Conversion of Official Bilateral Debt: The Opportunities and the Issues

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The level and structure of external debt limit the growth prospects of many severely indebted low-income and lower-middle-income countries. Because many of these countries owe a large proportion of their external debt to official creditors, mechanisms such as debt conversion can be useful in reducing their debt overhang; important efficiency gains can be achieved if the use of local currency linked to the debt reduction is productively channeled. This paper examines the lessons learned from swaps of commercial debt and evaluates the potential benefits and costs of swaps of official debt. For debtors, the potential benefits associated with a reduction of debt include an improved climate for domestic and foreign direct investment, a transfer of risk to foreign investors, and access to a source of additional capital for privatization, as well as additional external funding for social programs. The problematic effects include the risk of inflation. For creditors, debt-for-equity and debt-for-development conversions are one way to help countries achieve long-term financial viability and at the same time prompt them to undertake socially desirable programs. The paper also addresses technical issues, such as transparency of operations, ownership of converted claims, and the need for financial intermediaries.

Even as dramatic increases in capital flows and foreign exchange reserves in countries such as Chile and Mexico imply that debt crises are a problem of the past, many other countries are still struggling with a high level of external debt that limits their prospects for growth and development. Because a large proportion of this debt is owed to official bilateral creditors, mechanisms such as debt conversion can be useful, and important efficiency gains can be achieved if the use of local currency linked to the debt reduction is channeled productively.

Section I examines the need and the potential for official debt conversion in heavily indebted low-income and lower-middle-income countries and describes

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current practices in the Paris Club (where official bilateral debt is rescheduled or reduced, or both). Sections II and III review the lessons of commercial and official debt conversions, primarily in middle-income countries, evaluate the potential benefits and costs for debtors and creditors, and address technical issues, such as transparency, ownership of converted claims, and the need for financial intermediaries. Section IV presents conclusions and policy recommendations.

I. THE NEED, THE POTENTIAL, AND THE REALITY OF OFFICIAL BILATERAL DEBT CONVERSION

Between 1982, when the debt crisis exploded, and 1991, total external debt stocks in developing countries grew rapidly, particularly in severely indebted lowincome countries. Growth of total debt outstanding and disbursed (referred to in this paper as "debt") more than doubled in these countries, climbing from \$79 billion in 1982 to \$175 billion in 1991 (see table 1). Total interest arrears in this period also increased significantly for these countries, rising from \$1.3 billion in 1982 to \$12.9 billion in 1991, as many low-income countries found themselves unable to service their debt. This debt is a greater burden for the poorest countries than for countries with less severe difficulties, for two reasons. First, the level of debt implies contractions of output and income that are particularly damaging to human welfare. Second, structural weaknesses in many of these countries make adapting to changes in the international environment difficult.

As a result of these problems—and in some cases, of mistaken policies—many of these countries sustained a decline in export performance, which led to a greater deterioration than would have otherwise occurred in the debt service ratio and the debt-to-export ratio (see table 2).1 By the late 1980s both ratios were higher in the severely indebted low-income countries than they had been earlier in the decade: the debt service ratio in 1989 was double the level of the 1980s, while the ratio of debt to exports was almost five times higher.

This situation contrasts with that of the severely indebted middle-income countries (especially the upper-middle-income countries). Their total debt started to fall in 1991 (see table 1), primarily as a result of actions taken within the framework of the Brady Plan-which reduced private debt-and of a large number of debt conversions. As table 2 shows, these countries also had a better export performance during the 1980s, posting an average growth rate of 3.5 percent. As a result, debt service ratios for this group have declined quite substantially, although they are still fairly high.

The rapid rise of bilateral debt has been an important element in the increase in developing country debt since 1982. In severely indebted low-income countries, bilateral debt rose from \$32 billion in 1982 to \$80 billion in 1991, or more

^{1.} The debt service ratio is defined as loan amortizations plus loan interest payments divided by the level of exports.

Table 1. Growth in Debt Stocks of Severely Indebted Developing Countries (billions of U.S. dollars)

Category	1982	1985	1988	1991a
Low-income-country debtb				
Total	79.12	116.74	160.91	175.35
Interest arrears	1.25	3.09	8.00	12.89
Bilateral	32.06	49.45	75.10	80.43
Multilateral	10.61	16.76	26.77	34.73
IMF	3.23	5.56	5.83	6.30
Private guaranteed	18.32	24.11	32.24	29.18
Private unguaranteed	2.90	3.33	3.09	2.88
Short-term	12.00	17.53	17.88	21.83
Middle-income-country debt				
Total	346.15	418.46	485.13	486.54
Interest arrears	4.53	4.81	15.59	40.50
Bilateral	35.23	62.58	90.58	99.59
Multilateral	15.94	24.35	41.71	53.87
IMF	6.97	12.99	14.71	17.54
Private guaranteed	183.49	223.00	255.34	220.69
Private unguaranteed	61.70	50.96	29.17	23.10
Short-term	48.82	44.57	53.62	71.76
Others ^c				
Total debt	55.00	50.00	69.00	65.00
Total debt	846.00	1,046.00	1,282.00	1,351.00
Interest arrears	6.10	8.67	25.64	55.50

Note: IMF, International Monetary Fund.

Source: World Bank (1991).

than 45 percent of the total debt, despite the cancellation of \$8 billion in official development assistance debt from 1983 through 1990 and the successive application of concessional terms granted by the Paris Club under Toronto, Venice, Houston, and, now, "enhanced Toronto" agreements. In the severely indebted middle-income countries, bilateral debt jumped from \$35 billion in 1982 to \$108 billion in 1990 (it declined somewhat in 1991). The increase reflects the effect of exchange rate changes since 1985 and the interest capitalization practices of the Paris Club.

A further source of concern is the increase in multilateral debt. In low-income and middle-income indebted countries, outstanding debt obligations to multilateral creditors rose sharply (see table 1). It is not clear what can and should be done to reduce the multilateral debt burden, given the need for creditworthiness in international capital markets, but the size of multilateral debt service payments

b. The estimates for 1991 for this group are higher than those projected in the World Development Report because data from other sources suggest that the World Debt Tables understates 1991 debt. (It has consistently understated the latest year's estimates.) The 1991 estimates for the middle-income group remain unchanged. No data are included for low- or middle-income countries that do not report to the World Bank but whose debt the World Debt Tables estimates in aggregate form (see World Bank 1991,

c. Afghanistan, Albania, Cuba, Iraq, Democratic People's Republic of Korea, Mongolia, Viet Nam, and about thirty island microstates in the Caribbean and the South Pacific.

Table 2. Structural Features, Export Growth, and Debt Indicators, Severely Indebted Countries

ltem	Severely indebted low- income countries	Severely indebted middle- income countries
GNP per capita, 1988 (U.S. dollars)	288	1,632
Infant mortality, 1987a	102.8	55.0
Annual growth of exports, 1982–89 (percent)	-2.0	3.5
Debt service ratiob		
1980	10	36
1982	20	49
1989	23	29
Ratio of debt to exports		
1980	96	196
1982	214	297
1989	493	294

a. Deaths per 1,000 live births.

Source: World Bank (1990).

increases the need to reduce and convert bilateral debt, particularly for severely indebted low-income and lower-middle-income countries.

In this sense, export credit agencies need to accept the realities that commercial banks have recognized and offer not just debt cancellation but also debt conversion options on a scale which would reduce bilateral debt to levels that can be serviced. Debt conversion options should be used not just where debt reduction has been insufficient but also to enhance other gains (including efficiency) when undesirable effects—on inflation, for example—are marginal or can be easily counteracted by government policy.

As for official bilateral debt, a number of measures for debt reduction have been and are being implemented for severely indebted low-income countries, but there is evidence that for an important number of those countries progress is still insufficient. (For good discussions of these measures, see World Bank 1989, 1990, 1991; Mistry 1992.) It is disappointing that neither Britain's 1990 proposal (known as the Trinidad terms) nor the Dutch proposal was adopted by the Paris Club. The consensus that was reached in December 1991 (enhanced Toronto terms) and that has already been applied to Benin and Nicaragua dilutes the Trinidad terms considerably. Under the terms of the enhanced Toronto consensus the creditors have several options: canceling 50 percent of eligible maturities; halving interest rates on nonconcessional debt; rescheduling export credit and concessional debt repayments; and capitalizing reduced interest rates in a way that would result in equivalence in net present value terms with the other options.

For severely indebted lower-middle-income countries, the Paris Club agreed in September 1990 to lengthen grace periods and maturities on the basis of three criteria—low per capita income, a high ratio of Paris Club debt to commercial

b. Payment of loan amortization and interest divided by export earnings.

bank debt, and a heavy debt (and debt service) burden as measured by ratios of debt to gross national product, debt to exports, and debt service to exports. The "10 percent clause," a debt conversion mechanism, was also introduced. The clause allows "creditor countries, on a voluntary and bilateral basis, to exchange up to 10 percent of bilateral official or officially guaranteed nonconcessional loans, and up to 100 percent of official development assistance loans, for debtequity swaps, debt-for-nature swaps, and debt-for-development swaps." There is also a value limit (\$10 million or \$20 million, depending on the case) that can be used when 10 percent is less than the bilateral nonconcessional debt. In December 1991 the same clause was extended to the severely indebted lowincome countries.

Initially, swaps of official bilateral debt were practically nonexistent; indeed, there were limits on debt sales by creditor governments. But emphasis is rapidly shifting toward bilateral official debt conversions for equity as well as for development. Such operations potentially open debt conversions for low-income and lower-middle-income countries, as well.

By early 1992 conversions under this clause were approved by the Paris Club in the cases of Benin, Congo, Côte d'Ivoire, Ecuador, Egypt, El Salvador, Honduras, Jamaica, Morocco, Nicaragua, Nigeria, Peru, the Philippines, Poland, and Senegal. Relatively few conversion transactions had actually taken place under the "10 percent clause," but a number of actions were reportedly being considered, including the following.

- Funding for a \$3 billion Environment Fund in Poland by the United States and France
- · A conversion of up to \$10 million of Egypt's bilateral debt by the French government for cofinancing a Social Emergency Fund (with the World Bank). In addition, France and other creditor governments are considering official debt-equity conversions.
- Debt-equity swaps for Morocco by the Netherlands (and some other creditor governments)
- A proposal to use debt-equity swaps to support privatization in Nigeria
- A conversion of official debt by the government of Canada for United Nations Children's Fund (UNICEF) spending programs in Bolivia

Even before September 1990 some European and North American governments were selling (or converting) their Paris Club debt to improve the balance sheets of their export credit agencies. Because these operations were not allowed in the Paris Club framework, they were not publicized. They are, however, interesting prototypes for official debt-equity swaps, showing that it is feasible for an export credit agency to take an equity position in developing country companies, sell official debt to private investors, or both. One creditor agency converted Mexican debt into equity in a private steel company that it later sold, recovering the full face value of its claim.

The U.S. Initiative

Just before the Paris Club initiative was launched, a three-pronged U.S. "Initiative for the Americas" was proposed, including trade and investment measures, and debt concessions. Under the debt sections of the program the United States agreed to reduce stocks of concessional debt (PL 480 and U.S. Agency for International Development obligations) owed by Latin American and Caribbean countries and to accept interest payments in local currency on the remaining debt, to be paid into a fund for the environment. (If the country has not entered into an Environmental Framework Agreement, interest is to be paid in U.S. dollars.) In other words, a commitment to allocate domestic resources to the environment is exchanged for debt reduction. The U.S. Congress has also broadened the use of interest payments for domestic development—specifically, for programs to benefit children.

The Economic Commission for Latin America and the Caribbean (ECLAC 1991) reports that Washington has canceled large portions of the outstanding (primarily concessional) debts owed by Guyana, Honduras, Nicaragua, Haiti, and Bolivia, as well as smaller (in percentage terms) amounts owed by Jamaica and Chile. Implementation of the environmental fund is gradually beginning. Chile—the first country to be granted this concession, in June 1991—was, at the time this paper was written, in the process of defining its agreement on the environment.

As for nonconcessional debt owed by eligible Latin American and Caribbean countries to the Eximbank and the Commodity Credit Corporation, the U.S. initiative contemplates sales of a portion of the debt to facilitate debt-for-equity, debt-for-development, or debt-for-nature swaps; these swaps would imply both a conversion and a reduction of debt. Legislation to approve such operations has been seriously delayed, however. The passage of an appropriations bill to fund additional reductions in PL 480 debt is also problematic.

Other Official Debt Conversion Initiatives

Outside the framework of the Paris Club, some developing countries, especially Mexico, have pursued an active strategy as creditors to convert the debt of Central American and Caribbean countries. In three different operations, for example, Mexican investors purchased a privatized company in Honduras, leased farming land in Nicaragua, and agreed to build new hotels in Costa Rica. In addition, debt owed to Central and Eastern European countries and the former U.S.S.R. can be converted, as was done in the sale of loans from the former German Democratic Republic to commercial firms engaged in importing raw materials. Commercial firms are reportedly recovering the full face value of the debt through imports of raw materials from countries such as Zambia. The outcome in this case seems very undesirable, as it implies full prepayment of official debts when Zambia is not even servicing the rest of its bilateral debt in full.

II. LESSONS FROM CONVERSIONS OF PRIVATE COMMERCIAL DEBT

Since 1985 conversions of private commercial bank debt have been used extensively in a number of (mainly middle-income) developing countries to reduce debt, promote foreign investment, encourage privatization, and further other development objectives.

Debt-for-Equity Swaps

Table 3 shows that the estimated total volume of commercial debt eliminated through official debt conversion from 1985 through 1990 was \$33.6 billion, or about 15 percent of the total commercial debt of all heavily indebted countries (see table 4). With the exception of Chile, which converted almost 70 percent of its 1985 commercial debt, debt conversions clearly did not overcome the debt overhang of most countries, but they did make a meaningful contribution in several instances. Argentina and the Philippines were able to reduce more than 30 percent of their commercial debt; for all other countries, conversions represented less than 20 percent of commercial debt.

The evolution of actual conversions of such debt is noteworthy. Table 3 shows a rapid expansion in 1987 and 1988 before some countries became concerned about the domestic monetary implications of these operations and began to slow or suspend debt conversions. In other countries—especially Chile—debt conversions grew so rapidly that their very success reduced the stock of debt available for sale. The revival of debt-equity swaps in 1990 in

Country	1985	1986	1987	1988	1989	1990	Total
Argentina	469	_		764	1,180	7,038	9,451
Brazil	537	176	336	2,095	942	483	4,569
Chile	323	974	1,997	2,927	2,767	1,096	10,084
Costa Rica	_	7	89	44	124	17	281
Ecuador		_	127	261	31	42	461
Honduras	_	_	9	14	47	32	102
Jamaica	_	_	4	5	16	23	48
Mexico	_	413	1,680	1,056a	532	435	4,116
Nigeria	_	_	·—	70	304	217	591
Philippines	_	81	451	931	630	378	2,471
Uruguay	_	_	_	104	53	_	157
Venezuela	_	_	45	49	544	716	1,354
Total	1,329	1,651	4,738	8,320	7,170	10,477	33,685

Table 3. Volume of Debt Conversion by Country, 1985-91 (millions of U.S. dollars)

Note: Face value of debt converted under official ongoing schemes. Figures do not include large-scale cash buybacks and debt exchanges.

Sources: Central Bank of Argentina; Central Bank of Brazil; Central Bank of Chile; Mexico Ministry of Finance; Central Bank of the Philippines; Bank of Jamaica; Central Bank of Venezuela; International Monetary Fund.

⁻ Not available.

a. Does not include an estimated \$6 billion-\$8 billion under an August 1987 agreement to restructure

Table 4. Contribution of Debt Conversion Programs to Reduction of Commercial Bank Debt (billions of U.S. dollars)

Country	Stock of commercial bank debt, 1985	Value of debt conversions 1985–90	Conversions as a percentage of commercial debt	
Argentina	25.3	9.5	37.5	
Brazil	67.1	4.6	6.9	
Chile	14.8	10.1	68.2	
Mexico	71.4	4.1	5.7	
Nigeria	4.9	0.6	12.2	
Philippines	7.6	2.5	32.9	
Venezuela	23.6	1.4	5.9	
Total	214.7	32.8	15.3	

Sources: World Bank (1990); table 1.

countries such as Argentina, Mexico, and the Philippines has been largely linked to privatization because these conversions do not lead to the monetization of foreign debt. Furthermore, if privatization produces efficiency gains, the debtor government saves the revenues previously spent to subsidize inefficient public enterprises. (Of course, if the government swaps debt for equity in profitable enterprises, the reduction in income from those enterprises could have a negative fiscal impact, as discussed in Corden and Dooley 1989.) In addition, several recent agreements to restructure bank debt (especially in the context of the Brady Plan) contain commitments to swap debt for equity.

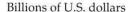
The increased use of market-based debt reduction techniques has been facilitated by—and has contributed to—marked growth in the size of the secondary market. As figure 1 shows, total trading volume in 1990 reached about \$100 billion. (Nederlandse Middenstand Bank, the largest European trader, estimates \$150 billion.) This contrasts with levels in 1983 or 1984, when trading was only \$0.5 billion.

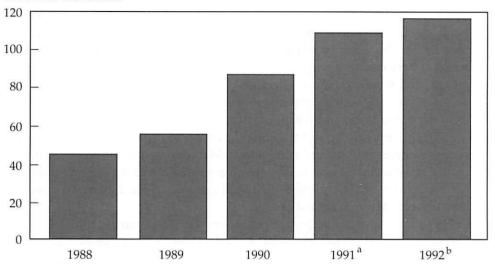
Finally, there has been an effort to streamline and simplify financial procedures, particularly the documentation required for carrying out swaps. That all post-Brady bonds are tradable and assignable has played a major role in facilitating and expanding the volume of transactions. The impressive development of the secondary market for commercial debt points to the potential for similar systems to swap official debt for equity or for development.²

Country results. The economic effects of debt conversions are heterogeneous among countries and sometimes within the same country. Factors that seem to contribute to positive results include a stable macroeconomic environment with low deficits; adequate domestic capital markets that can attenuate or eliminate monetary effects; well-designed debt conversion programs aimed at meeting

^{2.} For a useful analysis of the issues, see Blackwell and Nocera 1988 and Frenkel, Dooley, and Wickham 1989. For a review of debt swaps and policy lessons, see UNCTC 1991; Bouzas and Ffrench-Davis 1990; and Mortimore 1991. For an analysis of Chile's experience, see Larrain and Velasco 1990; Williamson 1990; Lagos 1989; and Aravena 1991.

Figure 1. Total Trading Volume in the Secondary Market for Debt





a. Estimated b. Projected

Source: Latin Finance (October 1991).

objectives such as debt reduction or foreign direct investment; and control of undesirable outcomes, such as excessive monetary expansion or misuse for "round-tripping." When the policy framework, the circumstances, and the program design are right, debt-equity swaps have yielded positive results, as outlined below.

- · Major reductions in commercial debt. In Chile, for instance, swaps helped reduce the debt overhang significantly and enabled the country to regain access to international capital markets. In other cases the effect has been less meaningful (see table 4). Mexico's access to international capital markets was only partly advanced by debt conversions. Both debt reduction and the renewal of capital inflows led to a reduction—or a reversal—of negative net transfers in several cases (for example, Chile and Mexico).
- · Foreign direct investment and a reversal of capital flight. An important bonus of debt-equity conversions has been their contribution to an increase in foreign direct investment. There is some debate in the literature about how much of this flow is additional; the answer depends on assumptions about how much foreign capital would have entered in the absence of the conversion program. Experience in Chile and Mexico, however, suggests that conversions have influenced potential investors and accelerated the pace of foreign

^{3.} Round-tripping is the practice of converting debt with the sole purpose of obtaining local currency to purchase foreign exchange in the parallel market.

investment. Policymakers stress that favorable publicity linked to debt-equity programs (in the financial press, for example) about the country's economic performance, business climate, and economic openness plays an important indirect role in jump-starting investment flows. Two caveats are important here. First, debt conversion will be effective if it is part of a policy package that makes the country attractive to investors. Second, there may be some tradeoff between applying selectivity criteria to enhance the positive developmental and macroeconomic effects (by demanding new flows to accompany debt conversion, as in Argentina, or restricting the sectors eligible for swaps. as in the Philippines) and the magnitude of the debt conversions carried out.

Debt conversion also can facilitate the return of capital flight. Chile's experience is interesting because a special window was opened to encourage investments by residents. This facility, which provided a smaller subsidy than that for foreign investors but offered an implicit tax and legal amnesty, was successful in attracting returned capital.

- · Export promotion and import substitution. To the extent that the additional investment goes to tradable sectors (and especially if it brings know-how, additional markets, and more efficient technology), foreign exchange earnings and savings will improve. There is some evidence that an important share of foreign direct investment entering through debt conversions (especially in countries such as Mexico and the Philippines, whose governments had targeted this objective) has gone into such activities.
- Privatization. As pointed out above, debt conversion provides additional equity for the companies involved. In some countries (for instance, Chile) it lowers the debt of state-owned enterprises and makes them more attractive to potential private shareholders.
- · Private sector finance. In countries such as Chile, Brazil, and Ecuador, the debt crisis precipitated problems in the private sector, especially the financial sector. Debt conversion strengthened the private sector, lowered excessive levels of debt, and contributed to a recovery of domestic private investment.

Finally, as regards the positive effects discussed above, transparent government procedures are important to ensure that there are no hidden subsidies to foreign or domestic investors, as was reportedly the case in several debtor countries.

Debt conversion also has problematic effects, although they can be offset through efficient program design and implementation. The first potential problem, inflation, can occur if the swaps are large, debt is exchanged against local currency, the increase in the money supply is not regulated, and compensatory fiscal and monetary measures are neglected. Small swaps (in relation to the money supply) are more easily handled, especially if the expansion of the money supply and the fiscal deficit are small. Brazil's experience, however, is a warning that in a context of high inflation and high budget deficits, conversions can aggravate an already serious problem. If the conversion is made against bonds

placed in the domestic capital market, the monetary impact is diminished, but interest rates may increase.

A second risk is that the net effect on the balance of payments could be negative if none or only a portion of the converted debt was previously serviced, if there was considerable round-tripping and the foreign investment was not additional, and if the flow of profit remittances and capital abroad were higher (on a net present value basis) than the interest and amortization payments that would otherwise be paid.

A third concern is that debt-equity conversions normally imply a subsidy, either to a foreign investor or (less frequently) to a resident. This could lead to an inappropriate allocation of resources unless the operation implies important net efficiency gains. In such cases the magnitude of the subsidy can be regulated by the central bank through market mechanisms (for example, an auction) or through administrative measures, such as fixing a lower value for the local currency swapped per unit of debt.

Debt-for-Development Swaps

Another innovative approach, which can be broadly defined as debt-fordevelopment, involves a wide variety of swaps. Although most of the publicity, and a large share of operations, has focused on debt-for-nature swaps, some broader pioneering operations are under way. In one instance, six banks (from three countries) donated to UNICEF debt obligations in the Sudan valued at more than \$20 million. These funds will be used for clean water projects, with beneficial results for health and the environment.

Commercial debt-for-development swaps can originate in purchases or donations. Frequently, international charitable organizations or creditor governments purchase commercial debt on the secondary market and convert it to local currency. In other cases, banks have donated debt to an international charity or nongovernmental organization, with the condition that the debt be "paid" in local currency for conservation or social programs. The total face value of commercial debt-for-development transactions is only \$500 million to \$600 million, an incredibly small amount in relation to the total commercial debt of developing countries and only 1 to 2 percent of total debt-equity swaps (see table 3).

Experience suggests that the main benefit of such deals is that they emphasize high-priority sectors, such as social spending, and thus may serve as a catalyst for shifts in priorities on the part of debtor governments, donors, and other international agencies. Particularly in countries where such areas have been neglected, this shift will imply important efficiency gains. Furthermore—given favorable publicity, the multiplying effect of donor or creditor effort, and the assurance that the contribution will be channeled to high-priority spendingdebt-for-development swaps may encourage additional foreign exchange flows.

Debt-for-development flows tend to have more favorable foreign exchange effects than those resulting from debt-equity swaps; in the former there is no

outflow of profit remittances and capital amortization to offset the reduction in debt service payments (assuming oversight by central bank authorities to prevent abuse of such operations for round-tripping). From the perspective of a debtor country, debt-for-development swaps are more favorable if there is a clear net foreign exchange saving. This occurs, in particular, if the country was (or was about to start) servicing the debt. Otherwise the principal gain is the shift in spending to high-priority sectors.

Given the relatively small magnitude of most commercial debt-for-development swaps so far, the risks of inflation have been marginal. This is particularly true where inflation and budget deficits are low and where local currency proceeds from debt-for-development swaps are regulated in time (for example, through bond issues, as in Costa Rica). Furthermore, if there is a net foreign exchange saving, it will generate a contractionary effect on the money supply when it is used for more imports. Debt-for-development swaps are more attractive from a macroeconomic perspective for countries with relatively low inflation that are servicing (and planning to service) most of the category of debt being swapped. For countries with high inflation, special efforts need to be made to compensate for or sterilize the fiscal and monetary effects if these are meaningfully large.

III. CONVERSIONS OF OFFICIAL DEBT

Although we have had extensive experience with commercial debt swaps, the history of official debt conversions is limited. A significant difference between the two seems to be that debt reduction is more clearly additional in official debt transactions. For commercial debt, countries have other options (Brady Plan deals and debt buybacks). In the case of bilateral official debt, because the "10 percent clause" is negotiated after the multilateral deal is reached, debt conversion seems to imply additional debt reduction. Naturally it is important that this concession not be granted as a substitute for deeper debt reduction in the Paris Club. Similarly, debt reduction linked to debt conversion must not imply a reduction in other aid flows (a consideration if debt reduction is funded from aid budgets) or a reduction in new export credit guarantees—an unlikely possibility, given the limited magnitude of swaps.

Under the U.S. Initiative for the Americas, debt conversion also seems to be additional; if the debt is not reduced through this mechanism, it would not otherwise be reduced at all. Debt for equity or for development will have a similar effect on debt reduction, but the effects on the net balance of payments will be different.

The efficiency gains will differ as well. What is common to both, however, is that debt reduction, because it increases foreign investment, privatization, and social spending, implies additional gains in efficiency.

As discussed above, commercial debt-equity swaps have attracted additional foreign investment (although there is debate in the literature about just how much additionality there was). The reasons for additional investment are two-

fold: first, by decreasing the initial total expenditure, the swaps provide an important bonus up front, thus reducing risk and improving the rate of return, and second, debt-equity programs signal that the government is keen to promote foreign investment.

Whether these signals will work in low-income and lower-middle-income countries is not clear. There may be other problems that deter foreign investors (such as a lack of physical infrastructure, a poorly educated work force, and so on), and investment opportunities may be limited. Nevertheless, if the country does want to attract investors and has taken measures to improve the business climate, official debt conversion could be a valuable catalyst. Where capital flight has been significant, official debt conversions could also encourage domestic capital to return. In countries where nationals have been allowed to participate in debt-equity transactions, commercial debt conversion has been a powerful incentive for repatriation of capital.

To ensure these beneficial effects on the balance of payments, the government must take appropriate measures to avoid or limit round-tripping. In Chile, for example, the government controlled the volume of debt-equity swaps by nationals, monitored the parallel exchange rate, and allowed residents to hold attractive domestic securities. The government can also use more direct controls (as in the Philippines) to verify the use of swap resources by examining invoices, receipts, sales agreements, and other relevant documents and by requiring that funds not used for a project be invested in nontransferable central bank bills in local currency. These precautions will increase the willingness of creditor governments to allow their debt reduction to be used for debt conversion.

For debtor governments, the potential for inflation is the most serious constraint. In two cases, however, conversions would have no effect—or only a marginal impact—on inflationary pressures: when external debt is used to acquire domestic physical assets (companies being privatized, or nature reserves set aside for swaps) and when the amount swapped is very small in proportion to the total money supply (as in debt-for-development conversions).

An important final caveat is that inflation is a far more serious consideration in countries already facing high inflation and high fiscal deficits. Low inflation, low deficits, spare capacity, and an elastic supply response make a limited expansion of the money supply less problematic. Furthermore, to the extent that the economy becomes more efficient, the improved supply response may reduce inflation in the future.

Debt conversion represents only one tool for debt-distressed countries. As such, it is very much a complement of—not a substitute for—more important fiscal and monetary macroeconomic policies.

Macroeconomic Policies

Assessing the monetary impact of debt conversions means making some assumptions about whether the country would have serviced that part of its official debt if the debt conversion had not taken place. Some indication is provided by the country's past record.

As debt is converted, service payments are reduced in that year and in the future, leading to a decline in net monetary expansion. If the debt is swapped for new investment or development spending and is not compensated, the immediate effect will be a monetary expansion that is partly compensated by the contraction in debt service payments. As the debt is reduced, and ultimately amortized, however, the net cumulative effect on monetary expansion can be zero and in time can become negative.

Finally, there is an indirect contractionary effect on the money supply. If part or all of the foreign exchange saved is used to finance imports, the banking system will absorb money from the private sector, reducing net monetary expansion. These imports will attenuate supply bottlenecks and reduce future inflationary pressures.

Where monetary expansion is thought to be excessive, the financial authorities can take a number of measures to reduce, neutralize, or sterilize the effect. First, the central bank can regulate the redenomination rate to define how much local currency it spends for each unit of debt swapped. Second, it can issue long-term bonds in exchange for the debt. Because the principal is not amortized until the bonds mature, the monetary consequences are delayed (and distributed) as the cost of servicing the debt is transferred to the private financial market in the short run. This does, however, have adverse effects on capital markets as government expenditure pushes up interest rates; furthermore, the interest on the bonds is a drain on fiscal resources. Government paper is an attractive option, but it does require a comparatively welldeveloped domestic capital market (and a limited fiscal deficit). A third alternative would be a monthly quota of swaps. The total swapped can be varied, if necessary, to limit the monetary effects.

In debt-for-development swaps, inflation will usually manifest itself through increased fiscal spending. Such spending can be offset by reducing other government expenditures or by increasing government revenues. It is also possible to place long-term development bonds on private capital markets.

Balance of Payments

Because debt-distressed countries face severe foreign exchange shortages, a crucial effect of debt conversions is that on foreign exchange cash flow. As noted earlier, an important distinction between debt-for-equity and debt-fordevelopment swaps is the positive effect of the latter on this flow. Particularly if the country was servicing (or was planning to service) that debt, the net foreign exchange effect is likely to be very favorable.

It is difficult to estimate the present value of future foreign exchange flows. In a debt-equity swap the net effect will depend on (a) whether that part of the debt was going to be serviced and, if so, whether the transfer would be less (in net present value terms) than the likely future repatriation of profits, dividends, and

capital generated by the foreign investment; (b) how much foreign direct investment is additional (and whether it will help generate other investments); and (c) whether round-tripping is small or can be controlled. In development swaps, the net foreign exchange impact depends on the same factors, except that there is no repatriation of funds.

The net foreign exchange effect can be improved, in part, by government regulations. The real (as opposed to the projected) outcome also depends, however, on events in the future. If the overall economic situation improves, fears of negative effects on the balance of payments can prove largely unjustified. In Chile central bank officials report that foreign investors began in the early 1990s to cut back on profit remittances because the economy was so successful.

If a balance of payments crisis does occur, it is likely to lead to increased profit remittances and capital repatriation, exacerbating the foreign exchange crisis.

The positive effects of debt conversion can be enhanced if they are part of an overall plan that assures sufficient debt reduction to free the economy of the effects of excessive debt and if they are accompanied by a policy package designed to ensure sustainable growth.

In development swaps, too, the net foreign exchange impact of official debt conversion will depend on whether that debt was being serviced; whether the debt reduction is funded by additional contributions or under existing aid budgets; and whether round-tripping is small or can be controlled.

What about the effects of official debt conversions on creditor governments? These can also be positive. First, there is the general point that debt reduction improves the overall value of the residual portfolio of debt (see Claessens and others 1991). Second, in the case of official debt-equity conversions, export credit agencies will sell their debt. If the price at which they sell is higher than the expected net present value of future debt service payments, they will realize a profit. Although this calculation is clear in economic terms, it may be obscured in practice by the accounting and provisioning regulations of some export credit agencies, particularly those that are essentially government departments and that maintain a fictional value for the debt well above its real economic value (for a detailed discussion, see Mistry and Griffith-Jones 1991). Export credit agencies with a greater degree of autonomy and financial responsibility are forced to value the debt at realistic prices that reflect past and likely future servicing ability. It is important that officials not be required by accounting and provisioning regulations to make decisions that are economically incorrect. Third, if the debtor country's economy becomes more efficient (for example, as a result of privatization or increased social spending), future debt service payments are likely to increase. Fourth, creditor governments can be assured that official debt conversions will be used for high-priority government spending (for instance, health, education, and nutrition); this guarantee justifies additional debt reduction (which is also in the interests of the debtor).

Finally, the indirect benefits include enhanced trade, export, and investment as indebted economies recover. Creditor governments, for their part, can use official debt conversions as a way of funding international public goods, such as environmental protection.

Technical Issues in Official Debt Conversions

Several technical issues need to be dealt with to enhance the implementation of swaps. Some of the most relevant are outlined here. Most of these activities refer to debt-equity swaps because debt-for-development swaps are technically simpler.

Transparency and competitiveness. Five "prices" determine the net gains and losses to debtors and creditors: the discounted price of the debt on secondary markets; the redemption price (that is, the proportion of face value that the debtor agrees to convert to local currency); the transaction fees and taxes; the price (in local currency) of the asset to be acquired; and any sweeteners that are offered to encourage the investment. Experience shows that it is essential that these prices be transparent and equitably applied to all official creditors to avoid perceptions of inequities among creditors and to avoid excessive subsidies to foreign investors.

Legal and technical problems. Official debt claims—in contrast to commercial bank claims-vary widely. This is not a problem if the claims are to be canceled (in development swaps), but it is if the claims are to be converted to equity. (Some creditor governments see this as a major obstacle, while others seem to overcome these problems with ease.) Claims are structured differently for each source of credit within and across a wide range of creditor countries; they are not particularly easy to assign or transfer to third parties. Many clauses have implications for conversion that are not yet fully understood. To avoid complexity, it is possible in many instances to novate existing claims or to exchange them for promissory notes with standard features that reflect the maturities and coupon obligations of the existing bilateral claim. If the volume of official debt sales in secondary markets and bilateral debt conversions grows, the Paris Club could be instrumental in standardizing such exchange instruments.

A particular complication arises in the case of insured export credit agency claims that usually provide less than 100 percent indemnity and leave the policyholder with 5 to 25 percent of the claim but with full rights and obligations to protect in the rescheduling (or conversion). In some instances the policyholder remains the titular owner of the full claim and is responsible for obtaining full recovery, even when the export credit agency has paid out the indemnity. These "tail" claims present major legal and technical problems for export credit agencies that are considering debt reduction or conversion. In some instances the "tails" have had to be bought out at face value and in other instances at negotiated discounts (which are generally above the secondary market price). Although there is no easy answer to this problem, creditor governments could provide tax or other incentives to "tail-holders" to sell their claims at discounts to export credit agencies or to intermediaries that trade in debt.

Ownership of converted claims. Some governments of Organization for Economic Cooperation and Development (OECD) countries that have undertaken large-scale divestitures of public assets are reluctant to become shareholders of corporations in debtor economies. Debtor governments are also not particularly anxious to have them as shareholders. Unlike banks or other private creditors. governments and most export credit agencies that are government departments cannot directly undertake official debt-equity swap operations on their own. They are therefore left to (a) sell their claims directly—for example, in the secondary market—and withdraw from further involvement; (b) sell their claims on a negotiated basis to state-owned entities (which will pursue swap opportunities); or (c) transfer official claims from the primary source to the equity investment promotion arms of governments that specialize in such investments and already have large portfolios in indebted developing countries.

The last option is perhaps the easiest and most practical. Either the investment agency acts on its own account (after the debt is transferred to it from the export credit agency at an agreed-on transfer price), or the investment agency can act as a trustee in managing the government's foreign asset portfolio through equity conversions.

Financial intermediaries. An important operational issue is whether export credit agencies should rely on specialized intermediaries or should develop their own in-house capabilities. There are concerns that the use of intermediaries may involve conflict of interest issues because the intermediaries are such large players on these markets. There are also concerns about the advisory fees and transaction costs levied by financial institutions. The question is whether there is a case for the interim development of a specialized submarket in trading official claims (which need to become increasingly standard and liquid in their structural characteristics). Specialized market-making, bid-offer pricing, settlement services, and transactions knowledge would certainly be required to make the market work. It could later be integrated into the private secondary market when private and official debt claims become almost indistinguishable in their trading features.

IV. Conclusions

Although debt-for-equity transactions have absorbed the vast bulk of swaps involving commercial debt (a pattern that is likely to continue), it is important that conversions of official debt direct a greater proportion of funding to poverty alleviation, social sector development, and conservation. To help alleviate debt buildup, the additional debt reduction granted for this purpose should not be funded out of existing aid budgets, so as to ensure an additional foreign exchange saving for the debtor economy.

Debt-development conversions seem well suited for funding social services. Additional local currency resources could be accommodated relatively easily within existing programs or through replication and expansion of ongoing activities. It may be desirable to develop specific proposals to attract and accommodate additional resources on the basis of programs that have been developed but still need resources, such as the National Programs of Action adopted at the 1990 World Summit for Children or the Polish Environmental Fund.

In all these cases debtor governments need to take the lead, but they may require technical assistance from international institutions in program preparation, selection of an appropriate debt conversion mechanism, and bilateral or multilateral negotiations with creditor governments (through a special support group or the Paris Club). The cooperation of creditor governments (some of which may wish to take the lead) is, of course, crucial. For official debt-equity conversions, international institutions can play an important role by supporting the development of well-structured market mechanisms in creditor and debtor countries. Collaboration and consultation with private financial intermediaries will be important.

The potential for debt-equity swaps may be very great. If such swaps are linked to the privatization of state enterprises, they have the advantage of being broadly noninflationary. These conversions are particularly well suited for countries with a high level of official bilateral indebtedness and a large number of public enterprises in the process of privatization. They are suitable for funding private sector infrastructure and can benefit stabilization and structural adjustment programs by helping low- and middle-income countries attract significant foreign direct investment. Debt-equity swaps imply larger commercial returns for export credit agencies. Indeed, they may end up being far larger in volume than debt-for-development conversions. It would, however, be unfortunate if such swaps were to preempt the valuable complementary role that debt-development conversions can play.

REFERENCES

Aravena, José. 1991. Debt Reduction Schemes, Theoretical and Empirical Issues for Chile. Louvain, Belgium: Faculté des Sciences Economiques, Université Catholique de Louvain.

Blackwell, Michael, and Simon Nocera. 1988. "Debt-Equity Swaps." IMF Working Paper. International Monetary Fund. Washington, D.C.

Bouzas, Roberto, and Ricardo Ffrench-Davis, eds. 1990. Conversión de Deuda Externa y Financiación del Desarrollo en América Latina. Buenos Aires: Grupo Editor Latinoamericano.

Claessens, Stijn, Ishac Diwan, Kenneth A. Froot, and Paul R. Krugman. 1991. Market-Based Debt Reduction for Developing Countries: Principles and Prospects." World Bank Policy and Research Report 16. Washington, D.C.

Corden, Max, and Michael P. Dooley. 1989. "Issues in Debt Strategy." In Jacob A. Frenkel, Michael P. Dooley, and Peter Wickham, eds., *Analytical Issues in Debt*. Washington, D.C.: International Monetary Fund.

- ECLAC (Economic Commission for Latin America and the Caribbean), 1991, "Preliminary Overview of the Latin American and Caribbean Economy." Dic. 1991, Santiago.
- Frenkel, Jacob A., Michael P. Dooley, and Peter Wickham, eds. 1989. Analytical Issues in Debt. Washington, D.C.: International Monetary Fund.
- Larrain B., Fernando, and Andres Velasco, 1990, "Can Swaps Solve the Debt Crisis? Lessons from the Chilean Experience." Princeton Studies in International Finance 69. Princeton University, Department of Economics, Princeton, N.I.
- Latin Finance. 1991. October. Miami, Fla.: Euromoney.
- Lagos, Ricardo, 1989, "Debt Relief through Debt Conversion: A Critical Analysis of the Chilean Programme." Master's thesis. University of Sussex, Institute of Development Studies, Brighton, U.K.
- Mistry, Percy, 1992. African Debt Revisited: Procrastination or Progress? The Hague: Foundation on Debt and Development.
- Mistry, Percy, and Stephany Griffith-Iones. 1991. "Interim Report on Conversion of Official Bilateral Debt." United Nations Conference on Trade and Development, Geneva.
- Mortimore, Michael. 1991. "Debt-Equity Swaps." ECLAC Review (September).
- UNCTC (United Nations Centre on Transnational Corporations). 1991. Transnational Banks and Debt-Equity Conversions, Report to the Secretary General. EIC/10/1991/1. New York.
- Williamson, Mary. 1990. Chile's Debt Conversion Programme. ECLAC/CET. Santiago.
- World Bank, 1989. World Debt Tables 1989-90, Vol. 1, Washington, D.C.
- —. 1990. World Debt Tables 1990-91. Vol. 1. Washington, D.C.