

DEBT-EQUITY CONVERSIONS AND OTHER SWAPS:
EXPERIENCE AND PROSPECTS FOR THE CARIBBEAN

BY

DANIEL BOAMAH
RESEARCH DEPARTMENT
CENTRAL BANK OF BARBADOS

Presented at the XXII Annual Conference of the Regional
Programme of Monetary Studies, Georgetown, Guyana,
October 15-19, 1990

DEBT-EQUITY CONVERSIONS AND OTHER SWAPS: EXPERIENCE AND PROSPECTS FOR THE CARIBBEAN

1.0 Introduction

The international response to the debt crisis has concentrated on two broad fronts. There are strategies for dealing with external debt management per se, and policies that emphasise microeconomic and macroeconomic adjustments intended to remove economic distortions within the domestic economy. Debt management techniques have mainly been characterised by new borrowings to refinance existing loans, rescheduling negotiations between creditors and debtors and, recently, debt conversion schemes.

Only few moderately - indebted countries are able to borrow to refinance outstanding loans. Debt reschedulings serve to buy time for debtor countries by delaying repayment of principal but preserve the face value of the debt. Debt conversions usually operate on discounted values of debt and are the direct result of the desire by debtors and creditors to convert part of outstanding external obligations into domestic debt or into claims based on equity participation. They owe their emergence to the rapid development of the secondary market where foreign debt may be traded at a discount.

To the commercial banks debt conversion frees them from the drudgery and exhaustion of repeated debt reschedulings and affords them the opportunity to recoup at least part of their investment through the use of market-based voluntary schemes. Its appeal to the debtor nations

is based on the possibility of securing a flow of investable resources while reducing the stock of external debt.

There is a small but growing literature on debt conversion schemes. Much of this has focused on the concepts, mechanics, applications and problems of debt swaps. The works of Blackwell and Nocera (1988a), Moreno (1988) and Parhizgari (1988) are examples in this direction. Others have concentrated on specific country programmes as is evidenced by the efforts of Garces (1987) on Chile and Davis (1988) on Jamaica. Recently, studies by Bird (1988), Dooley (1988b) and Perasso (1989) have highlighted the economic forces that come into play to determine prices of foreign debt on the secondary market.

This paper largely concentrates on the economic implications of debt swaps, how such implications have influenced specific country programmes and what adjustments are necessary if swaps are to have any noticeable impact on investment and debt reduction in the Caribbean.

In the next section we discuss the definitions and examples of debt swaps after which there is a brief description of the secondary markets, including highlights of price determination on that market. An analysis of some economic implications of debt swaps in section four precedes a discussion of some countries' experiences with the schemes. The last two sections deal with experience and prospects of debt swaps for the Caribbean and conclusions, respectively. The analysis highlights a strong need for debt owed to official bilateral and

multilateral institutions to be included in debt swap programmes if they are to have significant impact on debt reduction in more developing countries.

2.0 Definitions and Examples of Debt Swaps

The basic idea underlying most debt conversion schemes is to have discounted debt owed to transnational commercial banks exchanged for either cash, services, bonds or equity. Thus several forms of debt conversion instruments have emerged, of which debt equity swaps are the most important and widely used. Other instruments are debt-for-debt swaps, debt-'peso' swaps, debt securitisation and debt for nature schemes, among others.

In a typical debt-equity swap, the debtor government offers to exchange its debt for domestic currency to be used to purchase local equity. A creditor holding a country's debt, usually a commercial bank, sells it at a discount in the secondary market to a potential investor. The investor sells it at or near the face value of the debt to the Central Bank of the debtor country in local currency and then buys portions or all of specified local enterprises. However, the local currency is registered as a foreign investment with the privileges normally available to foreign investors under the usual fiscal incentive legislation governing such investments.

A debt-for-debt swap involves an exchange of debt among creditors independent of the debtor countries. Often small creditors trade their outstanding debt of one country for the debt of another country deemed more credit worthy. The rationale for such action derives from a

desire by the small creditors to consolidate their exposure in countries where there is a long-term strategic interest.

In a debt-peso swap, residents of a country purchase the country's foreign debt at a discount in the secondary market and sell the debt back to the government of the country of issue, receiving in exchange assets dominated in domestic currency. In this case the 'peso' is used synonymously with local currency. The domestic asset normally takes the form of capital investment or equity shares in domestic companies. Residents use funds held abroad or hard currency obtained in the local parallel foreign exchange market to finance these purchases. The overall objective of this scheme is to encourage the repatriation of illegal flight capital as well as to reduce the size of the external debt.

Debt securitization involves the conversion of debt into some form of security, such as fixed or floating rate bonds, variable maturity bonds, exit bonds and other notes and financial instruments that can be traded in the secondary market or passed to investors through multilateral institutions. Debt for nature schemes arose out of the concern of environmentalist groups for adequate protection of the environment of some debtor countries. Usually groups such as the World Wild Life Fund and Conservation International provide funds to small and poor debtor countries to purchase commercial bank debt at a discount on the secondary market. In exchange the local authorities promise to use the local currency equivalent to protect rare natural resources such as endangered wild life, tropical forests and national parks.

3.0 The Secondary Market

The development of the secondary market is a recent activity, tracing its beginnings in 1983 when a few banks began to buy, sell and swap international bank loans to create portfolios that were consistent with longer-term objectives. It enabled some banks to reduce exposure, while others consolidated loans within a geographic region or in specific countries, where they desire to concentrate their loan portfolios.

The gradual settling down of the secondary market into a more structured form around 1986 attracted many participants including international banks, developing country-based banks, transnational corporations, investors in developing countries, debtor nations, investment bankers and speculators. As banks continue to make provisions against rescheduled debt, and as creative new applications for such debts are developed, the market becomes deeper and more efficient, providing cheaper sources of investment funds for international companies than direct investment.

Significant portions of foreign investments in many developing countries are expected to be funded with proceeds of external debt purchased from international banks in the secondary market. Morgan Guaranty Trust Company estimates that approximately US\$5 billion of international loans trading at prices below par were sold or exchanged in the market in 1986. The size of the market was expected to double by 1987 (UNCTC, 1989, p.61).

3.1 Price Determination in the Secondary Market

Recent research indicates that it is largely the behaviour of different economic agents which determines prices in the secondary market (Bird (1988) and Perasso (1989)). Bird posits that the demand to buy a country's foreign debt is driven mainly by the desire to invest (by both nationals and foreigners) in the country whose debt is acquired. Thus the main factors that influence demand are: the size of the discount on the debt; the availability of specific investment opportunities, the overall credit worthiness of the country involved, the return on other assets available to the investor in his own country and elsewhere, the extent of limitations on capital repatriation and profit remittances and finally, the extent of the transaction fee for debt conversion. The demand for debt to convert is influenced positively by positive changes in the first three factors but negatively by the last three.

The main suppliers of discounted debt are the transnational banks which hold developing countries' debt. A representative bank would, in general, not consider selling in the secondary market unless it considers the discounted price of the debt greater than the expected interest and amortisation payments, also appropriately discounted. The former is a function of the size of the discount while the latter depends on the bank's assessment of the country's credit worthiness. Another factor likely to influence the credit holder's desire to sell is the size of the debt held. In general the supply of debt for conversion may be expected to rise as the discount falls, as the size of the debt held increases, and as the credit holder's perception of the country's

credit-worthiness falls. The interaction of the supply and demand conditions help to identify the market clearing price, once some slight assumptions are made¹.

4.0 Some Economic Implications of Debt conversion

While the actual mechanism underlying debt-equity conversions appears simple, there are a number of positive as well as restricting implications which ultimately may account for the various measures that countries which engage in the schemes put in place. Some of these implications relate to the extent of the external debt reduction, monetary and fiscal policy effects for financing swaps, exchange rate and balance of payments effects and the implications for growth and foreign investment.

4.1 External Debt

The most obvious advantage with debt-equity conversion scheme is that it reduces the size of the external debt, with consequential benefits for the debtor, creditor and investor alike. The debtor country is able to reduce its stock of debt and secure a flow of new investment. The debtor has a doubtful debt partially restored and the investor receives low cost investment. By reducing its stock of debt the debtor country reduces contractual claims on scarce foreign exchange for debt servicing, enabling the country to relax foreign exchange controls and ensure flexibility in its balance of payments management. Also by reducing part of the interest load, the debtor country's ability to service its remaining debt is enhanced. This in turn tends to

enhance its international credit worthiness, raising the prospect of attracting new funds by way of new investment to meet short-term balance of payments liquidity problems.

The repayment of debt related interest and amortisation is replaced by outflows associated with foreign direct investment (profit remittances and dividends) when debt is swapped for equity. However, such outflows are based on profit earnings from the investment which may be re-invested without necessarily being repatriated. Moreover, most conversion schemes include clauses to limit capital repatriation and the remittance of profits. To that extent the country's foreign exchange position is strengthened, at least in the short-term.

4.2 Implications for Monetary and Fiscal Policy

The method of financing the local currency components of debt swaps may have significant implications for domestic monetary policy, especially if the volume of swaps is large. In situations where the equity sought is owed by Government, the swap could involve a shift of asset from the public to the private sector with little or no domestic financing required. Debt conversion would then not involve substantial new money creation. However, in general the equity attractive to private investors is owned by the private sector of the debtor countries. In such circumstances the original owner of the private property must be paid cash for his equity. The debtor government has the option of financing the swap either through new taxes, through money creation or by issuing domestic bonds.

The first option of raising new taxes may be the most appropriate in terms of the effect on the rest of the economy, but that may be politically not feasible. The second option of printing money may tend to generate inflationary pressures on the domestic economy. Blackwell and Nocera (1988) have estimated that a 5% reduction in the stock of debt through debt-equity swaps financed by printing money in four of the major indebted countries in Latin America increased domestic money supply by 33%-59%. To the extent that there exists a high degree of substitutability between money and real assets in many developing countries, this has implications of substantial inflationary pressures. Indeed, increases in the rate of inflation were noticed for Mexico and Chile between 1986-88, due, in part, to their debt - equity programmes (Parhizgari, 1988, P.45).

The inflationary consequences may be averted by directly selling government bonds to the private sector. However, even this may not avoid difficult policy choices to the extent that the sale of government paper could put upward pressure on interest rates and potentially crowd out domestic economic agents and possibly investment. Furthermore, the limited size of the domestic capital market in most debtor countries means there would be not much scope for financing substantial debt-equity swaps. This constitutes a major limitation with regards to the volume of debt swaps that could reasonably be accommodated, especially where there are no on-going programme of privatisation.

The implications for fiscal policy may be different. Following a swap an external liability is replaced by domestic obligation and in situations where domestic interest rates are

higher than the rate applicable to the external debt, the cost of servicing the domestic obligations may be higher, with obvious implications for fiscal policy. On the other hand, to the extent that government or its operating agency, the central bank, charges debt conversion fees, this will serve to raise government revenue and reduce the fiscal deficit.

4.3 Exchange Rate and Balance of Payments

The effect of debt swapping on a country's exchange rate may take different forms. In situations where the main demand for a country's external debt for conversion comes from residents, (as for example, Chile) the favourable exchange rate offered by the swap arrangement relative to the official exchange rate may create favourable conditions for arbitrage. As long as the discount on the debt is greater than the discount obtained when the debt is redeemed in local currency, the demand for foreign exchange on the local parallel market will tend to cause exchange rate depreciation.

If the amount of external debt retired is large and the equity sought is financed through money creation, the resultant inflationary pressure could lead to over valuation of the exchange rate at the old nominal rate, putting downward pressure on the value of the local currency. However, in situations where debt reduction generates increased confidence in the economy, it is possible that the increased demand for local currency resulting from the inflow of new investment funds would tend to raise the value of the local currency on the foreign exchange market.

The effect of debt swaps on the balance of payments derives from two sources. Inflows of new investment funds would tend to strengthen the balance of payments. Similarly to the extent that the reduced external debt lowers the debt-servicing needs of the debtor country, the current account of the balance of payments is strengthened. In the long run, the effect on the balance of payments depends on the relative size of the out payments for dividends and profit repatriation associated with the equity investment, relative to the interest and principal payments that would have been due on the reduced external debt.

4.4 Growth and Investment

Although the reduction of outstanding external debt is the primary motive for debtor countries to participate in debt-equity schemes, the swaps provide important investment opportunities for investors and debtors alike.

The flow of new foreign investment accompanying debt-equity conversions could promote exports and improve the inflow of foreign capital in sectors with potential foreign exchange earning capacities, such as tourism in some caribbean countries. Naturally, these investments can also stimulate the economy by creating additional production and employment. An added attraction is the potential gains in new technology and management expertise which usually accompany foreign investment.

However, the flow of new foreign investment would normally take place in situations where the swaps are linked to the purchase of private sector assets. For public sector assets, the investor gets ownership of equity without necessarily injecting new money in the local economy unless immediate refurbishing of the asset acquired becomes necessary. Moreover it is argued that the investments made possible through swaps merely substitute for investment that would have come in even without the swaps. To that extent the swaps provide an expensive way for the country to secure foreign direct investment. For this reason some countries such as Jamaica and Argentina have formulated their programmes in such a way that debt exchanged for equity would have to be accompanied by 'new' money. By varying the inducements according to the direction of investments, or new money invested, debtor countries may be able to modify the distribution as well as the total amount of foreign investment.

For international companies, debt conversion transactions offer a cheaper source of funds than direct investment, benefitting not only from a more attractive rate of exchange but also from possible fiscal incentives available to foreign investors. The scheme has enabled transnational and local companies in Mexico, Brazil, Chile and the Philippines to expand and make new acquisitions (UNCTC, 1989). With the recent relaxation of the regulations governing United States bank operations in non-financial companies, many of the creditor banks themselves are becoming involved in the investment end of the scheme, swapping their own credits for equities in the debtor countries.²

5.0 Country Experiences with Debt Swaps

Most countries get involved in debt conversions with the primary intention of reducing the burden of external debt, obtaining investment in selected priority sectors and stemming the outflow of foreign exchange reserves through capital flight. However, worries about the inflationary and interest rate costs associated with financing swaps have given rise to diverse rules which ultimately affect the effectiveness of some schemes.

The common features underlying debt-equity schemes include some indication of the type of investment to be approved, a conversion fee that varies with the kind of equity sought, a definition of what classes of foreign debt would be entertained for swaps and an indication of how the investment is to be treated in relation to taxation and capital and profit repatriation.

Between 1984 and 1988 about US\$13.7 billion of developing country debt was converted into equity (table 3). Although this represents only a small proportion of total debt outstanding, it has, nevertheless enabled some debtor nations to pay some of their debts without necessarily undergoing excessive hardship and some commercial banks to recoup a portion of loans that appeared lost.

Despite its potential, wide applicability of the debt-equity conversion scheme is limited. It is only applicable to commercial bank debt and is therefore of limited use to debtor countries like Jamaica with more than 75% of its debt owed to official bilateral and multilateral agencies.

Its use is heavily concentrated to just five countries (Argentina, Brazil, Chile, Mexico and the Phillipines) which presently account for more than 85% of identifiable conversion (table 3). Also, most private debt is owed to US banks, but the US Federal Reserve Board restricts US banks' involvement in the debt-equity scheme, further limiting its scope³.

The first post-1982 debt swaps were introduced in Brazil in 1983 and in Argentina in 1984, both as part of major rescheduling packages. However, initial concern that the swap-induced investments might substitute for inflows that would take place without the scheme led to restrictions and modifications only one year after they were introduced. In Brazil, the authorisation of debt equity swaps was restricted to the original creditors in 1984 and in Argentina, the original scheme was discontinued in 1985 and a new one introduced in 1987 that effectively reduced the attractiveness of the scheme. The new scheme allowed swaps provided the face value of the debt swapped was matched by the investment of an identical amount of 'new' money. By end-1988 an estimated \$1.3 billion of Brazil's debt had been converted into equity while Argentina had converted \$400 million.

Chile entered the debt swaps market relatively late (May 1985) but its scheme was more comprehensive than those of Brazil and Argentina. In addition to allowing non-residents to swap foreign debt for equity in specified investments, the Chilean scheme also encouraged local participation. Chilean residents could exchange foreign debt obligations purchased at a discount for domestic currency or domestic currency denominated instruments. The proceeds could be used to repay debts to local financial institutions or acquire assets of those institutions. In 1987

the regulations were amended to allow for the formation of foreign investment societies whose funds (proceeds of discounted foreign debt purchased) could be invested in a range of Chilean shares and financial instruments.

According to Financial times (June 4, 1990) the amount of Chilean foreign debt eligible for conversion has fallen to US\$5 billion, from US\$14.5 billion since the programme began in 1985, making it the most successful in the world in the use of debt conversion schemes. Its relative success may be attributable to the high participation by Chilean residents. Chile was able to minimise excess money creation by operating a quota system under which resident swappers have to bid for the right to convert foreign debt. This served to impose an upper limit on the amount of debt that could be converted in a period.

Mexico, Philippines and Ecuador got involved in debt equity swaps in 1986. Under the Mexican arrangement the discount a prospective investor obtained for debt purchased on the secondary market was dependent on the perceived utility of the proposed investment to the economy. The scheme was suspended less than two years after it began because of concern of the possible inflationary consequences of the swaps. Also, the authorities believed that such swaps were effectively subsidising investments that would have been made without the extra incentive provided by the scheme. Similarly concern that large participation by domestic residents would put excessive pressure on the exchange rate influenced Ecuador to suspend its scheme in August 1987, after only six months of its introduction.

Such adverse effects influenced other countries contemplating the scheme to introduce specific guidelines, as was the case in the Philippines and Venezuela. In the Philippines the guiding principle was that the swap must increase the availability of foreign resources to the economy. Thus approval was, in general, not given to proposals intended to purchase claims to stockholders of existing assets, for increasing working capital or for paying off obligations of existing firms.

Investment in preferred export oriented sectors attracted lower conversion fees. Furthermore, it was required that the conversion fee could not be paid for the domestic currency proceeds of the converted debt in order to guarantee that every conversion generated some fresh money. To contain the expansionary monetary impact of the scheme, an indicative limit was placed on the conversion of central bank debt but no such limit was placed on converting private sector debt which, generally, does not involve additional credit creation. The rules governing debt conversion in Venezuela were similar to those in the Philippines.

Despite the problems associated with debt-equity conversion schemes, the desire to have the stock of foreign debt reduced and the attraction of possible new investment have encouraged several countries to get involved. Some of the countries that have introduced the scheme the last two years include Colombia, Costa Rica, Dominican Republic, Jamaica, Morocco, Nigeria, Peru and Uruguay.

6.0 Experience and Prospects for the Caribbean

A few Caribbean countries, like Guyana and Belize, have recently shown interest in debt conversion schemes but only Jamaica has an active programme in place. Faced with a commercial bank debt of US\$400 million, Jamaica launched the scheme in July 1987, with the intention of converting US\$200 million over a five year period. As is the case with such schemes in other countries, Jamaica's was designed to stimulate foreign investment in designated priority sectors and to reduce the burden of external debt.

The priority areas identified were hotel construction, export manufacturing, employment generating activities and investment in the free zone. Capital remittance requirements are also not much different from those of other countries. There is a holding period of three years for dividend remittances and three to seven year period for capital repatriation. The main measure intended to deal with the monetary implications of the scheme is to stagger the local currency transfer to the investor over a period. Local residents were excluded from active participation out of concern for possible speculative activities on the foreign exchange market.

By July 1990 about 87 applications for about US\$308.7 million had been received by the Bank of Jamaica, the designated authority for debt swaps in the country. A total of 25 swaps valued at US\$53.5 million had been completed, an increase of US\$20.5 million from December 1989. Of the swaps completed US\$31.6 million was for nine projects in the tourism sector, US\$8.7 million for eight projects in export agriculture, US\$6.8 million for five export

manufacturing activities and US\$5.6 million for a mining project. The value of approvals awaiting conversion was estimated at US\$61.7 million and a further US\$193 million in applications was being processed.

On current trends it is not likely that the objective of converting US\$200 million by 1992 would be achieved. Nevertheless, the size of applications to date and the extent of approvals lends support to the view that the programme has been reasonably successful in attracting much needed investment to Jamaica.

The relatively modest success rate of the Jamaican programme brings into focus the question of the applicability of debt swaps in the Caribbean. The external debt structure of six Caribbean countries is given in table 4. The proportion of commercial bank debt in the overall debt outstanding averages 41.5% between 1982 and 1989 for Trinidad and Tobago, 24.3% for Barbados, about 15% for Jamaica and 13.3% for Guyana. The ratio is even smaller for the two OECS countries of Grenada and St. Vincent, averaging only 4.9% and less than one percent, respectively.

Of the countries whose data are assembled in table 4, it appears the possibility of retiring significant proportions of debt from debt-equity conversion programmes exists for Trinidad and Tobago, Jamaica and, to a lesser extent, Barbados and Guyana. The applicability of such swaps for Grenada and St. Vincent is severely restricted because there is not much scope to retire significant amount of debt with the scheme as presently defined. Debt owed to commercial

banks is so small in the average commercial banks' overall debt portfolio that it may simply choose to cover it with loan loss provision and keep it on the books rather than write it down in the secondary market for possible swaps. Even where a multinational company is able to purchase discounted debt in the secondary market, there may simply not be enough viable prospects (for the money involved) to make significant dents into the overall debt structure. It is clear that for most of the small territories in the OECS there is a need for an alternative strategy to help reduce the stock of debt outstanding.

One such strategy calls for concerted efforts by debtor countries to get official bilateral and multilateral debt eligible for some sort of debt swaps for investment in commodity-base ventures. The recent move by the Inter-American Development Bank to seek members' approval to participate in Latin American debt reduction programmes is a step in the right direction⁴. If approved the scheme should be extended to its Caribbean membership.

One debt reduction instrument which should be suitable to Caribbean debtor countries is the exchange of long-term bonds for debt. The Mexican securitized bond scheme of 1987 was a good example. Mexico expected to convert US\$20 billion of commercial bank debt, substantially discounted, for up to US\$10 billion publicly marketable bonds with a 20-year maturity with the principal guaranteed by the US Government. However, the outcome fell far short of the target, with only US\$2.6 billion worth of bonds subscribed in exchange for about US\$3.7 billion of debt, effectively reducing Mexico's by only \$1.1 billion instead of the expected US\$10 billion.

The failure of the Mexican bond scheme may be attributable to two reasons. Firstly, the US guarantee of the bonds was limited to the repayment of the principal and not interest. Secondly, major commercial banks did not bid, preferring to convert their exposure bit by bit at smaller discounts rather than one shot losses of the order of 30%-40% discounts on the bond scheme (Mortimore, 1989).

The key to the success of converting debt into long-term bonds lies in the provision of adequate guarantees for repayment of both principal and interest of the new bond issue. Mexico had to pay about US\$1.8 billion cash for the 20-year zero coupon bonds which the US Treasury offered as guarantee for the US\$10 billion bonds. Thus such a scheme is applicable to developing countries which, like Mexico, have healthy foreign exchange resources with which to put up a guarantee for payment. Efforts to help developing countries find ways to obtain such guarantee at minimum cost is the new challenge facing the international community.

It has been suggested that commodities produced by developing countries can be used to back conversion bonds (Gordon & Gemill, 1988). Bond holders might be given entitlement to commodity output of debtor countries. The bonds represent an obligation of the debtor to pay an amount of money required to buy a prespecified physical quantity of the commodity in each period. The debtor pays less in periods when prices are low as compared with when they are high. The advantage of such commodity-indexed bonds⁵ is that both interest payments and the principal are related to the debtor's ability to pay. Hence, the scheme attempts to deal with

a fundamental problem of volatility in commodity prices which is an important cause of debt problems in many developing countries.

One drawback to debtors is that the outstanding debt is usually exchanged for bonds at its face value. Also, commodity-linked bonds, where they exist, have been applicable to gold, silver or oil. Therefore, they are not much help to the many developing countries that depend on the production and exports of agricultural produce. It may not be easy to sell commodity bonds as agricultural commodities are not easily stored and cost more to insure.

New and more generous schemes are needed if producers of all commodities, including agricultural produce, are to be helped to reduce their external debt obligations to manageable levels and to afford them some breathing space for growth, investment and measured increase in consumption. Both official and commercial bank creditors of commodity producing debtor countries could be offered bonds of some 20-25 years duration with bullet maturities for discounted values⁶ of their loans but carrying market interest rates⁷ (e.g. LIBOR). The principal and interest on the new bonds could be guaranteed through a fund into which debtor countries would pay the value of prescribed quantity of their commodities each year. The value of such agreed payments would be calculated to be only a fraction of the country's debt service obligations for the year. As a result, no interest would be paid on the yearly contributions. Rather, whatever interest is payable would be capitalised at a compound rate as obtains with zero-coupon notes in order to help build up adequate guarantee within the maturity period of the bond.

The scheme should be sufficiently attractive to the creditors to the extent that market interest rates are offered and that both the principal and interest payments would be covered by guarantees. In addition the risk of default on the new bonds could be minimised by entrusting its management to a competent board. We suggest that a new facility be created within the new World Bank-managed Multilateral Investment Guarantee Agency (MIGA) to manage and oversee the operation of the scheme.

Conclusions

The paper has discussed some of the economic implications of debt swaps and how such schemes have influenced specific country programmes. It has also touched on the experience of debt swaps in the Caribbean and the factors that hinder their wide applicability in the region.

At the moment debt equity conversion schemes are only applicable to commercial bank debt, making their use rather restrictive to many Caribbean countries which owe significant proportions of their foreign debt to official bilateral and multilateral sources. The paper has argued for their extension to include official bilateral and multilateral debt. It has also advocated for commodity linked debt securitization instruments as necessary innovations to existing debt reduction programmes if they are to be widely beneficial to commodity producing territories in the Caribbean and elsewhere.

However, it must be emphasised that debt reduction programmes must be accompanied by sound macroeconomic and structural policies to provide incentives for commercial banks and other creditors to re-lend new money to developing countries. This is important because any lasting solution to the debt problem must aim to promote the flow of new money to debtor countries in order to reverse the present net transfer of resources by developing debtor countries to the industrial economies.

NOTES

1. The supply price is inversely related to the size of the discount on the debt but the demand price depends on the extent of the charges imposed by the debtor country when the debt instrument purchased is redeemed.

2. In 1987, Morgan Grenfell arranged for a US bank and a UK bank to convert US\$25 million of their Brazilian exposure into a 20% share-holding in a Brazilian pulp and paper company. In the same year American Express Bank converted US\$100 million of its own exposure into hotel investment in Mexico (UNCTC, 1989, p.62).

3. As of February 1988, US banks were limited to 40% of non-financial shares if swapped for Government debt and only 25% of non-financial shares if the company does not have an investor with large controlling interest. Moreover, all investment must be sold not more than 15 years after it is first made.

4. See IMF Morning Press, September 14, 1990.

5. Commodity indexed bonds as described here should be distinguished from traditional commodity bonds which have been in existence for a while. In a commodity bond the buyer will be repaid either a certain sum of money or the

value of a quantity of commodity, whichever is the higher. Thus it is equivalent to an ordinary bond plus a commodity option. The Economist (February 6, 1988) estimates that commodity bonds with a face value of between \$4 billion and \$5 billion were issued in the year to September, 1987.

6. The discounts could be close but not necessarily equal to what is obtainable on the secondary market to encourage commercial banks to participate.
7. A variant of this scheme was proposed for Zaire in 1987. It did not really take off mainly because the guarantee offered covered only principal and not interest payments.

TABLE 1

BID-OFFER SECONDARY MARKET PRICES FOR SOME DEVELOPING COUNTRY DEBT
(Percentage of Face Value)

Country	July 1985	July 1986	July 1987	August 1988	August 1990
Argentina	60.0-65.0	63.0-67.0	46.0-49.0	43.0-45.0	13.5-14.0
Brazil	75.0-81.0	73.0-76.0	58.0-61.0	51.0-53.0	17.0-17.5
Chile	65.0-69.0	64.0-67.0	68.0-70.0	62.0-64.0	70.0-70.5
Colombia	81.0-83.0	80.0-82.0	81.0-83.0	N.A.	63.0-65.0
Ecuador	65.0-70.0	63.0-66.0	45.0-47.0	35.0-38.0	16.5-17.0
Mexico	80.0-82.0	56.0-59.0	55.0-57.0	50.0-53.0	64.8-65.3
Peru	45.0-50.0	18.0-23.0	10.0-12.0	N.A.	4.0-5.0
Philippines	N.A.	N.A.	69.0-71.0	64.0-67.0	49.0-50.0
Venezuela	81.0-83.0	75.0-78.0	70.0-72.0	62.0-64.0	45.8-46.3

N.A.: Not Available

Source: Shearson Lehman Brothers and Bear, Stearns & Co. as quoted in Mortimore (1989, Annex 2), and LDC Report, August 27, 1990.

Table 2

TOTAL EXTERNAL DEBT OUTSTANDING AND DEBT RATIOS OF SOME
SELECTED DEVELOPING COUNTRIES
(US \$ BILLION)

COUNTRY	1985	1987	1989 ^e
Argentina	50.9	58.4	58.9
EDT/GNP (%)	84.1	76.0	69.7
TDS/XGS (%)	52.4	60.1	36.6
Brazil	104.6	123.9	114.6
EDT/GNP (%)	48.2	42.4	29.1
TDS/XGS (%)	42.2	37.0	31.9
Chile	20.4	21.5	18.2
EDT/GNP (%)	143.7	123.6	72.5
TDS/XGS (%)	52.5	29.4	25.6
Colombia	14.2	17.0	17.1
EDT/GNP (%)	41.9	50.4	43.5
TDS/XGS (%)	41.9	36.7	52.2
Cote D'Ivoire	9.6	13.4	13.4
EDT/GNP (%)	152.4	142.6	163.4
TDS/XGS (%)	39.5	37.0	38.4
Mexico	96.9	109.3	95.9
EDT/GNP (%)	55.2	81.4	49.8
TDS/XGS (%)	54.1	38.8	36.5
Morocco	16.3	20.1	20.0
EDT/GNP (%)	134.7	110.4	91.3
TDS/XGS (%)	27.0	25.6	30.0
Nigeria	19.3	30.0	33.2
EDT/GNP (%)	21.9	128.2	120.7
TDS/XGS (%)	38.8	13.1	31.4

Source: World Bank: World Debt Tables 1989-90, External Debt of Developing Countries; First Supplement.
e: estimate.

Notes to Table:

EDT = Total External Debt, including short-term Debt and use of IMF Resources.
GNP = Gross National Product.
TDS = Total Debt service payments.
XGS = Exports of Goods and services.

Table 3

DEBT CONVERSIONS, BY COUNTRY, 1984-1988
(US \$ MILLION)

Country	1984	1985	1986	1987	1988*	Total	CBEDT 1988
(i) <u>All identified conversions</u>^a							
Mexico	N/A	N/A	620	5,420	1,516	8,325	63,384
Brazil	N/A	1,380	300	1,100	2,500	5,280	67,605
Chile	N/A	330	984	1,979	2,058	5,351	10,978
Argentina	N/A	469	270	289	400	1,428	30,376
Philippines	N/A	N/A	15	341	125	581	10,761
Others	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL	N/A	<u>2,179</u>	<u>2,189</u>	<u>9,129</u>	<u>6,599</u>	<u>20,965</u>	
(ii) <u>Debt equity conversions</u>							
Mexico	-	769 ^d	620	1,720 ^e	1,516	4,625	63,384
Brazil	1,198 ^c	581	205	380	1,300	3,664	67,605
Chile	-	85	270	832	799	1,986	10,978
Argentina	31	469	-	289	400	1,189	30,376
Philippines	-	-	15	266	100	381	10,761
Others ^b	-	301	523	353	648	1,825	N/A
TOTAL	<u>1,229</u>	<u>2,205</u>	<u>1,633</u>	<u>2,292</u>	<u>4,763</u>	<u>13,670</u>	

Sources: ECLAC/CTC Joint Unit as quoted in M. Mortimore (1989) Table 18.
World Bank: World Debt Tables 1989-90, External Debt of Developing Countries; First Supplement.

CBEDT: Total long-term external debt owed to commercial banks in 1988.
*: estimate.

- a: Information on direct conversions is very scarce and incomplete.
b: Includes programmes not identified by country.
c: Includes \$452 million converted in 1983.
d: Direct conversion only, includes those of 1983 and 1984.
e: Programme suspended in October, no new applications accepted thereafter.
N/A: Not available.

Table 4

EXTERNAL DEBT OUTSTANDING BY SOURCE
(PUBLIC & PUBLICLY GUARANTEED)
US \$ MILLION
BARBADOS

	1982	1984	1986	1988	1989*
Commercial Banks	68.0 (30.1)	71.0 (23.3)	115.0 (24.7)	130.0 (23.0)	126.0 (20.2)
Official (Multilateral)	75.0 (33.2)	97.0 (31.8)	136.0 (29.2)	165.0 (29.2)	189.0 (30.3)
(Bilateral)	46.0 (20.4)	88.0 (28.9)	107.0 (23.0)	116.0 (20.5)	116.0 (18.6)
Others	37.0 (16.3)	49.0 (16.0)	(107.4) (23.0)	155.0 (20.5)	192.0 (18.6)
Total	226.0 (100)	305.0 (100)	465.0 (100)	566.0 (100)	623.0 (100)

Source: World Bank: World Debt Tables (1989-90) First Supplement, External Debt of Developing Countries.

JAMAICA*

	1982	1984	1986	1988	1989*
Commercial Banks	437.0 (20.7)	461.0 (17.8)	451.0 (14.2)	411.0 (11.6)	383.0 (10.3)
Official (Multilateral)	504.0 (23.9)	554.0 (21.4)	904.0 (28.5)	1094.0 (30.8)	1135.0 (30.5)
(Bilateral)	1099 (52.1)	1476 (57.0)	1678.0 (53.0)	1854.0 (52.2)	2011.0 (54.0)
Others	71 (3.3)	100.0 (3.8)	136.0 (4.3)	195 (5.4)	194 (5.2)
Total	2111 (100)	2591.0 (100)	3169.0 (100)	3554.0 (100)	3723.0 (100)

Source: World Bank: World Debt Tables (1989-90) First Supplement, External Debt of Developing Countries.

Note: Figures in parentheses are percentages shares in column tables.

e: estimates.

*: Include private sector debt.

GUYANA

	1982	1984	1986	1988	1989*
Commercial Banks	110.1 (16.2)	111.6 (16.2)	105.1 (13.1)	104.6 (11.9)	91 (9.1)
Official (Multilateral)	204.8 (30.1)	247.3 (35.8)	300.3 (37.4)	352.7 (40.0)	404 (40.4)
(Bilateral)	286.8 (42.2)	271.2 (39.3)	325.2 (40.5)	327.4 (37.1)	429 (42.9)
Others	77.5 (11.5)	(60.3) (8.7)	72.3 (9.0)	97.6 (11.0)	77 (7.6)
Total	679.3 (100)	690.4 (100)	803.9 (100)	882.3 (100)	1001.0 (100)

Source: Office of Budget Management Ministry of Finance, Guyana. World Bank: World Debt Tables (1989-90), First Supplement, External debt of Developing Countries.

Table 4 (cont'd)

EXTERNAL DEBT BY SOURCE
(PUBLIC & PUBLICLY GUARANTEED)
US \$ MILLION

GRENADA

	1982	1984	1986	1988	1989 ^e
Commercial Banks	4.9 (14.8)	2.0 (4.8)	1.0 (1.9)	1.0 (1.5)	1.0 (1.3)
Official (Multilateral)	12.6 (38.1)	18.0 (42.9)	24.0 (46.2)	33.0 (50.8)	40.0 (50.6)
Official (Bilateral)	13.6 (41.1)	21.0 (50.0)	24.0 (46.2)	30.0 (46.2)	36.0 (45.6)
Others	2.0 (6.0)	1.0 (2.3)	3.0 (5.7)	1.0 (1.5)	2.0 (2.5)
Total	33.1 (100)	42.0 (100)	52.0 (100)	65.0 (100)	79.0 (100)

Source: World Bank: World Debt Tables (1989-90) First Supplement, External Debt of Developing Countries.

ST. VINCENT

	1982	1984	1986	1988	1989 ^e
Commercial Banks	0.4 (2.1)	0.2 (0.9)	0.2 (0.7)	0.2 (0.5)	0.2 (0.4)
Official (Multilateral)	15.4 (81.0)	19.0 (86.4)	22.0 (81.5)	34.0 (79.1)	37.0 (78.7)
Official (Bilateral)	2.5 (13.2)	2.0 (9.0)	4.0 (14.8)	8.0 (18.6)	9.0 (19.1)
Others	0.7 (3.7)	0.2 (3.7)	0.8 (3.0)	0.2 (1.8)	0.8 (1.8)
Total	19.0 (100)	22.0 (100)	27.0 (100)	43.0 (100)	47.0 (100)

Source: World Bank: World Debt Tables (1989-90) First Supplement, External Debt of Developing Countries.

Note: Figures in parentheses are percentage shares in column totals.
e: estimates

TRINIDAD AND TOBAGO

	1982	1984	1986	1988	1989 ^e
Commercial Banks	510.0 (56.2)	458.0 (43.1)	680.0 (38.4)	606.0 (35.3)	829.7 (34.6)
Official (Multilateral)	67.0 (7.4)	51.0 (4.8)	66.0 (4.2)	67.0 (3.9)	310.3 (12.9)
(Bilateral)	308.0 (34.0)	314.0 (29.5)	310.0 (19.6)	327.0 (19.0)	392.8 (16.4)
Others	22.0 (2.4)	240.0 (22.6)	601.0 (37.8)	717.0 (41.8)	868.2 (36.1)
Total	907.0 (100)	1063.0 (100)	1585.0 (100)	1717.0 (100)	2401.0 (100)

Source: World Bank: World Debt Tables (1989-90), First Supplement, External Debt of Developing Countries.
Central Bank of Trinidad & Tobago: Annual Economic Survey (1989)

Note: Figures in parentheses are percentage shares in column totals.
e: estimates

TABLE 5

SUMMARY RESULTS OF JAMAICA'S DEBT EQUITY
CONVERSION SCHEME: DEC. 1988 - JULY 1990
(US\$ MILLION)

	DEC. 1988	JULY 1990
Completed Conversions	9.3	53.0
Approved Applications	83.0*	115.0
Applications in Process	135.0	193.7
New Money invested	n.a.	16.7
Total Applications	200.0*	308.7

*Data for August

Source: Bank of Jamaica: Debt Capitalisation Unit

REFERENCES

- Avramovic, D. (1988), "Debt Crisis of the 1980s. The Beginning of a Wind Down?", Paper presented to the International Conference on External Debt of Developing Countries, Kingston, Jamaica, January.
- Bird, G. (1988), "Debt Swapping in Developing Countries: A Preliminary Investigation", Journal of Development Studies, Vol. 24, No. 3, pp. 293-309.
- Blackwell, M. and Nocera. (1988a), "The Impact of Debt to Equity Conversion", Finance and Development, June, pp. 15-17.
- Blackwell, M and Nocera, S. (1988b), "Developing Countries Develop Debt-Equity Swap Programs to Manage External Debt", IMF Survey, Vol. 17, No. 14, July, pp. 226-228.
- Boamah, D.O. (1988), "Some Macroeconomic Implications of External Debt for Barbados", Social and Economic Studies, I.S.E.R., Vol. 37, No. 4, PP. 171-191.
- Boamah, D.O. (1989a), "External Debt Management Strategies: Some Issues and Evidence for the Caribbean", Economic Review, Central Bank of Barbados, Vol. XVII, No. 1, June, pp. 12-19.
- Boamah, D.O. (1989b), "The Debt Crisis and its Implications for the Caribbean", Bulletin of Eastern Caribbean Affairs, Vol. 15, Nos. 4 & 5, I.S.E.R., U.W.I., September-December, pp. 1 -12.
- Davis, N. (1988), "Debt Conversion: The Jamaican Experience", Social and Economic Studies, Vol. 37, No. 4, pp. 151-167.
- Commonwealth Secretariat, International Capital Markets, London, Various Issues.
- Dooley, M. (1988a), "Capital Flows to Developing Countries", Paper presented to the International Conference on External Debt of Developing Countries, Kingston, Jamaica, January.
- Dooley, M. (1988b), "Buy-Backs and Market Valuation of External Debt", IMF Staff Papers, Vol. 335, pp. 215-229.
- Garces, F. (1987), "Foreign Debt Conversion in Chile", in The Economist, "Guide to Debt Equity Swaps", London, September.

- Gordon, K.M. and Gemmill, G. (1988), "Commodity-Indexed Debt", Columbia Journal of World Business, Winter, pp. 57-61.
- Jefferson, O. (1988), "Some Aspects of Jamaica's External Debt", Paper presented to the International Conference on External Debt of Developing Countries, Kingston, Jamaica, January.
- Moreno, R. (1988), "Debt Swaps and the LDC Debt Problem", Economic Impact, Vol.2, No. 62, pp. 37-42, USIA, Washington, D.C.
- Mortimore, M. (1989), "Debt Equity Conversion Programs: Guidelines for Debtors", UNCTC. (mimeo.), January.
- Parhizgari, A.M. (1988), "Debt Swaps: Innovative Proposals" Economic Impact, Vol. 2, No. 63, pp. 42-46 USIA, Washington, D.C.
- Perasso G., (1989), "The Pricing of LDC Debt in the Secondary Market: An Empirical Analysis", KYKLOS, Vol. 42, No. 4, pp. 533-555.
- UNCTC (1989), International Debt Restructuring: Substantive Issues and Techniques, Advisory Studies, Series B, No. 4, Annex I, United Nations.