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The Importance of Sub-National Authorities Avoiding Foreign Exchange Risk When Borrowing Long-Term

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It has become an internationally recognized best practice to match the repayment term of long term debt financing to the expected useful life of the infrastructure financed; sometimes 15 years or more. This makes infrastructure affordable. However, it is equally important to match the currency of the debt repayment to the currency in which the sub-national authority obtains its revenues.

When national governments are the ones building and financing infrastructure, they can repay some of the cost out of the foreign currency they controlled. Sub-national authorities do not have that option since their revenues are (with only rare exceptions) collected only in local currency. This is one of the principal reasons that the IBRD and most other International Financial Institutions (IFIs) only lend in foreign currency to national governments. Unlike national governments, sub-national authorities typically do not have the capacity to manage foreign currency risks, and therefore require local currency financing.

Successful sub-national authorities avoid foreign currency risk, and do not fall prey to the myth that foreign debt is somehow superior to local currency debt. Instead they are smart operators and hard-nosed negotiators who are unaffected by those who imply there is greater prestige or a stronger transaction associated with a foreign currency financing. Nor are they impressed by what appear to be low repayment costs that are based on current foreign exchange rates.

Foreign currency risk exists because the exchange rate between a local currency and foreign currencies is constantly changing in the international currency markets. When a borrower's local currency decreases in value compared to the foreign currency in which they have to repay their debt, the amount that has to be repaid immediately increases.

Unlike national governments, sub-national authorities are not in a position to affect the value of their local currency in the international currency markets. Although options may be limited even for national governments, they can at least officially intervene in the currency markets to support the value of their currency and negotiate additional support from IFIs. There is little incentive for a national government to intervene in the currency markets simply to protect a sub-national authority from rising debt service costs.

Nor are there any available mechanisms that sub-national authorities can use to protect themselves from currency market fluctuations. Purchasing currency futures as a hedge against exchange rate fluctuations is not an option because they are not available for transactions many years in the future. Currency traders recognize that the inherent unpredictability of exchange rates increases the further one looks into the future and they are not willing to offer long term futures contracts. Sub-national authorities that borrow in foreign currency are entirely at the mercy of market fluctuations.

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Illustrative Example

Let's imagine that a sub-national authority borrows US$100 million for an infrastructure project at a fixed rate of 5% interest for 15 years with semi-annual payments in June and December. The authority's semi-annual debt service payments would be US$4,778,000. Let's also assume that when the borrowing take place the local currency (called LC) has an exchange rate of LC 2.093 per 1 US$. This means that the authority's debt service payments should be LC 10 million every six months. For this example, let's say the authority's total budget is LC 200 million per fiscal year (January 1 through December 31) divided into: LC 100 million for Personnel costs; LC 70 million for purchase of Essential Goods and Services; LC 10 million for funding Programs & Activities with citizens and external organizations; and LC 20 million for debt service (a relatively conservative 10% of the total budget).

Now imagine the following scenario…

- After the first debt service payment of LC 10 million in June the LC devalues against the US dollar by 10% to LC 2.302 per 1 US$. Now the authority needs LC 11 million before the end of the fiscal year to make payment #2. If there is LC 10 million still available in the Programs & Activities budget, the authority would have to take 10% of those funds to cover the increased debt service (of course a higher percentage of the remaining budget would be needed if part of that budget has already been spent).

- In anticipation of the increased debt service payments, the authority prepares the next year's budget to reflect LC 22 million for debt service and only LC 8 million for Programs & Activities (a 20% cut from the prior year). But then the LC devalues by an additional 5% before the third debt service payment in June, and the authority has to come up with LC 11.55 million, and plan for a similar payment at the end of the year. This takes another LC 1.1 million out of the remaining Programs & Activities budget for payments #3 and #4; which amounts to an additional cut of almost 14%.

- Toward the end of the year the value of the LC improves by 2% so payment #4 is only LC 11.32 million, but there is hardly any time left to reprogram the savings of LC 230,000. By now the authority is finding it difficult to prepare a realistic budget for the following year and wishes that it did not have to face constantly shifting debt service requirements.

The foregoing example illustrates the problems that face sub-national authorities that have borrowed in a foreign currency. Currency markets are unpredictable and at times can be extremely volatile. Although our example only covered two years, the risks are seriously compounded by repayment periods stretching over 15 years or more. Over such a long term, it is entirely possible for debt service payments in local currency to increase dramatically as demonstrated in the multi-country Asian financial crisis of 1998 and the collapse of the Argentine currency in 2002. Even if the increases are gradual, they can wipe out non-essential items in a sub-national authority's budget and even cut drastically into essential spending or force reductions in personnel costs. Sudden large increases can be financially devastating as Argentine sub-nationals with foreign debt learned in 2002.

Sub-national authorities that borrow in foreign currency are entirely at the mercy of market fluctuations

The example also illustrates that even an attractively low interest rate on a foreign currency loan can be misleading. Let's assume that the interest rate of 5% in our example is half the rate that would be required to secure local currency financing from lenders in the authority's own country. The foreign currency loan sounds like a good deal for the authority. The local currency financing at 10% for 15 years would require debt service payments of LC 13.6 million every six months compared to only LC 10 million per payment on the foreign currency loan. That appears to be a 36% savings on each payment. However, this also means that the LC only has to decrease in value by 36% to eliminate the per payment savings. If the semi-annual payments increase by an average of LC 500,000 per payment over 8 years (an average LC devaluation of 3.8% every six months), then the total cost of the foreign currency loan is actually more than that of the local currency loan. For many countries the decline in their currency value over a 15 year period can easily exceed these kinds of changes when the economy suffers inflation.

The financial risks for a sub-national authority are even greater if their foreign currency loan carries a variable interest rate based on a foreign benchmark rate. In such cases the authority's debt service payments will fluctuate in response to changes in two variables: the benchmark interest rate and the foreign exchange rate. While there is no fixed relationship between these variables, it is not uncommon for currencies

such as the US Dollar, the Euro, and the Japanese Yen to appreciate in value against other currencies when their benchmark interest rates increase. In such cases, sub-national authorities with Dollar, Euro or Yen debt can experience a double increase in their debt service payments: one with the increase in interest rate and another with the decline in the value of their local currency.

Some sub-national authorities borrow in foreign currency with a guaranty from their national government, but with so many national governments facing difficult financial choices and pressure from IFIs, guaranties for sub-national authorities' borrowings are becoming more and more difficult to arrange. In any case, a national government guaranty does not protect the authority from currency fluctuations. It simply protects the lender from a default by the authority and makes the national government responsible for payment as a last resort. National governments can still require that the sub-national authority exhaust all other options to make the payments (including painful budgetary cutbacks and steep increases in fees or taxes) before the guaranty is exercised.

A rapidly declining local currency value can quickly bankrupt a sub-national authority with foreign currency debt. This has serious consequences for the people who depend on the authority for essential services such as electricity, water supply, transportation, and solid waste disposal. The local economy can be affected and people can loose their jobs. Public health conditions can deteriorate and people can become ill or die. The risk of facing such serious consequences should not be underestimated, and the risk should be avoided.

Avoiding foreign exchange risk can be done either at the national or the sub-national level. In some countries, such as Mexico, national governments have adopted laws that bar sub-national authorities from borrowing in foreign currencies. Other countries have established regulations that require some form of national government approval for sub-national borrowing. However, this latter approach is not as strong as an outright prohibition of foreign currency borrowing by law. Where national legislation is inadequate, prudent sub-national authorities have adopted their own by-laws or written policies to prohibit foreign currency borrowing. In either way, the avoidance of foreign exchange risk is institutionalized. This does not mean that international investors are not welcomed to invest in sub-national authorities, but simply that they have to invest using local currency. A positive side effect of avoiding the currency risk is that sub-national authorities become more creditworthy (all other factors being equal) and they may be able to access local currency financing on better terms as a result.

The Sub-National Technical Assistance (SNTA) Program

As more and more countries decentralize, the provision of infrastructure is increasingly becoming the responsibility of sub-national authorities (local governments and public utilities). These authorities are finding it necessary to seek long term private financing for their infrastructure projects. Using annual budget allocations to build infrastructure is difficult to manage because the funds required vary greatly from year to year. Long term debt financing allows sub-national authorities to smooth out the annual funding requirement by borrowing a large amount of capital at one time and then repaying the debt in predictable annual increments small enough to make the project affordable to the people served. The Public Private Infrastructure Advisory Facility (PPIAF) works with sub-national authorities to enable access to private financing on the best possible terms, and shares the lessons learned from its global experience.

SNTABRIEFS

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