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A Dynamic Approach to Debt Servicing Capacity Analysis

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A Dynamic Approach to Debt Servicing Capacity Analysis

by

Reed J. Irvine, Yves Maroni and Henry F. Lee

In recent years there has been wide acceptance of the idea that capacity to service foreign debt could be measured by comparing the burden of debt service to foreign exchange earnings on current account, and in particular that the former should not exceed 20 to 25 per cent of the latter. This has led to the view that impoverished capital importing countries should not contract to borrow the bulk of their capital requirements abroad on more or less normal commercial terms, but rather should rely on foreign aid on easy terms. For this reason it has been considered necessary to give extraordinarily long maturities and extremely low rates of interest on loans to these countries to prevent them from being overwhelmed by debt servicing burdens in the years immediately ahead.

This approach to debt servicing has for some reason taken a very one-sided view of the balance of payments accounts. The ability of a country to amortize debt will depend not only on its current account receipts, but also on the capital inflow and unilateral transfers that it receives, and upon the level of imports that it chooses to maintain.

A country that has an expanding economy, supported by expanding current account earnings, can normally expect to attract new capital from abroad in steady, if not increasing, quantities. Investors can be expected to reinvest much of their earnings, and repatriation of capital will be minimal. Debt will tend to be rolled over, not from necessity, but from choice. Calculations of the debt servicing burden for such a country will be highly misleading if they fail to take account of the voluntary debt rollovers and the inflow of new investments.

This suggests that static measures of debt-servicing capacity such as comparisons of amortization totals with projected current account earnings are of little value. It is more relevant to examine the overall economic performance of the economy. The following are some of the key questions that should be asked.

1. Is the real rate of economic growth above or below average?

2. Is the expansion of exports of goods and services keeping pace with the overall expansion of the economy?

3. Is the government considered to be stable and strong enough to enforce anti-inflationary discipline on the economy and to encourage national development?

4. Is the government committed to the encouragement of private investment, including investment by foreigners?

5. Has the country demonstrated the ability to attract private foreign investment?

6. Are real rates of return on capital attractive in comparison with rates available in other countries?

The serious debt-servicing problem being faced by several of the less developed countries does not arise simply because they have borrowed too much, but because they have not obtained an expansion of production and exports of goods and services sufficient to provide foreign exchange to pay for needed imports and invisible payments and have not otherwise maintained the conditions necessary to attract a sustained inflow of private investment from abroad. In several cases the policies have been such as to drive capital from the country rather than attract it. Some of these countries were able to incur large debt-servicing obligations only because of the willingness of official lenders to lend them large sums, at times from political motives, to be used for unproductive purposes, such as armaments, or for projects with low economic rates of return. They did not succeed in generating the kind of growth that would have attracted a large sustained inflow of private capital or a large expansion of current account earnings. This has led to involuntary rollovers of the official debt and to the necessity of making new loans on terms intended to make involuntary rollovers unnecessary, at least for many years.

The lesson to be learned from this experience is that debt servicing will always be a problem in an economy that accepts large amounts of foreign capital and does not succeed in generating a satisfactory rate of merchandise and invisible export growth. It will not be a problem in a country that is export oriented and which avoids sinking capital into protected industries that cannot compete with foreign products either at home or abroad.

Successful Borrowers

One of the reasons the debt-servicing problem has been widely misunderstood is because attention has largely been focused on countries that have not employed capital wisely rather than on countries that have made efficient use of invested funds acquired abroad. There is a great

deal to be learned by studying the experience of the successful borrowers in contrast with those that have encountered serious debt-servicing problems.

Japan--Japan has made extensive use of foreign borrowing to supplement her high rate of domestic savings. The Japanese began to borrow short-term funds from abroad on a substantial scale in the late 1950's. By 1960, the amount of short-term debt outstanding exceeded $1 billion, which was equivalent to over one-fifth of Japan's current account earnings for that year. The following year, Japan's debt service amounted to $1.3 billion, nearly 30 per cent of her current account earnings. However, this was not an intolerable burden, since it was more than offset by a capital inflow of $2.2 billion. Most of this was in the form of short-term bank credits associated with the financing of Japan's imports. By 1964, the amount required for debt servicing was equal to 45 per cent of Japan's current account earnings, but it was still more than covered by the inflow of new capital and the voluntary rollover of outstanding bank loans.

In 1965 and 1966, the debt servicing somewhat exceeded the capital inflow, but because of the rapid expansion of Japanese exports, a substantial surplus on current account was recorded in both years. There was a substantial reduction in Japanese short-term foreign borrowing in 1966 when rising interest rates in the U. S. and Europe coincided with falling rates in Japan. There were some fears that a serious balance-of-payments problem might arise because such a large proportion of the outstanding foreign indebtedness had a maturity of less than one year. A substantial part of the debt was retired, but the bulk of it was rolled over. Debt servicing remained extraordinarily high in relation to current account earnings--43 per cent--but this created no insuperable problem for Japan.

While Japan has not been a net importer of capital since 1965, she still has the constant use of a very large amount of foreign capital. She employs about $3 billion in foreign short-term bank capital alone, which is all contracted for on normal commercial terms. This is rolled over several times a year. The Japanese find it to their advantage to use it, and the foreign lenders find it to their advantage to employ the money in Japan. The availability of this capital has been an important factor in Japan's industrial expansion, even though most of it has not gone directly into financing plant construction. The great inflow of capital would not have taken place if private foreign lenders and investors had not had confidence in Japan's ability to utilize the funds efficiently. The rapid growth of production and exports, and the rapid correction of imbalance in the international accounts whenever necessary, have been the main factors in developing and maintaining that confidence.

Mexico--Like Japan, Mexico has relied very heavily on foreign capital, much of it in the form of short-term borrowing, to supplement domestic savings. Outstanding Mexican short-term liabilities to U. S. banks alone totaled nearly $1 billion in 1968. Mexico, even more than Japan, has had a very high ratio of debt service payments to current account earnings. In 1960, current account earnings were a little over $1.3 billion, and combined debt service payments (on both long-term and short-term debts) totaled nearly $529 million, nearly 39 per cent of current account receipts. In 1966, the ratio rose to 54 per cent.

This created no serious balance-of-payments problem because the payments on capital account have been more than offset by a capital inflow, much of it representing rollover of existing short-term debt. The willingness of lenders and investors to maintain and expand their investments in Mexico reflects their confidence in the Mexican economy. This confidence has been encouraged by the stability of the Mexican currency, the freedom from restrictions on capital movement and the steady expansion of current account earnings. Merchandise and invisible exports grew at an average rate of about 7 per cent a year from 1958 through 1966. Import growth has been somewhat more rapid, but this has been paid for by the capital inflow, not the draining of reserves. Indeed, reserves were $170 million higher at the end of 1966 than at the end of 1958.

Most of the capital utilized by Mexico has been private, rather than official. This means that it has carried market rates of interest and has of necessity been employed in ways that would earn a sufficient rate of return to pay market rates. While it is true that Mexico has made extensive use of protective devices to encourage domestic industrial growth, this has not been carried to the point of frustrating the expansion of the export sector. Mexico, like Japan, has recognized that sustainable economic growth must be linked to export expansion. The foreign capital has been attracted because it could be profitably employed in a healthy economy. It has not been regarded as a substitute for lagging merchandise and invisible export earnings.

China--Nationalist China was previously a recipient of substantial unilateral transfers from the United States which financed a large current account deficit. In 1961, these transfers and the gross capital inflow were equal to over 85 per cent of the earnings on current account. The volume of unilateral transfers has since diminished sharply, and this has been partly offset by a rise in private and official capital inflow, but the biggest offset was the rapid expansion of current account earnings, which rose by 180 per cent between 1961 and 1966. As a result, unilateral transfers and capital inflow in 1966 were equivalent to only 23 per cent of current account earnings, even though they were only 25 per cent below the 1961 volume. The debt servicing burden has been small for China, but

the contraction of unilateral transfers could have posed a problem similar to that resulting from an increase in debt service obligations. It meant a reduction in the annual increase of foreign resources available to China. This has been surmounted without difficulty because of the export expansion and the ability to attract increasing amounts of foreign loans. This has been possible because resources available have been used to produce goods that could be sold in ever increasing quantities in competitive markets.

As in Japan and Mexico, the key factor has been the efficiency with which capital has been employed, as reflected in a growing ability to export.

Thailand--Thailand is another country that has had a high ratio of debt service to current account earnings without accompanying balance-of-payments difficulties. Thailand's gross private capital inflow increased from $36 million in 1960 to $123 million in 1966. Commercial bank foreign liabilities increased from $50 million to $168 million in the same period.

Debt service, including service of commercial bank foreign liabilities, as a per cent of current account earnings increased from 14 per cent in 1960 to 24 per cent in 1966. The increase in the debt service ratio to over 20 per cent has not raised doubts about Thailand's ability to service debt.

Current account earnings grew at a rate of 13 per cent a year from 1960 through 1966. Despite the large capital inflow, current account deficits were small. As a result, Thailand's international reserves increased from $371 million in 1960 to $924 million at the end of 1966. The high level of reserves has contributed to greater international confidence in Thailand.

Thailand has received foreign unilateral transfers (grants), but they have been relatively small. Net transfers to Thailand increased from $37 million in 1960 to $55 million in 1963 but fell back to $37 million in the following year only to rise to $47 million in 1966. These transfers were equal to less than 10 per cent of current account earnings in the early 1960's and this ratio decreased sharply from 1963 onward.

The inflow of official capital into Thailand was proportionately small. The total increased from $4 million in 1960 to $20 million in 1966 while total capital inflow increased from $90 million to $311 million in the same years.

As in the cases of Japan, Mexico and China, Thailand has maintained an environment attractive to foreign capital by combining attractive rates of return and freedom of capital movement with financial stability. This has been made possible because of the healthy rate of export expansion and the high priority given to the maintenance of a strong balance-of-payments position.

Debtors in Trouble

The experience of these successful debtor countries contrasts sharply with some that have borrowed extensively from abroad without obtaining accompanying proportionate gains in their current account earnings. In such cases the major problem seems to be the erosion of the lenders' willingness to continue to put large amounts of capital at the disposal of a country that does not seem to be able to manage its affairs in a way that will permit it to pay its debts when they fall due. This points to the fact that the important issue is not so much the size of the debt servicing burden as confidence in the debtor. A country whose current account earnings are stagnant or subject to wide fluctuations will clearly not command the same degree of confidence as a country that is undergoing a sustained rapid export expansion. The following examples are presented to illustrate this point.

India--India has enjoyed a tremendous inflow of capital and transfers from abroad as a proportion of her current account earnings. In 1960, such inflows were equal to about 60 per cent and in 1965 to about 70 per cent of current account earnings. Such a relatively large infusion of funds from abroad might have enabled India to expand exports rapidly had the resources been invested in the export sector. Unfortunately, the foreign funds were not so employed for the most part. They went largely into infrastructure, consumer goods and import-substitution industries. As a result, India was able to sustain an import level far in excess of current account earnings. In 1965, import payments were 78 per cent greater than export earnings. The expansion of export earnings was not impressive. The average annual rate of increase from 1960 through 1966 was about 3.4 per cent.

The focus in India has been on filling the so-called "foreign exchange gap" rather than on the efficient use of the borrowed funds. This has been encouraged by the availability to India of large amounts of official capital on very generous terms, i.e., low interest rates and long maturities. The inflow of foreign private capital has been relatively small, reaching a peak of $93 million in 1964, compared with about $1.3 billion in official capital in that year.

India's problem now is that the gross inflow of official capital is diminishing at the same time as the payments due on earlier borrowings are increasing. This means that the large trade deficit heretofore financed by official capital inflows will have to be reduced unless the payments due can be postponed. Debt reschedulings have already been arranged and more are in prospect. This does not create a favorable climate for the inflow of private capital to compensate for the decline in official capital, as was the case in China. Furthermore, the fiscal, monetary and exchange rate policies that were consistent with maintenance of balance-of-payments equilibrium when there was a large net capital inflow will cease to be consistent with equilibrium if the net inflow diminishes sharply.

India's seemingly crushing debt-servicing burden would be considerably ameliorated if not solved if India were to adopt policies which produced both a rapid upturn in export earnings and a substantial inflow of private capital. That this can be done fairly quickly if the right policies are followed is demonstrated by Argentina, which is discussed below.

Argentina--Argentina entered the 1960's with a long depressed export sector, and a substantial need for foreign exchange to service foreign debts. Its import level had long been held down by exchange controls and other restrictions and, until 1958, had become increasingly burdened by the need to acquire petroleum products abroad because of a failure to develop local oil production.

The signing of contracts with foreign oil companies to develop the local production and the settlement of a long-standing dispute over compensation to foreign utility companies for properties expropriated several years earlier dramatically improved the climate for foreign lending to and investment in Argentina beginning in 1959. At about the same time, the authorities launched a comprehensive stabilization effort and adopted a realistic exchange rate. These developments together brought about a surge of foreign capital to Argentina in 1959, 1960 and 1961, and set the stage for a recovery of exports. The capital inflow made it possible to finance a greatly expanded volume of imports, and at first also to accumulate substantial gold and foreign exchange reserves. But as imports kept on rising very rapidly, often financed by relatively short-term credits, the external debt servicing needs increased. When the inflow of new capital levelled off and, at the same time, domestic confidence was impaired by a resurgence of inflationary pressures, triggering capital flight, reserves turned sharply down in 1962 and 1963.

The collapse of the stabilization effort in 1962 and its total abandonment in 1964-66, when rapid inflation reigned unchecked, at first reduced and eventually eliminated the availability of new foreign

stabilization credits, while the annulment of the foreign oil contracts late in 1963 impaired the investment climate. The declining inflow of new foreign capital was made up by a steady expansion of merchandise exports. These rose some 48 per cent from 1960 to 1966 or about 6.8 per cent a year even though after 1963 exchange rate adjustments lagged increasingly behind domestic price inflation. At the same time, imports fell sharply back in 1963, due to an industrial recession, and thereafter recovered only to about the level of 1960. Even though these changes produced a sizable current account surplus each year beginning in 1963, Argentina was unable to cover all of the external debt payments falling due. A succession of debt rescheduling operations substantially alleviated the problem in 1962, 1963, 1964 and 1965. Even then, debt service payments actually made rose steadily in these years and no further rescheduling was needed after 1965. The decision of the Argentine authorities after 1962 to follow policies which impaired the inflow of new foreign equity and debt capital made the debt refinancings necessary even with an emerging current account surplus.

Since the beginning of 1967, Argentina has again carried out a comprehensive stabilization effort, and maintained a realistic exchange rate, while attempting to come to terms with the foreign oil companies. Substantial stabilization credits have been obtained and an increased inflow of equity and debt capital has developed from the improvement in the investment climate. The current account surplus continued in 1967 and at a reduced rate in 1968. As a result, Argentina has succeeded in meeting all its external debt service payments while rebuilding its gold and foreign exchange reserves.

Brazil--For most of the 12-year period, 1954 to 1966, Brazil did not use foreign resources productively enough to avoid balance-of-payments difficulties. Failure to develop and maintain a consistent merchandise trade surplus in the face of heavy net payments for services resulted in large deficits on current account in most years. Efforts to attract private capital and heavy official borrowings for a time helped to balance the country's international accounts, but eventually the lenders became reluctant to increase further their exposure in Brazil and the burden of debt service became overwhelming, forcing debt reschedulings in 1961 and 1964.

In the last half of the 1950's, Brazil's debt service payments rose sharply while earnings on current account declined, until in 1960 the former were about 36 per cent of the latter, more than twice the 1954 ratio. Merchandise exports declined by about 20 per cent, as overproduction of coffee throughout the world depressed prices and led Brazil to limit its shipments, while other exports grew little. Imports were somewhat reduced in this period, but the current account deficit more than doubled from 1954 to 1960. This deterioration was accompanied at first

by an increase in private capital inflows (both on an equity and loan basis). But as loan repayments by the private sector also rose, and as the gross inflow shrank in 1960, gross international reserves declined, even though gross official sector borrowings rose sharply.

International confidence in Brazil was shaken not only by these deepening difficulties but also by the deterioration of the domestic economy. Although a rapid rate of real growth in domestic product was maintained, inflation intensified alarmingly. Since the applicable exchange rates were depreciated only with some delay, the competitive position of exports and potential exports suffered, while investment in productive facilities for the domestic market was stimulated even though their real rates of return may have made them uneconomic.

In 1961 the creditor countries agreed to debt rescheduling partly in consideration of the adoption by Brazil of a realistic exchange rate for most transactions. With this, the current account deficit was cut by nearly 60 per cent from 1960 to 1963, as exports rose, imports changed little, and the deficit on net service payments declined. But this improvement was offset almost exactly by a decline in the gross inflow of capital into the private sector, attributable to the adoption of severe restrictions on profit remittances, an upsurge in political instability and leftist political agitation, and a sharp slowdown in the rate of economic growth. In addition, borrowings abroad by the monetary authorities fell drastically, as the country failed to adopt a hoped-for stabilization program and instead followed policies which intensified inflationary pressures. The shrinkage of financing from abroad left no room for the increase in imports which would have been needed to sustain the relatively high rates of economic growth of the late 1950's. Growth was retarded also by the distortions caused by the accelerating inflation. In 1963, debt service payments were about 32 per cent of gross current account earnings. This was less than in 1960, but the country was again at the end of its financial rope.

The economic and political deterioration culminated in a popular uprising backed by the military on April 1, 1964. The new government restored confidence in the political stability of the country, launched a stabilization program, and greatly relaxed the restrictions on profit remittances. These developments facilitated conclusion of another debt rescheduling in May 1964 and resulted in an upturn in the flow of capital toward Brazil. At the same time, the current account deficit gave way to a surplus, as merchandise exports rose 24 per cent between 1963 and 1966, while imports dipped sharply in 1964 and 1965 and barely exceeded the 1963 level in 1966. It became possible for the monetary authorities to step up their own debt payments, to cut back their use of foreign credits and

to rebuild their gross international reserves. Inflation abated considerably and the rate of economic growth began to recover. In 1966, debt service payments were nearly 45 per cent of gross current account earnings. This was a much higher percentage than in 1963, but it was a much easier burden to bear because the economy was regaining its health and the situation and prospects inspired confidence.

Conclusion

It is clear that the widely accepted static concept of debt servicing capacity should be replaced by a more dynamic approach. In assessing a country's capacity to service additional debt, one must do more than calculate the ratio of debt payments to prospective foreign exchange earnings on current account. One must also ask whether the country's policies and prospects inspire sufficient confidence that private foreign lenders and investors will be willing to keep funds flowing to that country in the foreseeable future.

If foreign investment is a significant portion of total investment in the country, care should be taken to see that it is efficiently employed to increase productivity. While it is not necessary that foreign funds be employed only in projects which will contribute directly to foreign exchange earnings, it is important that investment in general help strengthen the international competitive position of the country if it is to avoid debt servicing problems in the future. If a country's overall investment policies are generally unsound, even investors who have financed good projects may suffer when the debt-servicing burden begins to prove excessive and remedial measures have to be adopted.

This analysis suggests that a country's debt-servicing capacity is not a fixed parameter that must be accepted passively. It need not be as dismally low as is often assumed. Rather each country has it in its power to raise its own debt-servicing capacity by adopting appropriate policies. These would include investment policies designed to discourage projects which promise a low economic rate of return, the establishment and maintenance of a climate favorable to foreign capital (including the willingness to see foreign capital earn rates of return as high as may be available in other countries), and a commitment to the avoidance of inflation and to the promotion of sustainable economic growth.

This is perhaps a tall order. But it is one that has proved its worth in what we have called the successful borrowing countries. It remains only for others to "go and do likewise."