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Volume Title: Developing Country Debt and Economic Performance, Volume 1: The International Financial System

Volume Author/Editor: Jeffrey D. Sachs, editor

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-73332-7

Volume URL: http://www.nber.org/books/sach89-1

Conference Date: September 21-23, 1987

Publication Date: 1989

Chapter Title: Conditionality, Debt Relief, and the Developing Country Debt Crisis

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Chapter URL: http://www.nber.org/chapters/c8992

Chapter pages in book: (p. 255 - 296)

6 Conditionality, Debt Relief, and the Developing Country Debt Crisis

Jeffrey D. Sachs

6.1 Introduction

This chapter examines the role of high-conditionality lending by the International Monetary Fund and the World Bank as a part of the overall management of the debt crisis. High-conditionality lending refers to the process in which the international institutions make loans based on the promise of the borrowing countries to pursue a specified set of policies. High-conditionality lending by both institutions has played a key role in the management of the crisis since 1982, though the results of such lending have rarely lived up to the advertised hopes. One major theme of this chapter is that the role for high-conditionality lending is more restricted than generally believed, since the efficacy of conditionality is inherently limited.

A related theme is that many programs involving high-conditionality lending could be made more effective by including commercial bank debt relief as a component of such programs. I shall argue that such debt relief can be to the benefit of the creditor banks as well as the debtors, by enhancing the likelihood that the debtor governments will adhere to the conditionality terms of the IMF and World Bank loans, and thereby raise their long-term capacity to service their debts.

Almost by definition, countries in debt crisis that appeal to the Fund or the Bank for new loans have already been judged to be uncreditworthy on normal market criteria. In such treacherous circumstances, it is appropriate to ask why the IMF or the World Bank should be extending new loans. As an alternative, for example, the international institutions could allow the creditors and debtors to renegotiate new

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terms on the old loans without any official involvement. Such two-party negotiations between creditors and debtors characterized earlier debt crises, before the IMF and World Bank existed (see Lindert and Morton, chap. 2 in this volume, for a discussion of the earlier history).

In principle, continued lending by the international institutions could be justified by several nonmarket criteria: as a form of aid, as an investment by the creditor governments that finance the IMF and World Bank in political and economic stability of the debtor country (see Von Furstenberg 1985a; 1985b, for such a view), as an extension of the foreign policy interests of the major creditor governments, as a defense of the international financial system, etc. Loans are not usually defended on these grounds, though in fact such considerations are frequently important. Of course, these criteria are valid to an extent, but also extremely difficult to specify with precision as a basis for IMF–World Bank lending.

Another defense of lending, also with considerable merit in some circumstances, is that the IMF (and World Bank to a far lesser extent), can act as a "lender of last resort," analogous to a central bank in a domestic economy. The theory of the "lender of last resort" is not fully developed, though the practical importance of having a domestic lender of last resort is not much in dispute. The conceptual argument goes something as follows.

Commercial banks are at a risk of self-confirming "speculative panics" by their depositors because the banks engage in maturity transformation of their liabilities, i.e., they borrow short term and lend long term (see Diamond and Dybvig 1983 for a formal model of banking panics). If the depositors suddenly get the idea that *all other depositors* are going to withdraw their funds, it is rational for each depositor to withdraw his own funds from the bank, even if the bank would be fundamentally sound in the absence of a sudden rush of withdrawals. The depositors' collective behavior creates a *liquidity* crisis for the bank, in that a fundamentally sound intermediary cannot satisfy the sudden desire of its depositors to convert their deposits to cash. A lender of last resort, usually the central bank, can eliminate the liquidity crisis by lending freely to the bank in the short term. The banking panic is a form of market failure, that can be overcome by a lender of last resort.

The analogous argument for the IMF would hold that the private commercial bank lenders to a country might similarly panic, and all decide to withdraw their funds from the country even though the country is a fundamentally sound credit risk in the longer term (see Sachs 1984 for such a model). In this case, lending by the IMF can eliminate the liquidity squeeze on the country, and thereby help both the creditors and the debtors. As in the domestic economy, the IMF helps to overcome a well-defined market failure.

This argument was part of the basis of the original IMF intervention in the debt crisis of the early 1980s. The argument following the Mexican crisis in mid-1982 was that countries were suffering from a liquidity crisis, made acute by the simultaneous rise in world interest rates and the sudden cessation of commercial bank lending. It seemed at the time that the crisis could be quickly resolved (as argued, for example, by Cline 1984), since it represented merely a liquidity squeeze.

The liquidity arguments are no doubt true in some cases, but most observers now doubt that the developing country debt crisis represents merely a problem of liquidity. Six years after the onset of the crisis, almost no countries have returned to normal borrowing from the international capital markets, and the secondary-market value of bank loans to the debtor countries reflect very deep discounts in valuation. For many countries at least, the crisis represents more fundamental problems of solvency and longer-term willingness to pay on the part of the debtor nations.

In these circumstances, other justifications (that can be in addition to the liquidity argument) have been advanced for the large role of IMF and World Bank lending. By far the most important argument is that *strict conditionality* attached to IMF–World Bank loans can make such loans sensible on normal market terms. The assumption is that the international institutions are better than the banks at enforcing good behavior of the debtor country governments, and therefore have more scope for lending.

The importance of conditionality in justifying IMF–World Bank lending is certainly well placed. Countries in crisis are often in poor economic shape in large part because of bad policy choices in the past. IMF and World Bank policies are appropriately focused on key policy weaknesses (excessive budget deficits in the case of the IMF, and excessive inward orientation in the case of the World Bank). Moreover, the IMF and World Bank have the expertise and institutional clout to design high-conditionality programs, while the commercial banks do not.

Nonetheless, the role for high-conditionality lending is overstated, especially in the case of countries in a deep debt crisis. In practice the compliance of debtor countries with conditionality is rather weak, and this compliance problem has gotten worse in recent years, since a large stock of debt can itself be an important disincentive to "good behavior." In other words, the debt overhang itself makes it less likely that conditionality will prove successful.

The reason is straightforward. Why should a country adjust if that adjustment produces income for foreign banks rather than for its own citizenry? Since deeply indebted countries recognize that much of each extra dollar of export earnings get gobbled up in debt servicing, a very large stock of debt acts like a high marginal tax on successful

adjustment. Therefore, two counterintuitive propositions could be true when a country is deeply indebted: "Good behavior" (such as a higher investment rate) can actually reduce national welfare, by increasing the transfer of income from the debtor country to creditors; and explicit debt relief by the creditors can increase the amounts of actual debt repayment, by improving the incentive of the debtor country to make the necessary adjustments.

Before turning to these arguments at greater length, we should consider one additional argument sometimes made for official lending. The argument is occasionally made that since countries are more averse to defaulting on official loans than they are on private loans, it is safe for official creditors to lend even when private creditors will not. This argument can sometimes be correct, but it is often mistaken. If official loans just raise the country's debt burden without raising its debt-servicing capacity, then repayments to the official creditors might simply crowd out repayments to its private creditors, and thereby undermine the smooth functioning of the international capital markets.

The issues of conditionality and debt relief will be discussed as follows. Section 6.2 outlines the theory of conditionality and section 6.3 focuses on the empirical record of high-conditionality lending. Section 6.4 shows the linkages between the overhang of debt and the effectiveness of conditionality, and demonstrates the potential role for debt relief in high-conditionality lending. Section 6.5 then discusses the specific problems raised by the macroeconomic situation of the heavily indebted countries: high inflation, excessive inward orientation, large budget deficits, and a prolonged economic downturn, all exacerbated by the problem of high foreign indebtedness. The recent history of stabilization has shown that few countries have been able to solve even one or two of these problems at a time, much less all of them simultaneously, and the record suggests that adjustment programs have the highest probability of success when macroeconomic stabilization precedes large-scale trade liberalization and a shift to outward orientation.

6.2 High-Conditionality Lending by the IMF and World Bank

The argument for high-conditionality lending is that the IMF and the World Bank can compel countries to undertake stabilizing actions in return for loans, thereby making the loans prudent even when the private capital markets have declared the country to be uncreditworthy. A full theory of conditionality would have to explain three things. First, if the actions being recommended to the country are really "desirable" for the country, why is it that the country must be compelled to undertake the policy? Second, if the country must indeed be compelled to undertake the actions, what types of force or sanctions could be

used to guarantee compliance? And third, why is it that international institutions are better able to impose conditionality than are the private capital markets?

One solution to the conundrum of why countries must be compelled to accept conditionality is the problem of "time consistency": a debtor government accepts ex ante the need for a policy adjustment as the quid pro quo for a loan, but the government has a strong incentive to avoid the policy change once the loan is arranged. In this case, the role of conditionality is to bind the country to a course of future actions, actions which make sense today but which will look unattractive in the future. In other words, the goal of conditionality is to make the ex ante and ex post incentives for adjustment the same (where ex ante and ex post are with respect to the receipt of the loan).

In earlier papers (Sachs 1984; Cooper and Sachs 1985), I gave a simple illustration of a case in which conditionality was appropriate. I will discuss that case here, relegating the formal model to appendix A. Suppose that a government faces the problem of allocating resources between consumption and investment. The government has a very high time-discount rate (0.30 for purposes of illustration), so that current consumption is much preferred to future consumption. The investment opportunities have a return (0.20) in excess of the world interest rate (0.10), but less than the time discount rate.

The problem is the following. Once the foreign loans are obtained, and the government has to decide how to allocate over time the total pool of resources (equal to domestic resources plus foreign borrowing), the government will choose to consume rather than invest. That is because its time discount rate exceeds the rate of return on investment, so that it does not pay to sacrifice consumption expenditures in order to raise investment. For concreteness we suppose that a particular export-oriented investment project costs $100 million, and therefore yields $120 million in the future.

We assume that without investment the country will not have the resources to pay off a loan in the following period. The government is then assumed to pay off as much as it can, and to default on the rest. Under these conditions, private foreign lenders will not lend much to this country since they correctly foresee that the government will not invest the money. The situation can be depicted simply as a two-stage game between the creditors and the borrower. The creditor must first decide whether to lend; the borrower then decides whether to invest. As illustrated in figure 6.1a, once the money is received, the government's "utility" is higher by consuming today rather than investing (utility is assumed to be equal to consumption, with future consumption discounted by the rate of time preference). In particular, the country gets 100 in utility by using the loan for current consumption, and then

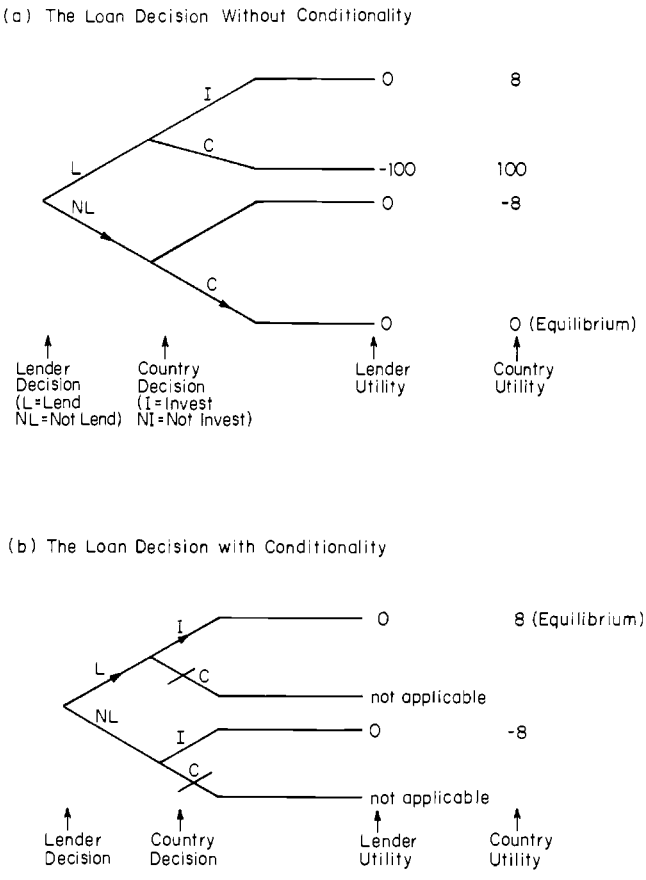

Fig. 6.1 Loan market equilibrium

defaulting on the loans, but only 8 if the loan is used for investment. Because the country's incentive to consume and then default is recognized by potential private creditors, the country is a bad credit risk. Since the loan will not in fact be made, the country's utility from the loan is of course 0.0 (the arrows indicate the equilibrium choices).

On the other hand, if the country could *commit* itself to increase investment by the amount of the foreign loans, as shown in figure 6.1b, it would result in a better outcome for the country specifically, a utility of 8 rather than 0.0. (As shown, the lender is indifferent between the two cases, because the lender just gets repaid with zero profit in the case 6.1b. In reality, the lender would presumably strictly prefer the case of lending with repayment to the case of no lending.) Since the investment

opportunities have a return that is higher than the world cost of borrowing, the returns to the investment will be more than enough to pay off the loans. Moreover, since the investment is foreign financed, undertaking it does not have to reduce current consumption. Thus, if the country can commit itself to use foreign loans for investment purposes, the country will (1) maintain current consumption levels and (2) generate out of the investment project more than enough future income necessary to repay the debt. In sum, it is advantageous for the government to try to "tie its hands," and commit itself to use new foreign money for investment rather than consumption purposes.

The role for conditionality is introduced by assuming that countries cannot make credible, enforceable commitments with private lenders to use loans for one purpose or another, but that by means of conditionality agreements with the IMF or World Bank, the country can commit itself to a particular investment program. In such a case, it would be safe for the IMF or World Bank to make high conditionality loans to the country (since the loans will be used for investment purposes), while it would be imprudent for the private sector to make the same loans (since without conditionality, the government will consume the proceeds of the loan rather than invest).

The remaining problem with conditionality comes from the fact that once the IMF or World Bank lending is received, the country has the incentive to renege on its investment commitment. Given the preferences of the government, it is always better to consume than to invest once a level of foreign loans has been established. Thus, there must be some way for the country or the IMF and World Bank to guarantee that the commitment to invest is actually honored.

In practice, bargaining over conditionality almost always involves more than the debtor government's binding itself to a specific path of policies. Bargaining between a debtor country and the IMF and World Bank may also involve an implicit dispute about which objective function to use in evaluating a set of outcomes. If a program will lead to a recession next year, but a recovery over the following several years, is it desirable? The answer may well be "yes" to the Fund or the Bank (or their creditor governments, which recognize that adjustment may involve short-run pain in return for long-run benefits), but the same answer might be "no" to a precarious regime that might lose power during a period of austerity. Openness about this difference of opinion would block the signing of many agreements. In practice, neither the Fund or Bank on the one hand nor the creditor government on the other fully admit their disagreements, so that many conditionality packages are signed that have little chance of fulfillment, a point I return to below.

6.2.1 Official versus Private Lending in IMF–World Bank Packages

In the framework just described, the major role for the IMF and the World Bank is to guarantee through conditionality that the country will use a new loan for investment rather than consumption. We have discussed the issue as if the loan itself would come from the monitoring institutions, but in fact, there is no reason why there could not instead be a division of labor: The international institutions impose the conditionality; the private capital markets provide the financing. This is a well-recognized idea, that the international institutions should act mainly to provide "a seal of good housekeeping," and thereby to catalyze private lending.

Since the outbreak of the debt crisis, the IMF and World Bank have often emphasized such a catalytic role. One of the major innovations early in the crisis was the IMF's insistence to the commercial banks that any new IMF program for Mexico would require that the commercial banks commit $5 billion of additional lending to Mexico as well. Thus began the pattern of "involuntary" or "nonspontaneous" bank lending, in which the banks agreed to commit new lending to a debtor country in proportion to their existing exposures to the country, as part of an IMF stabilization package. More recently, private cofinancing with the World Bank has also been added as a condition of some package agreements (e.g., the Argentine agreement in 1986).

The details of such loan packages are beyond the scope of this chapter, and have been discussed at some length by Sachs and Huizinga (1987). Here it suffices to point out the extremely limited nature of such financing, and that the "catalytic" role of the IMF and World Bank have been vastly overstated (this may be a result of the lack of credibility of the conditionality, for reasons suggested below). Three points can be made here. First, overall net bank lending to the problem debtor countries were negative during 1982–86, not positive. That is, loan amortizations exceeded new lending, even after taking into account all of the well-publicized "concerted lending" arrangement. The concerted lending has been sporadic, and small in absolute magnitude, compared with the levels of debt amortizations in recent years. Thus, the levels of commercial bank exposure in the debtor countries actually fell after the onset of the crisis.

Second, the new lending by the commercial banks, where it has occurred, has almost always fallen far short of the debt servicing payments made by the debtor countries to the creditor banks. In this sense, the net resource transfers from the banks to the major debtor countries has been highly negative in recent years, despite the occasional application of concerted lending.

Third, and perhaps most disturbing, the IMF has not devoted much energy to getting concerted lending programs for the smaller debtor countries, but only for the larger countries (e.g., Argentina, Brazil, and Mexico). Almost no debtor country with an outstanding debt below $5 billion has been able to get any concerted lending from its commercial bank creditors, as is shown in table 6 in Sachs and Huizinga (1987). The smaller and politically weaker debtor countries have apparently had to make much larger net resource transfers than have their larger fellow debtor countries.

6.2.2 Enforcement of Conditionality Agreements: The Theory

The question of enforcement of conditionality agreements is in many ways tougher than the question of why conditionality is needed. The justification for IMF–World Bank lending rests on two propositions regarding enforcement: (1) that the enforcement of IMF–World Bank conditionality is sufficiently powerful to result in an "acceptable" rate of compliance with IMF–World Bank programs and (2) that the official institutions have an advantage over the commercial banks in enforcing conditionality. In both this section and the next, I examine the validity of these views.

6.2.3 The Strength of Conditionality

For both the international institutions and the commercial banks, the legal bases of conditionality are weak. In the domestic capital markets, bond covenants are legally binding restrictions on the behavior of debtors, which can generally be enforced with only modest transaction costs. In the international arena, particularly for loans to sovereign governments, the transaction costs for enforcing loan agreements are extremely high. As most writers have recognized recently, the main method of enforcement for lenders (whether official or private) involves the threat of cutoffs of *new* loans to misbehaving borrowers. Such a cutoff in lending can of course be extremely disruptive and costly to a borrower. Bank creditors can cut back on short-term trade credits to a country, and thereby disrupt the flow of international trade in the short term. The IMF similarly can cut back on balance-of-payments support, and by doing so, also trigger the cutoff of lending from other official sources (e.g., the World Bank, the bilateral official creditors, the multilateral development banks).

Theoretical work and empirical evidence both establish that the threat of a lending cutoff is a credible, but inherently limited sanction. Thus, conditionality, whether by the IMF and World Bank, or by the commercial banks themselves, should not on an a priori basis be expected to have the same force as a binding bond covenant in a domestic loan.

From the beginning, we should appreciate the inherent limitations of the enforcement mechanisms in conditionality on international lending.

6.2.4 The Special Problem of Negotiating with a Sovereign Borrower

Conditionality is limited in effectiveness not only because of enforcement difficulties, but also because of the complexity of negotiating with a sovereign borrower. In the case of a bond covenant, there is a clear legal responsibility on the borrower to carry out the conditions of the covenant. When a government is the debtor, however, there is likely to be a considerable diffusion of power within the government, to the extent that the individual parts of the government negotiating the conditionality agreement may well lack the authority to implement the agreement.

This problem is common with IMF agreements, though it is rarely discussed or carefully analyzed. The IMF invariably negotiates with the executive branch, and mainly with a small part of the executive branch, the finance ministry. A small group of technocrats at the ministry of finance and at the central bank will typically negotiate the IMF agreement in private, and in splendid isolation from the rest of the government. However, when the minister of finance signs the agreement with the Fund, very often there can be little assurance that the minister has the authority or political standing within the government to carry out the agreement. This is especially the case when the minister agrees to spending and tax changes that require parliamentary approval, or that require the approval of other parts of the government (independent state enterprises, regional corporations, state and municipal governments, other ministries, etc.). Often, it is the president himself that undercuts his finance minister in the execution of an adjustment program.

In this sense, most IMF and World Bank agreements start with a formal myth, that there is one unified actor in the government that can be bound by the terms of a conditionality agreement. This may be a necessary myth, and even sometimes a useful one, but uncovering the myth helps us in a simple way to account for the fact that most IMF agreements fail, a point we shall see below.

6.2.5 The Debt Overhang and the Weakness of Conditionality

What must also be appreciated is the fact that the current overhang of external debt to private creditors can greatly hinder the effectiveness of IMF conditionality, at least under the prevailing design of IMF programs. Virtually all IMF programs to date have been designed under the assumption that the debtor country can and will service its external debts in the long run on a normal market basis. The programs are

constructed in the expectation of normal debt servicing. (For example, in the technical calculations in Fund programs, interest rates on the existing debt are assumed to be at market rates; the country is assumed to clear all arrears on a reasonable timetable, etc.)

It might easily be the case, however, that a country would be better off defaulting on a portion of its debts than it would be with timely debt servicing (a dozen or more countries had indeed taken such unilateral action by 1987). There simply may not exist an IMF high-conditionality program based on full debt servicing, that, if followed, would actually make the country better off than it would be without the program but with a partial suspension of debt payments. In other words, the IMF program might be too restrictive relative to the available options of the debtor government.

In such circumstances, four things could happen. One outcome would be for the IMF to design a program that is actually based on partial and explicit debt relief. So far, the IMF has avoided this rather obvious approach, partly because it has underestimated the possible efficiency gains for all parties (creditors, debtors, and the Fund) that might result. The second possibility is that the IMF and the debtor government would fail to sign a program, and the country would suspend payments on the part of its private sector debts. This has been the case with Peru during 1985–87, and Brazil in 1987. The third possibility, and indeed the typical case in recent years, is that the Fund and the country would sign a program based on full debt servicing, even though both parties fully expect that the agreement will breakdown in due course. Either the conditionality would be allowed to fall by the wayside and the country would continue to borrow from the Fund but without living up to earlier commitments, or the IMF program would eventually be suspended.

Argentina during 1987–88 provides an ideal illustration of the case in which the IMF and a debtor country signed a series of agreements in which almost no observers had any confidence, and in which the IMF simply relaxed the conditionality terms (with formal waivers) throughout the course of the agreement. Mr. David Finch, the former director of the IMF Department of Exchange and Trade Relations, writes of Argentina as a case of "renewed pressures to involve the IMF in an agreement where political solutions [in Argentina] won't allow a solution to the balance-of-payments problem. . . . [T]he IMF has been forced to continue lending [to Argentina] to maintain the facade of the debt strategy." (Finch, 1988, 127). In less diplomatic language, the U.S. government was fearful that Argentina would default to the commercial banks in the absence of new IMF money. The U.S. therefore pressured the Fund to maintain a program with Argentina despite the failure of the Argentine government to live up to earlier agreements.

A fourth possibility would be for the IMF and World Bank to approve programs with debtor countries that allow for a buildup of arrears (i.e., nonpayments) to the commercial bank creditors, in well-defined circumstances. These circumstances would include (1) a large overhang of debt that is deemed to be highly inimical to the stabilization efforts of the country and (2) the unwillingness of the commercial creditors either to grant relief or significant new financing. By allowing for the buildup of arrears to private creditors, the IMF could design more realistic programs without the need to press the private creditors for specific amounts of debt relief. The debt relief would instead emerge in the bilateral bargaining of the debtor and the creditors.

In a later section, we will explore in much greater detail the case for combining conditionality with debt relief.

6.2.6 The Strength of Official versus Private Conditionality

It remains to be asked whether the Fund and the Bank have more power than the private banks in imposing conditionality on sovereign borrowers. Here, experience will have to provide the most conclusive answers, and we discuss the historical experience in the next section. Some theoretical arguments, though, can be made as follows. First, the Fund and the Bank are ongoing institutions, while bank syndicates are ad hoc. Defaulting to the Fund or the Bank will presumably put the country at risk of rupturing the relations with these institutions, while defaulting to some private creditors in a particular syndicate might not forestall further borrowing from new lenders elsewhere.

Second, enforcement of loans raises several problems of collective action. With hundreds or even more than a thousand private creditors for a major debtor country, there is a problem in allocating the monitoring and enforcement costs of a conditionality agreement that might be reached between the country and the creditors. With the Fund or the Bank, a single actor bears the enforcement costs and reaps the rewards of enforcement. Third, it is sometimes suggested that the Fund or the Bank can dictate terms to a country while the private sector cannot because it is easier for the country to be responding to an independent political institution than it is for the country to be responding to "private capital."

Fourth, and perhaps most important, the creditor governments have made IMF conditionality the practical linchpin of all a debtor country's financial relations with the creditor governments. With few exceptions, a debtor country in crisis must have an ongoing relationship with the IMF in order to qualify for (1) a rescheduling of official bilateral (i.e., government-to-government) loans in the Paris Club; (2) new credits from official export credit agencies to the debtor government; (3) new lending from the World Bank and the multilateral development banks

(even if there is no formal cross-conditionality clause between IMF and World Bank lending, there is often implicit cross-conditionality). In addition, debtor countries are often instructed by the United States to maintain good relations with the IMF in order to maintain good bilateral relations with the United States. Thus, a country's concern about foreign policy relations with the United States often strengthens the hand of the IMF.

On the other side of the ledger, the public institutions also have several disadvantages in enforcement power relative to the private sector. With respect to the first point, banks are also ongoing institutions well aware of their reputations. They have so far been extremely reluctant to ease the repayment terms for any country (for example to reschedule at below market interest rates), even for countries in dire straits, because of the demonstration effect on the dozens of other countries with which these banks are bargaining.

Second, with respect to the free-rider problems of enforcement, the banks have worked out ways to get around many of the collective action problems involved in monitoring and rescheduling. For example, small steering committees of banks are appointed to manage the negotiations with the debtor countries. A small number of banks is entrusted with most of the actual mechanics of oversight and negotiation. Syndicated loan agreements now often contain provisions for certain binding actions by the entire syndicate upon a favorable vote of some fraction of the syndicate members. This kind of procedure can help to eliminate the problem of individual banks attempting to free ride on the actions of others.

Moreover, in some cases, the presence of hundreds of small banks can actually strengthen the bargaining position of a bank syndicate. The steering committee is able to point out in some circumstances that even the small banks might ruin an agreement, so that the country must accede to better terms for these weak links in the chain. When the country is negotiating with a single creditor such as the IMF, this appeal of the creditor to the "weak" fringe members of the bargaining team cannot be made.

As to the third point, that it is easier for a government to take marching orders from the international public institutions rather than from private banks, the evidence is at best mixed. The epithet that a program is *fondo monetarista* is about as damning as possible in the Latin American political lexicon. Indeed, there are several cases in recent years in which countries have explicitly attempted private workouts with the banks, in order to avoid the opprobrium of agreeing to a Fund program.

Finally, and perhaps most importantly, the World Bank and the IMF are in a weak bargaining position for several institutional reasons. First,

they are clients of the very governments to whom they are lending the money. It may be hard indeed for the IMF or World Bank to tell a member government to go away. To the credit of the Fund and the Bank, these organizations have developed several institutional levels of technical staff that intervene between the country and a final decision with respect to lending.

Because of the formal position of the multilateral agencies as clients of the member governments, there is a need for a formal equality of treatment for all member governments with regard to negotiations. It is very difficult for the Fund or the Bank to make invidious comparisons among countries concerning the likelihood that they will actually live up to commitments. If a program looks good on paper, there are great pressures for the program to be approved, even if there is widespread skepticism that the program will actually be carried out. The Fund of course keeps track of the compliance record of member governments, but it appears to be difficult to make that record a formal basis for approving or disapproving a program, assuming that the country is current in its repayments to the Fund and assuming that on paper a proposed program hangs together.

Another problem is that the Fund and the Bank have many goals other than profits, which can make them a soft touch with respect to conditionality. For the private capital markets, there is basically one bottom line: Will the loan make money? The Bank and the Fund must also worry about the political stability of the recipient country, the political interests of the creditor governments, the standard of living of individuals in the debtor countries, etc. These are admirable concerns, indeed crucial concerns. They are the raison d'être of international institutions. But these concerns do not always allow for a hard-boiled judgment about the potential success or failure of a conditionality package.

These limitations of the IMF are pointed out by Finch (1988), who cites the case of IMF relations with Egypt as an important example (we have already noted Finch's observations with regard to Argentina):

> For political reasons, Egypt had been receiving sizable support from the Western allies, much of it in the form of repayable export credits. With very limited cash aid available, servicing this credit became virtually impossible. Yet, debt relief was blocked by Paris Club rules that required that Egypt have an agreement with the IMF before the creditor countries would reschedule their loans. To maintain even a semblance of its traditional concern for timely repayment, the IMF had to insist on major changes in Egypt's economic policies.
>
> But the Egyptian government, fearing a domestic political backlash, refused to take the required action. Instead, it sought protection from other governments. The Fund was told to reach "agreement"

> with Egypt without insisting on the necessary policy changes. In recompense, undoubtedly, the IMF was given assured priority over other creditors (p. 127).

In sum, the power of conditionality is certainly present in the case of IMF and World Bank lending, though conditionality will face inherent restrictions, given the limited enforcement powers at hand. The alleged superiority of the international institutions in imposing conditionality is probably correct in general but much oversold quantitatively. The private sector can indeed impose conditionality, and has done so in the past. At the same time, the conditionality emanating from the international institutions is hobbled by the nature of the relationship of those institutions to the member governments. In the last analysis, the success or failure of conditionality is an empirical matter, and it is to the historical record that we turn shortly.

6.2.7 Enhancing the Strength of Conditionality

Even before proceeding to the empirical record, we can already make several points regarding ways to enhance the effectiveness of conditionality agreements. First, given the weakness of conditionality, the IMF and the World Bank probably undermine their effectiveness by signing too many (unrealistic) programs. In cases which appear particularly unrealistic, the IMF and World Bank can protect the conditionality process by requiring more prior actions on the part of the borrowing government, so that the government proves its resolve to carry through on the negotiated program (and is forced to build the domestic political base for the policy changes).

Second, if one source of unreality is the heavy burden represented by a large overhang of debt, the IMF and World Bank would increase the likelihood of success by endorsing some programs that allow for arrears to private-sector creditors, if those creditors are unprepared to allow for a realistic extent of debt relief. Furthermore, as we shall see, this point applies more generally to encouraging formal debt relief as part of overall IMF–World Bank programs.

6.3 The Recent Experience with Conditionality

The recent experience of the World Bank with high-conditionality lending in support of macroeconomic adjustment is rather limited, so that most of the discussion will focus on the outcomes of IMF programs. Moreover, measuring the success of Fund programs is a daunting task, because the inevitable refrain is "compared to what?" (See Williamson 1983, chap. 7, for an interesting discussion of possible bases for evaluation.) One useful standard, which I apply here, is to judge the

programs in terms of the compliance of the debtor government with the terms of the IMF agreement. Even this limited type of assessment is difficult, both because compliance is multidimensional, and because many of the details of the programs (particularly the contents of the letters of intent) are typically beyond the public view. Because of this latter feature, we must rely almost wholly on studies of compliance undertaken by the Fund itself, or on case studies of individual countries by outside authors.

Of course the design of IMF conditionality loans, and to a lesser extent, World Bank Structural Adjustment Loans (SALs), have been subject to intense criticism and debate among policy makers and academic economists. These debates often make it appear that the fundamental diagnoses underlying such loans, and the conditions attached to them remain in serious dispute. However, the problem of diagnosis is almost surely not the main source of the problem with compliance. At a recent conference reviewing IMF conditionality (see Williamson 1983), Richard Cooper conjectured (pp. 571–73) that despite their differing theoretical views, the conference participants would find themselves in broad agreement in designing a stabilization program for any specific country other than their own. He went on to say that the chosen stabilization program would probably look quite like a "standard" IMF package. Notably, there were few demurrals, despite the wide range of theoretical positions represented at the conference.

In that conference (and in the country studies in the NBER Project on Developing Country Debt) there was much evidence for the prevailing IMF and World Bank views that (1) balance of payments problems typically reflect, inter alia, excessive money creation in support of fiscal deficits; (2) multiple exchange rate systems lead to serious resource misallocations, and are often a burden on public-sector budgets; (3) overvalued exchange rates, coupled with exchange controls, capital flight, and smuggling, represent a tax on exports that is detrimental to long-term development; and (4) allowing key prices (including real wages, public-sector prices, and interest rates) to respond to market conditions as part of an overall adjustment effort will improve efficiency and growth.

Ironically, though, there was one more point of agreement running through most of the analyses at the Williamson conference (and the NBER studies): IMF programs are very frequently, if not typically, unsuccessful in restoring stability and growth in countries beset with balance-of-payments and inflation problems. Aside from the cases of the developed country borrowers (Italy, the United Kingdom, and Portugal) discussed at the conference, several of the remaining programs that were described (Argentina, Brazil, Jamaica, Tanzania) were unsuccessful in meeting stated objectives. These findings of limited success are in accord with a growing number of other case studies and

cross-sectional analyses of IMF stabilization programs, which in sum point to a mixed record, at the very best, in the compliance of countries with Fund programs. (Notably, however, in the cases where Fund programs were substantially implemented, the macroeconomic results seem to justify the conditions attached to the loans.)

Internal IMF reviews of compliance are similarly mixed. In a review of Fund programs supported by standby arrangements in upper-credit tranches during 1969–78, Beveridge and Kelley (1980) found that fiscal targets were achieved in about half the cases, but, "[b]y 1977 and 1978, expenditures were contained as planned in less than 20 percent of the programs, compared with over 50 percent in 1969 and 1970" (p. 213). Also, Beveridge and Kelley found that governments were not generally successful in meeting targets with respect to the composition of expenditure between current and capital outlays. In over 70 percent of the programs specifying a desire to expand capital outlays while constraining current outlays (exactly the form of conditionality considered in the theoretical model), "current expenditure in nominal terms exceeded the target or projection. In about half of these programs, capital outlays in nominal terms were lower than projected" (p. 214). With respect to the target on overall budget balance, as opposed to expenditures alone, budget targets were met in about 50 percent of the programs overall, but in less than 20 percent of the programs in 1978. Once again, a sharp downturn in compliance was noted. Doe's study (1983) has updated the Beveridge and Kelley results for Fund programs in 1980. Of the 18 programs surveyed that planned a reduction in the fiscal deficit, half of the programs did result in a reduced deficit, but in only 4 (22 percent) of the cases did the country actually meet the agreed-upon targets.

Stephan Haggard's (1985) recent review of IMF programs under the Extended Fund Facility (EFF) is no more heartening. The EFF was created in 1974 in the wake of the first oil shock as a way to enlarge the access of IMF member countries to Fund credits. The goals were similar to those enunciated for the Baker plan. In Haggard's words, the EFFs "are representative of a growing emphasis among development economists on the importance of microeconomic instruments and on the role of resource utilization and production as a basis for longer-term structural adjustment. EFFs often call for fundamental shifts in policy, such as liberalization of trade, decontrol of prices, and restructuring of public-sector corporations" (p. 508). The results of the EFFs were poor. According to Haggard, in his count, "of the thirty adjustment programs launched under the auspices of the Extended Fund Facility, twenty-four were renegotiated, or had payments interrupted, or were quietly allowed to lapse. Of these twenty-four, sixteen were formally cancelled by the IMF, virtually all for noncompliance" (pp. 505–6).

Haggard's bleak conclusions are echoed in a recent study by Remmer (1986), of IMF programs during 1954–84. It is worth quoting Remmer at length on the question of IMF conditionality:

> Unsuccessful implementation of IMF recipes has been the norm in Latin America, not the exception. A high proportion of standby programs have failed to push key indicators of government finance and domestic credit even in the right direction. Moreover, examining the IMF standby programs on a before and after basis shows that changes in key indicators are more readily attributable to chance than to the operation of IMF stabilization programs. The obvious conclusion is that the economic, social, and political impact of IMF programs has been overstated. To describe the IMF as a "poverty broker," as does the title of a recent book, or to charge the Fund with undermining democracy is to engage in hyperbole. The power of the IMF remains a useful myth for governments seeking a scapegoat to explain difficult economic conditions associated with severe balance-of-payments disequilibria, but the ability of the IMF to impose programs from the outside is distinctly limited (p. 21).

Given all these unsatisfactory results, it is not surprising that the Fund has been unable to wean many countries away from IMF support, in spite of being only "temporarily available." Table 6.1, taken from Goode (1985), shows the list of 24 countries that have used Fund resources consecutively for a period of at least 10 years. Note that of these 24 cases, fully 19 are still using IMF resources as of 1984. In other words, the lengthy reliance on Fund loans is a contemporary feature of the system. This table, by definition, does not include even more problematic cases, in which the country's performance under Fund programs was so unsatisfactory that its access to further Fund credits was suspended.

The experience with the World Bank SALs is too brief to allow any such comparable review. By design these programs are intended to yield results only in the intermediate term (say 5–15 years), so that no comprehensive judgments can yet be made. However, there are already some very worrisome signs that the compliance with Bank conditionality is no better than with the Fund's. In a review of recent SAL experience, Berg and Batchelder (1985) note that three (Senegal, Guyana, Bolivia) of sixteen SAL countries have already experienced a clear breakdown of a program in process or a denial of a follow-up of SAL because of inadequate performance. These authors are also skeptical of the strength of Bank conditionality, pointing to the case of Senegal (whose SAL was cancelled in mid-1983) as an example of the nonenforceability of conditionality:

> As noted earlier the Bank must shrink from the ultimate sanction, cancellation. Cessation of disbursements is too strong a response by

Table 6.1 **Members Making Prolonged Use of IMF Credit in the Period 1954–84[a]**

Member	Number of Continuous Years of Use	Period
Chile	27	1958–84
Egypt	27	1958–84
Sri Lanka	20	1963–84
Mali	20	1965–84
Sudan	20	1965–84
Pakistan	19	1966–84
Turkey	18	1954–71
Burma	17	1968–84
Nicaragua	16	1969–84
Philippines	16	1969–84
Guinea	15	1970–84
Chad	14	1971–84
Syria	14	1961–74
India	13	1958–70
Uganda	13	1972–84
Yugoslavia	13[b]	1972–84
Zambia	12	1972–84
Afghanistan	12	1965–76
Bangladesh	12	1973–84
Indonesia	12	1962–73
Kampuchea, Democratic	12	1973–84
Zaire	12	1973–84
Jamaica	11	1974–84
Romania	11	1974–84

Sources: From Goode (1985), table 3, which is based on International Monetary Fund, *International Financial Statistics: Supplement on Fund Accounts*, no. 3 (1982); IMF, *International Financial Statistics Yearbook, 1984;* IMF, *International Financial Statistics* (February 1985, p. 22–23).

[a]Periods of use are measured between the ends of calendar years and are, therefore, understated for all transactions occurring before 31 December of the years in question; the maximum understatement can approach two years.

[b]Yugoslavia also had an 11-year period of use from 1959 through 1969.

> the Bank to banal acts of nonperformance. In the one case where this was done (Senegal), the SAL was replaced by new credits. Noncompliance, at least in the short run, was virtually costless to Senegal, whose share of Bank-IDA disbursements has been 50 percent higher, during July–February of fiscal 1984, than it was during fiscal 1981 and 1982. . . . [H]owever, new Bank-IDA commitments to Senegal have dropped off, and it is not clear when that decline will be reversed (p. 44).

The record of failed SAL programs (3 out of 16 countries) may well understate the failure rate in the longer term, particularly if the SALs

become important for the Latin American countries. Many of the existing SALs cover the successful middle-income developing countries and the NICs, such as Thailand and Korea, rather than the problem cases of Peru, Chile, Argentina, Brazil, or Mexico.

6.4 External Debt and Conditionality

The theme of this section is that high external indebtedness can reduce the incentives for a country to undertake necessary macroeconomic adjustments, and thus further reduce the chance that the terms of a conditionality agreement will be fulfilled. Indeed, for very high levels of indebtedness, it may be useful for creditors to forgive some of the debt as an incentive for better performance, recognizing that such an incentive could actually *raise* the repayments to creditors in the long run. Before proceeding with this argument, a terminological point must be made. Creditors frequently "write down" the value of bad loans in their own books, without relieving the debtor of the legal obligation to make full repayments. The thrust of this section is not about writedowns (which may be wise from an accounting or regulatory point of view), but about explicit relief or forgiveness, in which the creditors reduce the legal obligations of repayment below the levels originally contracted.

6.4.1 The Basic Efficiency Case for Debt Relief

Let us see how debt forgiveness can work (once again the technical material is presented at the end of the chapter in appendix B). Suppose that a country has a large stock of debt due in the future. He will assume, for purposes of illustration, that the stock of debt is so large that the country lacks creditworthiness for any additional borrowing on international private markets. Moreover, to avoid complications, we will for the moment ignore conditionality lending. Finally, by assuming that the debt is due in the future rather than the present, we ignore issues relating to rescheduling.

The existing creditors have a choice this period: They can sit down with the country and negotiate some debt relief, or they can "hang tough" today, and hope to get fully repaid in the future. It might seem that, and it is often argued as if, the creditors should hold out for the maximum repayment, and take whatever they can get in the future. After all, why give up on full repayment today, before the debt is due? This is certainly the attitude of many banks, who recognize that they are unlikely to be repaid fully but have decided to sit tight until further developments occur. Unfortunately, this strategy may well ultimately leave the banks with smaller repayments than they would receive by negotiating forgiveness in some circumstances.

When the debt overhang is large enough, it can act as a major incentive against the very adjustments in the debtor country that would contribute to future debt servicing, as can be shown by a simple numerical example. Suppose that the country owes $150 million, but has a future capacity for debt servicing of only $100 million. Suppose also that in the future the country will repay (in present value terms) as much of the $150 million as possible, and will then default on the balance. Note that improvements in the country's future debt-servicing capacity (up to $150 million) would simply go to the creditors' benefit, and not the country's, since the overhang of debt is so large.

Suppose, for instance, that a wonderful investment opportunity is available for enhancing exports. If the debtor government sacrifices $10 million of current consumption and raises investments in the export sector, it will raise its future debt-servicing capacity from $100 million to $120 million. From the creditors' point of view this would be quite beneficial. But from the country's point of view, it would be highly irrational. The country would lose $10 million in consumption today, and would gain nothing in consumption in the future, since all of the added export earnings would go to the creditors, and the export earnings would still not be enough to repay the debt! The benefits of higher future production would fall entirely to the creditors.

Since the government will not undertake the investments in such circumstances, it is most likely that the debt-servicing capacity of the country will not be enhanced. The debtor will not adjust (i.e., the export-promoting investments will not be made). The future debt-servicing capacity will remain at $100 million, which is the amount that the creditors will receive in the future.

Now suppose instead that the creditors offer some debt relief. The creditors might agree to forgive $45 million, and to continue to demand $105 million of repayments (i.e., the creditors settle for 70 cents on the dollar). This could be done, for example, by a swap of the outstanding $150 million of debt for exit bonds with face value of $105 million. Now, if the country invests, it loses $10 million in consumption today, gains $20 million in additional export earnings in the future (total export earnings now equal $120 million), and repays $105 million in debt (i.e., the exit bonds would be fully serviced). Future consumption therefore rises by $15 million (= $120 million − $105 million), with a discounted utility gain of $-10 + 15/(1.3)$, or about $2 million. Since the government's rate of time discount is not too high, the opportunity to pay $10 million in current consumption in order to raise future consumption by $15 million is attractive, and the investment will be made.

In sum, *by agreeing to debt relief, the creditors raise the ultimate repayment from $100 million to $105 million.* The debtor is better off as well, since it accepts a short-run cut in consumption in return for a

much larger future increase in consumption. The whole game is diagrammed in figure 6.2. With no debt relief, the equilibrium involves no investment and $100 million in debt repayment. With debt relief, the equilibrium involves investment with repayments of $105 million and an improved debtor utility of $2 million. Of course, the numbers used in this example are arbitrary, and the actual gains from debt relief for both the debtor and creditors could be far larger than shown.

This argument for debt relief would be misplaced if the debtor countries are actually in the range of indebtedness in which they will eventually service all of their debts at market terms. However, most of the direct and indirect evidence that we have on the market value of claims on the major debtor countries shows that the investors indeed believe that there is a significant chance that much of the debt will not be fully serviced in the long run. (See Sachs and Huizinga 1987 for further details on the market valuation of the outstanding debt).

If this analysis is correct, there may be significant welfare gains from forgiving some of the existing stock of debt, rather than piling up more debt in the form of new loans and reschedulings. The question of how

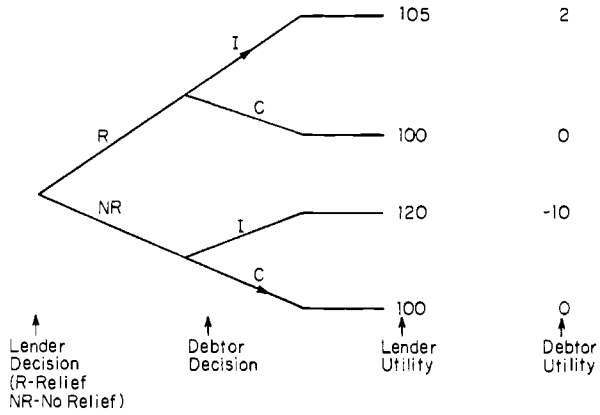

Fig. 6.2 The efficiency case for debt relief. Explanation: Without debt relief, the creditor is repaid $100 million, and the debtor consumes. Debtor utility in this case is set at 0.0, and utility in the other cases is measured as a deviation from this baseline, according to the formula $U = -I_1 + \max [0, 100 + 2I_1 - D]/(1.3)$, where D is the amount of debt that is due. $D = 150$ in the case of no relief, and $D = 105$ in the case of relief. I_1 is 0.0, or $10 million. Lender utility is measured by the amount of repayment in the second period, and is equal to $\min [100 + 2\ I_1, D]$, which equals $100 million if $I_1 = 0$; $120 million if $I_1 =$ $10 million and no relief is granted; and $105 million if $I_1 =$ $10 million and D is reduced from $150 million to $105 million.

actually to engineer debt relief is a very difficult one. Equity and efficiency considerations will dictate that the existing creditors from all classes must coordinate any forgiveness. This will pose serious administrative and regulatory problems, since creditors in different countries and in different sectors would face very different costs and benefits. Commercial banks might even face shareholder lawsuits if they were to forgive some debt without adequate administrative support from the bank regulators and perhaps from the legislatures of the various creditor countries. Moreover, the debt relief must be designed in a way to limit the moral hazard problem of countries intentionally mismanaging their international economic policies for the sake of achieving debt relief.

Of course debt relief could come in all shapes and sizes, varying from an Alan Garcia–style cap on debt repayments relative to exports, to a conversion of existing debt into new securities with a lower contractual present value, to a rescheduling at below market interest rates, to a scheme in which each dollar of amortization reduces the debt outstanding by some multiple of a dollar (by agreement with the creditors), or finally to an explicit elimination of claims by the creditors without a quid pro quo (as in the cancellation of inter-allied war debts in the early 1930s). The relative advantages and disadvantages of these various methods are beyond the scope of this paper.

6.4.2 The Interaction of Debt Relief and Conditionality

There are really two linkages between a debt overhang and the effectiveness of conditionality, one obvious and the other a bit more subtle. The obvious linkage has already been made: In the absence of debt relief, a country may have no incentive to honor a conditionality agreement, and to carry through on an economic reform program. The foreign debt acts like a tax on adjustment. The debt relief removes the tax, and encourages the country to undertake efficient reforms.

The second linkage occurs when debt relief is a necessary but not sufficient condition for inducing the country to undertake needed reforms. In the previous numerical example, the country chooses to undertake reforms once debt relief is granted, even in the absence of conditionality. As soon as the debt is reduced from $150 million to $105 million, the country voluntarily reduces current consumption by $10 million in order to raise future consumption by $15 million. It might easily have been the case, however, that even with debt relief, the needed reforms would still look unattractive. This would happen, for example, if the government's rate of time discount is so high that an increase in future consumption of $15 million would not justify a cut in current consumption of $10 million.

In such a case, relief would not result in any improvement in the debtor country's economy, and so would be unattractive from the

creditors' point of view. (In the formal modes, the creditors would be indifferent between relief and no relief: They would receive $100 million in either case. In reality, relief would only be granted if there were real expected gains, since in a world of uncertainty there is always some small chance that the loans can be repaid, and there is consequently an option value to the creditors in holding on to the face value of their claims. (See Krugman 1988 for a discussion of the value of this option in the model of uncertainty.) It might still be the case, however, that the combination of debt relief and conditionality would raise the welfare of both the creditors and the debtor, even though relief by itself and conditionality by itself, could not do so.

To see how this would work, suppose that the following high-conditionality loan package is put together:

1. Debt relief, which reduces the overhang of debt from $150 million to $105 million
2. IMF lending of $5 million to the country, and with repayment to the IMF of $5.5 million in the future
3. The country commits to undertake the export-enhancing reform, at the cost of $10 million today

Assuming that the conditionality is enforced, the country increases its future productive capacity from $100 million to $120 million. Current consumption falls by $5 million (since half of the cost of the investment is financed by the IMF loan). Future consumption goes up by $9.5 million ($120 million in exports minus $5.5 million in debt repayment to the IMF minus $105 million in debt repayment to the original creditors).

Now, instead of giving up $10 million today to get $15 million in the future, the government gives up only $5 million today to get $9.5 million in the future. As long as the rate of time discount is neither too low nor too high (specifically, as long as the discount rate is between 0.5 and 0.9), the country will reject the investment in the absence of the IMF–World Bank loan, but will accept the investment (with conditionality) if it comes with an official loan. In that case, the original creditors are better off, since their repayments rise by $5 million relative to the case of no reform. The debtor is better off by $9.5 million in the future. The IMF breaks even since its loan gets repaid.

And yet none of this would happen in the absence of debt relief (in which case the country reaps no benefit from reform), and in the absence of conditionality and new IMF lending (since the country would not undertake the investment without new lending, and would not get the new lending without a credible commitment to undertake the investment).

The key to this example is that the investment requires both new external financing and debt relief, and the external financing requires

conditionality, since the country would prefer to borrow abroad and then not undertake the reform, as in the first example in figure 6.1. Again we can resort to a formal game analysis, as shown in figure 6.3. In figure 6.3a we have the case without debt relief. Any increase in debt service capacity goes to the benefit of the foreign creditors. The country will not undertake the investment, and will not consent to a conditionality package (or, more likely, the IMF loan will be made, but not adhered to). In figure 6.3b we have the case with relief, but without conditionality. Again, the country will not undertake the investment out of its own resources, but also will not get any new loans, since potential new lenders will correctly believe that new loans will be used for consumption purposes. Note that figure 6.3b is the same as figure 6.2, except for a higher rate of time discount in the debtor country. In figure 6.3c, we have the combination of debt relief and new external financing with conditionality.

This example belies two common views: That debt relief must hurt the creditors or that if debt relief helps the creditors, it will be achieved without official intervention. The example makes clear that both relief and official intervention by means of conditionality are necessary for a successful adjustment program to the mutual benefit of the debtor and its creditors.

6.5 Some Implications for the Pace and Phasing of Adjustment Programs

The postwar history of stabilization, liberalization, and conditionality can make a pessimist of the most tenacious optimist. Few stabilization and liberalization plans meet their initial objectives, and many fail miserably. We have seen that conditionality is inherently limited in its capacity to effect adjustment in the debtor countries, and that the limitations are even more severe in the presence of a debt overhang. In many cases, debt relief might have to be combined with conditionality to improve the likelihood of success of IMF and World Bank programs.

Given these limitations, it is important to make the objectives of conditionality consistent with the limited efficacy of conditionality. Programs of the IMF and World bank should be tailored according to a realistic assessment of the possible accomplishments. One of the most important issues in this regard is the balancing of the demands of stabilization with those of longer-term structural reform. Since the major debtor countries suffer from acute macroeconomic disequilibria (with inflation rates in Argentina, Brazil, and Mexico well exceeding 100 percent per year in 1987), a crucial issue is the balancing of macroeconomic stabilization with other types of structural reform.

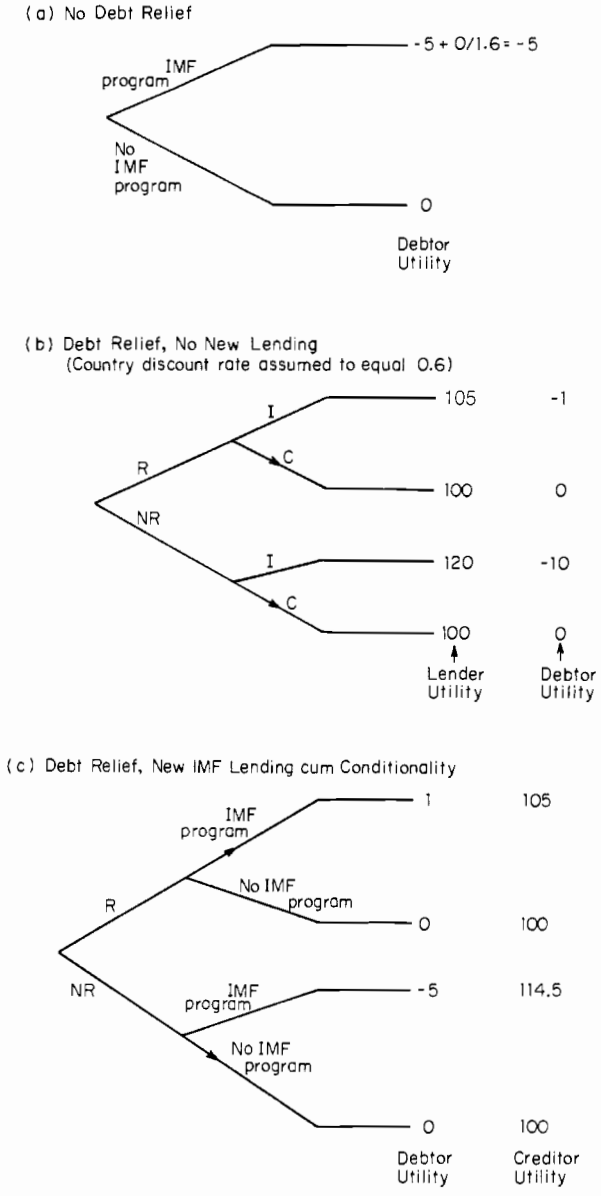

Fig. 6.3 Debt relief with conditionality. Explanation: Without debt relief, the debtor's second period consumption is always 0.0. Thus, if it accepts the \$5 million IMF loan, the utility effect is simply the change in C_1, which equals $-\$10$ million ($= I_1$) + \$5 million (= IMF loan), or $-\$5$ million. With debt relief, but no new lending, the benefit of investment is $-\$10 + (\$120 - \$105)/1.6$, which is approximately -1. With debt relief *and* conditionality, the benefit of the IMF package is $-\$5 + [\$120 - \$5(1.1) - \$105]/1.6$ which is approximately 1. Note that \$5(1.1) represents the repayment of the \$5 million IMF loan at 10 percent interest.

The main theme of this section is that structural reform (especially a shift towards greater outward orientation and trade liberalization) is a very difficult process that takes many years to bring to fruition. The process is so difficult economically and politically that it is likely to fail under the best of macroeconomic circumstances, and is in general greatly jeopardized by a concurrent macroeconomic stabilization crisis. The historical record suggests that adjustment programs rarely succeed unless stabilization is their first step, with structural reforms proceeding gradually and mostly *after* macroeconomic balance has been restored.

The historical record points to a high failure rate in general regarding attempts at trade liberalization and a shift towards outward orientation. One thoroughly documented record of liberalization experiences can be found in the multicountry study on "Foreign Trade Regimes and Economic Development" directed by Jagdish Bhagwati and Anne Krueger at the National Bureau of Economic Research, and summarized in Krueger (1978). Krueger identified 22 attempts to liberalize from a situation of heavy reliance on quantitative restrictions and exchange controls (pp. 219–20). By her own count, 13 of these episodes were unsuccessful and 9 were successful. Even this count is too optimistic, however, since only 4 of the 9 "success" cases (measured as *four* years of successful liberalization) proved to be enduring until the time of Krueger's study (these cases are Brazil, 1964; South Korea, 1964; Israel, 1962; and Colombia, 1967). Perhaps most discouraging from the current policy vantage point is the fact that the Latin American countries show the most repeated failures in attempts at liberalization. And the legacy of past failures can have an important bearing on the success of any future plan, as I argue below.

Table 6.2 gives the breakdown of success and failure, with the dates of the program, and the inflation rate of the preceeding year. Two points stand out clearly. In almost all cases, the internal imbalances in the economy at the time of the liberalization attempts, as measured by the inflation rate, are far smaller than the crisis conditions now confronting the Latin American debtors. Second, a high inflation rate seems to be a serious hindrance in successful stabilization, since in four of the five cases in which liberalization was attempted with an inflation rate above 30 percent, the experiment failed. Of those five, only Brazil, in 1964, demonstrated a successful liberalization with stabilization. That episode might be the only modern case of the type of adjustment now demanded of the Latin American countries. It had its own special conditions that allowed a successful program, not the least of which was a strong military dictatorship that could sharply squeeze real wages in the period of disinflation, 1964–67.

The appropriate link between stabilization and liberalization may be the most important policy issue facing the World Bank in choosing a strategy for high-conditionality lending. The suggestion in table 6.2 that

Table 6.2 **Successful and Unsuccessful Liberalization Attempts, Krueger-Bhagwati NBER Study**

Cases	Year	Inflation Rate, Preceding Year
Successful		
Brazil	1964	66.7
Colombia	1967	19.8
Israel	1952	n.a.
Israel	1962	5.6
Korea	1964	19.7
Philippines	1960	−1.2
Philippines	1970	2.9
Turkey	1958	17.4
Turkey	1970	7.0
Unsuccessful		
Brazil	1957	
Brazil	1961	29.6
Chile	1956	83.8
Chile	1959	32.5
Chile	1965	46.0
Colombia	1951	n.a.
Colombia	1957	6.4
Colombia	1962	8.6
Colombia	1965	17.6
Egypt	1962	0.7
Ghana	1967	13.1
India	1966	9.2
South Korea	1961	10.2

Source: Krueger (1978, 219–20)

Notes: Note that the definition of success used here is rather modest: a Phase III liberalization is converted to a Phase IV liberalization for at least four years. Several of the success cases ultimately became failures, as qualitative restrictions (QRs) were reapplied. The precise definitions of Phases III and IV can be found in Krueger (1978 26–27). Phase III signifies a trade regime in which the exchange rate has been devalued "to reflect the de facto price of foreign exchange." QRs may be reduced in scope but will generally remain. Phase IV "features greater emphasis on price mechanisms than on quantitative restrictions in managing the balance of payments."

n.a. = not available.

an initially high inflation rate can do harm in a liberalization effort finds independent support in several quarters. First, Krueger herself notes that liberalization attempts are most successful in countries that are not at the same time pursuing anti-inflationary policies or policies to restrict the level of foreign borrowing. One clear reason is that the fear of inflation induced governments to undertake inadequate devaluations at the start of a liberalization exercise, and they then failed to keep the exchange rate adjusting downward in correction for a domestic inflation rate in excess of the world rate.

Unfortunately, this lesson was not learned in time for the recent Southern Cone stabilization exercises, which foundered exactly on this conflict of goals. In their excellent survey of these episodes in Argentina, Chile, and Uruguay, Corbo and de Melo (1985) conclude that "policy inconsistencies were the main reason for the eventual failure of the reforms" (p. 864), with the inconsistencies revolving first around the use of the exchange rate both to promote trade and restrict inflation, and second around the inconsistent application of tariff and regulatory policies. Even the tariff inconsistencies can often be traced to the anti-inflation program, since unexpected and unplanned tariff changes were often made (especially in Argentina) in an attempt to further reduce inflation.

The Southern Cone countries were attempting to pursue two targets, low inflation and liberalized trade, and had the freedom to relax a third constraint: external borrowing. In the late 1980s, the Latin American countries are being called upon to pursue three objectives simultaneously: lower inflation, liberalization, and reduced dependence on foreign borrowing. I am still searching in vain for an historical example in which all three targets were satisfied. (Even if one could be found for the 1960s, it would probably be possible to distinguish it from current circumstances by virtue of the buoyant growth in world trade in the 1960s.)

Brazil and Korea, in 1964, and Indonesia in 1967 come closest to being examples. It is clear, however, that certain factors disposed these cases to success. Brazil and Korea started out their programs with sharp real wage reductions, backed by a strong military regime (comparable real wage data for Indonesia are not available). Also, all proceeded gradually with liberalization, and after a few years (starting in the late 1960s) relied on increasing foreign borrowing in order to maintain the momentum of growth. Finally, Brazil and Korea began the episode with much smaller internal imbalances than are typical in Latin America today. Korea had an inflation rate of a mere 19.7 pecent in the year before the stabilization program began, and Brazil's rate of 66.7 percent, while very high, is still dwarfed by today's rates. (Indonesia's inflation rate reached a very high 1044 percent in 1965.)

Other research, by Killick et al. (1984) and Lin (1985), agrees with the proposition that the simultaneous application of stabilization and widespread liberalization is unlikely to be sustainable and successful. Killick notes that a degree of liberalization was sought alongside stabilization in at least 8 of 23 standby arrangements in 1978–79, with meagre results. He concludes "It does not seem that the means available to, or employed by, the Fund are strong enough to achieve its liberalisation objective in more than rare cases" (p. 238). Lin has made a persuasive case, this time based on a comparative economic history of East Asia

and Latin America, that a reduction in inflation should take precedence over all other targets, including liberalization, when inflation rates are high and prone to rise. In a detailed comparison of the stabilization experiences of Latin American and East Asian countries, Lin argues that the success of the Asian cases was built on a reduction of inflation that preceded the liberalization attempts by 5 years or more:

> In both Chile and Argentina, the control of hyperinflation and the liberalization of the economy occurred at the same time [in the mid-1970s]. This greatly compounded the difficulties of the domestic industries by forcing them to cope with both the depressive effects of the stabilization policies and the increased competition of foreign producers at the same time. This contrasts sharply with the situation in Taiwan and South Korea, where the control of hyperinflation preceded intensive trade policy reforms by several years (chap. 4, p. 8).

Lin also points out at some length that inflation control was supported by a worsening rather than an improving of the trade balance, since foreign funds were used to support the governments of Taiwan and Korea after the resort to money creation was brought under control:

> In all of the cases mentioned, the eventual contraction of the inflationary process required the restoration of political stability and productive capacity, with the injection of massive foreign aid and the restriction of deficit financing by the central bank playing important roles (ibid.).

Lin is persuasive in arguing that improvements in the real economy have been unlikely to be long lasting when attempted in a setting of rapid inflation and large budget deficits. The analytical arguments in favor of giving anti-inflationary policies a strong priority include the following: (1) the damage to financial intermediation that occurs in a climate of high inflation, including bank failures, widespread disintermediation, the absence of financial instruments of long-term maturities, and capital flight; (2) the likelihood of major relative price distortions in an inflationary environment; (3) the damage to tax collection and public-sector finances; (4) the damage to real investment and financial institutions as governments implement increasingly onerous methods of collecting the inflation tax (e.g., raising reserve requirements on banks); (5) the likelihood of policy conflict and policy inconsistency in management of the exchange rate to meet both trade and inflation targets; (6) the high transaction costs that are incurred as individuals and firms economize on monetary transactions; and (7) the ever-present fear of the public that major new tax increases or capital levies will be used in order to close large public-sector deficits. Such fears will constrain the private sector from making the real investment expenditures necessary for a successful liberalization in the longer term.

6.6 Conclusions: Toward an Improved Use of Conditionality

We have noted that the efficacy of conditionality is inherently limited, and that the current overhang of debt greatly complicates the situation. In cases of extreme indebtedness, the debt itself might set up incentives that are adverse to significant adjustment or liberalization. In such a case, partial debt forgiveness can actually raise the expected repayments to the creditors, while at the same time giving greater incentive to the country for favorable adjustment. To be most successful, combining debt relief with IMF–World Bank conditionality would enhance the likelihood that the debt relief actually turns into economic reform.

The historical experience with liberalization alone, and with stabilization alone, are not very encouraging. The difficulties of combining the two policy initiatives are formidable. The historical record suggests that it is virtually impossible to bring inflation under control, while simultaneously trying to liberalize the economy. One is hard pressed to find an example of an economy which stabilized, liberalized, and improved the external position all at the same time. Only South Korea, Brazil, and Indonesia seem to provide examples of implementing the first two measures, and in those cases the programs were supported by a strong military government that substantially reduced real wages (at least in Brazil and South Korea) at the outset of the programs, and by favorable world conditions, including growing world trade, and after a few years, access to foreign borrowing in significant amounts.

These findings suggest that the IMF and World Bank should recognize the limited efficacy of conditionality. The following list of guidelines for improving the use of conditionality in future lending by the IMF and the World Bank would increase the chances of success for LOC adjustment programs and improve the effectiveness of conditionality:

1. Approve fewer programs.
2. Require more prior actions in cases where the efficacy of the conditionality is doubtful.
3. Encourage governments to enlist the necessary range of political support behind the terms of a high-conditionality program before the program is made final.
4. Approve programs which allow a buildup of arrears to private creditors in cases where the private creditors (a) fail to grant debt relief and (b) fail to provide sufficient amounts of new financing.
5. Encourage the use of debt relief schemes as a way to enhance the likely adherence to conditionality terms.
6. Narrow the goals of conditionality: Make macroeconomic stabilization the first step with structural reform to be implemented only as macroeconomic stability is restored.

Appendix A
A Formal Analysis of Conditionality

The model in this appendix provides a very simple illustration of the function of conditionality in international lending. Suppose that there are two periods ($t = 1,2$), and that a government of a small economy faces an allocation problem of consumption and investment. In the first period, the government can consume (C_1 or invest I_1 resources, subject to the budget constraint that total spending, ($C_1 + I_1$, must equal domestic output, Q_1, plus borrowing from abroad, D_1. The foreign loans carry an interest rate, r, so that repayments due in the second period are $(1 + r)D_1$. Output in the second period is a function of investment in the first. As a simple illustration, I assume a linear technology, with $Q_2 = Q_1 + (1 + g)I_1$, and also assume that investment opportunities are bounded by $I_1 \leq \bar{I}$. The utility function is $U = C_1 + C_2/(1 + d)$, where d is the rate of pure time preference. For purposes of illustration, I assume that we have the following relative parameter values: $d > g > r$. With this ordering, investments are profitable when evaluated at world interest rates, but not worthwhile when evaluated according to the subjective rate of time discount, d.

I assume that the country repays all of its foreign borrowing, subject to the constraint that $C_2 \geq 0$. If the debt is so large that full repayment would require $C_2 < 0$, then the country pays as much as possible, suspends further repayments, and consumes 0 in the second period. Under conditions of certainty, the lenders will ration credit such that $D_1 \leq Q_2/(1 + r)$. Of course $C_2 = 0$ should be taken figuratively. The model is virtually unchanged if the consumption constraint is $C_2 \geq M$ is some minimum level of consumption, based on political or economic constraints. Also, C_2 implicitly refers only to *tradable* goods (since only those goods can be used to finance debt servicing). With $C_2 = 0$ or $C_2 = M$, there could still be positive levels of nontradables consumption. However, to introduce nontradable goods at this point would unnecessarily complicate the model.

Now, to see the role of conditionality, suppose that private lenders must make loans *before* the country chooses the level of investment in the first period, while the IMF or the World Bank, to the contrary, can condition a loan on a particular level of investment. The private-sector creditor must determine how much investment the country will make once a loan is received, since the safe lending constraint $D_1 \leq Q_2/(1 + r)$ ties the sustainable debt D_1 to the level of Q_2.

It is easy to verify that for any level of debt D_1, the country will always prefer a zero level of investment, as long as we have the inequality that $d > g$. The reason is straightforward: an increment of investment reduces welfare by 1 in the first period and raises it in the

second period by $(1 + g)/(1 + d)$ in terms of first period goods. Therefore, the welfare return from an increment of investment is negative. Since the country will choose $I_1 = 0$, Q_2 will equal Q_1, and the lending limit for the commercial banks is given by $Q_1/(1 + r)$.

It may be possible for the Fund or the Bank to lend more than this safely, if the new loans can be conditioned on investment expenditure. Suppose that the World Bank or the IMF can obtain a credible commitment of the country to invest $0 < I_1 \leq \bar{I}$ in return for a stabilization or adjustment loan. In such a case, the country will be able to support total foreign borrowing in the amount $[Q_1 + (1 + g)I_1]/(1 + r)$, which is $(1 + g)I_1/(1 + r)$ greater than in the absence of the program. Will the country agree to such a program? The answer is clearly yes, since first-period consumption rises by $(1 + g)I_1/(1 + r) - I_1$, and second-period consumption is unchanged (since the rise in income, $(1 + g)I_1$, equals the increase in debt servicing).

It is not necessary, in this scenario, for the World Bank or the IMF to actually make the conditionality loan in the amount $(1 + g)I_1/(1 + r)$. In principle, any smaller loan should attract additional private resources to make up the difference. The Fund or the Bank is important only in the "seal of good housekeeping" role rather than as a supplier of funds.

Appendix B
A Model of Debt Forgiveness

To see how a given stock of debt can interfere with conditionality, let us return to the simple two-period model presented in appendix A. We now amend the model in two important ways. First, the utility function is written in general form as $U = U(C_1, C_2)$, with the standard concavity conditions. Second, we assume that as of the first period, there is an existing stock of debt, inherited from the past and due in the second period. Let D be the legal amount due in the second period (interest plus principal), and let S denote the actual debt servicing in that period (S may be a stochastic variable as of the first period). The creditors might, we shall see, be willing to forgive some of the debt as of the first period, in which case we denote the post-forgiveness amount due as R. Thus, with $D > R$, there is some formal forgiveness of the debt as of the first period, and with $R > S$, there is a partial default in the second period (since as of the second period, R is due and only S is actually repaid). The production technology is as before: $Q_2 = Q_1 + (1 + g)I_1$, $I_1 \leq I$.

Suppose that the country is cut off from the world capital markets by virtue of the preexisting stock of debt, D, or by virtue of its general

lack of creditworthiness, and ignore conditionality lending for the moment. All investment therefore comes from internal savings. We assume as before that as of the second period the country repays as much of the foreign debt as it can. If savings and consumption allocations are made by a central planner, then the planner's problem is:

$$\max_{I_1} U(C_1,C_2) \text{ such that } C_1 = Q_1 - I_1$$
$$C_2 = Q_2(I_1) - S$$
$$S = \min(R, Q_2).$$

The creditors have a corresponding problem. Should they demand full repayment of the debt, D, or should they agree *as of the first period* to forgive part of the debt, and to demand a smaller repayment, $R < D$? Assuming that the creditor "moves first" by announcing the debt decision, and that the debtor country thereafter solves the optimal allocation problem, the creditor must solve the following:

$$\max_{R} S \text{ such that } R \leq D \text{ and}$$
$$S \text{ is the solution to the debtor problem given above.}$$

In words, the debtor chooses the repayment level, R, that maximizes actual debt servicing, S, subject to the constraint that R be less than or equal to the original debt, D.

As noted in the text, it might seem, and it is often argued as if, the creditor should simply hold out for the maximum repayment, D, and take whatever he can get in the second period. Such a strategy, however, can be improved upon.

Consider the debtor's problem, taking R as a parameter. For low values of R, the debtor will repay everything, since it will turn out that $R < Q_2(I_1)$. Thus, the allocation problem becomes one of maximizing $U(C_1,C_2)$ such that $C_1 = Q_1 - I_1$, and $C_2 = Q_2(I_1) - R$. The interior solution to this problem sets the gross rate of return on investment, $(1 + g)$, equal to the marginal rate of substitution between first and second period consumption: U_1/U_2. Take, as an illustration, the special case of additively separable utility, $U(C_1,C_2) = U(C_1) + U(C_2)/(1 + d)$. The planner then sets $(1 + g) = (1 + d)U'(Q_1 - I_1)/U'[Q_2(I_1) - R]$. It is then easy to verify that I_1 is an increasing function of R in this range. In a sense, high debt repayments are a spur to adjustment. The social planner knows that there is a big reduction to real cash flow next period, because of the debt repayment, and therefore he smooths consumption across periods by saving today and investing more in order to raise second-period output.

For large values of R, however, it will be the case that $R > Q_2(I_1)$ so that the debtor will not make the full repayment, R. In that case, the allocation problem becomes one of maximizing $U(C_1, C_2)$ such that

$C_1 = Q_1 - I_1$ and $C_2 = 0$. Clearly, for very high levels of debt, the optimal policy is zero investment, since C_2 is fixed at 0! Let $R*$ be the minimum repayment due at which I_1 is set at zero. For $R \geq R*$, $I_1 = 0$. For R above $R*$, the entire increase in GDP due to higher investment would accrue to the existing creditors, rather than to the country itself. The debt is so high that the country works for the bank rather than for itself. The equilibrium level of utility is given as $U(Q_1,0)$. Call this threshhold level of utility $U*$. The country's utility can never fall below this level, since it is always feasible for the country to make no investments and to pay as much of the debt as is feasible, subject to the constraint $C_2 \geq 0$. At high levels of debt, the actual debt servicing is equal to Q_2 $[I_1 = 0] = Q_1$.

The key point from the creditor's point of view is that actual repayments, S, will fall when R increases above $R*$, since investment, I_1, falls to zero. The resource base from which the country makes debt repayments shrinks, so that actual repayments decline. Thus, for $R \leq R*$, we have $S = R$; for $R > R*$, we have $S < R* < R$.

Now let us return to the creditor's problem. For levels of debt, D, less than the threshhold $R*$, it is clear that the creditors should hold out for full repayment. Indeed, the higher the level of the debt, the greater will be the "adjustment" in the debtor country, with adjustment measured by the amount of first period investment. However, for $D > R*$, *it is a mistake to hold out for full repayment.* The creditors will get more repayment by agreeing in the first period to lower the required debt repayments in the second! Forgiving debt can be to the advantage of the creditors, by spurring investment in the debtor country, and thereby spurring the means of the debtor to service the debt.

The two-period model just explored lends itself to a standard diagrammatic analysis, as in figure 6.4. As usual, the X-axis measures production and consumption in the first period, and the Y-axis measures production and consumption in the second period. Note that since $C_1 = Q_1 - I_1$ and $C_2 = \max(0, Q_2 - D) = \max[0, Q_1 + (1 + g)I_1 - D]$, we can draw the consumption possibility frontier as $C_2 = \max[0, (2 + g)Q_1 - (1 + g)C_1 - D]$. When $D = 0$, the consumption frontier is given by the curve CC in figure 6.1(a). The point $Q = (Q_1,Q_1)$ is the consumption point when $I_1 = 0$; the CC curve has slope $-(1 + g)$, since each increment of foregone consumption in the first-period raises second-period consumption by $(1 + g)$.

When $D > 0$, the consumption frontier shifts downward as in figures 6.1(b) and 6.1(c). The curve shifts vertically downward by the amount D, except if D is so large that C_2 would turn negative if fully repaid. The resulting CC curve is shown for small levels of D ($< Q_1$) in figure 6.1(b), and for large level of debt D ($> Q_1$) in figure 6.1(c). In figure 6.1(c) note that the CC curve is kinked, because of the restriction that $C_2 \geq 0$.

The social planner picks the point on the CC schedule that maximizes domestic welfare. In figure 6.4(a), equilibrium is at the point A where CC is tangent to the indifference curve, U. Note that the horizontal distance between A and Q is the level of optimal first-period investment, I_1. In figure 6.4(b), equilibrium is at B. Note that the existence of a small amount of foreign debt, D, *spurs* investment (seen by the fact that the horizontal distance from B to Q, equal to I_1, exceeds the distance from A to Q). In this case, the foreign debt drives the social planner to smooth consumption by reducing C_1 in order to raise Q_2 enough to service the debt. In figure 6.4(c), the optimal policy is to set $I_1 = 0$, and to consume at the point E, with $C_1 = Q_1$, $C_2 = 0$. The point here is straightforward. Since D is so large that it will not be fully repaid, each increment of I_1 raises second-period output *without* raising second-period consumption. In such circumstances there is no incentive to invest! With zero investment, $Q_2 = Q_1$ and actual repayment in period 2 is $S = Q_1$, as shown.

The key point of this section is that in case (c) the creditors can raise the debt repayments through debt forgiveness. Instead of demanding D, they can instead demand a smaller amount, R. The result is a new equilibrium at point F. The country undertakes more investment and therefore has more resources with which to service the debt. As drawn, the debt writedown raises debt repayments (from S to R) and leaves the country's utility unchanged. It is obvious that a greater level of debt forgiveness could leave *both* the country and the creditors better off than at point E.

It might be objected that the foregoing model is artificial, in that it establishes a zone in which a high external debt level makes second-period investment *completely worthless* from the country's point of view. To see a more nuanced view, we could use the model of default and debt renegotiation in Sachs and Cohen (1985). Suppose that if the country defaults, the retaliation penalty from the creditors is a fraction, h, of national GDP. Thus, if the country repays the debt due, second period consumption is $Q_2 - R$. If instead it defaults, it saves repayments, R, but suffers a loss of GDP equal to hQ_2, so that second period consumption would be $C_2 = (1 - h)Q_2$. Clearly, the country would find default attractive whenever $R > hQ_2$. Finally, suppose that in lieu of default with retaliation, we can assume that in the second period if $R > hQ_2$, the creditors and debtor reach a *cooperative outcome* such that the debtors pay a fraction of the repayment due, in the amount hQ_2, and the creditors agree to forego any further retaliation.

In this case, the debtor's problem can be restated as follows:

$$\max U(C_1,C_2) \quad \text{such that} \quad C_1 = Q_1 - I_1$$

$$C_2 = Q_2(I_1) - S$$

$$S = \min [R, (1 - h)Q_2(I_1)].$$

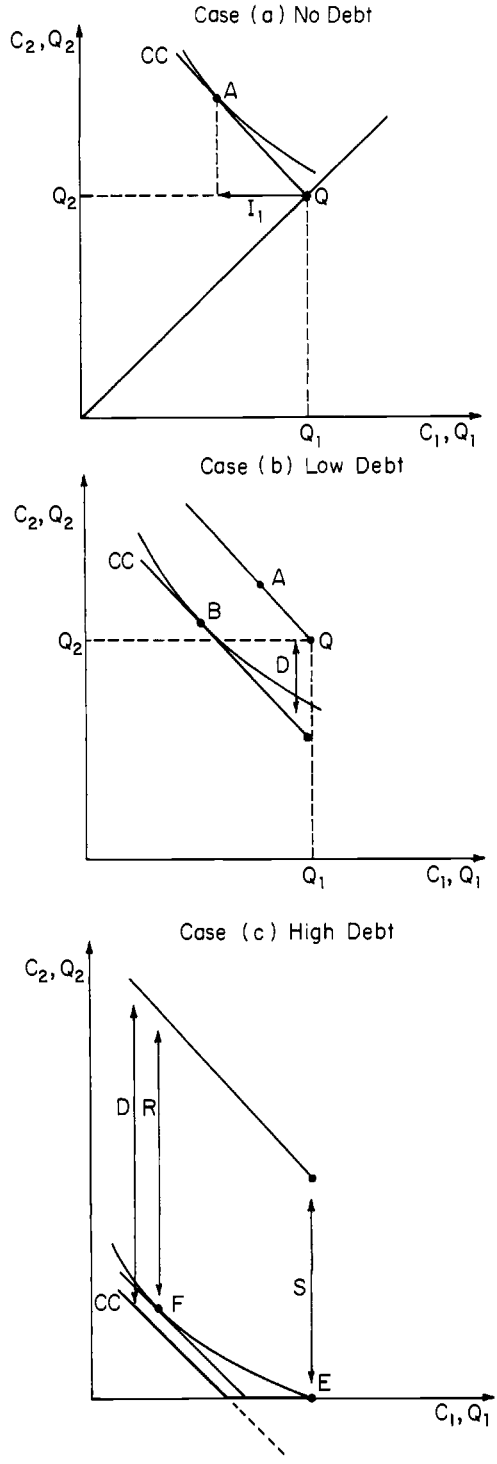

Fig. 6.4 Investment and external indebtedness

In this case, the marginal return to investment in the zone in which debt is fully repaid is simply $(1 + g)$. On the other hand, in the region in which debt is not fully repaid, the marginal return to investment is $(1 - h)(1 + g)$. The overhang of debt now imposes *a marginal tax of h percent* on the social return to investment. Once again, it is easy to show that explicit debt relief can in fact raise the creditors' eventual repayments, and can spur "adjustment" (i.e., investment) in the debtor country, by eliminating the implicit "marginal tax" on the returns to investment.

Appendix C
The Interaction of Debt Relief and Conditionality

In this appendix, we combine the models of appendix A and appendix B, to illustrate the case in which the *combination* of conditionality and debt relief is both necessary and sufficient for raising the welfare of both creditors and debtors.

For convenience, we work with the case of linear utility and linear technology. The government objective function is given as:

$$U = C_1 + C_2/(1 + d).$$

Production in period 2 is given as:

$$Q_2 = Q_1 + (1 + g)I_1 \qquad I_1 \leq \bar{I}.$$

There is an initial overhang of debt in the second period, D_2, with

$$D_2 > Q_1 + (1 + g)\,\bar{I}.$$

In the absence of debt relief, the government will undertake zero investment spending in the first period. Moreover, the country would not agree to any binding package of new official lending *with* conditionality if the official lenders were financing anything less than 100 percent of the investment. Suppose that a share, s, of the investment could be financed with an IMF–World Bank loan. Then initial consumption would fall by $(1 - s) * I_1$, i.e., by the amount not financed externally. Future consumption would not rise at all, however, since after repayment to the IMF–World Bank, and partial repayment to the original creditors, nothing would be left over for the country.

Next, suppose that there is debt relief alone, without the involvement of the official institutions. Suppose, for example, that the debt is reduced to the level Q_1. Then, the country will surely repay the remaining debt in the second period. However, it will still choose to do no in-

vestment spending, as long as the rate of time discount, d, is greater than the return to investment, g. Moreover, in the absence of conditionality, it would not be safe to make new loans to the country even after the debt is written down to Q_1, since the country will use the loans for consumption, and not for investment.

Now, suppose that the debt relief is combined with a high-conditionality loan, in the following manner. The country undertakes to make investment, I_1, with the share, s, to be financed by the IMF–World Bank. The initial debt is reduced to $(Q_1 + e)$, where e is a small amount. First period consumption falls by $(1 - s)I_1$, and second period output rises by $(1 + g)I_1$. Second-period consumption now rises in the amount $(1 + g)I_1 - s(1 + r)I_1 - e$, which will surely be positive as long as e is sufficiently small. (Note that the rise in consumption equals the rise in output, minus the repayment to the IMF, minus the increment, e, in repayment to the original creditors above the level Q_1). Now, as long as the rate of time discount, d, is sufficiently small or the share of IMF–World Bank financing is sufficiently large, then the overall effect on the government's objective function is positive. Specifically, the condition for an improvement in the government's objective function is:

$$-(1 - s)I_1 + [(1 + g)I_1 - sI_1(1 + r) - e]/(1 + d) > 0.$$

Since $g > r$, and e is close to 0.0, the condition for improvement is surely satisfied for s very close to 1.0, or d very close to 0.0, and may well be satisfied for intermediate values of s and d.

Note

1. Berg and Batchelder (1985) have done a very fine recent paper that reaches similar conclusions.

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