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The most misunderstood financial instrument: developing countries' debt

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As of May 2023, the IMF listed 41 developing countries as "highly indebted or at risk of default". In addition, some middle-income countries including Turkey and Argentina were deemed to be at risk. "Debt crises" have become a recurring aspect of the world economic landscape. Yet even among economists they are misunderstood in several ways. In this paper, I review some of the salient features of developing countries' debt. Many of the measures currently used can be highly misleading. This is illustrated by comparing measures currently used with an economically more meaningful measure.

A first section provides some background on the emergence of the complexities of debt financing for developing countries. A second section then contains definitions and discussion of some of the key concepts regarding debt. Then some of the economic characteristics of debt, and especially sovereign debt, are considered. Money is, after all, fungible. To what class of assets would the odious debt label apply? What of equities? If equities are not covered, creditors could "buy" equities and redeem them after a few months or years. The same
considerations apply to analysis of debt in other contexts. Another issue is the question of debt forgiveness. Some of those sympathetic to low-income countries advocate debt forgiveness to free up resources for education and other social welfare programs. Relatedly, what of providing funds for a country unable to service its debts? Should funds be lent without regard to the underlying policies in the country?

In addition to needing an adequate way of analyzing issues of debt and its relationship to other economic and financial variables, it is important to have an understanding of the debt numbers and what they mean. This paper attempts to shed light on these issues.

## Background

After World War 2 almost all present-day developing countries were colonies and all poor. As they gained independence, they all sought development, by which they meant rising living standards. Savings rates were low, and all focused on raising investment levels to achieve it. That much was certainly appropriate. But high per capita incomes were associated (wrongly) with industrialization and they sought that by an ill-advised means - import substitution (IS).

Among its other failings, IS drew resources away from export-producing activities. IS also led to sharply increased demand for imports of capital goods, intermediate goods, and raw materials used in the IS industries.

A major policy instrument for encouraging IS was the strict regulation of the imports of products that might compete with domestic production through quantitative restrictions or even prohibitions on their importation. But IS activities needed many imported goods, including machinery and equipment as well as raw materials and intermediate goods. Because demand for imports was increasing rapidly while exports were stagnant or growing slowly, foreign exchange became scarce. It was therefore rationed and most developing countries had currencies that were inconvertible.

Because of these, and other, factors (including the very high inflation rates in many countries with fixed exchange rates) there was little private foreign capital flowing to them aside fromsome investment in extractive mineral industries.

Many governments in advanced countries, however, adopted foreign aid programs to support development, and multilateral development agencies were established. Hence, capital flows to developing countries originated from official bilateral and multilateral agencies and were destined almost entirely for sovereigns.

Much of the aid was extended as loans (usually on concessioinal terms) and became part of the recipient's country's official debt.

In the early postwar years, the International Monetary Fund (IMF) and the World Bank were established as the international financial institutions. The World Bank would lend to support countries' development efforts. ${ }^{1}$ The IMF was charged with maintaining global financial stability which meant, among other things, supporting policy changes and lending in times of crisis to countries that were encountering severe dislocation because of foreign exchange difficulties.

One major result of the IS strategies was that many developing countries were caught in what came to be called "stop-go cycles". A stop-go cycle was one in which a country first went through a period of relatively abundant foreign exchange availability but then gradually experienced increasing scarcity of imports. The second phase involved reduced numbers of import licenses, increasing black market activity in foreign exchange (and in domestic goods when there were price controls). IS businesses were thus deprived of the capital goods, intermediate goods and raw materials they needed for their production. At some point, things became sufficiently bad that a third phase arrived and the afflicted country's authorities

[^0]approached the international community for help. By the time they did so, the rate of economic growth had halted or at least diminished sharply, governments had reduced their holdings of foreign exchange to dangerous levels, spent the foreign exchange available to them, and were unable to borrow further on international markets or persuade bilateral donors to increase their assistance.

This broad scene continued into the 1990s. Until then, most developing countries had inconvertible currencies. They had borrowed and incurred debt-servicing obligations mostly in foreign exchange and experienced repeated stop-go cycles, generally with shorter and slower go periods and longer and deeper stops.

The first break in the pattern came in the late 1960s and early 1970s, as four East Asian economies - Hong Kong, Singapore. South Korea and Taiwan - known as the "Asian tigers" reversed earlier policies and adopted so-called outer- oriented policies that encouraged exports and provided relatively balanced incentives for both IS and exports.

They were successful far beyond their expectations as growth rates, living standards, and other measures of well-being rose dramatically. For example, South Korea in the 1950s had been the poorest country in Asia and far poorer than most

African countries. ${ }^{2}$ The country had very low rates of growth and major foreign exchange difficulties despite substantial foreign aid and the opportunities for rapid economic growth presented by the ending of the Korean War in 1953.

South Korean policy reforms and switch to an outer orientation began in the late 1950s. ${ }^{3}$ As late as 1960, South Korea's exports were only about 3 percent of GDP and imports 11 percent of GDP. The difference was financed almost entirely by foreign aid. By the early 1960s, however, growth of exports and real GDP accelerated rapidly. Investment rose from a very low level very quickly, and was financed largely by private foreign capital inflows. Private foreign capital mostly consisted of borrowing from foreign banks in those years and served both to begin replacing foreign aid and to enable accelerated investment.

But with changed incentives and rapid growth, private foreign creditors, mostly banks, found their loans to be profitable and South Korea achieved higher and higher credit ratings. Despite borrowing averaging about 10 percent annually, the South Korean debt-GDP ratio hardly rose during the decade.

Similar, if slightly less headline news, experiences of the other Asian tigers began to convince policy makers in other developing countries of the potential for more

[^1]satisfactory economic performances with economic policy reform. Private foreign capital flowed into those countries as well. By the 1980s, the Peoples' Republic of China, Turkey, Chile, and other countries began reversing policies or at least to mitigate the extreme bias against exports and toward IS that they had. To be sure, many countries still experienced old-style debt-crises. The most prominent case was that of Mexico in the early 1980s.

Even in the 1990s, most of the countries experiencing severe foreign exchange, or balance of payments, crises (as they were called) owed most of their sovereign debt to official creditors. But as the success of the Asian tigers continued and other countries began reforming, private foreign investment and private lending to sovereigns and private business in developing countries increased rapidly.

In this century, there are still capital flows from the official sectors in advanced countries and the international institutions to governments in developing countries and emerging markets. But private capital flows have increased to a point where they are now as large as official flows.

Concessional aid flows are loans that are extended as below-market interest rates. They generally have a longer tenor (time to repayment) than private capital
flows, and often have a grace period of several years before any interest payments are due.

Valuing aid grants dollar for dollar as equal to lending of like amounts clearly makes no sense. The value of a gift of, for example, $\$ 100$ to a country is surely worth more than a loan of equal amount with a zero interest rate for the life of the loan but must be repaiid, which in turn is certainly more valuable than a loan with a positive interest rate.

This paper is intended to elucidate on the major different types of borrowing, indebtedness, and capital flows, with focus almost entirely on developing countries. For many purposes, developing countries' debts are measured at face value regardless of the interest rate and the maturity of the loan. The purpose of this paper is to examine the various forms of lending, and to indicate how the "apples and oranges" can more meaningfully be aggregated.

## The Mechanics of Debt

There are probably almost as many debt contracts as there are borrowers. They can differ in many ways. They can specify the minimum balance of cash or securities a borrower may hold; they may require collateral be placed with the lender. They specify the interest rate and the frequency with which interest payments must be
made and principal paid back, along with the tenor (time to maturity of the entire amount). A potential borrower facing several different loan offers with differing conditions, tenor, interest rate, and face value, would take all these conditions and more into account. For present purposes, however, focus is on the main ones.

The Current Account Balance and its Significance. Start with the well-known identity, true for all countries, that the net capital inflow (or outflow) of a country is the difference between its current receipts of foreign exchange (exports of goods and services, interest payments, grants of foreign aid, and a few smaller items such as payments for military bases rented in the recipient country) and current expenditures for imports of goods and services and other items.

This difference is the capital account balance, which in turn is equal to investment minus domestic savings. For developing countries that are poor and have low savings rates but economic policies conducive to high-return investments, a capital account surplus (i.e., greater expenditures than receipts of goods and services and miscellaneous items), finances more investment than can be undertaken financed by domestic savings alone.

Developing countries' ability to attract capital from abroad is a crucial factor in their economic growth prospects. ${ }^{4}$ That ability itself is a function of several variables: the economic policies of the country, its treatment of foreign capital, its current level of indebtedness, and much more. There are multiple forms of international capital flows to a developing country: private foreign direct investment, foreign aid, official lending from multilateral institutions and bilateral countries, and private lending. Together, these flows (and some other usually minor sources of funds) constitute the capital account receipts of a country, while debt servicing of both official and private capital outstanding debt and payments on foreign equity constitute the capital account expenditures.

The net capital account balance is the difference between receipts and expenditures. It constitutes the country's ability to invest more than it saves and equals the difference between domestic investment and domestic savings. A positive capital account balance enables the country to import and hence invest more than it saves. For poor countries with economic policies conducive to growth, capital inflows enable a more rapid rate of investment than would

[^2]otherwise be possible and hence when ${ }^{5}$ the investment is productively allocated, a higher rate of economic growth.

Denomination of Currency and Jurisdiction of Bonds. Among advanced countries, lending (including bond issuance) is denominated in the currency of the borrowing country, although the currency of another advanced country might be used. Since the currencies of advanced countries are convertible, the denomination of the debt instrument is irrelevant. But many developing countries have inconvertible currencies (i.e. currencies that are not freely exchangeable for dollars, euros, or other currencies in which the right to exchange exists).

Generally, borrowers in those countries (including the governments) issue some debt to domestic residents and other debt denominated in foreign exchange. When a payment, either interest or principal, on a loan becomes due, the debtor can either pay the amount due (out of cash flow or assets - such as foreign exchange holdings) or it can roll over the debt. To do so, it can apply to the creditor(s) for new money and use the proceeds to service its debt (see discussion of evergreening in the next section). It can also apply to other lenders when they need to borrow

[^3]additional amounts or simply roll over their debt. The more creditworthy the borrower, the lower the interest rate likely to be charged for the loan.

For developing countries, the situation can be different. When their currencies are inconvertible (or only convertible for some current account transactions), they usually need to obtain foreign exchange to pay debts both for rollovers and for additional activities. Even domestic residents can hold foreign-currency denominated assets in many cases, and they may wish to sell their bonds for foreign exchange. While a government can always create money to pay domestic bills, it cannot necessarily do so when foreigners hold their debt instruments.

Some developing countries' governments issue domestic debt without assurances that the proceeds from sale of the asset will be convertible in foreign exchange. In many cases, those bonds are unattractive, especially to foreigners, and usually carry a significantly higher premium than do foreign-currency-denominated loans.

In some cases, such as Russia in 1997, the government chose to pay foreign bondholders and not domestic bondholders. In other cases, the opposite has happened. The important point is to recognize the extent of foreign-exchange liabilities in instances when currencies are not fully convertible. Later in this paper, some data will be shown for sovereign (official) debt. It does not include debt of
private sector entities. Sometimes, private sector entities borrow in domestic currency and the omission is conceptually appropriate. In other situations, however, a country encounters foreign exchange difficulties as domestic firms that had borrowed from foreign sources in domestic currency seek to service their debts and buy foreign exchange from the government. In those circumstances, data on sovereign debt understate the potential foreign exchange liabilities of the government. Especially when large companies with good credit ratings borrow from abroad (usually to take advantage of cheaper interest rates), those companies' obligations are not regarded as official, although the authorities may deem it important to provide the foreign exchange to service those loans. Of course, when foreign exchange reserves are too low, domestic debtors are unable to service their debts regardless of their financial status in domestic currency.

There is no official international bankruptcy court. Most bonds contain clauses stipulating a jurisdiction in which any disputes arising will be settled. The jurisdiction can be whatever is agreed between debtor and creditor. In practice, many bonds stipulate the United States or the United Kingdom as the jurisdiction to be chosen in the event or dispute. The currency in which debt is denominated can be different from that of the creditor, the debtor, or the court.

Evergreening. Evergreening is the term used to describe a financial institution's lending to its debtor to provide enough financing for the debtor to service the loan. The amount paid might cover all or part of the debt servicing payment due. It might cover just interest or part of interest, and it might cover interest plus any principal payments coming due.

Sometimes, evergreening covers payments due to others. As this paper was being written, there were grave concerns in Pakistan and the international community as to whether and for how long Pakistan would be able to meet its forthcoming debt servicing obligations. Pakistani officials announced [FT 5/26/23, p 4] that Pakistan would receive $\$ 2.3$ billion from China immediately after Pakistan had made a repayment of $\$ 1$ billion to the Chinese government and payment of $\$ 1.3$ billion of commercial loans due. China was clearly evergreening the commercial loans as well as its own. ${ }^{6}$

Lenders have evergreened loans when they might otherwise have had to report excessive nonperforming loans (NPLs). Obviously, large and rising NPLs on lenders' books are a reflection of problems and potential creditworthy problems for lenders. Financial authorities monitor them closely.

[^4]Concessional Finance. Immediately after the war, many countries held large sterling balances (earned by exporting to the United Kingdom and others during the war when there were few imports available) which they drew down to finance development expenditures. But developing countries' sterling balances quickly were spent and foreign aid became the predominant form of capital flows. Foreign aid came from individual rich countries, from the World Bank, and from the regional development banks.

Most foreign aid was "concessional", meaning that it was granted to the recipient at terms much easier than those prevailing in the private capital market. Some aid was in the form of grants. But much was in the form of low-interest loans with grace periods in the first few years and long payback periods.

Many low-income countries continue to be recipients of foreign aid. For example, much of The World Bank's International Development Association's (IDA) funding of projects for developing countries has consisted of a 50 percent grant component (which is counted at face value), a long "grace" period (during which no interest or principal are paid), a period ranging from 10 to 30 years of very low-interest loans and a service charge of 0.75 percent) with repayment at the end of 50 years.

When it comes to providing data on aid flows, countries normally list the face value of their aid, regardless of whether it is a grant, or whether it is at nearcommercial interest rates. ${ }^{7}$ It is clear that the net present value of debt obligations incurred by receipt of foreign aid is zero for grants, and less than the face value of aid when the interest rate is concessional.

The Paris Club. It was earlier noted that until the end of the last century, most debt incurred by developing countries was lent by sovereign creditors in advanced countries. Inevitably, even on the soft terms on which money had been lent, there were cases when the government of the indebted country simply could not pay its debt. ${ }^{8}$ Although no formal organization was created, representatives of the major creditor countries convened when it was clear that debt service obligations could not be met and that some relief to the debtor should be given.

The Paris Club meets regularly in Paris and is served by the French Treasury as
Secretariat. When a heavily indebted country seeks support because it deems it cannot continue voluntary debt service, without help, it approaches the IMF for a

[^5]Ioan (after a policy reform program is agreed upon) and the Paris Club for rescheduling of sovereign debt.

A basic principle of the Paris Club, similar to that in legal arrangements for bankruptcy in most countries, is that there should be equal treatment of the creditors when relief is extended. Over time, terms of restructuring have been agreed at the Paris Club for different groups of countries, depending on their per capita income and other relevant variables.

Comparability of treatment of creditors is taken to mean that perecentage of the net present value of the debt forgiven should be equal across debt instruments and creditors. Since different sovereigns and multilateral institutions have extended debt on different terms, including interest rates, maturities, collateral requirements, and more, the first task confronting those tasked to do it is to determine what obligations are outstanding and their term.

Debt Restructuring. There are certainly times when a country confronts circumstances that cause considerable hardship, often meaning they are unable to meet current debt-servicing obligations without an outside source of financing. That may happen due to a very bad harvest and thus sharp fall in export earnings or import demand, because of a major shift in the terms of trade, or for other
reasons. In those instances the international community is normally receptive to financial support, often through the International Monetary Fund, to tide over the shortfall. The country's difficulties are temporary.

But there are other circumstances when creditors agree that a debtor country cannot fully service its debt, and under plausible future conditions will not even be able to do so in the foreseeable future. In that case, creditors agree on a restructuring. Restructuring is the international counterpart of domestic bankruptcy proceedings. Enough debt relief (and new money) is extended so that the country in question can be expected to resume economic growth (as determined in the IMF program) and once again service debt.

Restructuring can take several forms. It can consist of reduction in the face value of outstanding debt. It can include a "grace period" during which no interest or principal will be repaid. The debtor country may be able to replace some or all of its existing bonds with newly issued ones, which may have different face values, maturities, and/or interest rates.

One of the issues confronting the international community in recent debt crises has been the Chinese practice of evergreening loans (perhaps with a higher interest rate) instead of participating in Paris Club activities. This creates a major difficulty,
because if Paris Club members proceeded without China to extend debt relief, monies from the IMF and elsewhere extended to the debtor country in the restructuring could be used to service the Chinese debt.

Haircuts and Sustainability. Circumstances can arise in which it is highly unlikely, if not impossible, that a debtor country will be able to sustain voluntary debt servicing of all its obligations. That could be the case, for example, if a country's growth and productive capacity was sufficiently damaged that output plunged and was expected to recover only very slowly or if the future earnings from a major export (such as oil) were likely to drop sharply either because the price of oil plummeted or because oil wells ran dry.

More frequently, sustained debt servicing is highly improbable because debt and debt-servicing obligations are already high and the government continues to budgets for large fiscal deficits. In those circumstances, lenders become unwilling to roll over debt as it comes due when the government also needs to borrow more to cover its anticipated budgetary and other expenditures. Lenders may wish to cash out on their bonds and new lenders can become reluctant to lend.

When that happens, imports even of most essential goods become scarce as financing dries up. As the situation persists, shortages intensify and can indeed result in slowdowns or stoppages of economic activity.

As crisis conditions are experienced, the authorities are driven to appeal to the international community - through the IMF in most cases - for financial support to restart economic activity. The IMF can only provide financing, however, when it is confident that the crisis will be resolved. In the most extreme cases, that can require economic policy reforms to enable the country to earn more or spend less plus both fresh money (to replenish supplies of intermediate goods and raw materials to restart production) and a reduction in debt-servicing obligations. In such circumstances, official creditors gather, receive analysis of the desperate country's situation, and (usually on the basis of IMF recommendations) can agree to a "haircut" reducing the future payments of existing debt. At the same time, private creditors need to meet and agreed to a similar haircut as a basic principle of fairness among creditors must be honored. When the bulk of debt was to official lenders, the Paris Club agreement combined with an IMF program specifying the reforms that would be carried out could enable a highly indebted country to begin to emerge from the crisis.

Haircuts and restructuring of existing debts have become considerably more complex as China has become a major lender. Its Belt and Road Initiative (BRI) has been sufficiently large so that it has become the world's largest bilateral official creditor for developing countries and emerging markets. As Zamba and Sri Lanka encountered crises in 2022, there were major delays in providing international support for them as the Chinese declined to join the Paris Club and insisted on issuing new debt and evergreening outstanding debt.

Finding ways to provide quicker relief for highly indebted countries that are confronted with unsustainable debt is a major challenge facing the international community.

Net Present Value. When a good is imported and the recipient pays in a convertible currency, it makes no difference what the good is. A unit of currency is the same regardless of whether machinery or wheat or anything else is purchased.

## The same is not true of a unit of foreign currency lent. A loan of $\$ 100$ for ten years

 is not the same as the same dollar amount for twenty years. Nor is a loan of \$100 for 10 years at 5 per cent interest the same as a $\$ 100$ 10-year loan at 3 percent interest. There are other complications, such as the fact that frequency with which the loan is to be serviced, and whether amortization of the loan will be spread outevenly over its tenure or whether the face value will be repaid in full at the end but they are ignored here.

To compare loan values, the net present value (NPV) of the stream of payments is calculated. NPV is the sum of the discounted stream of payments associated with a given credit instrument. The NPV of the payments associated with a grant (i.e.,a gift) is zero. The NPV of the repayment stream for a loan of $\$ 100$ for a year at 1 percent interest when the interest and principal are to be paid at the end of the year and the discount rate is 10 percent is $\$ 1.01 / 1.10$, or $\$ 91.82$.

By convention, the Development Assistance Committee (DAC) of the OECD calculates the NPV of foreign aid by different countries at a discount rate of 10 percent. Since much foreign aid from IDA and advanced countries consists partly of grants and partly of low-interest long term loans, comparing foreign aid across countries (even when it is valued entirely in US dollars) is not meaningful unless NPV of the various aid programs are calculated on a comparable basis.

Debt Crises. Many observers are puzzled when they learn that a country in crisis has interest payments owed of "only" a few percentage points of the country's GDP. They overlook the principal repayments which may be due and can be a multiple of
the interest payments due and often the fact that some essential imports may have to be cut off.

Often, however, the country's authorities only admit to a crisis when they have exhausted short-term (and often unproductive) measures to attempt to avoid the admission. Efforts to delay the inevitable have taken a number of forms at various times and in different combinations. They have included borrowing at very high interest rates, obtaining aid from friendly foreign governments, raising tariffs and/or imposing import prohibitions and quantitative restrictions, guaranteeing the foreign exchange value of bank deposits denominated in domestic currency, and more.

Different countries also seem to have different thresholds at which they admit to crisis. Sri Lanka in 2022 was an extreme case of letting foreign exchange availability decrease to the point where even imports of fuel and medical supplies could not be obtained for lack of foreign exchange. Debt crises usually occur long before that point, however, when enough creditors are troubled about future prospects, or when existing creditors refuse to roll over debt, demanding repayment, and other potential creditors are not willing to lend. Indeed, one critical statistic to which
potential creditors (and others) look is the proportion of the debt-servicing obligation that is successfully rolled over.

In the absence of new money, the debtor has no choice but to default. Before that happens, foreign exchange reserves are used to finance some current expenditures and debt-servicing obligations. Creditors normally keep a careful watch on reserve levels. As reserves fall, which usually happens as the debtor's current account balance is negative (and hence the creditor must seek more debt as well as rolling over existing loans), the interest rate creditors charge to roll over or lend new money rises. Finally, of course, markets close.

In recent years, some rich Arab states have provided funds to some of their neighbors, enabling them to continue servicing their outstanding debt. In those circumstances, questions arise as to whether the flow of funds will continue and the situation becomes more fraught over time. Turkey is a country where Arab money has been supporting the country despite high inflation and debt.

## Substantive Issues about Debt and Debt Service

As international capital flows have increased importance, debt servicing burdens and debt crises have become more visible and of greater concern in the policy world. Some issues, such as coordination of creditors through the Paris Club were
addressed and resolved until a new creditor- China - came along and wanted to do things differently. Finding ways to speed up the satisfactory resolution of crises has emerged as a significant issue as a result.

Related to that, it is widely recognized that a good domestic bankruptcy law is an essential part of a good commercial code. There is no counterpart for that internationally. A way of establishing an international procedure and tying it to the need for policy reform and judgments as to policy sustainability is needed. Several proposals have been made, and there are now collective action clauses and other measures (such as aggregation clauses) in debt contracts that have been moves in that direction. Further attention needs to be addressed to the issue, however. ${ }^{9}$

Odious Debts. An age-old issue that keeps being raised is that of "odious debt". Many of those sympathetic to the poverty and needs of those in poor countries are especially offended by debt incurred by governments unelected by their citizens.

In some countries throughout the world, by law debts do not have to be repaid if they were incurred by fraud. For example, if a top executive of a company borrowed in the name of the company but without authorization to do so or if an individual
fraudulently borrowed in someone else's name the company or the other person would have no legal obligation to pay. The legal doctrine is known as "odious debt".

Some advocates for developing countries have suggested that there should be a comparable international doctrine: debts should be forgiven when rulers borrowed for personal gain or without the peoples' consent. Advanced countries could implement this, so it is argued, by legislation that odious debt should not be transferable to a new government. Michael Kremer and Seema Jayachandran (KJ), for example, have proposed that creditor countries' laws could make odious debts legally unenforceable and that foreign aid to any successor government should be contingent upon it not servicing its debt. ${ }^{10}$

KJ propose a new international organization, an independent institution, that could "assess whether regimes are legitimate and declare any sovereign debt subsequently incurred by illegitimate ones odious and thus not the obligation of

[^6]successor governments." They view their proposed policy to be a form of economic sanction. ${ }^{11}$

There are many questions before such a proposal could be considered. First, even if there were an independent international tribunal judging whether regimes are odious, there would have to be virtually unanimous membership of the world's countries. A nonmembers country's financiers could otherwise serve as an intermediary to on-lend funds to the dictatorship. The risk premium might be high, but in cases where dictatorships were reasonably politically secure and the term structure of debt not too long term, intermediaries would surely emerge. A second question is the criteria for judging a dictatorship. Would South Korea in the 1960s and 1970s (when it annually borrowed almost 10 percent of GDP) but grew so rapidly that it averaged 13 percent real growth which in turn enabled rapid increases in living standards and increasing political pressures for democracy which ultimately triumphed) have been deemed an odious debtor under the rule of

[^7]President Park? At what point on the path toward autocratic government would the tribunal act and as the probability of its action rose, would not lending cease? If creditors refused to roll over debt, that in itself would probably plunge the named country into a debt crisis, increasing the risk of a dictatorial outcome.

There are further issues. Money is, after all, fungible. To what class of assets would the odious debt label apply? What of equities? If equities are not covered, creditors could "buy" equities and redeem them after a few months or years. What would happen to a country whose democratic institutions and practices seem under threat? If political unrest were seen to be rising, would that not induce creditors refuse new money and to refuse to roll over existing debt, which would of course disrupt economic activity and increase the chances of a fall of the democratic government. Finally, quite aside from these problems, most of which appear fairly insurmountable, there are important questions as to whether the type of provisions KJ proposed would be permitted under constitutions of democratic countries and be enforceable with a regime of capital mobility.

Highly Indebted Poor Countries. Toward the end of the last century, the differential rates at which different developing countries were growing meant that referring to all non-advanced countries as developing or poor no longer made
sense. While countries such as the Asian tigers had been so successful that they joined the ranks of advanced nations, some had achieved sufficiently rapid growth that they were markedly richer than others, and the terms "emerging markets" and "least developed countries" emerged.

Most of the emerging markets were usually able to service their debts, and began increasing their reliance on private capital markets, but many of the poor countries were receiving foreign aid and other concessional finance and their debt remained mostly to the official community. Many of those wanting their governments to support poor countries' development began lobbying for debt forgiveness for poor countries.

They were successful, and in 1996, a Highly Indebted Poor Countries Debt Initiative (HIPC) was launched. Under it, HIPC countries could apply for relief from their debts. They had to submit a proposal containing plans for needed policy reforms and once approved received relief of 100 percent of their eligible obligations from the IMF, the World Bank, the African Development Fund and all Paris Club creditors. Such deb relief was extended to 36 countries between 2001 and 2015. The percentage of their GDP paid to debt service fell by 1.5 percentage points, and expenditures on health and education rose. With the onset of covid, its
disruptions, and subsequently with higher interest rates, debt and debt-servicing obligations once again have risen and a second HIPC was enacted by the IMF's Board in February 2022. Ghana was the first to be approved for debt service relief in the second HIPC: $\$ 3.7$ billion was the amount reported and the face value of the loan to be disbursed over three years. In the accompanying press release, the net present value of that relief, $\$ 2.7$ billion, was noted.

Other countries are applying for relief, but there have been delays in granting it. Most of the delays are associated with efforts of the country and the donors to agree on a reform program that offers sufficient promise of policy reforms that will accelerate the country's progress.

The difficulties are well illustrated by Nigeria - an oil exporter. It is estimated that in 2022, 96 percent of Nigeria's government revenues were allocated to servicing the debt. While that is clearly unsustainable, theft of oil was a major factor. A Nigerian senate report in 2022 estimated that about a third of its oil was stolen. Fuel subsidies were forecast to be about $\$ 7.2$ billion in the first half of 2023 and clearly could be cut to make room for government expenditures on health and education. ${ }^{12}$ The Nigerian case provides a vivid example of the problems associated

[^8]with debt relief: as much, or more, could be obtained within the existing fiscal framework if theft, corruption, and relatively unproductive allocation of resources could be at least contained or, better yet, reduced. That, in turn, points to the need for economic policy reform even before the debt crisis point is reached.

In Nigeria's situation as of a newly elected President in May 2022, foreign capital inflows had been falling for several years. FDI into the country had fallen from \$3 billion in 2015 to $\$ 468$ million in 2022. It was thought that a major part of Nigeria's difficulties originated from maintaining an unrealistic exchange rate in spite of an inflation rate of 17 percent in the preceding year.

The Need for Policy Reform. The preceding discussion makes clear that debt is not a phenomenon independent of all else in the economy. In a sense, it depends on everything else: given government and private expenditures and receipts from taxes and other sources, increasing debt is the way in which the fiscal deficit can be financed, and imports increased without cutting domestic spending on other items.

The urgency with which many analysts call for additional lending, debt relief and other measures attests to the lack of understanding of the link between economic performance and domestic economic policies. A case in point is the Sri Lankan crisis which rose to the headlines in 2022. A new government in 2019 had cut taxes
enough to shrink government revenues almost by half despite the fact that the prospective fiscal deficit was already uncomfortably large. To make matters worse, the resulting inflation did not induce the new government to allow the exchange rate to float in the face of the rising inflation, but rather led to its effort to restrain imports. To do that, the President decreed (among other things) that all imports of agricultural inputs should be prohibited. The result was a large decrease in agricultural production in a country that was an exporter of agricultural goods. Yet, when the international press discussed the crisis, focus was on covid and worldwide inflation as the factors that had precipitated the crisis! In fact, given the policies then in place there would in any event have been a crisis, perhaps a few months later.

There needs to be clarity and understanding as to the linkage between economic policy reform and the potential benefits from debt relief. Yet those urging debt forgiveness seem to be unaware of the degree to which resources are wasted when inappropriate policies are undertaken. It is not automatic that monies extended for short-term financing needs or those resources freed up in any debt relief will be allocated to the social sectors or other projects which will help the poor. Nor do they recognize the benefits to the poor that can arise from more rapid rates of growth. Too often, political pressures have led to lending asserted to be for these
purposes but instead simply enable continuation of policies not particularly conducive to alleviation of poverty or more rapid economic growth.

## Measurement of Debt

The net present cost of a loan to the borrower is the discounted stream of payments the borrower will make to the creditor over the life of the loan. A loan of $x$ dollars will cost the debtor less if payment of principal and interest is made at the end of the loan period, and the longer that period is.

It was already noted that the DAC of the OECD uses a 10 percent discount rate to evaluate the cost of the loan to the lender. So if the interest charged on the loan is, for example, 5 percent, the cost to the lender (and value to the borrower) is 5 percent of the face value of the outstanding amount of the loan during its life. If foreign aid is a grant, the net present value of the cost to the borrower is zero. If the foreign aid is for one year with payment of interest of 5 per cent and principal at the end of that year, the net present value of the cost is the face value of loan divided by 1.05. Stated another way, the lender could have invested his funds at the 10 per cent rate and received 1.10 times the amount of the loan whereas in fact he would receive only 5 percent.

That these differences matter is evident from the fact that IDA loans are largely concessional, as already noted, while private lenders to sovereigns normally charge market interest rates with shorter tenors. They not only matter for analyzing a country's creditworthiness prospects, but also for assessing the differential burdens across countries.

A rule of thumb that has often been stated is that developing countries and emerging markets could safely have debt-GDP numbers up to 30 percent while advanced countries can safely carry debt burdens of twice that level. But as already noted, Japanese debt has been safe thus far with debt well over 200 percent.

However, what is always true is that a higher debt number increases risk of difficulties if and when the interest rate charged on that debt increases. That risk does not matter for short term debt, but for long term debt it matters, the shorter the average tenor of the debt. At debt of over 200 percent of GDP and a tenor of about 9 , an increase of 2 percentage points the Japanese government would have to pay on debt (assuming it is rolled over, and it surely could not all be repaid) would raise the budget cost 4 percentage points over the nine years (assuming no further deficits), or about .5 percent of GDP annually. Given the political resistance to tax increases, that would be cause for concern.

Rather than using the face value of outstanding debt (as reported by, among others, the World Bank), use of the aggregated net present cost of various loans to sovereigns better reflects the burden of outstanding debt. Even then, many countries in crisis have honored some or all debt incurred by the private sector, and especially bank debt. Some countries' governments do not provide guarantees for projects, but nonetheless have assumed their debts during crisis resolution.

The net present value of the cost of outstanding debt service obligations relative to GDP is a better measure of indebtedness than is the face value. That these differences are significant is easily seen by example. Consider, the 2021 external debt levels reported by the World Bank for Turkey and Uganda [all numbers used for comparisons are from the 2002 [International Debt Report of the World Bank]. Turkey's was 151 percent of gross national income, and Uganda's 312. But both countries fully serviced their obligations that year: Turkey's ratio of debt service to exports was 25 percent and Uganda's was 12. Evidently, the difference lay in a higher fraction of loans made to Uganda being concessional, whereas those to Turkey which were not.

Whether the debt that is denominated in domestic currency is held by domestic residents or by foreigners can matter in assessing debt burdens. But even if public
debt is held domestically, it matters whether residents will sell their assets to buy foreign currency, or whether they will continue to hold assets denominated in domestic currency if there are large negative shocks to the economy. Japan has the highest percentage of government debt to GDP of any country in the world, at around 260 percent. Yet it has had no difficulty in rolling over, or even issuing new, debt. There are several reasons for this, but one is that the average tenor of the debt is very long, over 9 years (compared to around 6 for US debt). That means that if the interest rate increases, the interest costs of servicing the debt will rise more slowly in Japan than in the US.

## Conclusion

There are many aspects of capital flows to developing countries that need to be better understood. Clearly the productivity of the investments that capital inflows finance is crucial. A good loan is one that enables a sufficient rate of return on the investment so that that return can cover the debt servicing associated with it.

But beyond that, the types of financing used and their methods of debt service are also important.

But even if all of these were better understood, it would be desirable to have measures that more accurately reflect the financial liabilities developing countries
assume when they receive funds, and to have those measures on a more comparable basis than is currently available.


[^0]:    ${ }^{1}$ The World Bank's mission includes support for reconstruction activities.

[^1]:    ${ }^{2}$ Taiwan began its very successful reforms in the mid-1950s.
    ${ }^{3}$ For an fuller account, see Frank, Kim and Westphal.

[^2]:    ${ }^{4}$ Of course, the return on investment is also important. If there are poor investments in projects with little or no payoff, the investment will not contribute to growth.

[^3]:    ${ }^{5}$ It was estimated that South Korea experienced an average rate of return on investment of over 35 percent during the first decade of its rapid development [Wontack Hong, ]. See also Krueger Foreign Trade Regimes...].

[^4]:    ${ }^{6}$ Pakistan had a total of $\$ 3.7$ billion in foreign debt due in May 2023 and an estimated $\$ 4.3$ billion in reserves. FT 5/26/23. P.4.

[^5]:    ${ }^{7}$ The Development Assistance Committee provides data on the face value of aid and also on the "aid component", by which is meant the amount by which the loan Is greater than it would have been if the loan had been made on the same repayment terms by a commercial entity.
    ${ }^{8}$ The first country to receive restructuring under the auspices of the creditor countries was Argentina. The creditors met in Paris, and thus the name of the group. There are now 22 members. Some other lenders are invited on an ad hoc basis. China is not a member and has declined to join. There is a comparable group, consisting of the large private creditor banks, called the London Club, which focuses on sovereign debt to them. The Paris Club meets regularly ten times annually.

[^6]:    ${ }^{10}$ Michael Kremer and Seema Jayachandran, "Odious Debt", in IMF, "Finance and Development", June 2002, Vol. 39 No. 2

[^7]:    ${ }^{11}$ They also propose that the multilateral lending institutions refuse to lend for illadvised purposes regardless of the form of government but that is beyond the concern of this paper.

[^8]:    ${ }^{12}$ FT 5/29/23, P. 2

