Nearly a decade after the Asian financial crisis, developing countries remain wary of global capital markets. But an Asian capital market could lead the way in issuing new growth-linked bonds that are less risky for emerging-market borrowers.

It is nine years since the IMF/World Bank annual meetings were last held in East Asia. Those Hong Kong meetings were held during a lull in the financial crisis that was ravaging the region. Partly at least to prevent a recurrence, virtually every country in the region has since built up its reserves to a level where a new crisis is, at least for now, inconceivable. But everyone knows that this insurance is expensive. One of the main benefits of international capital flows is negated if a country that receives a capital inflow feels obliged to build up its reserves to cover a subsequent outflow. If the international capital market is ever again to fulfil its potential of reallocating resources to parts of the world where the return on investment is highest, countries need to be given the confidence to use their capital inflows to finance current-account deficits.

Looming demographic and development trends make this task especially important. Over the next 50 years, virtually all population growth will occur in parts of the world that are now labelled as developing countries, while most of the currently developed countries are likely to experience a gradual population decline. Moreover, many (with luck, most) developing countries – and certainly most in East Asia – seem likely to develop. Undeniably, this requires good institutions, a work ethic, entrepreneurial attitudes and a good education system, but it also requires lots of investment. Meanwhile, many developed countries should be saving more than they can profitably invest, in part to build up assets for the coming explosion in their retired population. The world would benefit from arrangements that facilitate a flow of capital from developed to developing countries. That means real capital flows, transferred via current-account deficits, not having reserve changes provide the counterpart to capital inflows. Large capital flows to emerging markets would also help attenuate the pressure for large-scale migration.

Several things can be done to facilitate this process. Potential capital-importing countries need to manage their economies in ways unlikely to cause investors to panic. They need to maintain low rates of inflation and a sound fiscal position, adopt modern methods of economic management (involving flexible exchange rates and inflation targeting), allow automatic fiscal stabilisers to work, avoid large currency mismatches in their asset/liability positions, borrow in forms that do not impose the risk of sudden large demands for repayment, and avoid a reputation for corruption. The world’s major economies need to maintain a healthy rate of growth and avoid crises and recessions.
It would help if groups of capital-importing countries could create regional capital markets, in part because this would enable regional surplus countries to satisfy a part of the needs for capital, and also because it would reassure investors that unexpected changes in the rules of the game by debtors would be resisted by peers as well as outside lenders. The international financial institutions need to create mechanisms, such as the IMF’s proposed arrangements for high-access contingency financing, which will give confidence to debtor countries that in the event of a withdrawal of funds for reasons other than their own irresponsible policies they would be able to draw as quickly on liquid facilities as they can currently mobilise their reserves. Finally, the international capital market needs to play its part in creating and lending through instruments that do not pose the threat of imposing sudden large demands for repayment unrelated to the debtor’s actions.

I will focus principally on what types of instruments would be best suited to minimise the risk of sudden demands being made on a country’s payments capacity at inappropriate times. Introducing and making use of such instruments will require supportive actions by both emerging-market borrowers, which need to issue their instruments in the appropriate form, and lenders, which need to recommend that their clients buy appropriate instruments.

**Some forms of debt are best avoided**

Financial crises such as the one in 1997 arise when a large number of creditors seek immediate repayment of their loans. For this to be possible, a large number of short-term loans must be outstanding. For it to be dangerous, the value of the short-term loans outstanding has to be large relative to the reserves held by the debtor countries that are unconditionally available to make payments. (Hence the popular recommendation that countries should keep reserves at least equal to their level of short-term debt.) Debt is particularly dangerous if it is denominated in foreign currency, for then a crisis that reduces the value of the domestic currency – as they tend to – will automatically increase the domestic-currency value of debt, and thus the burden of servicing it.

This simple analysis points immediately to two kinds of debt that developing countries ought to avoid: short-term loans and foreign-currency-denominated ones.

Of course, some debts are naturally short-term, such as trade credit. Foreign banks could hardly be expected to make a five-year loan for imports that are due to be...
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Sold within three months. Trade credits are naturally short-term, and are normally rolled over as a matter of course. But in a crisis, banks may try to cut the trade credits that they supply to a country, and occasionally countries have tried to negotiate with their banks to maintain aggregate trade credit lines unchanged. It is difficult, though, to envisage any pre-commitment to that effect. One probably has to accept that banks may try to curtail trade credit in a crisis, and any attempts to modify that will have to be ad hoc.

But other forms of short-term debt could be avoided. For sure, banks prefer to make short-term loans because then they can tell their regulators that they have a balanced short-term position, even if this is based on a fallacy of composition, because not all banks could simultaneously liquidate their assets. Investment banks sometimes recommend their clients to invest in country X, but only in assets of less than six-months’ duration, because they believe that no crisis is likely to occur within six months. Such investments are useless to a developing country – except perhaps one nearing a crisis, but then such finance would not be available – because prudence demands that they be matched one-for-one by higher reserves. The only ways of avoiding such a burden are through exchange controls that prohibit short-term loans other than for trade credit, or by reducing short-term domestic interest rates below the foreign rate. As countries develop, the latter will become a real possibility, but until then there is much to be said for retaining some capital controls.

The other problem arises from currency mismatches. Loans denominated in a foreign currency are likely to increase in domestic-currency (and therefore real) value when the domestic currency depreciates, as it normally does when a country encounters economic difficulties. A part of the literature argues that lenders are simply not prepared to lend in the currencies of most emerging markets, because the countries suffer from “original sin”. This seems to me far too defeatist. Once, investors had little confidence in the monetary and statistical authorities of most emerging markets, so if those countries wanted to borrow abroad they had to do so in foreign currency. But nowadays, many emerging markets are capable of borrowing on the international market in loans denominated in their own currencies (as recent local-currency loans...
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issued by countries such as Brazil and Colombia show). Even when international markets do not have enough confidence in local monetary authorities to make long-term loans at reasonable interest rates, they may well have sufficient confidence in the integrity of their statistical services, and thus be prepared to make loans indexed to the local price level. These are still denominated in the local currency, so that in the event of a real depreciation of the local currency in a crisis the borrower does not risk suddenly finding the burden of debt servicing has increased just when it is least capable of paying it. At the same time, the lender has the reassurance of knowing that the borrower is unable to inflate away the real value of its debts.

One measure needed to promote a shift to local-currency financing is simple: sovereign issuers need to be willing to issue local currency debt, and overcome their fear of “original sin”. But of course much debt is private, and this cannot be converted to local-currency form simply by the will
of the sovereign. Issuing local-currency sovereign debt might help – for example, by establishing a yield curve – but it is unlikely to be sufficient. Hence it is natural to ask what other policies might help to encourage private companies to issue debt denominated in the local currency.

Apart from the heavy-handed tool of administrative direction, which few economists would wish to use unless there seemed no feasible alternative, there are at least two possibilities. One involves bank regulation. Bank regulators could make it clear that they wished the banks subject to their supervision to maintain a balanced currency position. Of course, there is still a danger that enterprises that sell in the domestic market borrow foreign exchange in search of a lower interest rate, and thus expose themselves to currency risk, but regulators could also require that their clients guard against this (or suffer penalties such as higher reserve requirements). The other possibility is taxation. Payments of interest, and/or receipts of interest, on loans denominated in foreign exchange could be taxed at a higher rate than interest on domestic-currency loans. This would not involve the prohibition of foreign-currency loans, but it would create an incentive for borrowers and lenders to use such loans only where they perceived a compelling reason for not using the domestic currency.

Link bonds to growth instead

Short maturities and foreign-currency denomination are the two features of standard loans that have been most conspicuous in past crises, and it would therefore be sensible to avoid them in the future. But once one begins to think of financial engineering that would be ex ante in the interest of both borrower and lender, at least one other possibility leaps to mind. This is sovereign borrowing through growth-linked (sometimes referred to as GDP-linked) bonds.

Growth-linked bonds involve a yield that varies according to a country’s rate of growth. They could take several forms. They could be for any maturity, though it is most natural to think of them being used for fairly long-term loans, since otherwise the return to the lender (and therefore the cost to the borrower) is unlikely to vary much from what the market would otherwise require. But in the longer term, our foresight is very imperfect, so that an instrument whose return varies with actual outcomes could ex...
post yield substantially more (or less) than the principals expected ex ante. Because the yield would vary depending upon the borrower’s ability to pay, the likelihood of default would be lower than with a plain vanilla loan. Only in bad states of the world would the borrower have to pay less, but this could help persuade a debtor not to default if its payments were automatically reduced at times when it confronted difficulties. Lenders would expect those low returns to be compensated by the high payments that would accrue to them in good states of the world. And by holding a diversified portfolio of these assets issued by a number of countries, lenders would be able to reduce the expected variability in their returns over time. If many countries issued such bonds, one would expect lenders to be able to diversify away most of their risk.

Growth-linked bonds could also differ as to the currency in which the bonds are denominated and growth is measured. Like plain-vanilla bonds, growth-linked bonds could be denominated either in the domestic currency or in a foreign one. However, there would be strong advantages in domestic-currency denomination. This would give the borrowers the advantages discussed above, of avoiding an increase in their debt burden just when circumstances are most difficult. Also, growth (both nominal and real) is in the first instance measured in terms of the domestic currency. It would therefore be relatively simple and completely unambiguous to calculate the debt service implied by the contract.

The third dimension of designing a growth-linked bond is the most interesting, because it raises completely novel issues. Even if we have agreed that we are talking about (say) a 30-year instrument with a domestic-currency denomination, we may think of an instrument that promises to pay a given proportion of GDP each year, perhaps with a higher proportion in order to amortise the instrument in the final year (or a number of concluding years), as proposed by Robert Shiller. Or, we might design an instrument that promises to pay (in addition to amortisation) a base rate if growth is (say) equal to the average over the past 10 years, plus or minus 1 percentage point (say) for every percentage point that the real growth rate exceeds or falls short of that past average growth rate, as proposed by Eduardo Borensztein. For example, a country that has grown at an average rate of 3% in the past and has been accustomed to borrowing at 7%, might offer an instrument that paid 7%, plus or minus the difference between measured growth and 3% (so that in a year when its growth was 5% it would pay 9% and in a year when real GDP stagnated it would pay only 4%). If it found no lenders on those terms, the country would have to raise the base offer to something more than 7%, but one would...
expect this premium to be small where lenders have an opportunity of diversifying their risks away.

What are the main differences between these two instruments? Most obviously, the Shiller bonds are inflation-indexed whereas Borensztein ones are not. (A doubling of inflation doubles the nominal yield of the former, and leaves its real amortisation unchanged, but leaves the nominal yield and amortisation of the latter unchanged.) This is surely an advantage of the Shiller specification. However, the Borensztein version is far more sensitive to changes in the growth rate. Consider Thailand during the 1997 crisis. Suppose that its Borensztein bonds had carried a coupon of 7% when the growth rate was 5.5%, as it was in 1996 before the crisis. This would have made debt service only some 2% in 1997 (when growth was slightly negative) and zero in 1998 (when growth was strongly negative), whereas a Shiller bond’s yield would have fallen trivially in 1997 and by only 8% in 1998. This greater sensitivity to changes in the growth rate seems to me an advantage for the Borensztein variant. In any event, although both are “growth-linked”, these bonds are very different securities.

It is interesting to speculate about some of the other consequences of introducing growth-linked “bonds”. For a start, it is not clear that they are “bonds” at all. A contract says what a bond will yield, whereas these instruments are equity-like in that how much the debtor is obliged to pay depends upon performance. Clearly, though, they are not equities either, because they do not give a right to residual ownership if management fails. My guess is that if they take off they will soon be recognised as a new asset class. Investors who believe they have a knack for forecasting how fast different countries will grow will find these assets attractive. In the long run, borrowers may not have to pay a premium to borrow in this way, although it would be sensible for them to be prepared to pay somewhat more in order to reduce their risk profile.
Sceptics always ask whether countries would not cheat and announce lower growth figures in order to reduce their debt-service payments. Since the increase in debt service-payments is unlikely to be more than a small part of an increase in growth, there need be no fear that countries would seek to reduce their growth in order to reduce their interest bill. The more realistic danger is that countries might lie about their growth rate. But finance ministers usually take pride in announcing higher, not lower, growth, and it seems rather unlikely that they would anticipate gaining political brownie points by lying about how little their country had grown. Furthermore, investors do not fret about countries under-estimating their inflation numbers in order to save interest on inflation-linked bonds. Above all, this is surely an issue where financial markets could be relied on to discipline any rogue countries that might consider manipulating their published growth rates in order to reduce their interest bill. A country that acquired a reputation for doctoring its growth rate so as to reduce its interest payments would before long be forced to sell growth-linked bonds at a higher premium.

Since the East Asian crisis of the 90’s virtually every country in the region has built up its reserves to a level where a new crisis is, at least for now, inconceivable.
An Asian capital market?

One of the financial initiatives currently under way in East Asia involves an attempt to build a regional capital market. In addition to attracting private investors, it is envisaged that countries will invest a part of their reserves in liabilities issued by other regional countries. Of course, this will only reduce the volume of dollar assets that the countries of the region collectively have to buy to the extent that some countries (presumably those that issue the liabilities) adjust their current-account positions, but they would be in a position to do this as a result of the larger capital inflows.

There is a danger that any such regional capital market would operate in excessively traditional instruments. If creditors were only willing to buy short-term, dollar-denominated, plain vanilla bonds, it is difficult to see that much would be accomplished by having the intermediation occur in Singapore rather than Wall Street. But it does not have to be that way. The most likely modification of conventional arrangements would involve the issue of bonds denominated in local currencies, or a basket of local currencies, rather than the dollar. The Asian Development Bank has been advocating the creation of a local-currency basket that could be used to denominate loans. Such a basket would go part of the way towards satisfying the objectives that it was argued above would be furthered by local currency denomination: the basket would depreciate in the event of a renewed regional crisis, but the depreciation would be modest if a crisis were confined to just one country. It is therefore to be hoped that any regional capital market would be open to the issue of instruments denominated in the national currencies as well as a regional basket.

A regional capital market would neither preclude nor guarantee the issue of long-term or growth-linked instruments. One would not expect central banks to want to place their reserves in such instruments, but a number of countries are now realising that their asset accumulation has already exceeded prudent estimates of the need for reserves and that the balance should be invested to make money. These assets might well take longer-term and growth-linked forms. A regional capital market would enable Asia to start issuing such instruments internationally even if traditional creditors in the developed countries resist this move. My guess is that some of the less hidebound moneymen from the developed countries would soon be attracted to what had initially been planned as an Asian regional market.

The whole world, North and South, old industrial countries and emerging markets, share an interest in reviving large capital flows to developing countries. While it is important to prevent these flows getting out of hand and generating a new crisis, the current problem is to re-establish the direction of flows that prevailed prior to the 1997 crisis. This will only happen if emerging markets are convinced that a revival of capital inflows does not threaten them with a new crisis. Several conditions would help nurture such a conviction, but one of the most important is to develop new instruments that carry less risk of provoking crisis. This implies longer-dated debt, avoiding denominating loans in the currencies of creditor countries, and developing a market for growth-linked bonds. An Asian regional capital market would not in itself guarantee that instruments would take this form, but it would give Asia the power to decide for itself whether to issue such instruments rather than also having to rely on the goodwill of Wall Street.