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Securitisation of LDC Debts

by
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'Securitisation' of debts has been offered as one of the 'market-based' solutions to developing countries' debt problem. This paper reviews and analyses the important proposals for securitisation in terms of institutional structure as also new instruments. The theoretical framework of Debt Relief Laffer Curve provides the necessary backdrop. After bringing out the advantages, problems in securitisation have also been examined in the light of country experiences. While securitisation by itself may not be the panacea for the debt crisis, once debtor country adopts prudent economic reforms, it could improve the probability of repayment at each level of nominal debt.

Introduction :

TOWARDS finding a lasting solution to the problem of external commercial debts of heavily indebted less developed countries (henceforth to be referred to as LDCs) an influential segment of professional opinion has veered round to "market -based" solutions, particularly securitisation of outstanding debts. The term "securitisation" which has been much discussed in recent literature on financial markets, refers both to the switch away from bank intermediation to direct financing via capital markets, and to the transformation of previously illiquid assets like loans into marketable instruments[1]. In the context of LDC debts, securitisation refers to packaging of outstanding loans into appropriate blocks of marketable securities. The creditor banks are, consequently able to mark-to-market the loans which were hitherto non-performing. While some economists have proposed securitisation per se as a solution to LDC debts, others have proposed securitisation as part of a package to solve the crisis. The securitisation schemes for LDC debts encompass various schemes such as, corporate restructurings, debt buy-backs, debt-equity swaps, and exchange of debts for collateralised securities. It is the exchange of debts against collateralised securities that is the subject-matter of this paper. Other schemes of securitisation, particularly debt-equity swaps, have been covered

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extensively in the recent literature[2]. The purpose of this paper is to review the most important proposals[3] for securitisation and to generally evaluate the scheme of securitisation as a mechanism for defusing the debt crisis. No attempt has therefore been made in the paper to examine the causes that led to the debt-crisis[4], nor to review the voluminous literature on the proposals floated to defuse the crisis[5]. For quick reference, however, a table is given at the end of the paper, providing an idea of the magnitude of the debt problem. The paper is organised into three parts: Part 1 gives a bird's eye view of the important proposals for securitisation after dealing with the idea of securitisation as a feasible solution to the debt crisis in an analytical framework. Part 2 analyses the advantages of securitisation and looks at some of the problems of the emerging secondary markets for country loans. Finally, Part 3 sums up the conclusions drawn on the basis of the analysis.

1. Theoretical Framework and Proposals for Securitisation

1.1 Theoretical Framework of Securitisation

Any examination of the feasibility of various market based solutions to the debt crisis would have to begin with the analysis of Krugman (1988) who introduced the Debt Relief Laffer Curve in this regard. The Debt Relief Laffer Curve, OCD in the figure, shows that at higher levels of debt, the probability of non-payment of nominal debt, D, grows such that the expected payment, P, traces out a curve that falls increasingly below the 45° - line after the point C. Further, after a point M, the expected payment actually declines. If 'P' is the average market assessment of the probability of payment of the debt, then (1-P) would be the market discount on the debt on the CD portion of the curve. If secondary market were competitive, 'P' would be equal to the market price of the debt and would be given by the slope of ray from the origin. It follows from the above that the value of the debt (1-P) D on the segment CM is greater than the value of the debt (1-P) D on the portion MD.

Krugman shows that market-based debt reduction strategies (including securitisation of outstanding loans) would be beneficial to the creditors only when the debtor country is on the wrong side of the Debt Relief Laffer Curve, that is on the segment MD of the curve. On this part of the curve, according to Krugman. when creditors give up their claims, it deprives them of the chance of receiving full or substantially higher amount of repayment in the event of a good fortune; but that
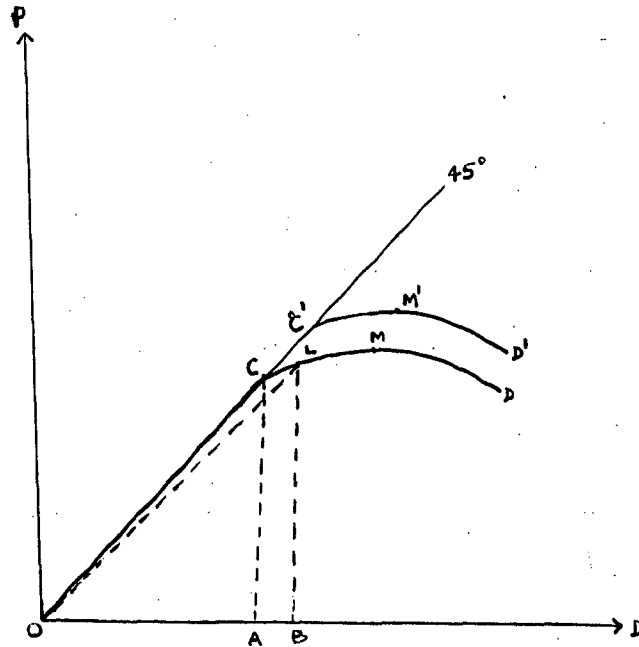
Figure 1 : Debt Relief Laffer Curve

cost would be more than compensated by the effect of improved incen-tives on the debtors.

It could, however, be seen from the Debt Relief Laffer Curve that as long as the debtor country is on any point on CD portion of the curve, it pays to introduce securitisation schemes. By definition, since the creditor bank passes on the market discount to the debtor country, it should enable the country to move back to the 45° - line. At one of such points (say L), the market discount is given by the slope of the ray OL, and if the creditor bank passes on the market discount to the debt-or country, other things being equal, it would put the country back on point C, where the market price of the debt equals P. Once the country is put back on point C, with additional lending and other economic policy reforms, the Debt Relief Laffer Curve would shift upwards along the 45° - line, raising the probability of payment or market price of the debt, at each level of nominal debt. This is clearly in the interests of both the creditor banks and the debtor countries.

The movement from OL to OC represents the gain from securitisa-tion. It should, however, be noted that if the creditor banks had agreed to forgive AB amount of debt instead of securitisation of the

outstanding debts, the debtor country would still be at point C. In other words, forgiving an amount equal to the market discount has the same effect on the debtor country as the process of securitisation. The major differene between a voluntary debt relief and a scheme of securitisation is that securitisation schemes, other things being equal and in the absence of sovereign risks, enable the quantum of discount on debt - in other words, value of the debt - to be determined by the market. The market value of the debt could be considered as the market's assessment of the country's ability to repay the debt. Therefore, by exchanging outstanding loans against new bonds at the prices established in the secondary market, securitisation leads to optimal debt relief. This debt relief would be equal to, in the absence of transaction costs, and under efficient market conditions, to an amount that is sufficient to take the debtor country along the 45° - line where the value of the debt is equal to 'P'. On the other hand, under a scheme of voluntary debt relief, the amount of debt to be forgiven is determined by the process of political bargaining and more often than not, does not bear any relation to the underlying economic fundamentals.

The securitisation process described above differs from the conventional analysis of debt-buy-back in an important respect : under the securitisation scheme, no financial or real assets are *dedicated* as collateral ; rather the existing loans are only exchanged against the new securities. It could even be considered, as in Rohatyn's or Kenen's proposal, that the outstanding loan receivables serve as collateral for the new securities. In this respect, the new securities issued under the scheme resemble very much the asset-backed securities. The creditors are benefited in the sense that the new securities are considerably less risky compared to the outstanding bank loans. This should be an important consideration for the creditor banks particularly when one views the near-perfect debt-service record of bearer bonds issued by the Highly Indebted Countries since 1982.

Some of the proposals for securitisation seems to have been made on the analogy of the growing market for asset-backed securities in the USA and other developed countries. The outstanding amount of residential mortgage-backed, pass-through securities, the largest segment of asset-backed securities market in the US, increased from $ 287 billion in end- 1984 to $769 billion in end - 1988, that is, an increase of about 168 percent ! Securities backed by other assets like credit card receivables, automobile loans, boat loans, commercial real estate loans, and home equity loans, student loans, nonperforming loans, and lease receivables increased from about $1 billion in 1985 to more than $16

billion by the end of 1988[6]. However, it would be naive to expect success of LDC bonds simply on the analogy of asset-backed securities. The success of asset - backed securities in USA has partly been due to the explicit guarantee given by government agencies like Government National Mortgage Association and other government sponsored agencies. Even the privately issued asset - backed securities generally depend on some form of credit enhancement provided by the originator or a third party to insulate the investors from losses. Realising the importance of such a guarantee, some of the proposals, as noted above, provide for guarantees by some multilateral organisations.

Moreover, it would also be necessary to ensure that the new securities issued do not meet with the same fate of the old ones and this leads to the urgency of implementing appropriate economic policy reforms. Implementing economic policy reforms is an essential condition for the working of Laffer Curve and for minimising sovereign risk. It needs to be emphasised that securitisation schemes assume absence of sovereign risk.

One should not, however, conclude that securitisation is the panacea for the debt crisis. A debt reduction strategy with heavy reliance on market-based solutions has little relevance to very poor countries south of Sahara. Securitisation schemes are critisised on the grounds of the boost it gives to domestic liquidity and aggravates inflation rates which are known to be high in most LDCs, especially of Latin America and of the fear of foreign banks and multinational corporations buying up an uncomfortable share of domestic industries. It is also asserted that securitisation schemes such as, debt-equity swaps, channelise foreign investment that in any way would have occurred. To that extent, inflow of foreign capital to the country is reduced. A final point is the apprehension whether capital markets of the developing countries would be able to absorb the new instruments created in the process of securitisation.

1.2. Proposals for Securitisation

A Central Agency ?

It has been generally recognised that as the problem of external debts of LDCs is essentially one of solvency there is the need to improve the match between debt service obligations and debt service ability. Many proposals for securitisation of outstanding loans have been floated with a view to bringing about synchronisation between the country's

debt service obligations and its debt service ability. These proposals could be classified operationally into two broad groups : those favouring a central agency to pool the outstanding loans and then to issue marketable securities against collaterals, and those recommending issue of commodity bonds by the LDCs.

The proposals by Felix Rohatyn (1983), the New York financier, envisages a new agency (or a subsidiary of the World Bank or the IMF) to acquire LDC debts from the banks at a discount in exchange for the agency's low interest-bearing bonds. The agency would stretch out LDC debts to 25 to 30 years, with an interest rate of about 6 percent. The main objective behind the proposal is to keep debt service payments (interest and principal) within tolerable limits of the country's export earnings.

Peter Kenen (1983) has also proposed setting up of a new institution, the International Debt Discount Corporation, with capital subscribed by governments of industrialised countries. The Corporation would buy LDC debts at a discount (about 10%) from banks in exchange for its long-term bonds. The Corporation would reschedule the LDC debts on a one-time, long-term basis, using half the discount for modest debt relief by either reducing interest rates or granting grace periods. All banks would be given a limited period of time to decide whether to participate or not. The proposal envisages the Corporation to deal only with debts of those countries which have recognised it as successor claimant to the banks.

A scheme which links debt amortisation payments to real, measurable capacity to pay has been proposed by Norman Bailey (1983). According to this scheme, the central banks of the debtor countries would issue equity-like, negotiable exchange participation notes to their private and official creditors on a pro-rata basis against the existing amortisation schedules. These would entitle the holders of the notes to some prudent levels of current and future foreign exchange earnings.

Guttentag and Herring (1985) have suggested development of a 'conduit agency' to pool country loans and to issue participation interests against these pools. Like Bailey's exchange pariticipation notes, this scheme is clearly linked to improving the match between the country's debt service obligations and its ability to service debts. According to the authors, the conduit role could be played by one of the existing international agencies like the IMF or the World Bank or a new

entity created specifically for the purpose. The conduit would buy LDC debts against its negotiable participation certificates. The conduit agency would provide some guarantees to certificate holders ranging from reimbursement of losses in the event of misfeasance to guaranteeing the timely payment of interest and principal. These features, according to the authors, would enhance attractiveness of the Conduit Certificates and increase its marketability.

Griffith-Jones (1985) proposes establishment of investment trusts for individual developing countries. Trust shares would be issued to new investors as well as interested commercial banks in exchange for outstanding loans. The Trust manager would try to swap the loans for equity stakes in local enterprises. This scheme also pins its hopes on the marketability of the Trust shares.

A Debt Adjustment Facility (DAF) under the IMF for writing off a part of the outstanding debts and to exchange the remaining part of the loans for the long-term bonds of DAF has been suggested by Sengupta (1988). The DAF bonds would be fully secured, with a maturity of 15-20 years and the coupon rate would be calculated at a rate equivalent to the rate for SDRs. The bonds would be issued to commercial banks against LDC debts at a rate to be settled through negotiations. The agreed price would be related to, but not necessarily equal to, the price in the secondary market. The DAF would, in turn, reissue claims on the debtor country with the same repayment schedules as for the DAF bonds. By taking secondary market price as a guide, but not as a determinant of the final discount, the debtor countries stand to gain the maximum discounts that the creditors are able to provide. The proposal provides for according senior status to participating creditor banks in the country's future payment transactions to ensure that their obligations are first met before those of non-participating institutions. Percy Mistry (1987) has also suggested a similar Debt Restructuring Facility (DRF), to be administered by the World Bank as a special programme and to be funded by the industralised countries. The DRF would buy LDC debts at a discount of 25-30% against issue of bonds with a maturity of 25-30 years and with a coupon rate of modest spread over the treasury securities of US, Japan and West Germany. The DRF would buy debts of only those countries which have agreed with it to implement structured policy reforms.

Creation of a new institution has not been favoured many economists. According to Krugman (1985), creation of such an agency would present important technical problems : it would be difficult to

define which countries and which debt would be eligible. This criticism, however, has been taken care of in the schemes floated by Sengupta and Mistry by stipulating certain eligibility conditions. A more fundamental objection, as noted by Cline (1983) is that debt buy out would remove the incentive for creditors to continue lending. It would, therefore, be necessary to ensure that multilateral organisations fill in the gap caused by the withdrawal of banks.

Commodity Bonds :

In order to bring a country's debt service payments directly in alignment with its ability to service the debt, many economists (Lessard and Williamson (1985), Anderson et al. (1989), Priovolos (1987), among others) have suggested issue of commodity bonds by LDCs. Since many of the LDCs depend upon a small basket of primary commodity exports for their foreign exchange earnings, commodity bonds would shift the risk of price fluctuations that are beyond the control of the borrowers. Commodity bonds enable such risks to be shared between creditors and debtors. It would also ensure that interest or amortisation payments or both vary in accordance with the fluctuations in commodity prices. A fall in the country's commodity prices would thus reduce its debt service obligations.

A commodity bond is a negotiable instrument the return on which is linked to the price of its underlying commodity. While the periodical interest payments may or may not be expressed in units of the underlying commdity, the redemption value of the bond is usually expressed as a specified quantity of the commodity. Some commodity bonds may also contain an option clause allowing the holder to receive either the nominal face value or the specified quantity of the commodity at maturity. A distinction is usually introduced between commodity-convertible bonds and commodity-linked bonds. Commodity-convertible bonds are those which promise to redeem the principal in specified quantity or nominal value of specified quantity of the commodity, whereas commodity-linked bonds are those which are issued with the backing or collateral of a specified commodity or basket of commodities. An example of the commodity-convertible bonds was the National Defence Gold Bonds issued by the Government of India in the early sixties which redeemed the value of the bond in specified quantity of gold. A more recent example is the Mexican government bonds issued in 1979 in local currency backed by oil. Each 1,000 peso bond was linked to 1.95 barrels of oil with a coupon rate of 12.66% and a maturity of 3 years. On maturity, the bonds were redeemed at face

value plus the excess of market value of oil over the face value together with the interest on the excess if it were positive. An example of commodity-linked bonds was the gold bonds issued in 1985 by Peggold Overseas Ltd. of USA, with the backing of gold. During the year ended 1987, there were 45 commodity bond issues in USA; 95% of these issues were commodity-linked and the remaining were commodity-convertible bonds[7]. Most of these issues were linked to gold or silver and about 10% of the issues were linked to oil.

Commodity bonds are often found to be attractive to both debtors and creditors. By linking the country's debts to commodities which are marketable, commodity bonds ensure that payments are certain. It is advantageous to the debtor country in that the fluctuations in its debt service capacity resulting from exogenous shocks such as world economic recession or adverse changes in the terms of trade do not make its debt serice payments unduly burdensome. This, however presupposes that commodities to which debt service payments are linked should be the ones which the debtor country is selling in the world markets. A country like Peru or Zaire could issue copper-linked bonds as part of its debt restructuring[8]. However, commodity bonds as a scheme of debt restructuring may fall into the problem of moral hazard- the country could reduce its exports so as to cut down on its debt service payments. Lessard and Williamson (1985) however discount such a possibility. In the case of commodities which have a ready domestic market, nonetheless, this possibility could not altogether be ruled out. A more important apprehension raised in this context is that commodity bonds may lead to banks having in their portfolio, assets not suited to them[9].

As a way-out to these problems, trade-linked bonds have been suggested (Lessard and Williamson, 1985). These bonds are issued with its return linked to the value of the country's export earnings. The country's debt service obligations would move in tandem with its export earnings, bringing closer correspondence between its obligations and ability. There is also the incentive effect : it would provide an incentive to the creditor nations to open up their economies for exports from the debtor nations. However, the trade linked bonds too suffer from moral hazard problem : as in the case of commodity bonds, a country with a sizeable external debt may intentionally restrain export promotion so as to limit its debt service obligations. Lessard and Williamson (1985) seem to have doubted the marketability of the bonds. They have, therefore, argued in favour of a guarantee by a multilateral organisation.

Schemes of Securitisation in Operation :

As compared to transformation of outstanding loans into marketable securities, other schemes of securitisation have been put into practice with varying degrees of success[10]. Corporate restructurings like those of Mexico and Chile (including the large ones for Alfa and Visa groups of companies), reduced debt by about US$ 4 billion through exchange of existing obligations at deep discount for equity or cash. Debt buy-backs have been undertaken by private and public sector companies in Brazil, Mexico and Chile to prepay foreign - currency loans at a discount agreed to with creditors. Such buy-backs are reported to have reduced LDC debt by US$ 8-10 billion since 1982. In early 1988, Bolivia repurchased US$ 240 million of commercial bank loans for 11% of face value with funds anonymously donated to this end by foreign governments. Chile brought back US$ 300 million of its long-term loan, paying about 56% of the face value. In contrast to the modest scale of corporate restructurings and debt buy-backs, debt-equity swaps have been significant in most of the countries seeking equity participation in new and existing companies. The debts are converted at varying discounts into equity of private or state-owned enterprises being privatised, usually with conditions attached regarding repatriation of dividend/capital. During 1983-88, debt-equity swaps have reduced debt by about US$ 13 billion.

The first official recognition of the need for linking a country's debt service obligations to its ability to service the debt and for a market-based approach could be seen in the debt strategy launched in 1985 by James Baker, the then US Treasury Secretary. The Baker Plan encouraged market-based approach such as, debt-equity swaps and exchange of outstanding debts into marketable securities at prices that reflected the discounts prevailing in the secondary markets. Such schemes have retired some US$ 27 billion of LDC debt by end - 1988[11]. Mexico launched, in early 1988, a scheme of exchanging debt for bonds under the Baker Plan. The Mexican government offered creditor banks the opportunity to trade loans at a discount for a special issue of bonds with maturity of 20 years. The bonds carried an interest rate of twice the spread on most of the Mexican bank loans and were fully secured by the collateral of zero-coupon US Treasury securities. The size of actual exchange fell short of expectations : the government accepted bids for only US$ 3.7 billion of loans at a discount averaging 30%. Outstanding debts were cut by US$ 1.1 billion although Mexico had to spend reserves of US$ 530 million to buy zero-coupon US Treasury bonds[12].

Similar to the Baker Plan, but giving more emphasis on market-based approach, the Japanese government offered a major proposal in 1988 for securitising LDC debt. The plan which came to be known as the Miyazawa Plan after the then Finance Minister of Japan, provides, among other things, issue of securities by LDCs backed by a guarantee fund of their export earnings specifically created for the purpose. The proposal, however, did not take-off beyond the discussion stage. A further impetus to the market-based approach was given in 1989 by the Brady initiative- the debt reduction strategy proposed by the US Treasury Secretary, Nicholas Brady. The Brady Plan builds on and improves the essential features of the Baker Plan[13]. It recognises that a favourable solution of the debt problem requires higher economic growth, which in turn depends on economic policy reforms designed to use resources more efficiently, encourage domestic savings and investment and attract capital from aborad, including repatriation of flight captial. The Brady Plan gives considerable importance to market-based debt reduction strategies. The Plan envisages the IMF and the World Bank to provide financial support expressly to enable debtor governments to negotiate debt reduction transactions with the commercial banks. With collateral of these funds, the debtor nations can offer commercial banks, in exchange of outstanding loans, new bonds at a discount or bonds at par with reduced rate of interest. In support of the Plan, a total amount of US$ 32 billion including $ 4.5 billion from Japan, has been committed for debt reduction[14].

Mexico provided the first test case for the Brady Plan. Mexico's creditor banks were given the opportunity to take either the new 30-year bonds in exchange for the existing debt at 65% of the face value with interest @ LIBOR plus 13/16% or the new 30-year bonds at a fixed interest rate of 6.25%. Banks accepting the new bonds in exchange for old bonds will have interest guaranteed on a rolling basis and the principal has been collateralised by zero-coupon US treasury securities. While the response to the Mexican scheme has reportedly been favourable from banks[15], the response for a similar programme of Chile has been rather poor. Although expected to extinguish about US$ 500 million of external debt, Chile could repurchase only about US$ 140 million worth of loans at an average price of 58.25 cents per US dollar[16]. This may be interpreted as an indication of the continued confidence of banks on the ability of the government to service its debt partly induced by the fact that chile had an extended arrangement with the international Monetary Fund.

2. Evaluation of Securitisation :

2. 1. Advantages of Securitisation :

The immediate advantage of securitistion is that the hitherto non-performing assets of banks could be made marketable and the balance sheets of the creditor banks could be made to look more sanguine. At the same time, the debtor nations could retire some of their hard currency loans which otherwise would not have been possible.

The major advantage of securitisation is that it provides, as Swoboda (1985) has noted, a mechanism that allows flexibility in pricing and trading of risks. Securitisation of outstanding debts, by creating new instruments encourages wider ownership and thereby reduces concentration of risks. Moreover, secondary markets allow the value of the instruments to be determined, which under perfect competitive conditions would be reflecting the underlying risks. Thus, the market price of the instrument would be a better indicator of the asset's worth to the holder and thereby, would induce prudent behaviour on the part of the lenders. As a corollary, an active secondary market for securitised instruments would provide a mechanism for imposing market discipline on the borrowers. For example, a fall in the market price of the instrument, by raising the cost of new borrowing would induce the borrowing country to service its debts regularly or to adopt prudent economic reforms. A higher price in the secondary market for its debt instruments would enable the debtor country to secure more competitive pricing for its new borrowing. However, too much emphasis on secondary market leads to the danger that a country with heavy accumulated debts could bring down the price of its debt instruments in the secondary market through targeted information policy and economic measures so as to repurchase it later at the reduced rate.

By far the unassailable advantage of securitisation lies in the fact that like collateralised mortgage securities, securitisation improves the country's cashflow matching with its debt service obligations. It also allows the country a wide array of instruments to choose from, better suited to its needs. Many modifications could be introduced not only to deal with the instability in the borrowing country's debt service capacity but also to reduce the country's exposure to interest rate risks. Financial instruments like swaps and options are now available for risk management. Swaps can be utilised to reduce the volatility of debt service payments by achieving a judicious mix between fixed and floating rate obligations. By diversifying the currency composition of its debts,

a country could achieve a better match between its debt and the structure of its export earnings. Again, swaps could be used to change the cashflow pattern of the country's debt service payments. As majority of the debts are on a floating rate basis, use of interest rate swaps would help the LDCs reduce the volatility of their debt service payments by converting a part of the debt to fixed rate basis although they may have to forego the benefit of future decline in the interest rates. A combination of swaps and interest rate option would, however, enable the country to hedge interest rate fluctuations, at the same time benefiting from downward movements in the interest rates. Similarly, call option could be used to introduce interest rate caps establishing an upper limit to the interest rate liability for the country. Thus, securitised instruments enable the LDCs to build up a more stable debt service profile.

2.2 Problems in Securitisation :

Although secondary markets in country loans had been in existence for sometime, it was only from 1986 when debt-equity swaps became increasingly popular that it attracted the attention of the market makers. Despite the official recognition to the market-based approach to the debt crisis, the contribution of the secondary market to reducing the debt burden has been limited. As a proportion of the debt outstanding of the Heavily Indebted Countries in 1987, the reduction amounts to only 1.7 percent[17]. The total debt conversions, however, have increased from US$ 2 billion in 1984 to $ 4 billion in 1985, $ 7 billion in 1986, $ 12 billion in 1987 and $ 22.4 billion in 1988[18].

The secondary market for country loans has been very thin, with prices varying across countries[19]. The market quotations were as low as 10 cents per dollar for Bolivia, 21.75 cents for Argentina, 21 cents for Ecuador, as against 46.25 cents for Brazil, and 46.75 cents for Mexico at the end of September 1988[20]. The prices also show remarkable variation over the years. For example, Argentina has slumped to about 11.5 cents in Dec. 1989 from 20 cents a year ago and from 60-65 cents in July, 1985[21]. Prices for Mexico and Venezuela were affected in 1986 by the drop in oil prices, while a fall in Peru's price to 8 cents per dollar was probably on account of that country's announcement that debt service would be related to exports. The secondary market has also been very volatile : relatively small transactions of US$ 5 million could swing prices unduly.[22]. Competition among banks has also pushed down trading spreads to a quarter point or less[23]. There are reportedly few buyers other than some Latin American banks or companies desirous of making investment in Latin American countries for debt-equity swaps.

Moreover, five countries (Argentina, Brazil, Chile, Mexico and Venezuela) accounted for about 90 percent of the $ 12 billion turn-over in secondary markets in 1987[24]. This clearly indicates the fragmented development of the secondary market, with trading in other country-debts virtually absent. A secondary market similar to that of asset-backed securities in the developed countries, particularly in the USA, is yet to pick up. In order to diversify the ownership of LDC securities, it is necessary that the instrument developed is homogeneous, with necessary guarantees and adequate credit standards. The investor demand for such bonds would largely depend on the availability of guarantees which will insulate the investors from financial losses.

Data indicate that a large segment of the transaction involves pure trading and no debt conversion takes place[25]. The World Bank estimates the volume of loans trading for the year 1988 at $ 30 billion; and the volume of equity swaps concluded during the first-half of 1988 amounted to only $ 8.8 billion. This shows that the bulk of the transactions represent change of ownership and the contractual amount of countries' external liabilities remains unchanged[26]. The trading of their debts, therefore, does not offer much benefit to the countries as they are unable to capture the market discounts.

The deep discounts prevailing in the market has been one of the major reasons for the slow growth of the secondary market. The World Bank (1988/89) notes that the downward trend for secondary market prices set in June 87, despite the increased turnover and two-way quotations, has continued throughout 1988 although the countries have embarked upon a successful adjustment programme. It has been observed that prices for a given country could vary depending upon the borrowing country institution, participants in a given loan syndication, extent of loan guarantees, etc.[27]

Some empirical studies suggest that the discounts reflect the underlying country risks[28]. It would, however, appear that country risk alone does not satisfactorily explain the heavy discounts for LDC debts. This would be apparent from the active market for bearer bonds issued by some of the Latin American governments. Merrill Lynch have launched in Dec. 1989, a successful high-yield Fund devoted to investment in such bonds[29]. The fact that there have been no defaults in such bonds probably explain the development of an active market for such bonds. This brings us to the important fact that it is the market's perception of a country's willingness to service its debts which is the key variable in the pricing of its debt instrument.

Many of the proposals for securitisation has, as noted above, envisaged a central agency to pool the outstanding loans and to issue marketable securities, which will be homogeneous with respect to return, maturity and collateral available. With the guarantee of such an agency, the new instrument is expected to become more marketable. The plan for securitisation would mean that secondary market for loans of all other countries is also developed. This would not only help the market assess the value of the country's debts but also ensure that the countries establish a more stable debt service profile.

The major problem standing in the way of commodity bonds gaining acceptance is the performance risk and country risk. Many economists have, therefore, put forth suggestions to tackle these problems. Lessard and Williamson (1985) have proposed issue of such bonds with the backing of one or more OECD governments or multilateral development bank. Their scheme envisages issue of index-linked long-term, partially guaranteed bonds with an international institution acting as an agent for a consortium of developing countries. Each issue of bonds would be the joint liability of the particular group of countries that desire to borrow at the time of issue, the amount of issue being determined by their willingness to service the debt at the real interest rate set at the time of issue. Such bonds might be denominated in an international currency like the US dollar or in a composite currency like the SDR. Dollar-denominated bonds would be indexed to a measure of US inflation such as US Wholesale Price Index, while SDR-denominated bonds would be indexed with weighted average of similar measures. Priovolos (1987) suggests that an international organisation such as the World Bank should establish a mechanism to cope with the performance risk involved in the issue of commodity bonds. According to this scheme, the World Bank would provide commodity loans to LDCs and issue similar bonds in international markets. This suggestion, however, shifts the risks from the ultimate bond holder to the World Bank. Anderson et al. (1989) consider sovereign risk as the most important problem for commodity bonds. They have, therefore, suggested a two-pronged strategy to unbundle the default risk : to separate sovereign risk component from default risk and then insure with a third party on actuarial basis. The advantage, according to the authors, is that like in the case of mortgage-backed securities, by unbundling the risks, the securities can be sold to agents with comparative advantage in bearing these risks at competitive prices so that their value is greater than when bundled. However, insurance cover for sovereign risks has not yet been developed. Moreover, such risks are actuarially difficult to estimate since they are highly correlated across countries. This

suggestion may not, therefore, be feasible in the short run.

3. Conclusion :

In this paper, an attempt has been made to review some of the proposals for securitisation of LDC debts. Clearly, securitisation has certain advantages: by establishing a closer correspondence between a country's debt service obligation and its ability to service the debts, securitisation gives the country a better debt service profile. Securitisation also enables the LDCs to benefit from the financial innovations by allowing them to choose from a wide array of instruments suited to its requirements. Schemes of securitisation also enables dispersal of risks. It can be shown that securitisation schemes, once the debtor country adopts prudent economic reforms and it is given the benefit of additional lending, improve the probability of repayment or market price of the debt, at each level of nominal debt.

Securitisation by itself may not be the panacea for the debt crisis. It has no relevance to the very poor countries of sub-Saharan Africa. Although there are imporatant shortcomings, securitisation of outstanding debts, along with other measures to reduce the debt overhang, and implementation of appropriate policy reforms could ultimately defuse the debt crisis.

Tabel I.
External Debt of LDCs.

(In billions of US$)

	1983	1985	1987	1988	1990
Developing countries					
Total Debt	889.0	1004.5	1216.0	1223.7	1306.4
By Maturity :					
Short-term	179.1	171.9	196.9	206.3	224.7
Long-term	709.8	832.6	1019.0	1017.3	1081.6
By type of creditor :					
Official	279.9	353.5	488.7	496.7	575.7
Commercial banks	461.5	487.1	545.0	532.2	517.9
Other Private	147.5	163.9	182.2	194.8	212.7
Western Hemisphere	344.5	367.6	419.5	408.2	418.7

Source : World Economic Outlook, May 1991, International Monetary Fund,
 Washington, D.C.

Notes :

1. Gardner, E.P.M. (1986), 'Securitisation and the Banking Firm', Institute of European Finance, Research Paper, 86/15, Bangor.

2. See, among others: Alexander, L.S.(1987), 'Debt-Equity Swaps - a Formal Analysis', Board of Governors of the Federal Reserve System, mimeo; Hans-Joachim Huss (1988), 'Debt-Equity Swaps - Panacea or Emperor's New Clothes?', Working Paper No. 328, Kiel Institute of World Economics.

3. For a brief, comprehensive review of the various proposals floated upto 1984, see American Express Bank, *The Amex Bank Review* , Vol. 11, No.5, 1984,

4. For an exposition see: Nunnenkamp, Peter (1987), *The International Debt Crisis of the Third World : Causes and Consequences for the World Economy*, Wheatsheaf Books Ltd., Brighton.

5. See: Sachs, Jeffrey (1986), (1988) and (1989).

6. *Federal Reserve Bulletin, October 1989*.

7. Priovolos, Theophilos (1987).

8. Peru had announced in 1987, a debt-for-products deal with its creditor banks. See: *The Banker*, October 1987.

9. *The Banker*, August 1987. see also Donald R. Lessard and J. Williamson (1985).

10. This Section relies heavily for data on *Morgan Guarantee* (1988).

11. *Ibid*.

12. *Ibid*.

13. For essential details of the Brady Plan, please see Fried, Edward, R. & Trezise, Philip H. (1989).

14. *Ibid*.

15. *Financial Times*, 6 and 20 December 1989, and 12 January 1990.

16. *Financial Times*, 24 November 1989.

17. The World Bank: *The World Debt Tables*, 1988/89.

18. *Ibid*. and *Financial Times*, 19 December 1989.

19. *Financial Times*, 19 December 1989.

20. *The World Debt Tables*, 1988/89.

21. *Financial Times*, 19 December 1989.

22. *Ibid*.

23. Fidler, Stephen (1989).

24. *The World Debt Tables*, 1988/89.

25. *Ibid*.

26. *Ibid*.

27. Laney, Leroy O. (1987).

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29. *Financial Times* (London), 4 December 1989.
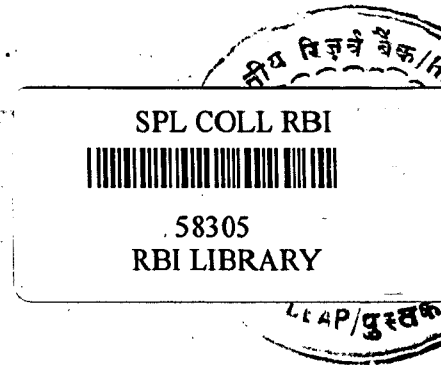
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Inter-temporal Comparisons of Engel Elasticities based on Consumer Expenditure data

by
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In this study the skew distribution of consumer expenditure in the different rounds of National Sample Survey (NSS) is approximated by a lognormal distribution and intertemporal comparisons of the share of expenditure in the total for some broad commodity groups in different deciles is made. This will incidentally circumvent the problem of non-comparability of the data sets in different time periods. As an extension of this, expenditure elasticities for different broad groups of commodities are also worked out under assumptions of lognormality. Similar elasticities are worked out using the Gini Coefficient of concentration with reference to a specific commodity group vis-a-vis all items. The estimation of elasticities as above allows one to overcome the limitations inherent in the regression technique when applied to grouped data.

Introduction :

THE results of the Consumer Expenditure Surveys conducted in various rounds of the National Sample Survey (NSS) are available in the form of grouped arithmetic means for different expenditure size classes. An intertemporal comparison is fraught with difficulties due to price changes, differences in the number of size classes as also unequal class intervals used in presenting the Survey results. Further, the upper class interval, which is generally open bounded, creates problems of estimation of parameters. Attempts have been made to overcome these problems using methods such as deflation or interpolation and making the data sets comparable over time. These are, however, subject to limitations.

It is a general practice to estimate the expenditure elasticities by assuming a mathematical form to the Engel Curve through the conventional least squares method. The use of grouped data, however, leads to a problem of heteroscedasticity and the least square estimators are less efficient. Iyengar (1960) suggested another method to calculate the elasticities based on concentration curves, the implicit assumptions being (i) lognormality of total income/expenditure and (ii) constancy of elasticity. The elasticities could also be estimated by the ratio of the Gini Indexes of the distributions of the specific commodity expenditure and the total expenditure, as per the methododology adopted by Kakwani (1980). In this paper an attempt is made to estimate the elasticities of some specific groups, using both the methods based on NSS consumer expenditure survey results. A comparison is also made over the time points covered in 32nd (July 1977 – June 1978) 38th (January 1983 – December 1983) and 42nd rounds of NSS (July 1986 – June 1987).

I
Consumer expenditure pattern over different NSS rounds

The pattern of expenditure for specific groups over the different Rounds of NSS Surveys presented in Table 1 revealed that expenditure on 'food' group accounted for a major share in the total consumption for rural as well as urban households. This share showed marginal increase over the 3 rounds for the rural households, while it declined for urban households. The share of foodgrains declined from 37 per cent to 31 per cent over the 3 rounds for rural households while for the urban, it declined from 24 per cent to 18 per cent. The share of foodgrains in total consumption was relatively low for urban households, compared to that of rural households. The share of milk and milk products in the total consumption was more or less the same (8 to 10 per cent) for rural as well as urban households, eventhough it was increasing over the years. The share of durable goods accounted for 2 to 3 per cent for rural households for the 38 and 42 rounds; the corresponding shares were around 2 to 4 per cent for urban population.

In order to see the differences in the expenditure pattern of various items by different segments of rural and urban households, comparisons were made at the decile group level over the different rounds. The share of expenditure in each decile group was estimated by assuming log normality for total consumption expenditure. These results are presented in Statement 1. It may be seen from the statement that the share of expenditure in each decile class varied marginally over the different Rounds. The share of the lowest decile group was 3-4 per cent

Table 1 : Consumer expenditure as percentage to total expenditure by broad groups of items and by NSS Rounds

Item	Rural				Urban			
	42nd round (1986-87)	38th round (1983)	32nd round (1977-78)	27th round (1972-73)	42nd round (1986-87)	38th round (1983)	32nd round (1977-78)	27th round (1972-73)
1.	2.	3.	4.	5.	6.	7.	8.	9.
Food Grains	31.22	36.27	37.35	45.97	18.34	22.92	24.37	27.18
Milk & Milk Products	9.57	7.52	7.68	7.30	10.32	9.24	9.53	9.33
Food total	65.67	65.58	64.34	72.92	57.07	59.12	59.99	64.49
Clothing	7.53	8.59	8.69	7.00	6.52	7.63	7.05	5.27
Durable goods	3.17	2.27	7.00*	2.15	3.90	2.25	8.85*	2.21
Non-food total	34.33	34.42	35.66	27.08	42.93	40.88	40.01	35.51
Total (All Items)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source :   Key results of consumer expenditure survey (National Sample Survey Special Report No.2, February, 1990).

*   The large share of 7 per cent and 9.0 per cent in respect of durable goods for rural and urban respectively during 32nd Round was attributed to misclassification of certain items (NSSO 44th Round Report).

while the top decile had a share of 22-25 per cent in both rural and urban households in the different rounds.

The following table gives the average of consumer expenditure and corresponding share in total expenditure for different quartiles.

Table 2 : Average amount of consumer expenditure and the corresponding share in different quartiles

	Average (Rs.)			Share (per cent)		
	32 Round (1977-78)	38 Round (1983)	42 Round (1986-87)	32 Round (1977-78)	38 Round (1983)	42 Round (1986-87)
			RURAL			
1st Quartile	28.59	52.04	64.30	10.75	11.70	11.51
2nd Quartile	38.26	67.06	84.22	28.77	30.15	30.15
3rd Quartile	48.21	83.56	104.42	54.38	56.36	56.08
Top 25 per cent	121.33	194.11	245.38	45.62	43.64	43.92
			URBAN			
1st Quartile	37.30	69.15	90.74	9.85	10.65	10.08
2nd Quartile	50.94	80.61	123.19	26.90	28.43	27.37
3rd Quartile	66.13	117.22	158.70	52.39	54.16	52.89
Top 25 per cent	180.30	297.63	424.06	47.61	45.84	47.11

It may be observed from the above table that the average amount of consumer expenditure was relatively high in urban areas when compared to rural in each of the quartiles. However, the structural pattern of expenditure of the households in different quartiles for rural and urban households was broadly similar. For instance, the share of the households in the first quartile was in the range of 10-12 per cent and 44-50 per cent for the top quartile in both rural/urban areas.

II
Elasticities obtained by different methods for
selected groups of items

The unequal distribution of consumption expenditure over the decile classes results in a high degree of inequality. Thus one way of comparing the distribution of consumption expenditure is to compare the measure of inequality over time.

Jain and Tendulkar (1989) studied the inter-temporal and interfractile group movements in the real levels of living. By dividing the nominal fractile-group-specific means by the appropriate retail price index they derived the real-fractile-group-sepcific means. From these they calculated the Gini Indexes and concluded that the differences between the nominal and real Gini Coefficients were not significant. In this paper the distribution of total consumption is approximated to lognormal distribution and inter-temporal comparisons of elasticities are made. In view of the limitations of the application of regression methods for grouped data indicated earlier, we have calculated expenditure elasticities in specific groups by assuming (i) lognormality for the distribution of total consumption expenditure and (ii) by taking the ratios of specific Gini to overall Gini Coefficients of concentration.

The assumption of lognormality was empirically tested by drawing the Lorenz Curves for the original data and theoretical values obtained through lognormal distribution (graphs enclosed). The closeness of the two curves confirms the assumption of lognormality to the consumption data.

Following Iyengar's method, let X be the per capita total expenditure and Y expenditure on specific item. Let log X be distributed normally with mean μ and variance σ^2.
Also $E(Y/X) = A X^n$, where n is the parameter to be estimated

η can be estimated as $\eta = \dfrac{t_{Q_c}}{t_{q_c}}$ $\quad\Big|\quad$ $p_c = -\dfrac{1}{2}$ [@]

where p_c is the proportion of population having per capita total expenditure 'C or less'.
Q_c and q_c are the proportion of total consumption of a specific commodity and all commodities respectively of the population having per capita total expenditure 'C or less'
and t_k stands for probit or abscissa upto which the area under the standard normal curve is k.

In the second method, the expenditure elasticity of the ith commodity (η_i) is equal to the ratio of the Gini Indexes of the ith commodity expenditure (Gi) and the total expenditure (G*) respectively.
Thus $\eta_i = \dfrac{Gi}{G^*}$ The Gini coefficient G is obtained as

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[@]   The details of this derivation are given in Iyengar (1960) and hence not repeated here.

$$G = 1 - \sum_j (P_j - P_{j-1})(Q_j + Q_{j-1})$$

where P_j = cumulative proportion of persons upto j^{th} class interval
Q_j = cumulative proportion of expenditure upto j^{th} class interval.

The results thus obtained are presented below.

Table 3 : Consumer expenditure elasticities

Item		32nd round		38th round		42nd round	
		Rural	Urban	Rural	Urban	Rural	Urban
Foodgrains	A	0.45	0.22	0.46	0.30	0.43	0.27
	B	0.43	0.22	0.45	0.30	0.43	0.28
Milk & Milk	A	2.10	1.35	1.73	1.28	1.52	1.08
Products	B	1.51	1.21	1.54	1.19	1.40	1.03
Food total	A	0.72	0.73	0.78	0.74	0.78	0.71
	B	0.69	0.71	0.76	0.74	0.77	0.71
Clothing	A	1.98	2.03	2.30	2.23	2.34	2.12
	B	1.73	1.76	2.02	1.90	2.01	1.78
Durable goods	A	3.27	2.06	3.12	2.82	3.38	3.09
	B	2.61	1.88	2.63	2.30	2.77	2.20
Non-food total	A	1.58	1.48	1.47	1.42	1.43	1.45
	B	1.56	1.43	1.45	1.37	1.46	1.39

A : Using lognormal distribution
B : Using concentration Ratios

It may be observed that the elasticities of 'food total' were in the range of 0.7 - 0.8 for both rural and urban areas in different rounds in both the methods. However. at the sub-group level the elasticities in respect of food grains were in the range of 0.4 - 0.5 for the rural areas in all the rounds and were consistently higher than those observed for urban areas which moved in the range of 0.2 - 0.3. The elasticities in respect of 'food grains' were lower than that of 'food total' because it includes not only food grains but also relatively more luxury items of

consumptions like milk and milk products, where elasticity exceeded unity in both urban and rural areas. This could be due to the uneven distribution of milk products over the population. Elasticities in respect of non-food total and also at disaggregate level for clothing and durable goods exceeded unity in both rural and urban areas.

In general, the elasticities obtained using the lognormal distribution appear to be consistently higher than those obtained by the other method. This may be due to the fact that the estimate of elasticity depends on parameters of lognormal distribution; these in turn, get vitiated by the open intervals of the size variable. Another point to be borne in mind is that the elasticities estimated in this paper are at subgroups. At the item level, however, the estimates of elasticity may be different.

The inequalities in the distribution of consumption expenditure between rural and urban households for different items are presented in Table 4. The coefficient of concentration revealed that over the different rounds, there is a marginal reduction in inequality in consumer expenditure in rural areas declining from 0.34 in 1977-78 to 0.30 in 1986-87. In the case of urban areas also, the coefficient showed only marginal variations in a narrow range of 0.33 - 0.34, indicating that the inequalities in urban areas remained almost invariant over the decade. However, one interesting feature was that in each of the rounds, the inequality coefficient in urban areas exceeded that of rural areas, *albeit* marginally.

Table 4 : Concentration Ratios

Item	32nd round		38th round		42nd round	
	Rural	Urban	Rural	Urban	Rural	Urban
Foodgrains	0.14	0.08	0.13	0.10	0.13	0.09
Milk & Milk Products	0.51	0.42	0.46	0.39	0.42	0.34
Food total	0.23	0.25	0.23	0.24	0.23	0.24
Clothing	0.58	0.61	0.60	0.62	0.60	0.59
Durable goods	0.88	0.65	0.78	0.75	0.82	0.73
Non-food total	0.52	0.49	0.43	0.45	0.43	0.46
All Items	0.34	0.34	0.30	0.33	0.30	0.33

III.
Concluding observations

In this study the skew distribution of consumer expenditure in the different rounds of NSS is approximated by a lognormal distribution and inter-temporal comparisons of the share of expenditure in the total for some broad commodity groups in different deciles is made. This will incidentally circumvent the probem of non-comparability of the data sets in different time periods. As an extension of this, expenditure elasticities for different broad groups of commodities are also worked out under assumptions of lognormality. Elasticities are also worked out using the Gini Coefficient of concentration curves with reference to a specific commodity group vis-a-vis all items. The following are the important findings of the study.

1. There was a substantial fall in the proportion of expenditure on food grains over the years both in rural and urban areas; in rural areas the decline was from 37 per cent in 1977-78 to 31 per cent in 1986-87 whereas in urban areas the decline was from 24 per cent to 18 per cent. The share of expenditure on non-food items showed a marginal decline in rural areas whereas in urban areas this share increased marginally over the years. The share of expenditure of each decile group in the total consumer expenditure varied marginally from round to round. The share of expenditure in the lowest decile group was only about 3-4 per cent in both rural and urban areas, while the top decile had more than 20 per cent share of the total expenditure. The average amount of expenditure in urban areas was consistently higher than that in rural areas but the structural pattern of expenditure in urban and rural areas was broadly similar.

Elasticities derived from using lognormal distribution and those obtained from Gini's concentration ratios are dimensionally comparable in respect of essential commodities; in case of luxury goods elasticities obtained using lognormal distribution are consistently higher than those obtained using concentration ratios for reasons mentioned in the previous section.

The elasticities in respect of food total were in the range of 0.7-0.8 both for rural and urban areas in different rounds, whereas the elasticities in respect of 'food grains' were marginally lower and moved in the range of 0.4 - 0.5 in the rural areas and 0.2 - 0.3 in the urban areas. The commodities which came under the category of luxury items were 'milk and milk products', 'clothing' and 'durable goods'.

In each of the rounds the inequality coefficient in respect of 'all items' in urban areas exceeded that of rural areas indicating that inequalities in consumer expenditure are more pronounced in urban areas as compared to rural areas.

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Statement 1 : Consumer Expenditure : Share of expenditure in each decile group (Rural)

(Per cent)

Decile Group	Food grains			Milk & milk Prod.			Food total			Clothing			Durable goods			Non-food total			All items		
	32	38	42	32	38	42	32	38	42	32	38	42	32	38	42	32	38	42	32	38	42
0-10	5.59	6.18	6.18	0.89	1.00	1.46	4.27	4.46	4.36	0.87	0.68	0.60	0.38	0.33	0.25	1.88	2.22	2.27	3.22	3.59	3.59
10-20	6.92	7.39	7.39	1.79	2.05	2.63	5.76	5.92	5.84	1.75	1.44	1.32	0.91	0.80	0.64	3.17	3.60	3.66	4.71	5.10	5.10
20-30	7.82	7.91	7.91	2.58	2.87	3.69	6.82	6.98	6.91	2.54	2.15	2.08	1.52	1.31	1.13	4.29	4.75	4.81	5.86	6.23	6.00
30-40	8.44	9.02	9.02	3.59	4.07	4.73	7.66	7.78	7.72	3.54	3.22	2.94	2.24	2.02	1.74	5.35	5.78	5.85	6.82	7.15	7.38
40-50	9.44	9.24	9.24	4.94	5.08	5.90	8.49	8.58	8.89	4.88	4.21	4.00	3.18	3.04	2.55	6.50	7.23	6.98	8.16	8.08	8.08
50-60	9.80	9.86	9.86	6.27	6.52	7.70	9.47	9.92	9.53	6.20	5.66	5.66	4.69	4.21	3.90	7.93	8.34	8.70	9.06	9.21	9.21
60-70	10.70	10.66	10.66	8.37	8.57	9.46	11.12	10.74	10.73	8.33	7.78	7.60	6.57	6.18	5.67	10.24	10.15	10.19	10.58	11.04	10.64
70-80	11.83	11.64	11.64	11.70	11.66	12.04	11.95	12.26	12.30	11.64	11.18	11.00	9.97	9.55	8.96	12.23	12.70	12.70	12.62	12.15	12.55
80-90	13.14	12.71	12.71	17.40	16.84	17.19	14.40	14.14	14.23	17.40	17.27	17.19	16.56	16.21	15.69	16.85	16.46	16.40	15.39	15.09	15.09
90-100	16.35	15.39	15.39	42.47	41.27	35.20	20.06	19.22	19.49	42.86	46.41	47.61	53.98	56.36	59.48	31.56	28.77	28.43	23.58	22.36	22.36
	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Statement 1 : Consumer Expenditure : Share of expenditure in each decile group (Urban)

(Per cent)

Decile Group	Food grains			Milk & milk Prod.			Food total			Clothing			Durable goods			Non-food total			All items		
	32	38	42	32	38	42	32	38	42	32	38	42	32	38	42	32	38	42	32	38	42
0-10	6.55	6.94	7.08	1.46	1.88	2.28	3.92	4.27	4.27	0.62	0.45	0.38	0.80	0.23	0.07	1.74	1.92	1.62	2.87	3.22	2.87
10-20	7.68	7.98	8.07	2.63	3.17	3.54	5.42	5.76	5.76	1.35	1.05	0.91	1.64	0.59	0.23	2.91	3.23	2.84	4.34	4.71	4.62
20-30	8.43	8.66	8.74	3.69	4.13	4.74	6.53	6.82	6.57	2.12	1.72	1.52	2.40	1.06	0.43	4.04	4.36	3.92	5.50	5.86	5.43
30-40	8.90	9.06	9.11	4.73	5.28	5.79	7.40	7.66	7.60	2.99	2.49	2.24	3.38	1.64	0.77	5.10	5.41	4.97	6.51	6.82	6.57
40-50	9.73	9.43	9.47	5.90	6.73	6.92	8.29	8.49	8.80	4.04	3.47	3.18	4.69	2.42	1.31	6.27	6.85	6.14	7.87	7.82	7.94
50-60	9.91	10.32	9.92	7.70	7.93	8.65	9.73	9.86	9.47	5.73	5.05	4.69	6.02	3.57	2.04	8.04	8.04	7.94	8.85	9.02	8.89
60-70	10.59	10.54	10.54	9.46	9.85	10.15	10.70	10.73	10.72	7.66	6.67	6.57	8.15	5.41	3.38	9.73	9.93	9.64	10.47	10.56	10.49
70-80	11.45	10.96	11.29	12.04	12.62	12.31	12.07	11.95	12.35	10.69	10.31	9.97	11.50	8.66	6.00	12.57	12.65	12.53	12.68	12.63	12.67
80-90	12.30	12.10	11.99	17.19	16.85	16.50	14.75	14.40	14.41	17.19	16.80	16.36	17.37	15.39	12.20	16.96	16.76	17.04	15.77	15.47	15.69
90-100	14.46	14.01	13.79	35.20	31.56	29.12	21.19	20.06	20.05	47.61	51.99	54.18	44.04	61.03	73.57	32.64	30.85	33.36	25.14	23.89	24.83
	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Appendix

NSS 32ND ROUND

Consumer expenditure (Rs. 0.00) per person for a period of 30 days by broad groups of items and by monthly per capita expenditure class

Rural

Items	monthly per capita expenditure classes in rupees									
	0-30	30-40	40-50	50-60	60-70	70-100	100-150	150-200	200 & above	all expenditure classes
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Food grains	13.99	19.51	23.05	25.97	28.04	30.80	34.46	38.30	46.79	25.74
Milk and milk products	0.43	1.06	2.08	3.42	4.98	8.11	13.91	20.90	27.52	5.29
Food total	18.93	27.63	34.44	40.95	46.73	56.33	72.55	91.95	122.81	44.33
Clothing	0.52	1.09	1.93	3.07	4.56	7.58	15.33	28.26	62.89	5.99
Durable goods	0.09	0.20	0.36	0.65	0.92	1.75	4.10	8.85	208.83	4.82
Non-food total	4.99	7.62	10.50	13.85	17.93	26.08	46.27	78.32	366.69	24.56
Total expenditure	23.92	35.26	44.94	54.80	64.66	82.41	118.82	170.27	489.50	68.89
Percentage of persons	10.10	15.54	17.24	14.90	11.46	17.92	8.82	2.28	1.74	100.00

NSS 32ND ROUND

Consumer expenditure (Rs.0.00) per person for a period of 30 days by broad groups of items and by monthly per capita expenditure class

Urban

Items	monthly per capita expenditure classes in rupees									
	0-30	30-40	40-50	50-60	60-70	70-100	100-150	150-200	200 & above	all expenditure classes
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Food grains	10.59	15.03	17.31	18.79	19.85	21.15	22.08	23.08	24.00	20.00
Milk and milk products	0.71	1.51	2.57	4.05	5.47	8.41	13.71	19.91	29.11	9.16
Food total	18.23	27.17	33.90	40.07	46.11	56.00	73.22	95.07	131.82	57.67
Clothing	0.28	0.57	0.83	1.52	2.19	4.05	9.04	15.61	40.72	6.78
Durable goods	0.40	0.78	1.28	1.87	2.59	4.41	8.96	15.82	64.60	8.55
Non-food total	5.51	8.37	11.26	14.82	18.77	27.31	47.34	75.88	196.33	38.48
Total expenditure	23.74	35.55	45.16	54.89	64.88	83.31	120.56	170.95	328.16	96.15
Percentage of persons	3.19	7.25	10.87	12.23	11.37	24.54	17.43	6.62	6.38	100.00

NSS 38TH ROUND

Consumer expenditure (Rs.0.00) per person for a period of 30 days by broad groups of items and by monthly per capita expenditure class

Rural

Items	monthly per capita expenditure classes in rupees									
	0-30	30-40	40-50	50-60	60-70	70-100	100-150	150-200	200 & above	all expenditure classes
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Food grains	14.09	20.81	25.31	29.22	32.82	38.69	45.31	51.03	59.92	40.77
Milk and milk products	0.15	0.52	1.04	1.65	2.54	4.85	9.86	16.97	27.64	8.45
Food total	18.98	27.83	35.16	42.04	49.14	62.06	82.53	106.42	149.79	73.73
Clothing	0.31	0.41	0.70	1.22	1.80	3.50	8.69	18.70	50.28	9.66
Durable goods	0.02	0.04	0.08	0.14	0.25	0.41	1.21	3.38	20.97	2.55
Non-food total	5.88	8.00	10.27	13.19	16.02	22.35	38.28	64.71	147.87	38.71
Total expenditure	24.86	35.84	45.44	55.24	65.17	84.42	120.84	171.14	297.67	112.45
Percentage of persons	0.92	2.47	5.11	7.90	9.69	28.88	26.99	9.78	8.26	100.00

NSS 38TII ROUND

Consumer expenditure (Rs.0.00) per person for a period of 30 days by broad groups of items and by monthly per capita expenditure class

Urban

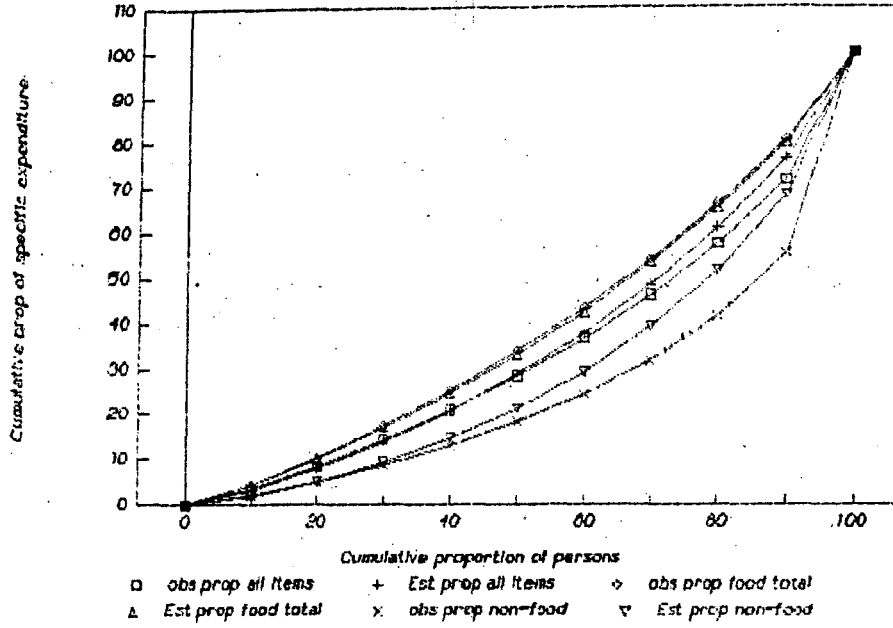| Items	monthly per capita expenditure classes in rupees									
	0-30	30-40	40-50	50-60	60-70	70-100	100-150	150-200	200 & above	all expenditure classes
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Food grains	9.01	16.97	21.17	24.37	27.30	32.17	37.34	41.01	45.68	37.58
Milk and milk products	0.39	0.95	1.38	2.44	3.58	5.73	11.11	17.69	32.11	15.15
Food total	14.57	26.93	34.20	41.31	47.81	61.08	82.95	106.76	162.83	96.97
Clothing	0.11	0.13	0.38	0.40	0.82	1.88	4.55	10.92	38.36	12.52
Durable goods	0.05	0.01	0.07	0.08	0.12	0.24	0.73	1.83	13.37	3.69
Non-food total	7.35	8.88	11.50	14.23	17.44	24.31	39.96	65.20	162.99	67.06
Total expenditure	21.92	35.81	45.70	55.54	65.25	85.39	122.92	171.96	325.82	164.03
Percentage of persons	0.21	0.51	1.40	2.93	4.92	20.16	30.30	16.31	23.26	100.00

NSS 42ND ROUND

Consumer expenditure (Rs.0.00) per person for a period of 30 days by broad groups of items and by monthly per capita expenditure class

Rural

Items	monthly per capita expenditure classes in rupees									
	0-30	30-40	40-50	50-60	60-70	70-100	100-150	150-200	200 & above	all expenditure classes
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Food grains	5.83	18.69	22.73	26.97	31.24	36.84	45.16	51.06	58.72	44.02
Milk and milk products	0.13	0.70	1.11	2.10	2.45	5.42	10.84	19.01	32.97	13.48
Food total	10.16	28.08	34.54	42.29	49.87	63.56	87.87	114.69	162.35	92.55
Clothing	0.68	0.18	0.39	0.73	0.84	2.28	5.54	13.03	38.57	10.61
Durable goods	0.00	0.04	0.13	0.09	0.13	0.24	0.89	2.05	23.79	4.46
Non-food total	6.55	8.20	11.16	13.29	15.35	21.41	30.26	55.91	137.73	48.38
Total expenditure	16.71	36.28	45.70	55.49	65.22	84.97	121.77	170.60	300.08	140.93
Percentage of persons	0.30	0.72	1.83	3.83	5.94	24.14	31.08	16.27	15.89	100.00

NSS 42ND ROUND

Consumer expenditure (Rs.0.00) per person for a period of 30 days by broad groups of items and by monthly per capita expenditure class

Urban

| | monthly per capita expenditure classes in rupees | | | | | | | | | |
| | 0-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-100 | 100-150 | 150-200 | 200 & above | all expenditure classes |
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Food grains	2.54	22.00	18.85	22.38	25.58	31.84	36.76	42.23	47.91	41.45
Milk and milk products	0.00	0.61	1.61	2.05	3.84	6.54	12.05	19.61	38.25	23.32
Food total	4.30	31.01	33.42	40.90	48.25	64.80	87.67	116.23	184.91	128.99
Clothing	0.00	0.00	0.67	0.55	0.43	0.82	2.46	6.60	31.27	14.73
Durable goods	0.00	0.00	0.03	0.11	0.06	0.15	0.39	1.34	20.83	8.81
Non-food total	11.86	6.89	11.72	15.05	17.12	21.88	36.95	56.91	181.11	97.03
Total expenditure	16.16	37.90	45.14	55.95	65.37	86.68	124.62	173.14	366.02	226.02
Percentage of persons	0.06	0.09	0.35	1.08	1.70	11.17	24.05	21.09	40.41	100.00

concentration curves

32 Round Rural

□ obs prop all items   + Est prop all items   ◇ obs prop food total
▲ Est prop food total   × obs prop non-food   ▽ Est prop non-food

concentration curves

32 Round Urban

□ Obs prop all items   + Est prop all items   ◇ Obs prop food total
▲ Est prop food total   × Obs prop non-food   ▽ Est prop non-food

concentration curves

38 round rural

□	Obs prop all items	+	est prop all items	⋄ obs prop food total
△	est prop food total	×	obs prop non-food	▽ est prop non-food

concentration curves

38 round urban

□	obs prop all items	+	est prop all items	⋄ obs prop food total
△	est prop food total	×	obs prop non-food	▽ est prop non-food

concentration curves

concentration curves

BOOK REVIEWS

Public Policy and Economic Development, Edited by Maurice Scott and Deepak Lal, Clarendon Press, Oxford, 1990, pp. XVIII + 396, Rs.275.

THE history of mankind is dotted with instances of conflict of interest arising mainly due to uneven factor endowments, and differences in levels of economic development and living standards. Such differences pose opportunities and challenges for economists to develop analytical tools that help to address the problems of the day and for policy makers to work out pragmatic policies that help achieve the goal of maximum social welfare. Over time, a myriad of economic theories have in fact been developed on the basis of the observed phenomena. These theories fall in different areas of public policies. Among the economists who made such contributions, Professor Ian M.D. Little stands out distinct. Prof. Little's initiative in conducting a comparative countries project in the World Bank on "Macro-eonomic Policies, Crises and Long-Term Growth" is a unique analytical attempt to emphasise the need for year-to-year macro-economic adjustment in developing countries in contrast to excessive preoccuption with five-year plans and long-run structural changes. Without a reference to Professor Little's contributions to modern economic policies in respect of trade, aid, exchange rate, planning, taxation, development and above all, social welfare, no literature on analytics of policies would be complete. As Francis Seton in his personal memoir, described Prof. Little's versatility thus: "developmental economists of his calibre, it seems, far from dying, never really retire; they do not even fade away."

The volume under review is in honour of Professor Little. It is a collection of sixteen articles including Francis Seton's piece. Barring Angus Maddison's article on "The Colonial Burden : A Comparative Perspective" which does not fit into the thematic scheme of the book, the rest of the articles deal essentially with macro-economic adjustment policies and related issues.

Max Corden's article "Macro-economic Adjustment in Developing Countries" discusses about how a country, confronted with deficit in

the balance of payments and with high inflation, could reduce both the problems at minimum cost. Devaluation, as Corden has argued, has an inflationary bias but could be successful if accompanied by reduction in expenditure which involves primary and secondary adjustment costs. The former i.e., primary adjustment costs, arising out of large-scale switching in the presence of factor price flexibility is unavoidable, while the latter, i.e., secondary adjustment costs, results in losses in terms of unemployment and under-utilisation of capacity caused by failure to devalue sufficiently, by real wage resistance or by inappropriate use of import substitution. His exposition with respect to redistribution effects of devaluation, capital flight and structural rigidities arising out of low import and export elasticities is pessimistic, and reminiscent of the widely held views in the literature. In most developing countries, continuous budget deficits, as Corden observed, have been responsible for balance of payments problem because a part of the former is often financed by foreign borrowings. When external sources dry up or when countries face problems in servicing their debts, Governments rely more on monetisation of fiscal deficit. This, however, gives rise to inflation, the consequences of which are well known. The costs involved in reducing inflation are high, but Corden shows that they could be minimized by reducing real government expenditure or increasing non-inflation taxes.

Small open developing countries often face unavoidable economic fluctuations due to exogenous causes, such as, increase or decrease in commodity prices which are often temporary in nature. David Bevan, Paul Collier and Jan Gunning in their article "Economic Policy in Countries Prone to Temporary Trade Shocks" examine sets of public policies and apprehend that errors in government policy may completely wipe out the entire windfall gains (arising out of trade boom) during the period of slump. In the case of Nigeria, following oil boom, the Government adopted an expansionary fiscal policy which became irreversible in the post-boom period. Nigeria continued to borrow from the external market till it lost its credit-worthiness in the world capital market. On the other hand, the coffee boom in the case of Kenya and oil price hike by Indonesia were recognised to be temporary phenomena by the two governments. Therefore, the pre-shock control regimes in these countries were largely maintained with the result that they could withstand the impact of the decline in prices of the respective commodities in the subsequent period. While these experiences are eye openers for policy makers, every small open economy should try to diversify its exports by utilising the windfall gains whenever they occur and refrain from making unproductive use of them.

After the collapse of the par value system in the early 1970s, countries could opt for any of the exchange rate policies varying from single-currency pegging to independent floating. The relative merits and demerits of different types of exchange rate arrangements are examined by Vijay Joshi in his article "Exchange Rate Regimes in Developing Countries". The effectiveness of an exchange rate system lies in achieving an appropriate level of real effective exchange rate at minimum sacrifice. The author has shown that a managed floating exchange rate pegged to a basket of currencies would be ideal for a developing country which is really a 'modified purchasing power parity crawl'. Under such an arrangement, exchange rate can be regularly adjusted to compensate for the difference between the domestic and foreign inflation rates. Simultaneously, the arrangement could be used to override the rules to rectify the past misalignment of the real exchange rate or to tackle a permanent real shock. However, the article has not addressed certain wider issues involved in exchange rate management. For instance, is it useful to have a managed floating exchange rate system with strong regime of exchange and trade controls? Or, will the real effective exchange rate policies work if price controls and distribution controls operate especially in respect of many consumer goods or tradeable goods? The need for having a flexible exchange rate is never questioned, but it need not assume overriding importance in circumstances where the causes of imbalance in the economy lie elsewhere.

Developing countries depending substantially on exports of a few primary commodities for their foreign exchange earnings are prone to macroeconomic instability because of wide fluctuations in the prices of those commodities. David M. Newbery has examined various costs of instability, such as the cost of price risk, the cost of income risk and the cost of misperception, which could be reduced by several methods, of which publicly owned buffer stocks is an important one. However, he has argued that alternative measures, such as lending and borrowing, future market intervention etc., which would be less costly than opting for buffer stock to stabilize the commodity prices, the experience about which has been discouraging. Despite high cost to the producers and stock holders, buffer stock programme is often preferred by countries as it prevents unanticipated price shocks which often make macro-economic adjustment difficult in the small open economies.

Macro-economic policies of the developing countries discussed individually by John Page, Sudhir Mulji and G.M. Meier, in the next

three articles, show that they are mostly inward-looking and have generally been unsuccessful. In order to escape fluctuation of commodity prices in the international markets, most of the developing countries pursued, as John Page observes, policies of protection from foreign competition, of provision of subsidised credit and of direct public investment in industry which, however, could not improve productivity over time. On the contrary, in certain cases, productivity has declined, which means, these countries have become relatively inefficient. Influenced by the contemporary writings, policy makers in most of the developing countries turned out to be planners, preoccupied with the idea of public sector occupying 'commanding heights'. Sudhir Mulji argues that the autonomy of the public enterprises in India has been sacrificed for accountability to parliament even though it has the best chance of improving productivity, as the Japanese model shows. Immediately after the Second World War, suffering from elasticity pessimism and uneven gains from trade (Singer, Prebisch, Myrdal, Nurkse et al), import substituting industrialisation (ISI) has predominated against export-led growth strategy in developing countries. G.M. Meier has categorically explained how 'ISI Syndrome' has imposed dynamic losses to economies in contrast to successful experience of Hong Kong, Taiwan, Republic of Korea and Singapore which adopted export oriented programmes. The author is optimistic about the success of other developing countries if they adopt outward-looking export strategy.

Although virtues of free trade are advocated by economists, governments/bureaucrats have strong attachment for protection. The question to ask is why is it that official preferences for protection are so strong as to go against plausible theoretical structure. Anne Krueger citing the US policy with respect to sugar, concluded that protection, once instituted, develops complexities and has a life of its own. It may not be always successful nor do the interest groups correctly perceive their long-term interests.

As alternatives to import substitution, Jagdish Bhagwati in his article has examined a set of other possibilities and concluded with a preference for direct foreign investment (DFI). Traditionally, foreign firms prefer to invest in a country to 'jump over the tariff wall'. But this should be distinguished, as the author has done, from 'tariff-threat-reducing DFI'. The USA, for example, persuaded its foreign rivals in Japan to invest in USA and thus reduced the threat of protection against goods coming from Japan. This type of *quid pro quo* DFI which is primarily meant for avoiding trade friction is no doubt a model

worth considering. But it is against the ideals of market determined capital flows and is not perhaps universally applicable, especially when the trading partners are at different levels of development with different trade and exchange control regimes. This of course is not to say that DFI is not a worthwhile option for policy makers in developing countries.

A relatively more detailed survey has been made by Deepak Lal on international capital flows where the author has examined the relative merits and demerits of different types of capital flows to the developing countries. Until the mid-1970s, DFI and official flows were the major forms of international capital flows to the third-world countries. These were overshadowed by private portfolio lending in the form of syndicated bank loans and extension of private export-credit in the subsequent period. The new forms of foreign capital flows have, however, turned out to be a mixed blessing for many recipients since they soon got into severe debt crises. Growing 'aid fatigue' on the part of the donor countries, decline in syndicated bank loans, and the need to ensure that adjustment efforts are supported by adequate financing from outside, have in recent years led to revival of interest in augmenting official flows and in promoting DFI as an important means of financing the gaps. This scheme would succeed, if there is world-wide integration of capital markets, about which the author is very optimistic.

Working on Professor Little's important idea of having an ideal tax policy for a developing country, Ehtisham Ahmad and Nicholas Stern emphasise that the tax system must pay attention to its effects on incentives, distribution of income, efficiency of production and above all, on the amount of revenue raised. They suggested some guiding principles, at the end of their article such as lump-sum taxes and transfers wherever possible, indirect taxes mainly on final consumption, pricing of the public goods at marginal social cost for intermediate goods and at a little higher cost if it is for final consumption etc. But these appear to be broad generalisations that may not be applicable to all the developing countries.

For any investment decision which is preceded by cost-benefit analysis, one is confronted with actual pricing of inputs and outputs. The problem is compounded when social costs and social benefits are included in the cost-benefit analysis. In the literature, this is addressed through the logic of 'shadow pricing'. Maurice Scott in his piece on "Social Cost-Benefit Analysis" has thoroughly analysed the problems associated with shadow pricing, such as, the unequal weighting of

benefits, the choice of numeraire, the rate of discount, the pricing of commodities and the shadow wage of unskilled labour. Although shadow pricing is useful for improving investment decisions, economists are divided in their opinion as to the solutions to the issues raised by the author.

The dynamics of population growth and their impact on socio-economic development have several facets which Goran Ohlin has discussed from the point of view of uneven demographic trends over different regions of the world and the international mobility of labour. He agrees with the views that 'migration is selective' (Myrdal) and that migration causes 'brain drain' (Bhagwati). Despite immigration restrictions, only the enterprising labourers migrate in response to opportunities available in the developed countries and deprive the parent country of their services. And developing countries, as experience shows, should not create such conditions that force the best talents to desert them.

Wages are commonly observed as very high in large firms and are maintained at such higher levels by institutional factors compared to those in small firms and therefore, a case is made out to restrict employment in large firms, and protect the small firms for employment generation. This sort of dualism in the urban labour market, particularly in private sector, has been challenged by Dipak Mazumdar on grounds of inefficiency of the migrant workers engaged in the small sectors. Citing the case of Indian experience, he observes that protection extended to small firms has done extensive damage to the economy and, therefore, suggests that government should be more selective on equity ground while protecting the small firms. The small scale sector should be gradually integrated into the large scale sector over time as in Japan.

The volume has much to offer by way of suggestions to policy-makers in developing countries. But, it is always necessary to place faith in empricial verification in one's own unique institutional setting before accepting all the suggestions blindly. It is this independence of judgement on policy perspectives that Professor Little has sought to promote. And that is indeed the main message that a perceptive reader would get on going through this interesting volume.

– B.K. Bhoi*

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World Development Report 1991, World Bank, Washington DC, 1991, pp xii + 290.

THE latest World Development Report (WDR), 1991 is an attempt to synthesize and interpret the lessons of more than forty years of development experience. Titled as 'The Challenge of Development', the Report makes a crucial point about the role of government and its relation with market and suggests that government and private sectors should interact in order to improve the living standards of the economies. Clearly, there is no place for any one of the two extremes - complete *laissez faire* or complete command economy in the present day world.

The Report has in all 8 chapters, replete with considerable historical evidence. Chapter 1 sets the tone by arguing that because of the single most contribution of technology, developing countries could make dramatic economic progress in a record time compared to the time-period taken by the now industrialised countries. Yet, almost a quarter of developing countries have experienced decline in their living standards in the last three decades. Despite these differing development experiences, progress is possible even for those countries which are expected to fail, as the Report contends. This optimism arises out of the fact that new technologies could be effectively used if appropriate political, economic and social institutions are created, trade liberalized and macroeconomic policies appropriately pursued.

The idea that technical progress is a critical determinant of economic growth is already well known to students of growth economics, thanks to the perceptive contributions of Nicholas Kaldor and Robert Solow. But technical progress should be complemented by requisite increases in capital and labour. The WDR has, it seems, no problem in accepting this premise but adds an important dimension of the need to have appropriate institutions and policies so that growth rates are high and sustainable. As the subsequent chapters show, the Report also focuses on the important aspect of the *kind* or pattern of development as the index of economic progress.

Chapter 2 is the most critical one of the Report, according to this reviewer. It discusses the real meaning of economic progress, as one that must, at a minimum, look beyond growth in per capita incomes and focus on reductionof poverty and inequity, progress in education, health, and nutrition and protection of the environment. 'The challenge of development', according to WDR 1991 in the broadest sense is thus to improve the quality of life. The chapter argues that the dominant paradigms of development have shifted by the early 1980s from the ones in the earlier periods which emphasised (a) rapid accumulation of capital; (b) farm sector as a provider of infant industries which need protection; (c) import substitution; and (d) the role of the State to direct the development process. After highlighting the economy experiences (of China, India, Nigeria, Brazil, Argentina, Malaysia, Sri Lanka, the Republic of Korea, Hong Kong, Singapore, Taiwan, and some OECD countries), the chapter suggests that recent studies have shown that sustained development can be promoted by policies which promote outward-orientation, and that severe and prolonged macroeconomic imbalances hurt investment and growth. The chapter then analyses the growth process through the estimation of total factor productivity. It is here the writers of the Report show considerable skills in working out the do's of policy making for economic progress. As they point out, and elaborate in three successive chapters, productivity growth would be positively affected by investments in education, and by openness and competition, while increase in the share of government consumption in GDP would result in a decline in productivity growth later on. The chapter also stresses the need for greater effectiveness in absorbing foreign aid and for providing "basic needs" for the economically vulnerable sections of people.

In a sense, this chapter can be treated as one that suggests a strategy of development. But is this really 'new'? Does it not remind one of the debate about balanced growth versus unbalanced growth in the literature? Is it not reminiscent of much of Albert Hirschman's *The Strategy of Economic Development*, published in 1958? Can the suggested development paradigms of 1980s be applied *with minimal cost* to economies which have been brought up on the paradigms of the earlier period? Is it not possible to have States play major role in economic activity *in the early stages of development* when capital markets are not developed and entrepreneurship and skill formation are inadequate? If the economies have invested inappropriately in uneconomic activities, is it not possible to think of diverting it into desirable activity-channels ('malleability' of capital) and enhance productivity.

To be fair, the Report answers most of these questions implicitly in Chapters 6 and 7 which deal respectively with 'the macroeconomic foundation' and 'rethinking the State'. In the view of the Report, stabilization policies apart, economies could adopt structural reforms in different areas - fiscal, price formation, public enterprise - in different combinations. Yet, as the Report argues, history suggests some 'general principles' on timing, speed, and sequencing. One is led to agree that there are general principles. This is where one has to be careful in preferring enthusiasm for the seemingly new paradigms to ground realities. No reform, it must be said, would succeed if there is no predominant support of the people. One should be also careful in not confusing the wisdespread debunking of the State and bureaucracy for ready acceptance of the active role for the private sector which, in many poor economies, has not established any credible reputation for fairness and hardwork.

These observations are not to be construed as opposition to the ideas expressed by the Report. They are intended essentially to sound notes of caution to making universal generalizations of some of the historical experiences. Countries with their unique institutional, and socio-political set up, need to work out only those measures that work. There is no doubt much to be said in favour of incentives and 'market friendly' approaches - a point that is most eloquently echoed by people who were subjected till recently to totalitarian economic regimes as in East Europe and Soviet Union. But, there is a point upto which States have active roles to play especially where foreign capital inflows are not high. *A priori* it is difficult, however, to pin-point the exact stage from which the State's role has to be gradually deemphasized and reoriented towards investments in human resources and infrastructure. This is where much research effort is required on country-specific basis. And such efforts have to be necessarily inter-disciplinary.

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Role of Trade Unions in Productivity Improvement – Papers, Proceedings and Conclusions of the National Conference, Edited by G.K. Suri and Ajit Singh, National Productivity Council, New Delhi, 1990, Price Rs.150.00, pp.152

THIS book, brought out by the National Productivity Council (NPC) contains, as the title indicates, a gist of the discussions together with the theme papers, presented by participants at the three day National Conference on the "Role of Trade Unions in Productivity Improvement" which was organised by the NPC in collaboration with the Ministry of Labour, Government of India and the International Labour Organisation (ILO), New Delhi, in February 1990. The participants were trade union (TU) leaders, management representatives and management professionals. The focus of the Conference was on providing a forum to the TU leaders to share their views and experiences on an issue somewhat of an anathema to them, viz., their role in promoting productivity.

That all the Central level Trade Union organisations participated in the Conference and a consensus among them to implement policies and strategies on productivity improvement, emerged, can indeed be termed a remarkable achievement. NPC has, in the ultimate, been able to come out with a distinct set of guidelines for effective implementation of productivity improvement measures.

The subjects covered by the Conference were Productivity and Technological changes and implications and involvement of TUs and workers therein; Productivity agreements between unions and Management; Labour participation in Management; Participative culture and Small group activities, and Sharing of the gains of productivity.

The views put forth by the participating TU organisations (viz. All India Trade Union Congress, Bharatiya Mazdoor Singh, Hind Mazdoor Sabha, United Trade Union Congress, etc.), echo the predictable approach of unions when they assert that the task of promoting productivity in industry is that of the management, viz. creating an

envioronment in which the worker can feel enthused to contribute his best. Politicization and proliferation of TUs leading to inter/intra-union rivalry are cited by them as obstacles affecting the worker's drive for productivity. For example, for fear of being branded a stooge of the employer, very few unions were prepared to shape workers' attitude to a productivity oriented one.

Despite this damper of cold reality, it is cheering to hear majority of TUs agreeing that they do have equal social responsibilties in the matter of productivity. They concede that the awareness of productivity is still confined to the top level TU leaders, and agree that the same is required to percolate to the lowest level shopfloor workers. They opine that the better educated workforce of today `should be trained and motivated by TUs for fuller involvement in the productivity movement. The TU leaders are, however, unequivocally and understandably guarded on the issue of adoption of higher technology to improve productivity, due to some perceived implication of possible curtailment of jobs. They strongly feel that while making productivity improvement plans in organisations, in addition to areas of engineering, accounting, etc., the employment aspect of the Plan should also be studied with utmost emphasis. Almost all TUs were in favour of indigenous technological development in a phased manner instead of technical import. They also stressed transfer of technology to rural sector. Some TUs have suggested that high-power Committees for agariculture, agro-industries, manufacturing and service industries at the national level may be formed, with equal representation of the Government, employers, employees and consumers, wherein NPC could work as co-ordinator to plan and evolve ways and means of improving productivity. One of the TU organisations has cited the improvements which have accured as a result of productivity agreements between labour and management.

The case study in question pertains to the Steel Authority of India Ltd., where we are informed that the agreement was, inter alia, in the areas of improving yields, improving quality in all operations, attaining 95-100% capacity utilization in each plant, mutual identification of wasteful practices/expenditure for reducing costs and increasing operational efficiency. The improvements effected consisted of optimising manpower through redeployment, training 2000 'key' category workers in multi-skills (viz. coke-oven-machine operator), increasing availability of workmen on the shop-floor (through reduction in shift change delays/extension of mobile canteen services to the shop-floor), near total elimination of overtime with saving of Rs.40 crores annually

and raising of labour productivity from 49 tons per man year in 1984-85 to 64 tons per man year in 1989-90. It can be discerned from the discussions that TUs felt that peaceful industrial relations and workers' involvement in decision-making, especially in the formulation of a productivity improvement policy–both in the public and private sectors –were necessary pre-requisities for TUs to motivate workforce towards productivity.

The other side of the picture is reflected in the views of the management professionals and delegates representing management in Indian industry. They emphasized an imminent need for shift from confrontation to cooperation between TUs and management. The paper by a management professional from IIM, citing examples from developed countries like U.K., Japan, United States and Australia, felt that technological change (which was an important instrument for raising total as well as labour productivity) can be introduced in a phased manner in industry in our country, in consultation with the TUs without undue displacement of labour. The TUs seemed inclined to concur with this suggestion.

The management representatives stressed on the need for small group activities like Quality Circles (Q.C.), suggestion schemes and autonomous work groups in the organization to develop a sense of team work across all sections of the organization and to mobilize the creative resources of the employees to work towards organisation - wide improvement. The success rate of the Q.Cs. (there are reported to be more than 6000 QCs in about 360 organizations) is, however, not high in India because of the prevailing working culture in the organizations, lack of interest of management and workers in Q.Cs, non-implementation of Q.C. recommendations, change of management. etc. Systematic training of employees and management would help in changing the prevailing culture.

On labour participation in management, the Comprehensive Scheme for Employee Participation of 1983 provided for a 3-tier participative structure of workers and management at the shop level, plant level and Board level and was applicable to all central public sector enterprises, also had limited success, due to lack of participative skills among both managers and employees, non-inclusion of issues like grievance settlement/pay scales, wages etc. It was agreed by delegates that the decline in the culture of involving employees in the decision-making process had to be halted, by ensuring worker participation at all levels, viz., from the plant to the Board level. It was hoped that TUs

could work together with management in areas like training, safety, grievance redressal, welfare, matching of skills of workers etc. to change the quality of worklife. In this context, the recapitulation of the NPC study of 2 organizations viz., Bharat Heavy Electricals Ltd. (BHEL), Bhopal and National Fertilizers Ltd. (NFL), Panipat, was very useful and could be profitably read.

Finally, the Managment representatives emphasized the need for a common understanding between workers and management on the concept/measurement/needs and means of improving productivity and the relationship between productivity and wages in general. Since gains of productivity motivate and sustain a high quality of human resources, the managment delegates emphasized that sharing of productivity must be regarded as a part of organizational philosophy and strategy to improve productivity, rather than merely an adhoc response to industrial relations. Accordingly, a blueprint for a corporate wage policy aimed at achieving the twin objectives of recruiting, retaining as also motivating employees for improving productivity was suggested by them. This would include a Flexible Wage system consisting of 2 broad components (a) a fixed component with basic wage, annual increaments, annual bonus and (b) a variable component with production incentives, merit awards and variable bonus, linked to productivity, profitability and outstanding individual/group performance.

The organizers have thoughtfully given a summary of the conclusions arrived at the end of the Conference, in the book. These conclusions reflect the positive attitudinal shift in the hitherto rigid stand of trade unions. The major points that emerged from the Conference are - (a) the need to organize a tripartite round-table Conference to evolve a code and guidelines on technological changes; (b) the need to tap the creative potential of employees through Quality Circles; (c) the need for cooperation between various rival TUs along with need for cooperation between union and management; and (d) the need to evolve a productivity policy, encompassing areas of skill improvement and education of workers, training attitudinal changes, and creation of participative culture. The NPC is hopeful that the Government would take note of these while formulating policy in future.

Today, the emphasis of productivity has shifted from the 'work' to the 'people' who produce results, and what is required to harness these human resources is, creating of the right kind of attitude conducive to a culture of productivity. In this context, the negligible growth in labour productivity in all sectors of the Indian economy is in a way a

telling indictment of the prevailing management techniques.

The book is recommended for all those connected with productivity planning and implementation.

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