, with particular emphasis on the World Bank. It also includes a description of the project lending process of the World Bank.

Chapter II describes cofinancing -- its original form and its history.

Chapter III presents the three basic areas of contention between the World Bank and the commercial banks when considering cofinancing. We then discuss the proposed new cofinancing instruments and the extent to which they address the areas of contention.

Chapter IV examines the advantages and justifications for cofinancing from the perspectives of the three parties involved -- the borrower, the World Bank and the commercial bank.

Chapter V contains an analysis of cofinancing with respect to the issues of full-recourse lending and the volatile repayment structures.

The Conclusion contains further thoughts on cofinancing, as well as recommendations for the future.

CHAPTER I
INSTITUTIONS

In general, the term "cofinancing" refers to the combining of funds from several sources external to a country for the purpose of financing specific projects or programs in that country. The World Bank perceives a need for cofinancing because it never lends 100 percent of the funds necessary for the financing of a given project, and the borrower country cannot always fill the gap with counterpart funds. The combined funds can be from several sources: official entities, export credit institutions and private financial institutions.

Official sources include governments and their agencies and international multilateral institutions. Among the former are agencies such as U.S.A.I.D. and its non-U.S. counterparts in other countries that provide bilateral aid to developing countries. Among the latter are multilateral aid organizations, such as: the World Bank and its affiliates, the International Monetary Fund, the United Nations Group aid organizations (U.N.E.S.C.O. and W.H.O.) and regional development banks, such as the Inter-American Development Bank, the Asian Development Bank and the African Development Bank.

Export credit institutions include programs, such as the United Kingdom's Export Credits Guarantee Department (E.C.G.D.), France's foreign credit insurance program administered by Compagnie Francaise d'Assurance pour le Commerce Exterieur (C.O.F.A.C.E.) and Germany's Gerling-Konzern Speziale Kreditversicherungs - A.G. (G.K.S.) and the Allgemeine Kreditversicherung A.G. These institutions and others like them are usually supported, if not run, by governments. Their common objective is to facilitate the financing of activities that lead to the purchase of the country's exports.

Private sources of funds include private financial institutions, such as commercial banks, pension funds and insurance companies. Commercial banks represent by far the largest lenders to developing countries.

The focus of this thesis, as described in the Introduction, is the cofinancing of projects in developing countries where funds are combined from the World Bank and commercial banks. Since the World Bank only lends for projects that it has identified, prepared and appraised, the projects will be referred to as World Bank projects. (This should not imply, however, that such projects do not belong to the countries in which they are undertaken. The expression simply provides a convenient shorthand for this special category of projects.) Hence, this thesis will examine the cofinancing of World Bank projects by the World Bank and

commercial banks.

Since a cofinancing arrangement requires some degree of partnership between the World Bank and commercial banks, an understanding of the World Bank is essential to a discussion of cofinancing. The World Bank is an institution with objectives unique to it and to only a few other multilateral institutions. As such, it functions within a unique legal and political framework that does not readily allow it to achieve effortlessly a successful partnership with the commercial banks. Commercial banks themselves have a set of policies established so as to best achieve their objectives. For a cofinancing mechanism to be effective, the World Bank will have to "market" such a strategy in a way that is consistent with the objectives and policies of commercial banks. In the same way, commercial banks will need to better understand the objectives and policies of the World Bank if some degree of partnership is to be reached. The following section contains an explanation of the World Bank -- its objectives, procedures, and legal and political constraints.

The World Bank Group

The World Bank Group is composed of three institutions: the International Bank for Reconstruction and Development (I.B.R.D.), the International Development Association (I.D.A.) and the International Finance Corporation (I.F.C.). The

common objective of I.B.R.D. and I.D.A. is:

"...to help raise standards of living in developing countries by channeling financial resources from developed countries to the developed world."-[1]

Although I.B.R.D. and I.D.A. are legally and financially distinct institutions, they are organizationally integrated. Their operations are administered by a common staff. Only the sources of funds and, consequently, the terms of the lending differ according to the institution. This distinction is very important, yet there is much confusion centered around it. The press, the public and even commercial bankers often do not appreciate the distinction between I.B.R.D. and I.D.A.

The institutions differ both in their funding and lending practices. The I.B.R.D. obtains most of its financial resources by borrowing in the capital markets on commercial terms. It then lends to its borrowers at a rate commensurate with its own cost of funds. The average maturity for an I.B.R.D. loan is twenty years and the interest rate is .5 to 1 percent over its cost of borrowing, as estimated for a twelve-month period. The loan typically has a grace period on the repayment of principal of about three years.

I.D.A.'s funds are not obtained on commercial terms. Its

capital comes from three sources: (1) transfers from the net earnings of I.B.R.D.; (2) capital subscribed in convertible currencies by its members; and (3) contributions from its wealthier members. The replenishment of I.D.A.'s resources, which is accomplished periodically, has become a hotly debated issue in the United States Congress, and consequently, in the press. It is here that the distinction between I.B.R.D. and I.D.A. is not fully appreciated by the public. I.D.A. makes "credits," as distinguished from the I.B.R.D. loans, on concessional or "soft" terms to the poorest of the developing member countries. These credits, which are for a term of fifty years, are interest-free. There is, however, a service fee charged to cover administrative costs, typically about one percent. The grace period for the repayment of the credits is ten years. Clearly, I.D.A. credits are intended to reach the poorest of the developing countries. Countries must meet several specific criteria to qualify for I.D.A. credits, one of which is that they not exceed a per capita gross national product maximum. Most countries that qualify for I.D.A. credits receive a blend of I.D.A. credits and I.B.R.D. loans, with the proportion of I.D.A. credits diminishing as their economic conditions improve. Countries are eventually "graduated" when they no longer meet the criteria. In the public debate over the I.D.A. funds replenishment, the general perception is that all "World Bank" lending is from this contributed capital and, hence concessional. In fact,

I.D.A. credits represent, only a fraction of total "World Bank" (I.B.R.D. and I.D.A.) lending. In 1981, I.D.A. loans comprised 28.4 percent of total World Bank lending. [2]

The types of projects financed by I.D.A. are generally not suitable for cofinancing with commercial banks. Most of the countries that qualify for the credits are countries to which commercial banks would not lend, or would lend at such high rates that the countries could not afford to borrow. Thus, this discussion of cofinancing with commercial banks will apply only to loans for I.B.R.D. projects. However, it should be noted that many I.B.R.D. projects are also not suitable for cofinancing with commercial banks; thus, the group of eligible I.B.R.D. projects is rather small.

The International Finance Corporation (I.F.C.) differs from both I.B.R.D. and I.D.A. in that it lends strictly to private sector institutions in developing countries. Its objective is to encourage the growth of private enterprises in these countries. The activities that I.F.C. finances are generally well-suited for cofinancing with commercial banks. In fact, I.F.C. regularly engages in such arrangements. The focus of this thesis is, however, the cofinancing of I.B.R.D. projects and, from hereon, all discussion, unless otherwise indicated, will refer only to the cofinancing of these projects.

International Bank for Reconstruction and Development

The International Bank for Reconstruction and Development (I.B.R.D.) was established in 1944 together with the International Monetary Fund (I.M.F.) at the United Nations Monetary and Financial Conference at Bretton Woods, New Hampshire. It is owned and controlled by its member governments, all of whom must be members of the I.M.F.

The capitalization of I.B.R.D. is often misunderstood and hence warrants some discussion. As mentioned above, I.B.R.D. finances most of its lending operations by borrowing in the international capital markets. Its debt capital represents about seventy percent of its total capital. I.B.R.D.'s borrowing policy is to diversify by country and currency. It sells its securities by placing its notes and bonds directly with its member governments, their agencies or central banks, and by offering its issues to investors in the private investment markets through investment banks, merchant banks and commercial banks. Its bonds carry a "AAA" rating in the United States and comparable ratings in other countries. Historical borrowing costs have remained relatively stable. This reflects a conservative liquidity policy that supports the World Bank's effort to borrow in the capital markets when rates and terms are favorable.

The equity capital of I.B.R.D. includes subscribed capital and net accumulated earnings. The former represents the largest component of the equity; it includes both "callable capital" and "paid-in capital." [3] Callable capital represents most of I.B.R.D.'s subscribed capital (90 percent). It is not actually paid by the members and may not be used in the disbursement or administration of its operations. According to the Articles of Agreement, the founding charter that defines the legal framework within which I.B.R.D. operates, this capital is to be called in the event the World Bank becomes unable to meet any of its debt obligations. It is, therefore, intended as a financial safeguard for its bondholders. However, I.B.R.D.'s operating policies regarding liquidity, diversification of borrowing, lending, and the like, are as they would be without the existence of the callable capital. Paid-in capital represents the remaining 10 percent of the subscribed capital. Unlike the callable capital, it is actually paid by the members and is usable in the institution's general operations.

I.B.R.D. does not bear the risk associated with foreign exchange fluctuations. It holds the currencies of its liquidity in the same proportion in which it borrows. It disburses against loans in the basket of currencies that it currently holds; it is repaid by the borrower in that same basket and paid interest thereon. The basket of currencies in which a given loan is repaid is continually redefined during

the disbursement and repayment periods as the exchange rates of the currencies held shift. I.B.R.D. borrows, however, as if it bore the foreign exchange risk, calculating the implicit revaluation potential of a borrowed currency against the interest rate differential of other major currencies.

I.B.R.D. lending is limited by its Articles of Agreement. The total amount of outstanding and disbursed loans cannot exceed 100 percent of the unimpaired subscribed capital, reserves and surplus. It is important to note that guarantees given count against this limitation. (This is as it should be since the World Bank incurs the same risk through a guarantee as if it had made the loan.) Its ratio of loans to equity, as governed by its Articles of Agreement, contrasts with that of a commercial bank, which is typically greater than 15-to-1. Capital increases for I.B.R.D. can be approved periodically by a special governing body, the Board of Governors. The ratio of loans to equity, however, can only be altered by an amendment to the Articles of Agreement.

The function of I.B.R.D. is to lend for activities that contribute to economic growth and productivity in its developing member countries. Certain basic rules, as stated in the Articles of Agreement, govern its lending decisions. All loans must have a government guarantee. All loans must be for projects or, in special circumstances, programs that are considered "productive." Since the I.B.R.D. must "pay due regard to the prospects of repayment,"-[5] it is required to

lend only when it "can assure itself that necessary funds are unavailable from other sources on reasonable terms."-[6] Hence, I.B.R.D. loans are intended to supplement official and private lending. Its decisions to lend (as distinguished from not to lend) must be based on economic considerations. It is interesting to note that since all loans have government guarantees, the repayment of a specific loan does not hinge on the success of the project, but, rather, on the overall ability of the government to meet its debt obligations.

I.B.R.D. states that it lends to member governments, public agencies and corporations, or private entities and corporations. However, since it requires a government guarantee, it in effect is only lending to governments, although funds are channeled to the other entities.

The World Bank considers itself both a developmental and financial institution. Accordingly, the projects selected for financing are expected to meet criteria established by both "sides" of the institution. Given the broad development objectives of the World Bank, the loan approval process differs considerably from that of commercial banks. Following a request by a member country, the World Bank undertakes a comprehensive study of the economy (the Country Economic Report). It is here that the overall development objectives are agreed upon by the World Bank and the government. This document serves as a planning tool for World Bank lending in that country, as well as an assessment of the country's

overall "creditworthiness." Projects for which it lends must go through an elaborate process of evaluation prior to approval. Thereafter, unlike commercial banks, the World Bank continues its involvement throughout the implementation of the project. The process that World Bank financed projects undergo will be referred to, from hereon, as the project cycle.

Project Cycle

The World Bank considers that it passes through six distinct phases in the development of a project: identification, preparation, appraisal, negotiations and board presentation, supervision, and evaluation. [7] From the perspective of commercial banks, these phases can really be condensed into two broader stages. The first comprises all the steps, leading up through the appraisal of the project, which result in the project analysis. The second comprises all the steps thereafter which involve the close monitoring of project implementation.

In the identification phase, [8] the first phase of the project cycle, the World Bank and government identify projects they consider to be of high priority for the economic development of the country. The projects that are identified are seen as consistent with the sectoral objectives of the country's development strategy. The general design of a

project is still so tentative at this stage that no analysis can be done, but projects that are identified are considered potentially viable.

Once a project has been identified, the World Bank makes a commitment to the project and there begins a close collaboration by the World Bank and the proposed borrowers: the preparation phase.-[9] The extent and nature of the collaboration vary greatly from project to project, depending on the borrower's expertise and familiarity with the World Bank techniques and procedures. During this phase, the technical and institutional arrangements for the project are made, and detailed feasibility studies are prepared.

The preparation phase then leads to project appraisal,-[10] at which time the World Bank reviews all aspects of the project and lays the foundation for the subsequent steps in the project cycle. The project is evaluated for the soundness of its technical design and engineering, as well as for the appropriateness of the technologies and standards used. It is also critically examined in terms of its "institution building" capacity, that is, the impact it is expected to have on the development of the country's institutions. Probably the most important aspect of this phase, from the point of view of the World Bank, is the assessment of the economic impact of the project on the development of the country. Finally, the financial appraisal is undoubtedly the most directly relevant component

of the project analysis from the perspective of commercial banks in that it ensures that there are sufficient funds to carry out the project and that the project is financially viable, ie. that it will generate cash flows sufficient for it to meet its financial obligations.

The next phase, negotiations and board presentation, -[11] marks the transition from the analysis to the implementation of the project. During the negotiations, the World Bank and the borrower attempt to reach agreements regarding the overall financial objectives and institutional arrangements of the projects. The agreements are then incorporated in the loan documents as loan covenants, and the loan is presented to the Board of Directors for approval. The World Bank maintains an active role in the subsequent phases of the project cycle. According to the Articles of Agreement, the World Bank is required to:

"...make arrangements to ensure that the proceeds of any loan are used only for the purposes for which the loan was granted, with due attention to considerations of economy and efficiency without regard to political or other non-economic influences or considerations". -[12]

An important aspect of the supervision phase is ensuring that procurement of goods and services financed under the loan is carried out in accordance with the guidelines stated in the loan agreements. In most cases, this is accomplished under

"international competitive bidding." This method ensures that prospective bidders from all member countries and Switzerland will have ample notification of a borrower's needs and an opportunity to bid on the goods and works. At other times, other procurement rules, such as local competitive bidding, may be stated in the loan agreements. As part of the supervision of a project, the World Bank assures itself that the borrower has prepared the specifications and tender documents, and has evaluated the bids in the appropriate manner. Only then will it disburse against the contract.

Finally, the World Bank completes the project cycle with ex post evaluations of the project. This allows the World Bank to expand its experience base for further projects.

The World Bank lends for a wide variety of projects. Most of its lending to date has been for agriculture and rural development projects (21 percent), transportation (21 percent) and power (21 percent). Of the sectors to which I.B.R.D. lends, only a few are suitable for commercial bank lending. Commercial banks are more likely to lend for projects in the industry, energy, power and telecommunications sectors than in the other sectors because such projects yield a higher financial rate of return and are less risky for the borrower.

ENDNOTES - CHAPTER I

1. The World Bank, The World Bank, September 1981, p.1.
2. Ibid, p.2.
3. Rotberg, Eugene H., The World Bank: A Financial Appraisal, Washington: The World Bank, January, 1981, pp. 21-25.
4. Ibid, p. 15.
5. The World Bank, op. cit., p.2.
6. Ibid.
7. Baum, Warren C., The Project Cycle, Washington: The World Bank, 1982, pp. 6-24.
8. Ibid, pp. 6-7.
9. Ibid, pp. 8-10.
10. Ibid, pp. 11-17.
11. Ibid, pp. 17-18.
12. The World Bank, International Bank for Reconstruction and Development: Articles of Agreement, 1980, p.4.

CHAPTER II
BACKGROUND AND HISTORY

Background

As mentioned in Chapter I, the term "cofinancing" refers, in general, to any arrangement whereby World Bank funds are associated with funds from other sources for the purpose of financing a project. Until recently, there were three general forms of cofinancing: joint, parallel, and participations. Under all three forms, the participating banks have equal claim on the project outcome, ie. there are no subordinated claims.

Under "joint financings," the World Bank and co-lenders share, in agreed proportions, in the financing and disbursements of the cofinanced component of the project. Since funds are combined to finance the same component, all procurement of goods and services must take place in accordance with World Bank procurement rules, typically under international competitive bidding.

In a "parallel financing," the World Bank and co-lenders finance separate components of a given project. Thus, the borrower enters into more than one loan agreement. In this case, World Bank procurement policies apply only to those goods and services procured for the World Bank component.

The sale of "participations" in a World Bank loan can also be regarded as a form of cofinancing. However, it is only considered as such if the arrangements for the sale have been set before the loan is signed. Thus, selling participations from the World Bank's portfolio of outstanding loans is not considered cofinancing.

Of the cofinancing arrangements possible, commercial banks become involved via parallel financings or participations. A parallel financing offers the private lender flexibility in that the parallel loan's terms need not match the World Bank's terms. On the other hand, participations are less popular because World Bank loans have fixed-rates and longer maturities than commercial loans; private lenders are forced to lock themselves into an instrument which is probably commercially less attractive. Therefore, the bulk of cofinancings with commercial banks have been through parallel loans.

The mechanism for arranging a cofinancing on a parallel basis is quite flexible and involves three parties: the borrower and its guarantor, the commercial banks, and the World Bank. If a borrower chooses to seek funds from private lenders, it must take the initiative in approaching the commercial banks. While the World Bank does not officially participate in the borrower's choice of a private lender, it does facilitate the process by alerting commercial banks to cofinancing possibilities, as well as by advising the borrower

in cofinancing technicalities. However, the ultimate choice rests with the borrower.

Under the parallel arrangement, the borrower negotiates two separate loans. The World Bank loan is usually at a fixed rate with an extended maturity. On the private side, the borrower negotiates terms and conditions directly with the commercial banks and chooses the lead bank in the syndicate. These commercial deals tend to be close to standard medium-term Euroloan deals and include the usual management, commitment, and participation fees. They are priced at a spread above LIBOR. Whether or not the commercial loan is guaranteed is negotiated between the borrower and commercial lenders. Thus, the borrower signs two separate loan agreements: one with the World Bank, and one with the commercial bank syndicate.

Although the World Bank and commercial banks have separate loan agreements with the borrower, they can be related in several ways. It is at this point that the World Bank draws the distinction between formal and informal arrangements. Often, the World Bank will act as billing agent for the commercial banks, collecting the payments of principal, interest and fees. In a typical formal cofinancing, the World Bank and commercial banks also sign a memorandum of agreement which describes the relationship between them and provides for: (a) the exchange of relevant information concerning the project and borrower, as approved

by the borrower; (b) the mutual consultation before taking action as outlined in the loan agreements with the borrower; and (c) the World Bank's role as billing agent, if applicable.

The World Bank and commercial banks are further associated through cross-default clauses in their respective loan agreements with the borrower. A standard World Bank loan agreement contains a provision "giving the World Bank the right to suspend disbursements on its loans if, for good cause, the loan from the private bank is suspended or cancelled, or if repayments are accelerated."-[1] Should the private bank accelerate repayments because of default, the World Bank also has the right to accelerate repayments on its loan. The commercial bank's loan agreement contains a similar clause. It is important to note that these cross-default clauses are optional, and neither lender is obligated to take action. The extent of these linkages between the World Bank and the commercial banks varies from transaction to transaction. In the case of an informal cofinancing, the borrower would conclude separate loan agreements and there would be no memorandum of agreement between the World Bank and the commercial bank. However, the standard formal arrangement seems to include some linkage between the World Bank and the commercial banks.

History

Cofinancing through parallel loans with commercial banks is still fairly new at the World Bank. Since 1974, approximately 92 projects have been cofinanced overall, with about 44 having formal arrangements with the World Bank (ie. memoranda of agreement and optional cross-default clauses) and the other 48 without formal arrangements (linkages). Among the first parallel arrangements were two loans to Brazilian steel companies in 1975: Companhia Siderurgica Paulista (COSIPA) and Companhia Siderurgica Nacional (CSN). Both loan syndicates were led by Bank of America and the loans totalled U.S.\$50 million and U.S.\$55 million respectively. The COSIPA loan was for eight years at 1 7/8 percent above LIBOR with three years grace on the principal repayment and the CSN loan was for seven years at 2 percent over LIBOR with three years grace on principal repayment. In both cases, the principal was retired in equal installments after the grace period. Of the 44 parallel loans with formal arrangements, signed between 1974 and 1982, 26 were for projects in Latin America and the Caribbean, with eleven in Brazil alone.~[2]

As mentioned, not all I.B.R.D. projects are suitable for cofinancing with the private sector. In general, commercial banks prefer to lend to large, capital intensive industrial projects which produce fairly reliable cash-flows within several years. It is, therefore, no surprise that between

1973 and 1982, 28 of the 92 privately cofinanced projects (or about 30.4 percent) were in the power sector and included projects in Brazil, Argentina, Thailand, and Fiji (among others). Other popular sectors included agriculture and rural development (17 projects), industry (14 projects), and transportation (9 projects). Within the agriculture sector, cofinanced projects were geared more towards agro-industries (eg. fertilizer production). The industry sector included several steel projects, as well as iron-ore, nickel, and aluminum; in the transportation sector both highway and railroad projects were privately cofinanced. The remaining sectors, such as education and urbanization, did not contain projects which were particularly attractive to commercial lenders.~[3]

As stated above, between 1973 and 1982, there have been 44 private cofinancings involving formal arrangements with the World Bank. Approximately 207 institutions have been involved and the total cofinanced amount is about U.S.\$2 billion. In a tally based on the country of headquarters, 39 United States institutions and 35 Japanese institutions have provided 22.5 percent and 29.8 percent of the cofinanced funds respectively. The next most active participants were United Kingdom banks with 8.2 percent of the volume and Canadian banks with 7.1 percent of the volume. The list of frequent agent banks includes Bank of America N.T. and S.A., Chemical Bank, Bank of Tokyo, the Industrial Bank of Japan, Lloyds Bank

International Limited, and Bank of Nova Scotia International Limited. For the 44 projects with formally arranged cofinancings, the syndicated loans have ranged from as little as U.S.\$5 million to as much as U.S.\$200 million. The terms of these loans have been varied, with 5 years the shortest and 17 years the longest term; however, the average term is about 9.5 years. The interest rates hover at one to two percent above LIBOR, and grace periods on principal repayment, when they have been granted, extend between one and eleven years, with the average being about 4.2 years.

While the numbers would seem to imply a rather strong emphasis, cofinancing has been actually only a small portion of overall World Bank lending. The cumulative total World Bank lending (I.B.R.D. and I.D.A.) as of June 1982 was approximately U.S.\$105.2 billion.^[4] In addition, about U.S.\$32.3 billion were raised through all forms of cofinancing (official sources, export credits, and private sources), of which U.S.\$8.4 billion were from private sources. Thus, total lending (World Bank plus cofinancing) was U.S.\$137.5 billion; cofinancing (all sources) accounted for 23 percent and private sector cofinancing accounted for only 6.1 percent.

There are several reasons why the amount of private cofinancing has been relatively small. Perhaps the greatest constraint, especially from the World Bank's perspective, is that there are relatively few projects which can stimulate commercial banks' interest in cofinancing. In any given year,

roughly 200 projects are appraised and presented to the Executive Directors for approval. Of these, about 170 involve concessionary funding and 15 involve export credits. Only the remaining 15 projects are attractive to commercial lenders. It is possible that as countries continue to develop, the project mix will shift, thereby increasing the number of commercially attractive projects. However, for the present, the number of these projects is small and places a limit on the amount of private cofinancing possible.

Another possible reason for the low amount of private cofinancing seems to rest with the mechanism itself. The basic stance of the World Bank has been that the private co-lenders should be involved in a separate loan to the borrower. In essence, the two should remain "distant." This is emphasized by the fact that the cross-default clauses, when they exist, are only optional; the World Bank and commercial lenders are not legally bound to support the other's action should one of them declare a loan in default. Many commercial banks feel this separation tends to make the cofinanced project less attractive than if the World Bank were more closely tied to them, and it limits the commercial banks' involvement. This issue is discussed more fully in the next section.

In general, cofinancing seems to be an attractive

concept. However, it has not occurred frequently. This might indicate that the current mechanisms do not adequately satisfy the differing objectives of the World Bank and commercial banks. The next chapter will present the different points of view and describe the World Bank's proposed solution to this controversy.

ENDNOTES - CHAPTER II

1. The World Bank, Co-financing with Commercial Banks: Note on World Bank Policy on Cross Default Clauses in Commercial Loan Agreements, January, 1983, p.1.
2. Source: The World Bank.
3. Ibid.
4. The World Bank, Annual Report, 1982.

CHAPTER III
CONTROVERSY AND PROPOSED NEW INSTRUMENTS

The Controversy

There are basically three areas of contention between the World Bank and commercial banks when considering cofinancing: the extent of World Bank participation, the cross-default clause, and guarantees. Under the original cofinancing mechanism, the commercial lenders (often through a syndicate) and the World Bank signed separate loan agreements with the borrower. Although both parties were involved in financing the same project, commercial bankers felt that the World Bank's presence alone did not really contribute to a reduction in their risk exposure. After all, the World Bank maintained a "preferred" status with the borrower, and commercial bankers felt that their position had been subordinated to that of the World Bank. Technically, their perception is accurate, for the World Bank believes its role must transcend that of a commercial creditor. In fact, in recent reschedulings, the commercial bank portions of cofinanced projects in Ecuador and Argentina were not protected, whereas the World Bank loans were not rescheduled. Thus, commercial banks are now seeking a closer relationship with the World Bank before entering into cofinanced deals. Commercial bankers believe, however, that

there is a certain reticence in the World Bank for it is felt that a more formal relationship will "commercialize" the World Bank and move it away from its broad development objective. If this is the case, then the World Bank must weigh this against the desirability of increasing commercial banks' involvement in lending to developing countries.

The second point of contention concerns the cross-default clause. Under the current cofinancing mechanism, the lenders agree to an optional cross-default clause in the loan agreement with the World Bank. By means of a cross-default clause, the World Bank reserves the right to suspend disbursements on its loans if, for good cause, the loan from the commercial bank is suspended or cancelled, or if repayments are accelerated. (The World Bank considers a default as "good cause.") It also reserves the right to accelerate repayment of its loan when a commercial bank loan is accelerated following a default by the borrower. Since the clause is optional, it does not, however, obligate the World Bank to take these remedial actions, but only states that it has the right to do so. Again, commercial bankers feel that this does not offer enough protection to reduce their risk exposure. In effect, the threat of default is lessened only to the extent that a given government feels the World Bank will take action if a loan is declared in default. Commercial lenders are aware of the World Bank's special relationship vis-a-vis member governments, and they are not convinced the

World Bank would come to their support when the situation had deteriorated to the point of confrontation between commercial banks and the government. On the other hand, the World Bank does not want to put itself in the position of having to respond in a specific fashion based on others' decisions. It is quite aware of its special relationship with a government, and it wants to maintain a certain flexibility of action. Thus, the cross-default issue represents a gaming situation: it reduces the commercial bank's risk only in that it poses the possibility of World Bank action in response to a country's default on a project.

The last point of discussion between the World Bank and the commercial banks concerns the possibility of a World Bank guarantee on the private portions of a cofinanced project. While the World Bank requires a guarantee on its loans, a guarantee is a negotiated item between the banks and the borrowers in the commercial bank loan. In many cases, commercial banks have received guarantees directly from the government or indirectly via parastatal organizations. However, these do not always carry the weight a commercial banker would like. Therefore, commercial bankers are requesting that the World Bank guarantee the private portion of a cofinancing. From a legal standpoint, this poses a problem for the World Bank. If it guarantees a loan, it must carry that loan on its books as if it had actually signed it. The amount of the guarantee is then counted against the

lending limit for that country and against the total World Bank lending target. Thus, the World Bank might as well have lent directly for the project.

These three specific points were derived from the basic issue of the World Bank-commercial bank relationship in cofinancing: how close should it be? After lengthy discussions with commercial banks, the World Bank has developed a supplementary cofinancing mechanism to augment the current system. It seeks to address the specific issues raised by commercial banks and attempts to define a closer relationship between the two.

Proposed New Instruments

In January 1983, the Executive Directors of the World Bank approved management's proposal to establish a U.S.\$500 million fund for the purpose of lending under the revised cofinancing scheme. This fund will be drawn down over the next two years in a pilot program with an expected average of fifteen to twenty projects per year. Given an average World Bank participation of 20 percent, it is hoped that the alternate mechanism will result in total cofinancings of approximately U.S.\$2.5 billion over the two years.

The purpose of the new cofinancing instruments in

supplementing the present methods is to increase commercial bank involvement. To this end, the new instruments are geared toward involving the World Bank in a direct participation or contingent obligation in a commercially syndicated loan. In general, the structure of the overall cofinancing will be similar to the current method. A given private cofinancing arrangement will consist of two parallel loans: the first from the I.B.R.D. and the second from the commercial lenders. The difference is that the World Bank will either be a participant in the syndicated second loan or will hold a contingent obligation in the second loan. The World Bank loan (or "A" loan) will be at standard I.B.R.D. terms; the parallel loan (or "B" loan) will be at prevailing commercial terms. Additional funds raised through these cofinancing arrangements will be used to finance projects already considered suitable for I.B.R.D. lending. The World Bank hopes that its closer association with the commercial lenders will improve "their perception of the quality and security of cofinanced assets."-[1]

There are three new instruments: a direct financial participation, a guarantee, and a contingent obligation. While each is different, the three have a common goal. That is, each option is supposed to encourage commercial banks to grant longer maturities and grace periods than are normally granted. In this way, a loan's repayment stream would better match the borrower's capacity to repay. This is a problem

with the current cofinancing mechanism: the commercial parallel loans in a cofinancing rarely have longer maturities than non-cofinanced commercial loans. The new instruments should solve that. They are described below.

i. Option I - Direct Financial Participation

Under this scheme, the World Bank would participate in the later maturities of a commercial loan, thus extending the maturities beyond the standard commercial limit. Initially, the World Bank would take a 10 percent participation, but would be willing to increase it to 25 percent, if necessary, in the hope of extending maturities. As the loan matured, the World Bank's share would increase proportionately, and it therefore would retain the right to reduce its share through the sale of its participations, thus remaining under the 25 percent ceiling.

ii. Option II - Guarantee

This instrument has two forms. In one case, the World Bank would guarantee the later maturities (eg. the last four years) of a commercial loan, thus providing the co-lenders with the incentive to extend maturities. In the other case, the World Bank would offer the co-lenders a put option on the later maturities. When exercising this option, under the conditions specified in the loan agreement, the World Bank

would purchase the designated maturities at the request of the co-lender. Of course, in economic terms, these two forms of this instrument are identical. The World Bank has priced the guarantee at about 75 basis points, which reflects the opportunity cost of its forgone investments. This is really quite cheap when one considers that the World Bank is valuing its investment opportunities at close to the risk-free rate, while the project it would guarantee is much riskier. This discrepancy is difficult to justify, given that it could result in an adverse selection of projects because the commercial banks would have less incentive to properly evaluate new projects when they are receiving a grossly undervalued option (guarantee). As was mentioned earlier, a guarantee counts against the World Bank lending limits and would correspondingly reduce its investment opportunities.

iii. Option III - Contingent Obligation after Level Payments

Under this scheme, the commercial lenders would extend a variable interest rate loan with fixed payments, and the World Bank would take a contingent participation in the final maturity. The variable interest and principal payments would be adjusted within a framework of a fixed nominal overall debt service payment. Since it would be a variable interest loan, the interest charges could change and the principal payments would adjust so that the overall payment remained fixed. If interest rates rose, the amortization would not be completed

according to the original schedule, and the World Bank would accept the obligation to finance the unamortized balance at the loan's maturity. Of course, the option would also exist for the commercial lenders to agree to refinance this outstanding principal balance.

Implications of New Instruments

The new instruments, in that they are a departure from the original cofinancing mechanism, require a different approach in their structuring. Whereas, under the original system, the World Bank did not participate with the borrower in choosing the co-lenders, its role will now be more active. The borrower and the World Bank together will decide which group of commercial banks will be approached. If preliminary discussions are fruitful, the selected banks will be invited to submit offers, which will be reviewed by both the World Bank and the borrower. However, the mandate to organize and negotiate the loan will be awarded by the borrower. Although the World Bank would play a significant role in the cofinanced loan, it does not wish to retain a controlling position. Thus, the role of lead manager or agent bank will be awarded to a co-lender.

This closer relationship between the World Bank and

co-lenders entails other changes in the current cofinancing procedures. The World Bank maintains strict control over procurement and disbursements under its loans, and it only disburses for approved purchases. The regulations would also apply to the actual or contingent share of the cofinanced loan. Also, the World Bank "would have to be satisfied that the entire loan would be used for proper purposes in an efficient and economical manner."-[2] Thus, co-lenders would benefit from the additional attention paid to the use of their funds.

The "B" loan would contain standard covenants governing the relationships between commercial lenders and borrowers. The World Bank would not include its broader sectoral or developmental covenants which are standard in an I.B.R.D. loan agreement. However, these covenants would be retained in the parallel "A" loan agreement. Governing law could be either English law or New York law, depending on the co-lenders. The World Bank usually follows international law and would have "to satisfy itself as to the acceptability of any particular domestic law and national jurisdiction."-[3] Another interesting point concerns the guarantee required by the World Bank in its loans. In the case of a "B" loan, the guarantee extended by the government would only apply to the World Bank portion of the loan.

By offering three new instruments, the World Bank is attempting to respond to the commercial banks' criticisms of cofinancing without compromising its own position vis-a-vis the borrower and its government. In general, commercial banks have commented favorably on the new instruments. However, several issues still remain to be settled.

Although the World Bank is willing to participate directly in a commercially syndicated loan, some commercial bankers have questioned the extent of this willingness. As it stands, in Option I (direct participation) the World Bank participates only in the later maturities. Several commercial bankers have wondered why the World Bank will not take a straight pro-rata participation across all maturities, rather than a discrete participation. In their opinion, a pro-rata participation would signify a closer relationship between the World Bank and commercial banks. From the World Bank's perspective, a pro-rata participation would bring it too close to the commercial banks, thus endangering its flexibility. While the World Bank does wish to cooperate with the commercial banks, given that its primary responsibility is to the borrower, it feels it must retain a separate relationship.

Several commercial bankers, when commenting on the new instruments, again raised the question concerning the cross-default clauses and guarantees. The new instruments will retain the standard optional cross-default clauses between the World Bank and the co-lenders. The World Bank

still does not want to commit itself to taking an action predicated on the actions of others. The World Bank also continues to argue adamantly against the extension of a blanket World Bank guarantee, which would cut into its lending limits. This is certainly justified in that a guarantee represents a real cost, based on the increased risk borne. In effect, they feel commercial bankers are looking for means of mitigating risk that they should probably be willing to assume, given the returns they are demanding. If one were to carry the issue further and allow the World Bank to guarantee the commercial portion of the loan, then the commercial banks should probably be lending at the risk-free rate. This being the case, the World Bank could itself just as easily borrow in the international capital markets at a low rate ('AAA' rated by Moody's) and relend these funds. There would only be two constraints to this option: (a) the Articles of Agreement stipulate that the world Bank's capitalization be fixed subject to the approval of the Board of Governors; and (b) the World Bank's presence in the capital market is so large, that it would find it difficult to borrow very frequently. This example possibly extends the point to its extreme, but it serves to illustrate that through a cofinancing, the World Bank hopes to achieve goals other than merely increasing its own lending volume.

As of this time, there is little data to show whether these new instruments will actually increase private cofinancing with the World Bank. Although commercial bankers have commented favorably, there is really no way of predicting whether or not these supplementary mechanisms will be successful. However, the question can be raised as to whether or not these new instruments -- or cofinancing in general -- are actually beneficial to the three actors: the borrower, the World Bank, and the commercial lenders.

ENDNOTES - CHAPTER III

1. The World Bank, Co-financing with Commercial Banks: Note on the New Instruments, February, 1983, p.1.
2. Ibid, p.3.
3. Ibid.

CHAPTER IV

PERCEIVED BENEFITS: A CRITIQUE

In any cofinancing arrangement, the three parties involved (the borrower, World Bank and commercial lenders) should derive some benefits. On one side, the commercial lender hopes to reduce its risk exposure through an association with the World Bank. The borrower could benefit from improved terms, funds additionality, and access to the capital markets. In the middle, the World Bank as facilitator would gain additional leverage in structuring projects. In addition to looking at the benefits of cofinancing to these three actors, it is important to look at the benefits as they bear on the system as a whole, ie. on society. In other words, does cofinancing somehow alleviate the international debt problem? If it can be shown that there is a net benefit to society through some synergistic effect, then the collaboration of the World Bank with commercial banks via cofinancing is superior to the sum of their individual efforts.

The Borrower

There are four areas in which the borrower supposedly benefits from undertaking a project funded through cofinancing: additionality, greater access to commercial lenders, better terms, and improved projects.

"Additionality" refers to the notion that an action (eg. cofinancing) can broaden the capital base to which a developing country has access for project financing. Implicit in this definition is the assumption that the World Bank is resource-constrained and that there are more projects than there are resources to finance them. In order to show that additionality is really achieved, one would need to prove that a commercial bank would not have lent for the project were the World Bank not involved or that it would lend more were the World Bank involved. This could indicate that, by decreasing the perceived risk to the commercial banks, the World Bank's presence has increased the flow of funds to the borrower.

Although it is difficult to determine directly if additionality has occurred, one can at least test some of the underlying assumptions. In the last two fiscal years, the World Bank has not even achieved its own lending targets. This indicates that the resource constraint over this period has not been binding. Hence, additionality could not have been achieved. With respect to this criterion, the borrower has not really benefitted from cofinancing.

Another stated benefit of cofinancing is that it increases the borrower's access to the capital markets. From a philosophical standpoint, one could argue that this is necessary. As a country develops, it must move away from concessional borrowing and enter the capital markets. Since the World Bank exists to promote development, it should be instrumental in this process. It is true that World Bank-arranged cofinancing has involved many commercial banks (approximately 207 between 1973 and 1982), but it would be difficult to prove that these institutions would not otherwise have financed projects in these countries. The countries in which cofinancings have occurred are predominantly Latin American countries where foreign commercial banks already had experience (eg. Brazil, Argentina, etc.), and might well have financed projects alone. However, recent projects have also been financed in Thailand, India, and Liberia -- countries possibly less familiar to commercial banks. Thus, it appears that borrowers might be benefitting from cofinancing in this respect. As an aside, the argument can also be made that a commercial bank will lend for any project in a developing country at the right price, and it does not need the World Bank to facilitate this (or make such "introductions"). The question remains, however: can the borrower afford to pay the required price?

Perhaps the greatest envisioned benefit of cofinancing is that it improves the terms of loans to developing countries, including lower interest rates and longer maturities. Together, these would lower the projects' contribution to the country's debt service payments in any given year. In essence, the commercial bankers would be willing to make concessions if they felt that the World Bank's presence would diminish risk and reduce the chance of default.

A meaningful comparison of terms under cofinancing versus under regular financing is somewhat difficult to make. Differences in project risk, even for the same borrower, would be met with different terms. Also, the timing of the loans and the corresponding market conditions would account for different terms. However, in a select comparison, conducted at the World Bank, of project terms versus terms obtained by the same borrower, interesting results were obtained. For example, the Republic of Ecuador borrowed U.S.\$70 million in June 1977 at 1.5 percent above LIBOR for seven years. In March of the same year, the Autoridad Portuaria de Guayaquil, with the government of Ecuador as guarantor, borrowed through a cofinancing U.S.\$10 million at 1.5 percent above LIBOR for eight years. The other comparisons are similar. The results have led World Bank officials to believe that cofinancing does not necessarily improve the terms the borrower can negotiate.

The last justification for cofinancing is that it improves and expands the scope of projects that commercial banks are willing to finance. Again, this is difficult either to support or refute. However, if one considers the types of projects that have been cofinanced so far, they appear to be projects which commercial banks would have considered in any case (industrial projects, etc.). It is not clear that commercial banks would be interested in a standard I.B.R.D. project because the aim of such a project is different from that of a commercial project. It is normally a longer-term project with cash-flows turning positive only after a substantial lag. Furthermore, its goal is macro-economic development, which will often lie outside the interest of the commercial bank. Therefore, although an expansion of the project base through private cofinancing would be desirable, it does not appear to be possible.

Although the borrower should benefit from cofinancing with the private sector, upon closer reflection it is not clear that the stated benefits are actually obtained. It is difficult to prove or disprove additionality, as well as the greater access to capital markets, and it is not clear that better terms (price and maturity) are negotiated, or that the project base can be expanded through cofinancing.

The World Bank

Given that the objective and raison d'etre of the World Bank is the fostering of economic development for its developing member countries, it should follow that the benefits to the World Bank of cofinancing should be the same as those of its borrowers. Hence, the above discussion of the benefits to the borrower -- additionality, greater access to commercial lenders, better terms and improved projects -- also applies to the World Bank.

In addition, because World Bank lending is limited by its Articles of Agreement, cofinancing offers it the possibility of broader impact in affecting international development. As was mentioned earlier, the World Bank has not met its lending targets in the past few years, indicating that its resource constraint is not currently binding. Recently, however, its lending program stopped growing in real terms. This has even been reflected in a contraction in the size of its staff. It is likely, therefore, that the resource constraint will be binding in the future. By providing access to expanded sources of capital to finance the projects that it promotes, cofinancing broadens the World Bank's impact on policy. As a result, the World Bank can promote more projects and larger projects. Moreover, it leaves more resources available for nonproject lending, or structural adjustment lending, which has a potentially broader impact on the macro-economic

policies of its borrowers. Finally, the increased capital leaves more resources available for "typical" I.D.A./I.B.R.D. projects that commercial banks would probably never be interested in financing.

Commercial Lenders

For a discussion of cofinancing to be more than purely academic, one must look at it in part from the perspective of the commercial lenders. Given that there are benefits to be derived by the borrower and the World Bank, the next step is to examine what commercial bankers perceive to be the advantages for them of entering into cofinancing arrangements. To this end, we conducted interviews with commercial bankers from several major banks that have been active in cofinancing with the World Bank. The following description of the advantages and disadvantages to commercial lenders stem from these interviews.

Probably the most tangible advantages are derived from the process through which World Bank-financed projects are subjected. Because of its broad development objectives, the World Bank directs a large amount of financial and staff resources towards making and following up on its lending decisions. The analysis that goes into a project appraised by the World Bank is far more elaborate than in the case of a commercial bank. As a result, a project that has reached the

World Bank's appraisal phase is likely to have had many of its rough edges smoothed out. Moreover, the World Bank, due to its official character, is privy to proprietary information. All these factors can have a bearing on the potential success of projects. The potential disadvantage to commercial banks of this process is the time that it takes; yet, in our discussions with commercial bankers, this did not seem to be of great concern.

Commercial bankers stressed the usefulness of the World Bank's involvement during the implementation phase of the project, even more emphatically than in the analysis phase. They felt that the World Bank was very effective in closely monitoring project implementation through the reporting requirements it imposes on the borrower and the periodic field visits its staff make. This aspect of the World Bank's involvement was found to aid in the effective and efficient implementation of projects and to lend great strength to an association with the World Bank. (This was the element that one banker thought the World Bank should stress the most in "marketing" cofinancing to the commercial banks.)

More important than the quality of the World Bank's project analysis and role in implementation are the benefits that are less tangible. These benefits relate to the "political presence" of the World Bank and bear on the possible lessening of risk in a project cofinanced with the World Bank. As mentioned earlier, the projects that are

identified, and subsequently disbursed against by the World Bank, are high priority projects. This, combined with the World Bank's involvement, helps to ensure that they will be allocated the resources and given the attention necessary for their success. In past cofinancing arrangements, some loan agreements between the commercial lenders and the borrower have included cross-reference clauses. These clauses often reflected commitments governing certain aspects of project implementation that were stated in the covenants of the loan agreement between the World Bank and the borrower. In our discussions with commercial bankers, the cross-reference clauses were not seen as important in the overall scheme since the World Bank could be counted on to ensure that the commitments were met.

Another advantage to an association with the World Bank arises from the special status that the World Bank enjoys. Not only does it receive a government guarantee for all of its lending, but there has never been a default on a World Bank loan. It could be that this special status may have a positive effect on the commercial bank component of a cofinanced project. On the other hand, it could also be that, in the case of pending default, the World Bank component of the cofinancing would be so likely to be repaid that the commercial bank component might have a greater probability of not being repaid. It should be noted, though, that in almost every past cofinancing with the World Bank, commercial banks

have received government guarantees. This does seem to be a benefit of an association with the World Bank.

An additional, though less important, benefit to commercial banks of entering into a cofinancing is that one bank must take the lead management role in a loan syndication, and hence collect the associated fees.

Finally, a few commercial bankers raised the public relations aspect of cooperating with an institution such as the World Bank. The consensus was that this was only a minor benefit, however.

One key element in assessing the appeal of cofinancing arrangements to commercial banks is the cross-default clause in the loan agreement between the World Bank and the borrower. Since under the optional cross-default clause, the World Bank is not obligated to take remedial actions, but only has the right to do so, the consensus of the commercial bankers interviewed was that the clause, as stated, was worthless.

Society

When looking at cofinancing from the standpoint of society, the perceived benefits to the borrower, World Bank and commercial banks, may not in fact be benefits at all. Under the proposed cofinancing structure, all of the benefits described above have costs associated with them. Some of these costs are incurred by the same party deriving the

benefit. The questionable existence of additionality is the best example. It remains uncertain whether cofinancing indeed expands the capital base to which a country has access for its investments or if it simply replaces commercial lending.

Other costs that offset benefits of one party may be incurred by another party. This occurs in the case of the guarantee that the World Bank offers under Option II or as implicit in the cross-default clause (if it were obligatory). Upon first observation, such a guarantee could be viewed as a net transfer from the World Bank to the commercial banks. As such, it would be neither good nor bad in that commercial bank lending would simply replace World Bank lending for the same types of projects as before. However, there is an additional cost associated with a World Bank guarantee to the commercial lenders. Since the World Bank requires a government guarantee from its borrower, its guarantee to the commercial lenders ensures that the government will also guarantee the obligation to the commercial lender. In essence, cofinancing, where there is some form of guarantee by the World Bank, contributes to replacing non-recourse lending with full-recourse lending. This results in a larger general debt obligation and exacerbates, rather than alleviates, the current international debt problem. In fact, given that commercial banks have enjoyed a government guarantee under almost every cofinancing to date, the net effect may actually represent a cost to society. The next chapter will elaborate on this and identify

what are really the important issues to be addressed and how a net benefit to society might be achieved.

CHAPTER V
EVALUATION OF COFINANCING

The objective of this chapter is to evaluate the effectiveness of cofinancing in alleviating the international debt problem as presented in the Introduction, namely the difficulty of developing countries in meeting their debt service obligations. The description of the problem will first be elaborated, with a discussion of factors that contribute to it. Then, an evaluation of how cofinancing addresses (or could address, were it altered somehow) these important factors will follow. Finally, we conclude the chapter with a simulation of several alternative cofinancing instruments.

There are two major factors that have contributed to the problem that developing countries currently face. The first, the high volatility of debt repayment structures, has made it difficult for these countries to manage their debt and has drained their foreign exchange reserves. The second factor, the high incidence of lending with full recourse to the borrower country, has unnecessarily added to the general debt burden of the countries. This has arisen because of the full-recourse nature of project financing in developing countries.

The Debt Repayment Problem

Western banks are finding themselves increasingly exposed in the developing world. The developing countries and Eastern Europe together owe about U.S.\$420 billion, of which U.S.\$135 billion is owed American banks.-[1] The nine largest U.S. banks have about 220 percent of their capital on the line in developing countries experiencing repayment problems. For example, Citibank has loans in Brazil totalling about 80 percent of shareholders' equity, and Chemical Bank has about 77 percent of its total equity exposed in loans to Mexico.-[2] It is no wonder that commercial bankers are concerned.

Commensurate with the commercial banks' increased exposure is the growth in the developing country debt problem. The flow of private medium- and long-term loans (net disbursements) for all developing countries grew from U.S.\$5 billion in 1970 to U.S.\$56 billion (current dollars) in 1982 -- a rate of 22.3 percent per annum. Debt service payments on private and official debt, which were U.S.\$71.3 billion in 1979, rose to about U.S.\$119.0 billion in 1982. Interest payments comprised about U.S.\$25.3 billion in 1979, rising to about U.S.\$56.0 billion in 1982 -- a 30 percent increase per annum.-[3] While debt as a percent of exports of goods and services remained somewhat constant throughout the period 1978-1982, the debt service ratios (debt service payments as a percent of exports of goods and services) increased.-[4] This

can be explained by the increasing nominal and real interest rates on the outstanding debt which raised interest payments. There has also been a marked shift by developing countries away from official lenders (fixed or concessional terms) to private lenders (variable terms) in the last few years; this has also increased the debt service requirements.

The increasing nominal and real interest rates -- results of high inflation in the developed countries -- have forced many countries into a liquidity crunch. Standard commercial loans carry variable interest rates which are tied by a spread to LIBOR. As inflation increases, LIBOR tends to move upwards, and the interest payable on a loan in a given period increases. "The average rate on floating interest debt including estimated spread and fees, rose from 8 percent for 1972 to 18 percent for 1981."-[5] This, in turn, increased the total debt service due in that period, and created a greater drain on the countries' foreign exchange. Currently, nearly 80 percent of developing country foreign exchange is required to service debt.-[6]

Much of the current liquidity crunch can be directly attributed to the lending mechanisms of the developed country banks. It is standard banking policy to match assets to liabilities. In other words, the terms on the loans a bank extends should resemble the terms on its deposits or borrowings. During periods of steady inflation, the nominal interest rate incorporates expectations of inflation, and

banks are willing to lend at fixed rates for extended maturities. However, during periods of unexpectedly high inflation, the value of a fixed rate loan erodes in real terms, and the banks face a loss. At the same time, on the liability side, banks are required to pay higher rates on deposits and for borrowings.

During the 1970's, inflation increased rapidly worldwide; banks reacted by taking actions to protect both sides of their balance sheets. On the asset side, they began to extend variable rate loans in order to protect themselves from asset erosion in real terms. On the liability side, they borrowed short-term funds at market rates, which in turn required that their own loans be of a shorter maturity. The net result was that the borrower bore the interest risk and faced shorter-term loans and higher interest payments. Under normal circumstances, this might not have posed a great problem. However, coupled with the high inflation came a drop in commodity prices, and the developing countries now face a general drop in export earnings. The growth of merchandise exports in the developing countries, which had averaged 5.1 percent per annum over the period 1970-1978, has begun to decline: drops of 4 percent in 1980 and 2.3 percent in 1981.-[7] As a result of the lost export earnings, the developing countries now face a shortage of foreign exchange necessary for repaying the outstanding loans.

While the prognosis for the future is not necessarily bright, there exists the strong possibility that the developing countries, working together with the commercial banks and the I.M.F., will be able to affect remedial measures for the short-term. However, unless the structure of the standard lending mechanisms employed by the commercial banks is changed, the developing countries will continue to fence with these debt servicing problems. Thus, long-term solutions must be sought through adjustments in both the risk compensation commercial banks require and the repayment structures their loans impose.

Project Finance as Full-Recourse Lending

Of primary concern to all three actors in an international project financing is the issue of risk and the extent to which it can either be shared, shifted or decreased. The borrower is concerned with the various types of risk that it faces throughout the development and commercialization of the project. The commercial lender is ultimately concerned with the risk of default on the project loan. In the case of loans for project financings in developing countries, this issue increases in importance because of the "country risk" component of default risk. Because of the special nature of project finance in developing countries, the government faces the additional concern of its loan's effect on the country's

overall debt obligation. The purpose of this chapter is to determine if the World Bank, through its proposed cofinancing scheme has succeeded in meeting the above-mentioned concerns.

The investor in a World Bank-financed project is the government or entity that borrows from the World Bank. In making the decision to invest, the investor must assess the value of the project. Modern international finance provides a framework within which to make decisions regarding the allocation of resources among alternative investment opportunities. Central to valuing a project is the assessment of risk or uncertainty associated with the project.

The investor faces several types of risk in the development, commercialization and financing of a project: (i) investment risk; (ii) currency risk; and (iii) financial risk. These components will be referred to as "project risk."

(i) Investment risk encompasses the uncertainty associated with the variability of project costs and revenues. [8] For either physical or market related reasons, costs, which include both capital and operating costs, can vary, hence affecting the profitability of a project. For example, a project can experience cost overruns due to market fluctuations in the price of inputs. The stream of revenues generated by a project is also subject to variability due to market related considerations,

such as price and demand. For example, the revenues from a mineral extraction project depend on the export price for that commodity.

(ii) Currency or foreign exchange risk relates to the vulnerability of a project to fluctuations in foreign exchange rates. There are two kinds of exposure to this kind of risk: financial and real. Financial exposure is the exposure that can be hedged via financial transactions. As such, it is not of much concern. Real exposure involves the extent to which project revenues and costs are denominated in different currencies; hence, it is of concern to the investor.

(iii) Financial risk is that element of risk that results from borrowing in the international capital markets. The combination of a money-fixed contractual obligation with uncertain cash flows has the effect of increasing the risk associated with the project itself.-[9]

The commercial lender must also assess the risk associated with the decision to lend for a given project in a given country. Ultimately, it is concerned with the risk of default on the repayment of the loan. This risk entails both

project and political risk. The project risk that concerns commercial lenders involves the uncertainty surrounding the ability of the project to generate sufficient cash flows to meet the borrower's debt obligations. It includes the risk that the project will not be completed due to excessive cost overruns or to raw materials not being as readily available as planned, and the risk that production will not occur as planned, and that market prices of demand for the item or commodity produced will fall short of expectations. Political risk encompasses a variety of environmental or political events that can affect the repayment of a loan, ranging from changes in foreign exchange controls and tax laws to coups d'etats and wars. Project and political risks clearly overlap in that there are many "political" events or actions that can have an impact on the cash flows generated by a project. When commercial banks make decisions to lend for projects, they are concerned with these risks and their effect on project cash flows.

They are also concerned, however, with another dimension of risk that is not directly associated with the ability of the project cash flows to cover debt obligations. This so-called "country risk" relates to the ability or willingness of the borrower country to meet its debt obligations. This ability or willingness depends not on the sufficient generation of project cash flows but on the aggregate debt obligation of the country, even when financing specific

projects.

In principle, project finance is non-recourse financing; that is, the repayment of the debt associated with the project should depend on the cash flows generated by the project. This is typically the case for projects financed in developed countries. In developing countries, however, it is not clear that project finance is truly project finance. Many of the projects in developing countries that are financed in part by commercial banks are run by state or parastatal entities. Their close relationship to the government is due in part to the important national impact that they tend to have. For example, large mineral extraction projects play a major role in the development of a country. Because of the government's close association with these types of projects, it sometimes grants sovereign guarantees to commercial lenders. For projects cofinanced by the World Bank and commercial banks, the governments have almost consistently granted a guarantee to the commercial lenders.

Even when a government does not explicitly guarantee the repayment of a loan for a project, it effectively treats the loan as if it were not project-specific. Hence, it is not truly project finance, ie. non-recourse financing. Project debt obligations effectively become part of the general debt obligation of a country. Hence, when lending for projects in developing countries, commercial banks are not really bearing project-related risk (project risk and political risk that

affects the project cash flows) but country risk. It follows then, that if, ex post, a project in a developing country does not generate cash flows sufficient to meet its debt service payments, the loan may still be repaid because the government, which considers a project loan as part of its national debt obligation, is likely to meet the obligation. This is not to say that project-related risk should be ignored by commercial lenders, since the success or failure of a project is likely to have an impact on the country's overall ability to meet its debt obligation. This is particularly the case in developing countries where the investments for these projects represent a large proportion of national income and the foreign exchange that the export revenues from the project are expected to generate are an important factor in the ability of a country to meet its debt obligations.

The treatment of project finance as lending with recourse to the country of the borrower has important implications for the commercial lender, the borrower and the country. The commercial lender is effectively lending to a country and is bearing not the risk of the project itself but of the country. The risk it bears that is project-related is really political risk, as it potentially affects project cash flows. Moreover, it bears the risk associated with the debt repayment capacity of the country. Indeed, country risk is the aspect that makes the commercial bankers "uneasy" about lending for projects in developing countries. This is understandable since the events

that comprise country risk are totally out of their control. The borrower, which shares the interests of the country, actually bears the project risk since this risk is shifted to the country as the project debt becomes part of the general debt obligation. This is a burden for the country in two ways. First, a developing country is less able than a commercial bank to diversify away the unsystematic risk of an investment; hence, it unnecessarily bears such risk. Second, the loan exacerbates the country's debt burden; this could be avoided were the project loan truly tied to the profitability of a project. In this way, full-recourse lending can make the country worse off.

World Bank Role

The World Bank, in its intermediary role between the developing countries and the commercial lenders, is in a good position to take the lead in investigating new mechanisms for cofinancing that address both the volatile loan repayment structures and the high incidence of full-recourse lending. As was mentioned earlier, any solution to the current debt problem proposed by the I.M.F. and commercial banks will only have a short-term effect. The long-term solution lies in the restructuring of project lending to developing countries. With respect to the problem of full-recourse lending, an alternative to the existing effective project finance

mechanism would be appropriate if it resulted in a situation where either both the lender and the borrower were better off or if either the lender or borrower were better off without the other being worse off.

One such alternative would be the establishment of an escrow account into which a predetermined proportion of the cash flows from a project would be periodically directed. The account would be located outside of the country of the borrower. The commercial lender would have access to the account for the purpose of collecting the scheduled loan repayments. A minimum balance would be maintained to ensure that repayments could be made even at times when project cash flows were not sufficient. This process would be continued until the loan was repaid. Such a mechanism would bring project financing much closer to non-recourse lending.

The legal issues surrounding this kind of arrangement pose a problem. The central problem becomes: how can a legal arrangement be arrived at where the government cannot "expropriate" or claim sovereign right to the cash flows from a project in its sovereign territory? This is a problem of international law, and it is not the object of this thesis to solve it. It suffices to state that there is currently no clear solution since sovereign right can ultimately override contracts that are entered into. Hence, a borrower, in the interests of its government, since the two are so closely linked here, will terminate a contract when it determines that

its costs of continuing to honor it exceed the costs of terminating it.

Perhaps the World Bank could play a part in the enforceability of such an arrangement. We do not mean to propose that the World Bank should guarantee that portion of the debt of the project. When commercial banks lend for projects, they should bear the risk associated with the project. After all, they are charging a price to the borrower for bearing this risk. Moreover, this is what true project finance should entail. In its special role, the World Bank could, as an alternative to the controversial cross-default clause, play an intermediary role. For instance, it could agree to intervene in a case of nonrepayment by the borrower to commercial banks due to specific actions that it would define specifically as "political." Such intervention could ultimately involve calling in its portion of the loan or participation.

This is more complex than it seems for several reasons. First, there is a large gray area between what is defined as "political" risk and "project" risk. For example, tariffs can be imposed by a government, which adversely affect the project cash flows. Similarly, tax laws can be changed which have a similar effect. Such actions may or may not be intended to effect the project. However, through their effect on project cash flows, they can affect loan repayment. Thus, it would be difficult to clearly delineate the responsibilities of each

party in a legal agreement. Second, the World Bank is legally required to call in all of its loans in a borrower country if it is forced to call in any one loan. Hence, it is unlikely to agree to any clause that would bring it closer to taking such serious action, particularly since it would have to do so based on events out of its direct control. This solution is unlikely to be acceptable to the World Bank.

This alternative form of structuring project financings -- using escrow accounts -- has been used by some commercial banks, particularly in Mexico. However, it has been done on a limited and ad hoc basis. It is limited, though, in the recourse it provides the commercial banks to the borrower. Therefore, it is unlikely that the nature of project finance will change, ie. that the repayment of loans will be directly linked to the success or failure of projects.

Since it might prove difficult to create project financing mechanisms that are tied only to project success, thereby eliminating the contribution of project lending to the developing countries' debt burden, attention should be directed to redesigning the loan themselves so that the repayment schedules are less volatile. As a large lender with an interest in the economic development of its borrowers, the World Bank could take the initiative in proposing innovative financial instruments that would mitigate the burden faced by its borrowers. Ideally, these instruments would insulate the borrower from the effects of inflation in the developed

countries, and, concurrently, provide the lender with a fair return. They should be longer-term instruments, for projects in developing countries have longer lags before cash flows can begin to cover debt service payments. Also, the repayment schedules should more closely match the countries' income potential. The net result would be to lower the general debt obligations of developing countries.

The original World Bank cofinancing mechanism has involved parallel loans extended by private lenders at standard commercial terms and variable rates. As was mentioned, it is primarily the variable rate that has caused debt service problems in the last few years. Inflation affects variable rate loans by shortening the loan's average life: the debt is amortized more quickly in real terms, and this causes an increased financial burden. Also, inflation affects the payment-to-income ratio implicit in the repayment structure. Since, in real terms, the periodic payments will decrease, a country is bearing a greater burden in the early periods of the loan. If this "tilt" were removed somehow, the real payments would more closely match a country's real income, and the payment-to-income ratio would remain constant in real terms, rather than decreasing.

All of the three alternative instruments proposed by the World Bank have variable interest rates. Although Options I and II (direct participation and the guarantee) seek to extend maturities, they do little to affect favorably the debt

service of the borrowing country. However, Option III (the contingent liability) takes direct action at reducing annual debt service payments by incorporating a fixed payment with flexible maturities. The argument for this instrument is that, unlike with previous loan structures, a borrower (or government) can plan better, because the annual payments are known. However, there still are drawbacks. First, the interest rate can still vary greatly and the payments would have to be designed to ensure that they cover interest costs in any given period, since no provision is made for this in the loan itself. Second, increasing rates will extend the maturities. Thus, the borrower will be tied in to this loan for an unknown length of time. This fixed rate flexible maturity instrument will allow the lender still to match borrowing to lending because a short-term market rate could be used, but the period of principal amortization would still be unknown. With widely fluctuating interest rates, the fixed nominal payment loan could become infinite.

Overall, Option III is an improvement over current financing instruments. However, it still does not resolve the basic question of which interest rate is preferable. The borrower faces a long-term commitment and would naturally prefer a long-term rate that is less volatile. On the other hand, the lender relies on short-term funding which is tied to the short-term market rate. Thus, although Option III insulates the borrower from some of the variability of LIBOR,

it does not match debt service to the income stream. Lessard and Modigliani, when looking at mortgages, proposed several options for dealing with this issue. Two of these might well be applicable to long-term development lending: the Dual-Rate Variable Rate Loan (VRL) and the Constant-Payment-Factor VRL.~[10]

The Dual-Rate VRL addresses the interest issue by using two interest rates. A short-term rate or deposit rate would be used as the debiting rate for computing the periodic interest on the outstanding balance. A longer-term rate or "payment factor" would be used to compute the periodic payment which "is recomputed at fixed intervals by applying to the principal then outstanding the standard annuity formula using some longer-term rate."

This loan structure has several advantages. First, the lender receives interest calculated at a rate closer to that paid for funds. Second, the borrower makes periodic payments at a long-term rate which better matches the project being financed. Also, the longer-term rate would tend to protect the borrower from the immediate impact of higher interest rates. Since the amortization is periodically recalculated using a long-term rate which incorporates short-term inflation expectations, payments would increase during periods of growing inflation. However, this payment increase would be smoother than under a standard variable rate loan during high inflation. Under this method, the maturity is fixed, and

lenders would know exactly when the loan would be fully amortized.

A hybrid variation of the Dual-Rate VRL is the Constant-Payment-Factor VRL. Again, it employs two rates: a debiting rate tied to market conditions for the lender, and a payment rate tied to the real interest rate. Under this mechanism, the payment rate is contracted (kept constant), but payments are recalculated on a regular basis. During inflationary periods, it could be expected that the debiting rate would exceed the payment rate by the amount of inflation. An interest payment could conceivably be higher than the total payment in a period of high inflation, but the excess would be added to the principal outstanding, and the next period's payment calculation would incorporate this. The net result of this is that the borrower is better protected from inflation because payments will increase approximately with inflation over time; in real terms, the payments remain constant.

Simulation of Four Instruments

In order to examine the effectiveness of each of the loan structures in spreading out the payments, we constructed several hypothetical loans which are presented in Tables A-D.

Table A presents the standard commercial variable rate

loan of which the bulk of current developing country debt is comprised. It is a twelve-year loan for \$120 million with the interest rate tied to LIBOR. In order to track interest rates more effectively, the loan is presented from an historical perspective: it begins in 1972 and is fully repaid in 1983. By taking the ex post approach, it is possible to use the actual interest rates in calculating the payments. The six-month Eurodollar deposit rates (London) from December of each year are used to approximate LIBOR, and a one-percent spread has been added. The principal is amortized in equal installments over the life of the loan. As can be seen, the debt service payments fluctuate rather widely in nominal terms over the loan's life, from a high of \$22.2 million to a low of \$10.99 million. In real terms, the earlier payments are quite high, and would have a great impact on a country's overall debt service. However, they decline rapidly, thus demonstrating the "tilt" in the repayment structure of this instrument. If a borrower had assumed a similarly structured loan in 1978, the debt service payments would have been quite high: \$25.96 in 1978, \$26.94 in 1979, and \$27.40 in 1980. From 1980 on, they would have declined. It is clear that this instrument is not beneficial to the borrower.

A version of the World Bank's new contingent liability instrument is presented in Table B. The loan again assumes \$120 million for 12 years at a variable interest rate (LIBOR). In this case, the total payments are fixed, and interest and

amortization are adjusted. While the fixed payment is supposed to be a benefit to the borrower, it also poses a problem. As can be seen, the high rates of interest have extended the maturities such that in 1983, \$37.44 million is left to be amortized. Supposedly, either the World Bank or the original commercial lenders would refinance this.

Of course, the degree to which maturities are extended depends on the level of the fixed payment. The \$16.00 million fixed payment was calculated using the annuity formula and assuming an average interest rate of 8 percent for the twelve years. Of course, with hindsight it is clear that the assumed interest rate was too low. The average rate over the period was 11.16 percent. This implies that the level payments would have to be about \$18.65 million in order for the loan to be fully amortized over twelve years.

Although this loan offers level payments in nominal terms, they are declining in real terms, and the borrower's payment-to-income ratio will also decline. This "tilt", coupled with the maturity problem, does not make this loan structure a perfect alternative.

Table C presents a version of the Dual-Rate Variable Rate Loan (\$120 million for 12 years). In this case, two interest rates are used: the debiting rate, which is the same as the LIBOR rate used in the previous examples, and the payment factor, which is a longer-term rate. In this case it is the United States domestic government bond yield (long-term) in

December of each year. As shown in the table, the use of a longer-term rate somewhat reduces the fluctuation in the stream of debt service payments. Here, the range is between approximately \$14.3 million and \$22.6 million. Under this arrangement, the lender still benefits by being able to charge interest at a short-term rate, thus matching funding costs. Concurrently, the borrower repays at a smoother rate, with nominal payments being slightly lower in the early years and then rising over time. While this instrument is an improvement, it still "tilts." The borrower faces a decreasing payment-to-income ratio since the debt service payments are decreasing in real terms over the period of the loan.

The last instrument we examined is the Constant-Payment-Factor VRL presented in Table D. As in the Dual-rate VRL, two interest rates are used. While the debiting rate remains the LIBOR rate, the payment factor is the assumed real rate of interest. For the purposes of this analysis, a rate of three percent was chosen, and it was held constant throughout the life of the loan. As can be seen, the debt service payments start out quite low and increase fairly steadily over the loan's life (from \$12.06 million to \$39.71 million). The primary benefit of this structuring is that the borrower faces a stream of payments that grows at the rate of inflation (ie. the difference between the debiting rate and the payment factor), thus remaining fairly constant in real terms at an

average of \$9.55 million. On the other hand, the lender still benefits from receiving interest based on short-term rates. However, there is one drawback: the payments between 1981 and 1983 grow at a rate faster than the implicit inflation rate. This probably occurs because there was a turnaround in the inflationary trend in 1981 and because the loan has a fairly short maturity. Moreover, real interest rates increased during this period. If it had a 15- or 20-year maturity, this variation would probably be reduced.

These four instruments are just a small sample of creative financial structurings possible for dealing with the debt burden of the developing countries. All of them address the issue of the lender's ability to match funding costs with loans, and three of them address (to some degree) the problem of the borrower's ability to bear the financial burden imposed by these loan structures (the standard variable rate loan does not). The preferability or suitability of one instrument versus the other two probably reduces to a question of implementation. From an institutional standpoint, it is perhaps easier to syndicate a loan along the lines of a contingent liability (fixed payments, flexible maturity) than under the other two alternatives. However, perhaps this is where the World Bank could enter the picture. As a coordinator and facilitator, it might be in a better position to implement an innovative form of lending to the developing countries.

Given the results of the evaluation, the following section concludes the thesis with the highlights of the analysis and some comments regarding the future of cofinancing or of some hybrid thereof.

TABLE A

STANDARD VARIABLE RATE LOAN

YEARS	INT. RATE	PRINCIPAL AT BEG.OF PERIOD	-----PAYMENTS-----			TOTAL 1972\$
			INT.	PRINCIPAL	TOTAL	
1972	7.2	120.00	8.64	10.00	18.64	18.64
1973	11.1	110.00	12.21	10.00	22.21	20.03
1974	11.2	100.00	11.20	10.00	21.20	15.42
1975	7.3	90.00	6.57	10.00	16.57	10.92
1976	6.4	80.00	5.12	10.00	15.12	9.00
1977	8.5	70.00	5.95	10.00	15.95	8.63
1978	13.3	60.00	7.98	10.00	17.98	9.04
1979	15.4	50.00	7.70	10.00	17.70	7.82
1980	17.4	40.00	6.96	10.00	16.96	6.34
1981	15.8	30.00	4.74	10.00	14.74	4.85
1982	10.4	20.00	2.10	10.00	12.10	3.50
1983	9.9	10.00	0.99	10.00	10.99	2.80

TABLE B

OPTION III: FIXED PAYMENTS, VARIABLE MATURITY

YEARS	INT. RATE	PRINCIPAL AT BEG.OF PERIOD	-----PAYMENTS-----			TOTAL 1972\$
			INT.	PRINCIPAL	TOTAL	
1972	7.2	120.00	8.64	7.36	16.00	16.00
1973	11.1	112.64	12.50	3.50	16.00	14.43
1974	11.2	109.14	12.22	3.78	16.00	11.64
1975	7.3	105.37	7.69	8.31	16.00	10.55
1976	6.4	97.06	6.21	9.79	16.00	9.52
1977	8.5	87.27	7.42	8.58	16.00	8.66
1978	13.3	78.69	10.47	5.53	16.00	8.04
1979	15.4	73.15	11.27	4.73	16.00	7.07
1980	17.4	68.42	11.91	4.09	16.00	5.98
1981	15.8	64.33	10.16	5.84	16.00	5.26
1982	10.5	58.49	6.14	9.86	16.00	4.63
1983	9.9	48.63	4.81	11.19	16.00	4.07

37.44 Unamortized Principal

TABLE C

DUAL RATE VARIABLE RATE LOAN

YEARS	DF	PF	PRINCIPAL AT BEG.OF PERIOD	-----PAYMENTS----- INT.	PRINCIPAL	TOTAL	TOTAL 1972\$
1972	7.2	6.0	120.00	8.64	5.67	14.31	14.31
1973	11.1	7.4	114.33	12.69	2.86	15.55	14.02
1974	11.2	8.1	111.47	12.48	4.20	16.69	12.14
1975	7.3	8.1	107.26	7.82	9.41	17.24	11.36
1976	6.4	7.3	97.85	6.26	10.25	16.51	9.83
1977	8.5	8.0	87.60	7.45	9.38	16.83	9.11
1978	13.3	9.0	78.22	10.40	7.03	17.44	8.77
1979	15.4	10.2	71.19	10.96	7.91	18.87	8.33
1980	17.4	11.5	63.27	11.01	9.60	20.61	7.70
1981	15.8	14.3	53.67	8.48	14.75	23.23	7.64
1982	10.5	10.6	38.92	4.08	18.52	22.60	6.54
1983	9.9	10.6	20.40	2.02	20.40	22.42	5.70

DF = Debit Factor
PF = Payment Factor

TABLE D

CONSTANT-PAYMENT-FACTOR VARIABLE RATE LOAN

YEARS	DF	PF	PRINCIPAL AT BEG.OF PERIOD	-----PAYMENTS-----			TOTAL 1972\$
				INT.	PRINCIPAL	TOTAL	
1972	7.2	3.0	120.00	8.64	3.42	12.06	12.06
1973	11.1	3.0	116.48	12.94	-0.34	12.60	11.36
1974	11.2	3.0	116.93	13.10	0.61	13.71	9.97
1975	7.3	3.0	116.31	8.49	8.45	14.94	9.85
1976	6.4	3.0	109.87	7.03	8.62	15.65	9.32
1977	8.5	3.0	101.25	8.61	7.64	16.25	8.79
1978	13.3	3.0	93.60	12.45	4.83	17.28	8.69
1979	15.4	3.0	88.77	13.67	5.71	19.38	8.56
1980	17.4	3.0	83.06	14.45	7.89	22.35	8.36
1981	15.8	3.0	75.17	11.88	14.69	26.57	8.73
1982	10.5	3.0	60.47	6.35	25.25	31.60	9.14
1983	9.9	3.0	35.22	3.49	35.22	38.71	9.84

DF = Debit Factor

PF = Payment Factor

ENDNOTES - CHAPTER V

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CONCLUSION AND RECOMMENDATIONS

In the preceding chapter, we attempted to determine if cofinancing -- either as it is currently done or as it is proposed -- indeed contributes to mitigating the growing developing country debt problem. The analysis suggests that cofinancing, even as proposed, fails to completely resolve the two factors that we identified as contributing to the problem.

The factor that relates to the volatile loan repayment of project loans is only partially resolved. One of the financial instruments proposed by the World Bank, the Contingent Liability (Option III) does reduce the annual debt service repayments. However, although it reduces some of the volatility created by the variance of LIBOR, it still does not succeed in matching the debt service to the income stream.

We have proposed two additional financial instruments, the Dual-Rate Variable Rate Loan and the Constant-Payment-Factor Variable Rate Loan. These instruments illustrate how creative financing can address the problem of the borrower country's ability to bear the financial burden of loan repayment.

Unfortunately, such financial instruments can only partially alleviate the volatile loan repayment structures. They represent an incomplete solution because they totally ignore the other very important factor contributing to the

debt problem.

This factor -- that project financing is really lending with full recourse to the borrower country -- is not at all addressed. Both the World Bank and commercial bank components of cofinanced project loans continue to be full-recourse loans. The World Bank, as required by its Articles of Agreement, receives an official guarantee. The commercial bank, as it is accustomed to in lending for activities in developing countries, also typically receives a guarantee, either officially or effectively. The commercial lender is probably more likely to receive an official guarantee as a result of its collaboration with the World Bank in a cofinancing arrangement than it would otherwise. This might actually increase the incidence of full recourse lending in developing countries, hence exacerbating the debt problem even further!

This issue is difficult to resolve because it requires looking beyond the financial arrangements of a cofinancing and reassessing the boundaries of the World Bank's role. The World Bank could intermediate between the borrower country and the commercial lender over certain arrangements in the project financing. On the one hand, it could encourage borrower countries to implement certain arrangements, such as the type of escrow account described in the previous chapter. It could also take part in the enforcing of such contracts either through the use of its "clout" with the borrower country or

through more explicit means, such as variations on the cross-default clause. On the other hand, it could encourage commercial lenders to forego a government guarantee when lending for cofinanced projects. After all, there are advantages to an association with the World Bank, as well as some assurance that World Bank-generated projects are somehow less risky than projects not associated with this institution.

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