

RECAPITALIZING THE THIRD WORLD:  
TOWARD A NEW VISION OF COMMERCIAL FINANCING FOR LESS  
DEVELOPED COUNTRIES

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Introduction

Two recent developments--Brazil's suspension of interest payments on its foreign debt and the general writedown of Third-World debt triggered by Citibank's \$3 billion action--are pointing to the end of an era. While bank advisory committees and finance ministers may continue to negotiate to postpone the inevitable, the focus is shifting to new commercial solutions to the international debt problem. The now official recognition that existing claims are worth much less than their face value removes a major obstacle to change, and Citibank and others have signaled a new creativity in their approaches to financing Third-World growth.

This article examines various opportunities for private financial markets in the inevitable restructuring and recapitalization of less developed countries (LDCs). These include various types of exchanges--debt for debt, debt for equity, and debt for commodities--that have already begun to play a prominent role in this restructuring of international claims. In contrast to financing proposals that simply shift the burden from debtors to creditors,

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\* This paper draws substantially on a much longer study that John Williamson and I published, entitled Financial Intermediation Beyond the Debt Crisis, Washington: Institute for International Economics, 1985. I have benefited from conversations on these topics with many commercial and investment bankers, government officials, policy analysts, and fellow academics who are too numerous to name here. A special acknowledgment is due to John Williamson for his delightful and always professional collaboration and to Don Chew for his editorial advice. Footnotes appear at end.

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this article emphasizes those alternatives that provide the possibility of gains to both groups.

There are two basic reasons for seeking alternatives to general obligation financing in its now traditional, floating-rate form. The first is that the likely future volume of such financing is insufficient to provide for a return to growth by developing countries. A conservative estimate of LDCs' need for funds from the industrialized nations over the next ten years is \$20 billion per year. Even if banks were willing to lend large amounts to countries whose debt is trading at a discount, it is unlikely that they could do so given their present weakened condition.

The second reason for seeking alternatives is that general obligation financing is inappropriate as the dominant financing vehicle for most developing countries. It is extremely vulnerable to external shocks, subjecting both borrowers and lenders to potentially catastrophic situations; and it provides little or no market discipline in the selection and management of economic activities within the borrower countries.

The basic goals of recapitalization, then, are to restore LDC creditworthiness and access to world financial markets and to establish more robust and efficient market mechanisms that will support the level and kind of financing required for sustained growth and development in these countries. More specifically, such a recapitalization will require (1) the establishment of a realistic valuation basis for existing debt in order to reduce the "overhang" of senior obligations that distort economic incentives within LDCs and block the issuance of new, junior claims; (2) a better matching of financing terms with debtors' ability to pay over time and across circumstances; and (3) the transfer of risks, rewards, and responsibilities to

those parties best able to bear them in order to increase the benefits of diversification and participation.

This article is organized in four parts. The first outlines the case for restructuring LDC obligations. The second describes specific alternatives to general obligation financing. Obviously, no single financing recipe will be appropriate for all countries, or even for all sectors within a given country. The third section accordingly discusses the likely fit of various financing proposals with the circumstances of specific countries. (The current financing predicament of Mexico, in particular, is used as an illustrative case study.) The final section focuses on new mechanisms for transforming existing LDC balance sheets such as debt-for-equity swaps and debt buybacks. It is principally these kinds of exchanges that must initiate the process of reducing LDCs' reliance on general obligation, floating-rate financing. Although a limited source of new finance in themselves, such exchanges can provide a bridge for the development of other, more promising innovations. These financing innovations, provided present obstacles can be overcome, have the greatest potential for stimulating the volume of funds necessary to restore LDCs to economic growth.

#### The Issues

There is no end in sight to the debate over which of two desirable goals should be given priority: getting the banks' money back and putting LDCs back on a growth path. It is becoming increasingly clear, however, that there will be little progress on either front unless these countries restore domestic capital formation and improve their prospects for new voluntary external finance. In some cases this will require a significant writedown in existing obligations, in others it will not. In most cases, though, it will require a

restructuring of these obligations. The issues involved will be of two kinds: how much external finance can a country obtain and carry? and what mix is both possible and desirable?

Many commentators stress that developing countries are competing for shares of a relatively fixed amount of potential foreign finance. Although this is clearly true of finance through official channels, especially when it includes a grant component, it is not a useful way to view the supply of finance on commercial terms. The financing requirements of developing countries are small relative to the size of world capital markets. Even an ambitious figure of \$20 billion a year is less than 10 percent of the current net debt financing provided by OECD markets and institutions. Individual countries face a virtually elastic supply on the condition that they are able to make credible commitments to meet the terms of their obligations.<sup>1</sup> Therefore, tapping new sources of funds should not be expected to increase greatly the potential supply of funds to a particular country. A given country, however, may significantly increase its actual supply of funds from existing sources by expanding the range of commitments it can back with credibility.

For example, Mexico, even today, could credibly offer a package of claims including oil-linked securities having considerably greater aggregate value than the value of the floating-rate debt it can service. The reason is that the servicing of oil-linked debt would be skewed toward future circumstances where Mexico's debt-servicing ability is higher relative to the pattern associated with floating-rate borrowing (even with the substantial grace period that the latter carries).

In general, it is possible to define an efficient financing mix that

maximizes the value of the commitments a country is able to make subject to constraints on both its ability and willingness to pay under different circumstances. In most cases, it is clear that the current dominant form of financing--general obligation, floating-rate debt--is not efficient.

#### Dimensions of Restructuring

In discussing the restructuring of countries' external obligations, it is useful to separate the issue into two dimensions. The first is the zero-sum game between a debtor country and its creditors, in which the borrowers' gains are the lenders' losses.<sup>2</sup> The second, by contrast, is a positive-sum situation in which the gains to the borrower do not involve a corresponding cost to its creditors. Clearly, whatever the outcome of negotiations among lenders about the degree of debt relief to be granted, every effort should be made to ensure that the resulting restructuring is efficient in the second dimension as well.

There are several reasons why heavily indebted LDCs could gain by altering the terms of their external obligations in a way that maintains their present value from the lenders' perspective. First, given the drastically reduced levels of economic activity faced by most of them, their time preference undoubtedly exceeds world interest rates at the present time, so that they will gain by shifting payments from now into the future, even at market rates.<sup>3</sup> Second, many of them have risk exposures due to a concentration in a few key exports that are quite different from the world economy and, therefore, would gain by shifting payments from circumstances in which export prices are low, whether now or in the future, to circumstances in which they are high. This will be the case even if such a commodity-price linkage commands a significant risk premium in world markets. Finally,

uncertainties about LDCs' ability to meet their obligations threaten not only their foreign creditors, but also those domestic savers and investors--as well as other foreign investors--whose claims are effectively subordinated to the official obligations. Therefore, steps that reduce the likelihood of future debt crises will increase non-official financial flows.

The financing dimension on which most borrowers focus is the explicit "cost," typically measured as a spread over LIBOR. This obviously is an important dimension, but it also involves an almost pure zero-sum situation.<sup>4</sup> The dimensions of financing in which improvement can lead to positive-sum outcomes are risk-sharing, hedging and cash flow-matching, performance incentives, and interactions with local financial markets. I take up each of these below.

#### Risk-Sharing, Hedging, and Matching of Cash Flows

A dimension that is given much less weight than it deserves, especially with market-priced finance, is the distribution of cost across circumstances. An oil-producing country, for example, might consider financing its needs either with general obligation borrowing or with a share of its oil income. With general obligation borrowing, it would be committing itself to repay an amount of foreign exchange that is independent of the condition of the domestic economy.<sup>5</sup> Thus, the same debt service will be due when foreign exchange is scarce as when it is not. By contrast, if servicing obligations take the form of a share of net foreign-exchange earnings, repayments will be smallest when foreign exchange is scarcest, and vice-versa. Clearly, finance giving rise to obligations keyed to a country's capacity to pay contributes more to its well-being, other things being equal, and hence a country should be willing to pay a somewhat higher expected cost for such financing.

The cost of external financing must be interpreted broadly to reflect not only the amount of the promised or expected repayment in relation to the amount borrowed, but also its timing and coincidence with other circumstances affecting a country's overall income and consumption. The least costly form of nonconcessional finance in terms of expected payments is likely to be general obligation bank borrowing, or floating-rate notes, where the borrower promises to pay a specified spread over short-term market rates regardless of its own circumstances. To the extent, however, that upswings in interest rates and hence debt service coincide with a worsening of the borrower's overall foreign exchange situation (either because the factors giving rise to these swings tend to coincide with factors depressing demand for its exports or because of its other interest-bearing foreign obligations), such financing will involve relatively large payments when foreign exchange is scarcest.

On the other hand, borrowing with an interest-rate cap might be more costly on average, since lenders would charge a risk premium for the interest-rate insurance implicit in the cap. But it might be less "costly" in terms of the borrowing country's general well-being because payments would be limited in periods where market rates are very high and the borrower, as a result, is under a great deal of financial pressure. The expected cost of financing involving an equity claim on a particular activity is likely to be even higher; but its "cost" in terms of the borrowing country's well-being might be comparable to, or lower than, the cost of bank credit because the largest payments would be likely to be due when times are good for the borrowing country.

Because borrowing countries and investors that participate in world capital markets differ in the risks to which they are exposed, they will



possess comparative advantage in bearing particular risks. The economies of Mexico, Indonesia and Venezuela, for example, are much more exposed to shifts in energy prices than the world economy as a whole. Thus, such countries can gain by laying off some of these risks through financing arrangements. This comparative advantage will be reflected in the fact that the premium demanded by world investors for bearing oil-price risks will be substantially lower than the premium such countries should be willing to pay to avoid them. In contrast, oil importers such as Brazil or Korea would benefit from financing arrangements that relate debt-service payments inversely to oil prices.

One of the major problems with developing-country borrowing decisions in the 1970s was that borrowers underestimated the risks associated with their income from the production of primary commodities. They failed to give sufficient weight to the different impact of alternative financing arrangements on the volatility of their income (net of debt service).

Furthermore, because of domestic rigidities, developing countries can find themselves short of foreign exchange, which gives them a greater effective exposure to variations in real and nominal interest rates than industrial country borrowers or lenders. This exposure will be reinforced to the extent that variations in world interest rates, or the exchange rates of currencies in which they borrow, accentuate the volatility of their foreign-exchange earnings. As a result, developing countries will, other things being equal, benefit from financial terms that limit their exposure to such variations.

Several features of financial arrangements determine the extent to which required foreign-exchange payments correspond to the borrower's capacity to pay. Most important are the degrees of risk-sharing and hedging,

time-matching, and flexibility.

Risk-sharing is accomplished by linking debt-service obligations explicitly to some aspect of the borrower's economic situation in order to shift risks inherent in the domestic economy to other participants in the world economy. Equity investment, for example, entitles the investor to a pro rata share of the profits of a particular firm, while commodity-linked bonds or export participation notes perform the same role at the level of the economy as a whole. This attribute is most valuable to a borrower when the shared risks contribute significantly to the variability of income or the availability of foreign exchange, or both. The outstanding examples are countries whose exports are dominated by one or two primary products, such as Chile (copper), Malaysia (tin, palm oil) and Mexico, Nigeria, and Venezuela (oil).

Because countries and investors have comparative advantages in bearing different risks, the gains from risk-sharing often depend on the extent to which the various risks entailed in a specific activity can be unbundled and assigned to the party best able to bear them. As we shall show below, the desired specificity of the contract depends not only on each party's exposure to various risks, but also on the effect of specificity on incentives and the enforceability of contracts.

Hedging is accomplished when financing terms minimize the borrower's exposure to adverse fluctuations in the cost of finance resulting from shifts in external economic variables, such as interest rates and exchange rates.<sup>6</sup> Hedging can be accomplished through the purchase of options or through entry into swap contracts. Using either of these instruments, the borrower can manage risk independently of the supply of capital.

The time-matching of financing refers to the degree to which the time profile of repayment obligations matches the profile of resources available for debt service. The rule of thumb is that long-term projects should be financed by loans with equivalent maturities, while current trade activities should be financed with short-term obligations. However, at the country level, the matching should be in terms of ability to pay at the aggregate level, which has little to do with the maturity of the assets being financed. In practice, time-matching requires spreading debt service as equally as possible over future periods where foreign-exchange surpluses or ready access to new financing are anticipated; in particular, it means avoiding the bunching of maturities.

Once the question of cost is extended to one of how the costs are distributed across circumstances, selecting appropriate terms for borrowing becomes an issue of comparative advantage. Assuming that world financial markets work reasonably well and that a particular developing country is a price-taker in those markets, the country should finance itself on those terms that most closely align its exposures with those of the world economy as a whole. A country where a few commodities make up a significant fraction of GNP or exports--relative to the role of these commodities in the world economy--should seek to shift the risks of these commodities to world financial markets. A country that has a relatively high negative exposure to short-term interest rates, as a result of heavy borrowing, should seek forms of financing with fixed or capped interest rates.

#### Performance Incentives

In addition to shifting risks and thereby stabilizing a borrower's income over time, financing whose cost is linked to specified circumstances

may have important incentive effects that can increase the expected level, or reduce the variability, of a country's income. When debt-service obligations are linked to the outcomes of specific projects or undertakings, with limited recourse to a country's general credit, foreign lenders or investors obtain a stake in the success of the project. This linkage may improve performance and reduce risk when lenders or investors have some control over variables crucial to a project's success. For example, if all or part of the yield on an obligation is tied to the performance of the project financed, the lender/investor has a greater interest in seeing that the project design is appropriate and its management satisfactory. Similarly, if the obligations of a borrowing country are linked to its volume of manufactured exports, lenders have a greater interest in ensuring that country's continued access to markets for its products. However, if the potential lenders do not have control over variables relevant to the project's success, the main effect of linking debt-service obligations to outcomes is likely to be on the credit analysis undertaken before the loan is made. In the extreme case where the project is not expected to generate returns sufficient to service the debt under a wide range of circumstances, lenders will not provide financing on a project basis and thus the project will be killed.

The incentive effects of any financial contract depend on its specificity in terms of risk-sharing. Because an equity share is specific to a particular firm, it gives investors an incentive to promote that firm's success. Because a production-share or risk-service contract (typically employed on oil and gas projects) links investor returns to a narrower measure of project success, it focuses incentives on managing those dimensions appropriately. General obligation borrowing, in contrast, is not linked to

any particular project or risk dimension and hence provides lenders with a stake only in a country's overall foreign-exchange situation.

In cases where a foreign investor can add significantly to the value of an undertaking through his knowledge base or access to markets, some form of stakeholding will be beneficial. But in cases where domestic policy choices are the primary determinant of project success or failure, such foreign participation will confront moral hazard. The risk of self-serving government policies will tend to confound the incentives facing the foreign investor and reduce the credibility of the contract. Since most activities involve both types of risks, it can be beneficial to separate them in contracting (a point I will take up later).

#### Impact on Local Financial Markets

International finance can never be more than a complement to domestic savings; and it typically will be available on the best terms, and employed most usefully, when it is accompanied by healthy domestic capital formation. A major problem in many developing countries is insufficient capital formation. Indeed, capital flight has been a principal contributor to a number of countries' external financial crises.<sup>7</sup> This poor record reflects unattractive climates for domestic savings--high taxes, negative real interest rates, fears of confiscation, discrimination against nonbank financial intermediaries, and regulations limiting the scope of investment--combined with distortions in foreign-exchange markets that are likely to induce capital outflows on net.

International finance in the form of general obligation borrowing has allowed LDC governments to bypass local financial markets. As a result, many of the policy measures necessary to stimulate domestic capital formation have

been neglected. Certain forms of international finance, in contrast, especially portfolio investment in corporate equities and bonds, make use of domestic markets and hence will be successful only to the extent that these markets develop.

### Contract Enforceability

The above three dimensions, then--risk-sharing or cash-flow matching, performance incentives, and local financial markets--primarily determine which financing arrangements are most desirable for a given country. Not all desirable contracts are possible, however, because of the difficulty of creating credible and enforceable contracts across national boundaries. For example, an obligation to pay a share of its foreign-exchange earnings would be ideal in terms of matching repayments with a country's capacity to pay. But because foreign-exchange earnings are so strongly subject to the borrowing country's actions, this kind of contract presents moral hazard of a degree that makes it unlikely that finance would be available on this basis.

Contracts across borders are harder to enforce than those between two parties within one jurisdiction. A sovereign can reject a claim against itself within its own territory (although there are cases where parastatals have foresworn such rights), and the sanctions that can be applied elsewhere are limited by legal and practical considerations. Further, a sovereign has considerable discretion over policy choices that influence its own or its citizens' ability to fulfill the contract. Thus, the parameters of control of one party become the elements of risk for the other party.

This ability of governments to influence economic outcomes, coupled with a lender's limited scope for imposing legal sanctions, means that contracts between developing countries and the private market have little economic value

unless both parties feel that it is in their long-term interest to honor their obligations. An "obsolescent bargain" will have to be revised if the creditor is to avoid repudiation of his rights. The countries most likely to meet their commitments are those that would suffer most if they did not do so, both in terms of the likelihood that particular sanctions will be brought to bear and the cost to the country of these sanctions.

The principal sanctions that can be imposed on a sovereign borrower in the case of nonperformance are the withholding of future finance and the blocking of commercial transactions that would put national assets at risk of seizure. Thus, the costs to a borrower of nonperformance will depend on the importance of its future trade and finance with the lending country or with other countries that will honor the lender's claim. In the case of commercial bank lending, these may include most potential lenders because of the formal and informal network among banks and their respective governments. In the case of an equity investment, however, the probability of a concerted response may be considerably less. This is especially likely if nonperformance takes the form of "creeping expropriation"--that is, policy shifts that reduce the value of the equity investment but do not involve outright confiscation.

In some cases, these limits to enforceability can be overcome at a cost. In extractive projects, for example, it is common to locate downstream and primary production facilities in different countries to reduce the value of the primary stages in the event of expropriation. The costs of this arrangement are additional transportation charges and other departures from economic efficiency. In other cases, a project may have to be oriented toward export markets to attract financing, even though economic efficiency would dictate home use, in order to allow the proceeds to be captured by lenders.

China's recent offshore gas discovery provides a case in point: lenders are reportedly pressing for the gas to be exported to Japan. Even when efficiency dictates exporting the project's output, the legal arrangements for "earmarking" the proceeds have a cost in that they create senior debt obligations that reduce the borrowing country's overall financial flexibility and, consequently, the enforceability of its general obligations. In the extreme, these limits to enforceability will be such that no financing takes place, in which case the cost is the forgone economic benefit of the project.

Financial contracts across national boundaries face a hierarchy of risks. All contracts, with the exception of those involving an escrowing of specified foreign-exchange earnings, are exposed to transfer risk--the risk that the country will either not have or not make available the foreign exchange to service the debt. Transfer risk involves both elements of chance, such as variations in interest rates and terms of trade directly affecting a country's ability to pay, and elements of choice, such as macroeconomic policies which reflect the country's willingness to pay. Obligations denominated in currencies other than those of the borrowing country, but payable in its jurisdiction, are also subject to the risk of exchange controls. (The holders of Mex-dollar deposits and Mexican petro-bonds learned this lesson to their dismay, when these accounts were converted to pesos at the official rate and reconverted to dollars only at the free rate--roughly twice the official rate.)

Debt contracts denominated in the local currency are also, of course, subject to the risks of inflation and devaluation. In addition, equity investments or loans to specific companies or projects are subject to the commercial risks of the firm or project. These commercial risks include



elements under managerial control, but they also include the exposure of these firms or projects to policy measures the local country may adopt in managing its economy or to policies of other countries. Examples of the former are the austerity measures adopted by developing countries in response to their debt crises, which have thrown many local firms into severe financial crises of their own. Examples of the latter are protectionist policies which threaten export markets. Thus, in many cases, there is no clear dividing line between noncommercial and commercial risks.

#### Limitations of General Obligation Finance

With the above dimensions of finance in mind, it is quite easy to see why general obligation finance has its limitations and why most countries' external liabilities should involve a broader mix of instruments. In particular, it provides for risk-sharing only through default, a costly, inefficient mechanism; it exposes borrowers to substantial fluctuations in financing costs; it stops at the "water's edge" and does not provide lenders with strategic stakes in enterprises or projects; and it concentrates the impact of default in a relatively small segment of world capital markets. It does, however, have two clear advantages as well: it is available in relatively deep, competitive markets and it involves minimal penetration of the host economy.

#### **The Alternatives**

There are a large number of alternatives to general obligation borrowing for obtaining external finance. The most visible is the other traditional source of external finance, direct foreign investment. Direct foreign investment has the virtue of combining risk-sharing with managerial control of investments and operations and, often, a substantial international integration

of operations as well. Other alternatives typically are more focused in the dimensions that they provide. Some simply improve the terms of general obligation finance. Others provide for risk-sharing with no managerial involvement, while still others share risks and responsibilities, but over a narrower range of outcomes than direct investment.

A range of alternatives is discussed below under three headings:

- (1) those involving a flow of risk capital;
- (2) those providing credit flows that do not involve general obligations--that is, "stand-alone" finance; and
- (3) those that improve the terms of general obligation finance.

The standards used to evaluate these alternatives are the ones developed in the previous section: that is, whether they improve risk-sharing or provide external investors with strategic stakes in areas where they should be able to improve performance. Improvements on either dimension should increase the capacity of a borrowing country to make credible commitments and, hence, increase its access to capital.

#### Risk Capital

All investment involves risk-taking. But when a developing country finances an investment project by incurring debt, it implicitly accepts virtually all of the risks of the activity being financed. Losses can be passed on to the lender only by default or the credible threat of default--a very costly strategy for the borrower as well as the lender. As a corollary the lender has little stake in the success of the project (provided there is the assurance of an eventual government bailout) and hence has small motive to intervene in its design or management.

At the national level, reliance on conventional forms of debt as the

source of foreign capital increases the variability of foreign-exchange revenues net of debt-service requirements. This implies an increased variability in import capacity, which in turn tends to increase the size of fluctuations in domestic absorption and may limit the country's ability to borrow abroad.

In addition to direct foreign investment, the two primary vehicles that transfer risk from borrower to lender are portfolio investment in equities and what may be termed "quasi-equity" investments--those in which the lender is entitled to an income stream that depends in some well-defined way on the success of the project, but with a narrow claim to participate in ownership or control.

Each of these vehicles has drawbacks as well as advantages. Accordingly, the most appropriate mix will vary from one country to another. The following discussion seeks to identify these advantages and disadvantages, with a view to providing a basis for evaluating the role that the various financing mechanisms might play.

Portfolio Investment in Equities. A major potential source of risk capital is portfolio investment in stocks quoted on public stock markets. Like the direct investor, the equity investor seeks a share in the profits of private enterprise. Unlike the direct investor, however, the equity investor is seeking only a share of profits and not the responsibilities of control. Indeed, most equity investors deliberately restrict their holdings to a small percentage of the total stock (less than 5 percent) in order to avoid any difficulty of selling out and any danger of being forced into taking responsibility for saving the firm if they lose confidence in its management.

The good news regarding portfolio equity investment is that the

potential volume of such investment in the Third World is limited only by the supply of equity opportunities that meet world risk-return criteria. The bad news is that in order to have such a supply, a number of institutional conditions must be met in addition to having real investment opportunities that provide adequate returns. First and foremost, there must exist a body of corporate and securities laws and practices that provide arms'-length minority shareholders with something close to a pro rata participation in the benefits of the firms in which they invest.<sup>8</sup> These institutions, in turn, will only develop and function if the tax environment does not discriminate against share ownership as opposed to direct investor control of enterprises. Further, the country must be willing to allow foreign investors access to their market, and to withdraw their funds when they feel that opportunities are better elsewhere.

The fact that new equity funds have been launched over the last two years for a number of LDCs--including China, India, Malaysia, Philippines, South Korea, Taiwan, Thailand, and Turkey--suggests that these obstacles can be overcome; and their ready market acceptance supports the view that the primary limiting factor is credible supply rather than demand.<sup>9</sup>

Quasi-Equity Investments. As discussed earlier, a major weakness of the past structure of international finance has been its concentration on lending instruments that were a general obligation of the borrower, with no tie to the outcome of the specific project for which funds were borrowed. Greater direct investment would be one solution to this problem. Greater portfolio equity investment, in which the investor shares fully in the rewards and risks of a particular enterprise (though not in its control), would be another. But these are not the only conceivable alternatives.

An important recent development is an increasing tendency to "break open" the package deal that direct investment has typically constituted. Traditionally, a single foreign-based firm would provide capital and technology while maintaining control of its local subsidiary. In contrast, what have been termed the "new forms of international investment" involve joint ventures, licensing agreements, franchising, management contracts, turnkey contracts, production-sharing, and international subcontracting.<sup>10</sup> The attractions of these new forms of international investment are clear: they permit the host country to single out the particular features controlled by the foreign enterprise that cannot economically be obtained elsewhere, and to contract for those without allowing foreign control of the domestic operation. This unbundling has been motivated, in large part, by developing countries' desires to limit the degree of foreign penetration and control to those activities where access to foreign know-how or markets is most important. However, it can also serve to increase the flow of risk capital by allowing investors to limit their exposure to risks which they have a comparative advantage in bearing by virtue of their diversification or expertise.

Instruments might be designed in several ways that would provide the investor with participation in certain risks, and hence potential rewards, without requiring the full set of conditions necessary for equity investment. Examples of such "quasi-equity" instruments include production-sharing, revenue-sharing, and profit-sharing through a variety of contract forms that may include contractual joint ventures, risk-service contracts, and management or licensing agreements with incentive provisions and preference shares of various types. Some quasi-equities are variants on

direct foreign investment in that they involve foreign firms that provide technology or access to markets, while others are akin to portfolio equity investment in that they involve arms'-length investors with little ability to control project outcomes and little interest in doing so. Three such arrangements are discussed here: production-sharing, revenue-sharing, and profit-sharing.

The simplest form of quasi-equity investment is the production-sharing arrangement. It entitles the investor to a specified proportion of the output of a project in return for an input of capital and, perhaps, technology, marketing, or management skills. Production shares are most often employed in the financing of mineral resources, with the investor taking physical delivery of its share.

Under a revenue-sharing arrangement, the investor's right is instead to a specified proportion of the revenue generated by the project. The main difference between a production-sharing and a revenue-sharing arrangement lies in who takes responsibility for selling the product, a major source of tension with either contract. With production-sharing, either party may spoil the other's market by dumping its share. With revenue-sharing, in contrast, the local firm is responsible for selling the entire output; but it may do a poor job or it may even choose to pursue goals other than revenue maximization. Thus, in general, under either arrangement one party will require some control over the other's commercial activities.

A profit-sharing arrangement goes one step further than revenue-sharing in giving the foreign investor a stake in the net (rather than the gross) outcome of the project, but without the share in ownership bestowed by an equity claim. By linking the stake to net outcomes, it provides the investor

with incentives to control costs as well as to maximize revenues; but this typically also entails transferring to the foreign investor a degree of control over the operations in question. Further, since it involves various elements of domestic cost streams, and possibly domestic revenues, it is more sensitive to possible distortions in the pricing of these inputs and outputs.

The potential advantages of quasi-equity investments over more traditional equity forms are threefold. First, in most cases they expose investors to a narrower spectrum of risks, and thus permit further exploitation of comparative advantage in risk-bearing (which is valuable if this advantage differs across categories of risks that are bundled together in traditional investments). Second, because they can be more explicit than equity contracts, they do not require the same sophisticated, capitalist, institutional infrastructure in the host country. Third, because they generally expose investors only to certain relatively well-defined risks, they may be credible even when the investor has little or no control over the activity in question. Thus, they allow greater separation of ownership and control and, hence, limit foreign penetration of the host economy to activities where it is of greatest mutual benefit.

To see these differences, consider alternative arrangements that can be used to finance the development of oil reserves in a developing country.<sup>11</sup> The key commercial risks in such an investment that must be borne by one party or another are the uncertainties regarding recoverable reserves, the price of oil in world markets, and the operating costs of the field. In fact, a number of risks involving the distribution of the gains between the two parties may make it difficult, if not impossible, to arrive at a mutually agreeable set of contract terms. Such risks include the obvious ones faced by, the foreign

producer of expropriation or some form of after-the-fact windfall profits taxes. But they also include risks faced by the host country in the form of reservoir stripping or, perhaps, underproduction, as well as a boycott of output in the event of a dispute. They also entail exposure of either party to general policy measures, such as exchange controls and changes in tax policies, of the other party's government (or, in the case of foreign investors, of their home country).

With traditional direct or portfolio equity investment, the foreign investor faces the whole spectrum of these risks. This arrangement will not be efficient if such investors do not possess a comparative advantage relative to the host country in bearing some of them, either because their exposures to such risks are greater or because the risks involve a substantial element of moral hazard--that is, the possibility that the host government will influence outcomes to its benefit but to the detriment of the foreign investor. The degree of inefficiency, and hence the benefit of a more narrowly drawn risk contract, naturally depends on the specific circumstances of each investment.

The Case of Indonesia. The potential magnitude of quasi-equity flows is large, as illustrated by the experience of Indonesia. A large proportion of its oil and gas development has been financed with production shares that provide foreign multinationals with 15 percent of output from specific projects (net of local taxes). These firms' gross profits arising from the production shares are subject to Indonesian income tax, an efficient arrangement from Indonesia's perspective since these taxes are largely eligible for credit against many of these firms' home country tax liabilities. If all Indonesian oil was subject to these arrangements, the 15 percent production shares would be worth from \$10 to 15 billion.<sup>12</sup> Given that



Indonesia's current foreign indebtedness is approximately \$20 billion, the implication is that by selling an additional 20 percent of its projected oil revenues, Indonesia could retire its general obligation financing.

As in the case of equity investment, many of the obstacles to increased quasi-equity flows lie in the policies of the developing countries themselves. Because of their novelty, though, these investments are also likely to involve long gestation periods and require the gradual building of a successful track record to attract substantial sums. At the host country level, it appears that quasi-equity instruments have been spurned to some extent because of the high perceived cost of the upside participation obtained by the foreign investor. Nevertheless, these same countries appear to have underestimated the cost of the downside risks they have retained by financing projects with general obligation borrowing.

Tax laws and foreign investment insurance schemes in investor countries have continued to favor direct investment over more limited forms of contractual involvement, although OPIC and several of the European insurance schemes extend to contractual schemes that do not involve ownership. The World Bank confines itself exclusively to lending rather than taking risk positions, although it is now considering commodity-price-linked financing and forms of co-financing that support quasi-equity investment. The IFC has made quasi-equity investments in mining and forest-products; but given its mandate to finance only private sector undertakings, these deals have typically been small.

One way to promote quasi-equity investments by portfolio investors might be to extend the World Bank's co-financing program to cover such operations. Alternatively, the mandate of the IFC might be broadened to allow

it to take quasi-equity positions in government-sponsored projects that could be structured on a commercial, stand-alone basis. In addition, the World Bank (or some other multilateral development bank (MDB) such as the Asian Development Bank) might assist in the process of unbundling risks by guaranteeing transfer risk. Thus, the absence of a true risk-bearing capacity for the MDBs does not preclude them from playing a role in supporting quasi-equity investments. Rather, the nature of the MDBs' strengths, and their preferred creditor position, make them ideal institutions for bearing and mitigating transfer risk which can easily prevent such transactions from taking place.

#### Stand-Alone Finance

Another way to avoid some of the problems associated with general obligation finance is to link borrowings to particular enterprises or projects without a general guarantee. In such cases, the lender is exposed to the downside risks of the undertakings being financed but, in contrast to equity or quasi-equity claims, does not share in the upside potential. Clearly, therefore, the lender would require a higher expected interest rate on such loans than on general obligations.<sup>13</sup>

Such financing, sometimes referred to as "project" or "limited recourse" financing, links the return to the lender to the success of the project, but only up to the promised, contractual interest rate. Thus, the lender has a stake in the project's success, but only up to the level necessary to service the debt. From the perspective of the borrower, such financing may be thought of as borrowing at a rate that is independent of the project's success and purchasing insurance to service the debt in case the project fails. It may also involve the earmarking of project revenues for servicing the project

borrowing.

To persuade potential investors to accept the commercial risks of a project, however, it may be necessary to protect them against transfer risk. This can be achieved in some export-oriented projects by escrowing the export proceeds. In some cases this might even enable a country to borrow on better terms for a stand-alone project than would be possible for general obligations, despite the fact that the lender would be accepting the commercial risk of the project.

The problem, however, is that other creditors might lose. The principle of not pledging specific assets or revenues to strengthen general obligations rests on a sound basis. Pledging assets presents the borrower with the worst of both worlds: the revenues of successful projects are encumbered and hence not fully available to the national treasury, while unsuccessful projects represent a drain on the treasury. To escrow substantial components of foreign-exchange earnings reduces a government's flexibility in difficult times and thereby reduces its overall creditworthiness.

While there are certainly circumstances where the other creditors can lose through the escrowing of export proceeds, there are also circumstances under which they would gain. Consider, for example, a country whose creditworthiness is too weak to sustain new general obligation borrowing, but which has a highly promising, export-oriented project whose development would be impossible without foreign finance. A stand-alone arrangement in which earnings were escrowed to cover debt service would permit the project to go ahead. At worst the country would have no more free foreign exchange than it otherwise would have had, leaving the position of existing creditors unaffected. But if the project was successful, it would add to the supply of

free foreign exchange and thus improve the position of the existing creditors. Hence the financing of a market-oriented project on a stand-alone basis without recourse to the public purse may well provide sufficient additional benefits to warrant the pledging of a part of the additional revenue stream generated by the project.

Market-oriented projects that do not generate direct export revenues present a more complex problem. Even if financed on a limited recourse basis, they remain subject to transfer risk and, in many cases, to other risks emanating at least in part from domestic policy choices such as output pricing. These risks often block financing from otherwise willing lenders who have the expertise to take on the commercial risks. As with quasi-equity investments, MDBs and investment guarantee authorities could do much to relieve this problem. An MDB, for example, might be able to introduce as project covenants the features and performance requirements that lenders need. Similarly, an MDB or a guarantee authority such as OPIC could provide guarantees against transfer risks. Such guarantees would be much narrower than those extended by the World Bank under its current co-financing program, and thus would allow greater specialization in risk-taking.

#### General Obligation Finance

As promising as is the potential of risk capital and stand-alone finance, there will always be a role for general obligation finance. This will be needed for any attempt to use foreign borrowing to smooth out shocks, since flows of risk capital and stand-alone finance are likely to vary with factors (notably, the availability of promising projects) that bear no relation to the need for balance of payments finance. For this reason, and given the likelihood that any significant buildup in the flow of risk capital

and stand-alone finance will take time, improving the form and increasing the volume of general obligation finance is a matter of some urgency.

There are a number of possibilities for better risk management through financial markets: one is through the use of swaps or options, another is by borrowing directly on terms that more closely match debt service with ability to pay.

Hedging Techniques. In recent years financial markets have developed new techniques that allow agents to hedge some of the risks to which they are exposed; and the use of these techniques has been growing at an explosive pace. As yet, however, developing countries appear not to have exploited these opportunities. Further, although MDBs--and particularly the World Bank--have become quite active in using the techniques in the management of their own liabilities and liquid reserves, they have done little to use these instruments to match more closely the terms of their loans with the needs of developing-country borrowers.

The longest established markets of this nature are futures markets for commodities and forward markets for currencies. While the maximum maturities traded in these markets are quite short, the same function is now provided for longer maturities by the newer markets for interest-rate and currency swaps.

So far, developing countries have made little use of the exploding swap markets. This may be due in part to a lack of interest on their part, arising from a failure to realize that currency swaps, in particular, offer the potential for a useful reduction in risk exposure. A bigger obstacle, though, is that banks are unwilling to enter into swaps with a counterparty whose liability could be rescheduled. This obstacle could be overcome most easily by MDBs, which could enter into swap agreements to provide a particular

borrower with a currency composition of debt-service obligations suited to its needs.

LDCs could also improve their risk management by making greater use of the rapidly expanding options markets. Unlike futures contracts or swaps, options do not oblige purchasers to effect future transactions at a price specified now, but simply give them the right to make such purchases (or sales). From the standpoint of developing-country borrowers, the great potential advantage of options relative to forwards or swaps is that the issuer accepts no exposure to the credit risk of the purchaser of the option, which is paid for in advance in cash. Thus, the existence of transfer risk should pose less of a barrier to use of this market. While at present both interest and currency options markets tend to be quite short term, longer-term interest rate caps (also a form of option) and currency options are becoming more common.

Indeed, with a sufficiently comprehensive and efficient set of options markets, a country might be able to achieve all the cash-flow matching it wanted while still doing all its general obligation borrowing at floating interest rates. There are nevertheless three reasons why it might in fact benefit by borrowing in other forms. The first is that options markets are still far from comprehensive and likely to remain so, however spectacular their expected future progress. The second is that options typically involve an up-front cash payment, which may come when foreign exchange is particularly scarce (although this problem can be mitigated by the use of range options). The third is that options markets may involve higher transaction costs than markets for the underlying assets.

Improved General Obligation Financing. Just as equities or

quasi-equities linked to particular projects or firms transfer some or all of the risks of those undertakings to investors, contingent general obligations could do the same for the country as a whole. A country that is heavily dependent on, say, oil or copper revenues could issue commodity-linked bonds. With such bonds, debt service would remain a sovereign obligation with the implied enforcement leverage, but the amount of the debt service under any set of circumstances would be determined by the price of the commodity. Thus such commodity risks would be shifted to investors.

General obligations with hedged or smoothed debt-service patterns also could benefit LDC borrowers by buffering them from undesirable shocks in debt service levels. The two principal candidates are price-index-linked bonds and constant-payment factor floating-rate notes. The key difference between these two is that price-level linked bonds shift the risk of changes in inflation to the lender, whereas constant-payment factor notes accrue interest at the current market rate, but smooth the cash debt service over time.

#### Country Strategies

Clearly, not all of the alternative forms of finance described in the previous section are possible, or desirable, for every LDC. An analysis of the appropriate mix of external financing arrangements for each country is beyond the scope of this paper. This section instead provides an illustration of how the various alternatives might be employed in one case, that of Mexico, and then suggests general guidelines that can be applied to other countries.

#### Mexico

Figure 1A provides a rough picture of the current structure of Mexico's external claims. It is dominated by government general obligations (and obligations guaranteed by the government), which amount to roughly \$100

billion; but it also includes substantial private sector foreign obligations, perhaps as much as \$30 billion. It also has a respectable base of foreign direct investment, \$10 billion in book value terms. Foreign portfolio investment, although harder to estimate, is likely to be of a similar order of magnitude.

Financial markets do not consider this structure to be viable, with Mexican general obligations currently trading at around 50 cents on the dollar. What structure of obligations would be viable, one which both accommodates local growth and provides investors with the expectation that their claims will be repaid dollar for dollar? First, current debt service would have to be significantly reduced, perhaps by 25 to as much as 33 percent, without substantially increasing the expected future ratio of debt service to export revenues. To do this, a large proportion of the obligations would have to bear repayment terms that more closely match Mexico's debt-servicing capacity. Further, there is general agreement--at least within the Mexican private sector, as well as outside of the country--that a larger proportion of external financing must be linked to specific enterprises in order for Mexico to prosper.

Figure 1B provides a picture of such a proposed recapitalization for Mexico. It includes \$50 billion of general obligation debt (a "guesstimate" of the amount Mexico can fully service), \$30 billion of oil-linked government obligations, \$15 billion in private foreign debt, \$25 billion of portfolio equity, and \$20 billion of direct investment. Depending on the terms of exchange for existing obligations, this package could provide the Mexican economy with as much as \$10 to \$15 billion in debt relief or in new funds.

The oil-linked securities might take any one of several forms. The most



conservative would be oil-price participation notes, a type of cumulative participating security. These notes would carry a market interest rate of, say, LIBOR plus 1.5 percent. Payments in foreign exchange of interest and principal would be made only out of the proceeds in excess of, say, 25 dollars per barrel on, say, 600 million barrels of oil per year. Interest arrears on these notes would accumulate at the LIBOR plus 1.5 percent level until oil prices reach a level where interest and, eventually, principal could be serviced. In the unlikely case that this never happened, holders of these notes would simply not be repaid. Alternatively, the notes might include a "put" feature whereby if the security is not fully retired by a particular point in time, the creditors could demand repayment over a prearranged number of years at a prearranged fraction of their face value.

The advantage of these oil-price participation notes is that they could be presented as meeting the full obligations of Mexico based on "reasonable" estimates of future oil prices, while at the same time providing substantial relief in terms of current debt service and some relief in terms of the present value of the obligation. Further, any eventual shortfall would be perceived as the result of the behavior of oil prices, rather than of arbitrary acts or "mismanagement" on the part of the Mexican government.

A more aggressive form of oil linkage would be the issue of oil-option bonds where the payment at maturity, though not the interim yield, is linked to oil prices. Mexico made several issues of such Petrobonds in the late 1970s. Most recently, in 1986 Standard Oil of Ohio issued a package of debentures and oil-option notes. These notes combine 5- or 7-year zero coupon notes with a participation in the excess of oil prices above \$25 (up to \$40) on a predetermined number of barrels of oil. While these these options are

not separable from the zero-coupon notes, an estimate of the option value based on recent trading is nearly \$3 per barrel. If Mexico could obtain similar terms for range options on, say, 600 million barrels a year over a five-year period beginning in 1992 (roughly 33 percent of its output at present levels), it could raise \$ 8 to 10 billion, which could be used either to reduce its debt by that amount, or to lower the effective interest rate on its total debt over the next five years by 3 percent, nearly one-third of the current level.

Yet another possibility would be oil-indexed bonds, for which both interest and principal would move in line with oil prices. This latter alternative would come closest to Mexico's issuing an "equity share" in its oil revenues. Such bonds would involve significantly lower current debt service than floating-rate borrowing, and future debt service would adjust in line with oil prices.<sup>14</sup>

#### General Principles

While country situations differ widely, and many subtleties would have to be taken into account in developing an idealized recapitalization for individual LDCs, the general outlines of such restructurings can be developed by relating the principles presented thus far to country characteristics along several dimensions. Most important are the following five:

- (1) concentration of export revenues;
- (2) extent of dependence on external finance;
- (3) private versus public mix in financing;
- (4) the degree of development of domestic capital markets; and
- (5) the current level of direct foreign investment.

Figure 2 attempts to classify a set of LDCs according to these

characteristics.<sup>15</sup>

Using these subjective classifications, it is possible to identify those countries that would benefit most from financing alternatives which provide aggregate risk-sharing and hedging, improvements in micro-level performance incentives, and increases in general creditworthiness.

Risk-sharing. Given their exposure to specific commodity prices, Mexico, Peru, Venezuela, Nigeria, Indonesia, and the Philippines all appear to have a substantial need for risk-sharing at an aggregate level. This risk-sharing could be accomplished through commodity-linked general obligations, quasi-equities such as production shares, direct investment, or portfolio investment in local firms. The choice among these alternatives depends on the desirability and feasibility of each in terms of other factors, such as the degree of foreign involvement desired (to acquire, say, technological or marketing expertise), the extent to which contingent finance could increase creditworthiness, and the degree of development of local corporate law and capital market institutions. Indonesia, for example, already obtains a great deal of its finance in the form of production shares, thereby not only shifting oil price risk abroad but also involving foreign expertise in its oil sector. It could probably also benefit, however, by shifting its public finance further in this direction, perhaps through the issue of oil price-linked instruments by the state.

Hedging. Again, because of their relatively high levels of foreign indebtedness, Nigeria, Philippines, Indonesia, and all the Latin American countries have an interest in hedging themselves against adverse swings in financing costs due to shifts in world interest rates or currencies. Korea also falls into this category.

Project Financing. Project financing, both through debt and quasi-equities, should be of special interest to two groups of countries: (1) those that have large-scale projects that could benefit from stakeholdings by foreign interests possessing valuable technology, management skills, or access to markets; and (2) those whose creditworthiness could be improved by carving out particular export revenue flows. This would appear to include Peru, Mexico, and China as well as the other countries mentioned so far.

Foreign Direct Investment. FDI will be most valuable where there are strong reasons for involving foreign firms and integrating local activities into their global networks. It is most promising where the decisions of foreign firms will be most likely to coincide with national interests--for example, in export-oriented economies where local prices are aligned with international prices. Where these conditions are not met, e.g. China, narrower quasi-equity forms of participation may be more desirable.

Portfolio Investment. Portfolio investment conveys substantial risk-shifting benefits as well as bringing world market criteria to bear on investment and management choices without requiring a deep penetration of host economies by foreign management interests. Thus it would appear to be a highly desirable form of foreign investment from a nationalistic perspective. Its feasibility is limited, however, by its substantial requirements in terms of local commercial and financial infrastructure. Efforts to increase portfolio investment flows thus need to focus on developing the requisite local institutions as well as removing policy constraints.

### Conclusions: How to Get There from Here

This article has argued that the mix as well as the volume of international finance is important because of its effect on the risk exposures and economic performance (primarily through its effect on revenues) of the borrowing countries. Further, by properly matching obligations to the factors that determine their ability to pay, a better mix of financing is likely to increase the volume of external finance in cases where the flow is constrained by the borrower's lack of creditworthiness.

Providing a transition, however, from current financing modes to the proposed new alternatives is a significant problem in itself. For even where a more efficient structure of obligations can be readily identified, the required recapitalization will not happen quickly--especially since it typically will present conflicts of interest between debtors and lenders, as well as among other classes of current claimants. Nor is a grand renegotiation likely to sort out these conflicts. Rather, the structure is likely to shift little by little, starting with debt-for-equity exchanges and gradually moving to include debt-for-debt and other direct exchanges of government obligations.

Let's consider the case of debt-for-equity swaps. Such debt "conversions" involve an exchange of government debt, which is valued in secondary markets at a discount from its face value, for local currency to be used for the purchase of specified investments, typically equities. Chile's program is the most visible, but a number of other countries (including Mexico, the Philippines, Ecuador, and Brazil) have started or are planning a similar program. Debt conversions can benefit a country directly in four ways. They can (1) reduce the expected (discounted) cost of its external

obligations; (2) shift repayments to circumstances under which it is better able to pay; (3) encourage investment that wouldn't otherwise take place; and (4) improve the quality of its existing investments by offering strategic stakes in projects or enterprises to firms with the necessary expertise. The first two benefits relate to the country's liabilities, the latter two to its earning assets. In addition, debt-equity conversions may result in significant indirect benefits by breaking the current financing logjam and focusing financial market interest on the country.

At first glance it is not obvious that a country gains by repurchasing its debt at a discount. This discounted price, after all, should reflect the market's assessment of the amount and timing of the country's future payments on its existing obligations. However, there are two reasons why it may benefit. First, the country's assessments of its future performance may be more informed and more optimistic than those of the market. Second, and more likely, even if the market price of the securities reflect well-informed expectations, the cost of defaulting may be substantial, and an exchange of course avoids default. If debt is exchanged for a "more efficient" security, in that its service obligations more closely match the country's ability to pay, so much the better.

Further, the asset effects of debt conversions may be quite important. Even if a debt-equity swap does not result in additional real investment, it may increase the value of a country's assets. Equity investors with strategic stakes in local firms will have incentives to improve their performance, and the improvement may be significant if the investors also bring the relevant expertise. This effect is likely to be greatest in cases where the conversion involves issuance of large equity interests in firms that have previously been

controlled directly or indirectly by the local government. Further, it is not limited to takeovers by foreign firms. Domestic private investors may be able to do just as well, with the additional benefit that they will add to the domestic political constituency for allowing a greater role for market forces.

Given the relative complexity and novelty of these issues for most developing countries, as well as for the international agencies that continue to play a key role in stimulating international financial flows, much more attention and resources should be committed to assessing the merits of new financing alternatives for Third-World countries.

## Notes

1. This result is obtained in theoretical models (see, for example, Jonathan Eaton, Mark Gersovitz, and Joseph Stiglitz, "The Pure Theory of Country Risk," European Economic Review 30, 1986), and is borne out by the NICs that have been able to achieve very rapid growth in external financing in line with the growth of their economies.
2. While most U.S. banks have recently "written down" their LDC loans, they have not provided debt forgiveness, except to the extent they have agreed to rescheduling where the terms imply a reduction in the market value of their claims.
3. Such a shift, of course, could involve a redistribution between the banks and Mexico if it alters the probability of a partial or total default.
4. The exception would be the case where a reduction in current interest rates, by reducing the probability of default, would increase the present value of lenders' claims.
5. Floating-rate borrowing, in fact, is likely to be more perverse since debt service will be greatest when nominal rates are highest, which is likely to coincide with periods of economic distress for LDCs.
6. See the 1985 World Development Report for an interesting discussion of risk-sharing and hedging in international finance.
7. For a discussion of these issues, see Donald Lessard and John Williamson, Capital Flight: The Problem and Policy Responses, Washington: Institute for International Economics, 1987.
8. Of course, a securities market is required as well. However, the "market" could be located in a developed country as opposed to the country where the firm is domiciled.
9. As reported by Lazlo Birinyi, Julie Morrison, Michael Belkin, and Michael Mahaffy, International Equity Analysis, New York: Salomon Bros, Inc., 1987.



10. For a description of these instruments, see Charles Oman, New Forms of International Investment for Developing Countries, Paris: OECD, 1984.

11. This illustration is drawn from Charles Blitzer, Donald Lessard, and James Paddock, "Risk Bearing and the Choice of Contract Forms for Oil Exploration and Development," The Energy Journal, Vol. V No. 1.

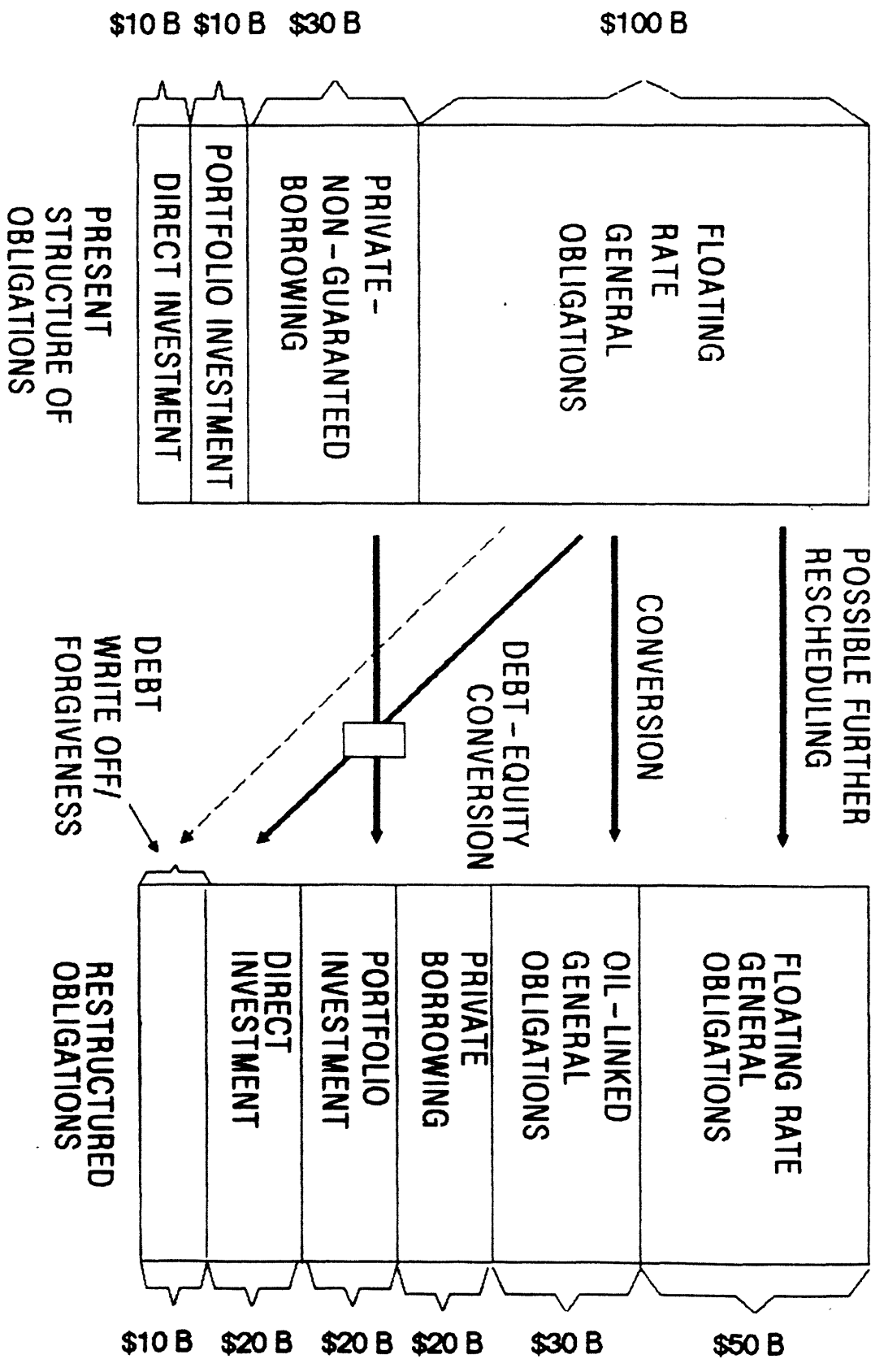
12. This estimate of value is based on an oil price of 18 dollars and 1987 production levels.

13. The exception would be a case where the lender is shielded from transfer risk by escrow arrangements that provide for debt-service payments out of export proceeds before they are remitted to the host country.

14. While the IMF package recognizes Mexico's extreme exposure to oil prices, it does so in a relatively inefficient manner. By offering further lending in the case of "bad news" on oil prices, it basically says to Mexico, "If circumstances worsen so that you are less able to meet your obligations, we are prepared to lend you even more." This commitment is a concession in that it commits the Fund and other creditors to lend at a time when Mexico probably cannot borrow elsewhere, but it also creates the specter of an ever mounting debt burden under such unfavorable circumstances.

A superior alternative would be an arrangement whereby a shortfall in oil prices would result in a reduction in Mexico's then current debt service and future obligations. There are several ways that this can be done without entailing relief in a present value sense, and obviously many ways to do it on a concessional basis.

15. The classifications in this figure are subjective and are presented for illustration only.



MEXICO: AN ILLUSTRATIVE RECAPITALIZATION

FIGURE 1

Figure 2  
 Characteristics of Debtor Countries Relevant to Choice of  
 External Financing Mix

Country	Export Concent.	Level of Ext. Debt	Private/ Public Mix	Cap.Mkt. Develop.	Level of DFI
Argentina	mod-hi	very high	high	mod-high	moderate
Brazil	moderate	very high	high	high	mod-high
Chile	mod-high	high	mod	high	mod-high
Mexico	moderate	very high	high	mod	moderate
Peru	high	high	high	low	low
Venezuela	high	high	mod	mod	mod-high
Nigeria	high	high	high	low	mod
China	low	very low	low	very low	very low
India	low	moderate	low	moderate	low
Indonesia	high	mod-high	moderate	low	moderate
Korea	low	high	moderate	moderate	moderate
Malaysia	high	mod- high	moderate	high	high
Philippines	moderate	high	low	low	moderate