



United Nations  
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# Debt Conversion Development Bonds

## Mobilizing Domestic Savings to Fund Development

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# Debt Conversion Development Bonds

## Introduction

This paper is for policy makers who are seeking ways to provide additional funding for social and economic development efforts in developing countries. It describes Debt Conversion Development Bonds (DCDBs) and explains how and where they might be used.<sup>i</sup> It also discusses the strengths and weaknesses of this form of financing.

DCDBs are a variation on traditional debt conversions (often referred to as debt swaps) that may be of use when donors wish to spread the costs of financial assistance over time utilizing the capacity of the beneficiary government to bring forward the benefits of this assistance via the issuance of domestic bonds

Briefly stated, DCDBs are domestic bonds issued by a developing country government, the future debt service payments of which are matched by the fiscal space created by creditors forgoing future debt service payments.

A key attraction of DCDBs for donor governments is that they allow the donor to mobilize substantial development funding today while spreading the cost over a number of years. Thus DCDBs can be especially useful for the funding of large social and economic infrastructure projects that may be difficult to fit into aid budgets otherwise. DCDBs may also be an attractive form of aid during periods of fiscal austerity in the donor country or as a means of responding to emergency funding needs.

A key attraction of DCDBs for the beneficiary country is that they allow the government to obtain substantial funding today by issuing bonds that will be repaid with no added fiscal burden in the future.

DCDBs can also help develop the domestic bond market in the beneficiary country. In the longer term this can be their most significant and sustainable impact. Well-developed domestic bond markets can be instrumental in channeling the rapidly growing institutionalized savings of the developing countries into social and economic development projects.

## DCDB Program Basics

The basic building blocks of a Debt Conversion Development Bond program are the following:

- One or more creditors agree to write off specific debts (or debt service payments for a number of future years) in exchange for a commitment from the beneficiary country's government to use the fiscal space generated by this action to support the issuance of government bonds and to use the revenue obtained from the bonds to fund specific social and economic development projects.<sup>ii</sup>

- Creditors who provide debt for conversions have the opportunity to negotiate with the beneficiary governments about the allocation of the funds raised by issuing DCDBs. They can negotiate means for monitoring results if they so desire. And they can provide technical assistance and other forms of financing to help ensure concrete development results from the projects that are funded.
- The beneficiary government would then issue one or more domestic bonds. The time profile of the future stream of debt service payments on these bonds should be aligned with the time profile of the fiscal space created by the debt conversions.
- The effort and cost of issuing DCDBs should be modest. Although DCDBs may be marketed as a special form of financing and designated to fund specific development projects, in actuality will be just another “plain vanilla” government bond. There will be no special financial structuring required or any additional credit rating needed. Governments that are already regularly issuing longer term government securities will already have in place all the necessary infrastructure for issuing DCDBs.
- The proceeds from the bonds would then be used by the beneficiary government to fund the social and economic development projects agreed upon with the donors.
- The government would repay the bonds from the savings realized over time by not having to make payments on the converted debt.

*“Cost spreading” for donors and  
“front loading” for beneficiaries  
are key incentives for using DCDBs*

Debt conversions and debt forgiveness have been used successfully over the past three decades to provide significant fiscal space for developing countries and thus allow them to spend more on development.<sup>iii</sup> They are a regular feature in the official development assistance (ODA) of several donor countries. DCDBs take traditional debt conversions one step further by linking them to the issuance of domestic bonds by recipient governments.

## **Cost Spreading**

The first step in creating a DCDB is for one or more creditors to agree to forego future debt service payments on selected debts owed to them by a beneficiary country. For the donor, the cost of not receiving the stream of scheduled debt payments is spread over future years.

Cost spreading can be useful in various situations. It may allow for donors to fund social and economic infrastructure projects are difficult to fit into annual aid budgets due to the “lumpiness” of the expenditures required. It can help donors maintain or increase financial assistance efforts during periods of fiscal austerity for the donor. And it can facilitate the mobilization of assistance when

unanticipated emergency funding needs arise. In these circumstances DCDBs may be an attractive option as they allow donors to spread the cost of aid across a number of future years.<sup>iv</sup>

## Front Loading

Under certain conditions it may be beneficial for recipient country governments to convert the future savings created by debt service payment conversions into immediate cash by issuing bonds. The bonds are then repaid over time using the savings, or “fiscal space”, generated by the debt conversions. Such front-loading is justified when the benefits of using the funds today, minus the borrowing costs, are greater than the benefits of using the funds over time. Front loading can be particularly useful when

*The rapidly growing collective savings institutions in developing country can be a major source of funding for development.*

funds are needed to invest in large social or economic infrastructure projects or to respond to emergency needs.

## Mobilizing Domestic Savings

The domestic savings of developing countries are potentially one of the most substantial and sustainable sources of additional funding for development. In many developing countries the assets of collective savings institutions such as pension funds, insurance companies and mutual funds are growing rapidly. A recent survey of pension funds in developing countries concluded that they had over \$1.1 trillion in assets (as of the end of 2008). In addition, large amounts of assets are held by insurance companies, mutual funds and similar collective investment institutions.<sup>v</sup> These institutions need to invest in safe, long-term assets; unfortunately, in most developing countries such assets are in short supply. The bonds issued by the national government are usually viewed as the safest asset that local investors can hold. However, the amount of such government bonds in many developing countries falls short of the investment needs of these local investors. As a result, savings held by institutional investors are often invested in local real estate and private companies—relatively risky and illiquid assets that are susceptible to corrupt practices—or held as time deposits in local banks earning relatively low rates of return. Developing countries can mobilize these assets and use them to finance social and economic development through the issuance of long-term local currency bonds in their domestic capital markets. Such bonds, however, should be issued only when it is clear there will be adequate future revenue available to repay the bonds. The ability of governments to issue such bonds is often constrained by the lack of adequate fiscal space to ensure the repayment of additional bonds.

A key feature of DCDBs is that they mobilize domestic saving for development purposes. And they do so without putting any additional burden on the beneficiary governments’ budgets. In addition,

DCDBs can be used to help develop local bond markets. They can help push out the yield curve, encourage the government to accept market pricing for their bonds, strengthen the issuance infrastructure, etc. Furthermore, DCDBs provide additional securities for domestic investors. In many developing countries the paucity of bonds relative to investors' demand for long term assets is a serious problem.

There are many other ways that DCDBs can be used to strengthen bond market infrastructure and capabilities in beneficiary countries. Their positive impact is likely to be maximized if the DCDBs are used in conjunction with other efforts that have been initiated to assist countries in the development of their domestic bond markets.<sup>vi</sup>

In countries with well-developed domestic bond markets a large share of spending for social and economic infrastructure comes via the issuance of bonds by national and sub-national government bodies and private sector entities. In the future, this is likely to be the case in other countries as well. DCDBs could help countries reach this stage more quickly.

### Illustration of a DCDB program

The potential for DCDBs to provide “cost spreading” for donors and “front loading” for the beneficiary, while helping to strengthen and develop the domestic bond markets of the latter, is provided in this illustration for Jordan.<sup>vii</sup>

Jordan meets all the requirements for the use of DCDBs:

- Jordan’s financial sector is sufficiently developed for the issuance of a DCDB. The Central Bank of Jordan issues treasury bonds, denominated in Jordanian dinars, at regular intervals and there is strong demand for bonds from banks and institutional investors (pension funds, insurance companies and investment companies). The bonds are sold at market determined interest rates, thus establishing a useful benchmark for non-government bonds.

<b>Jordan's Outstanding Bilateral (ODA) Loans</b> (as of June 30, 2012 in US\$ million equivalent)			
	<b>Total Outstanding</b>	<b>Estimated Annual Debt Service in 2013</b>	<b>Estimated Total Debt Service 2013-2022</b>
<b>France</b>	117.6	10.4	83.5
<b>Germany</b>	338.8	28.8	166.8
<b>Japan</b>	1247.3	149.7	1047.9
<b>United States</b>	92.3	9.0	68.3
<b>Other</b>	261.5	10.8	82.0
<b>Total</b>	<b>2057.5</b>	<b>208.8</b>	<b>1448.6</b>

The government bond yield curve has been established up to five years.

- Jordan has over \$2 billion in outstanding bilateral loans from official creditors. It is currently fully servicing this debt. The estimated debt service payments in 2013 will be over \$200 million and over the next ten years will be over \$1.4 billion.
- Jordan has specific important social infrastructure projects that are ready to be implemented but lack the necessary funding. One such project is in the education sector. In March 2010 the Government of Jordan launched the second phase of its Education Reform for a Knowledge Economy Program. The goal of ERfKE is to re-orient education policies and programs in line with the needs of a knowledge based economy, improve the physical learning environment in most schools and promote early childhood education. The total expected cost of implementing ERfKE II is \$410.2 million. The program is being implemented with funding from the Government of Jordan and various donors (IBRD, CIDA, EU, USIA, KfW, JICA). But there are several funding gaps in ERfKE II that are causing delays in the program's implementation, especially in Component Five—the construction of new schools and the provision of ICT equipment—which has a funding gap of \$112.3 million. Component Five is the type of investment that is well suited for financing via a DCDB.

If one or more of Jordan's creditors were to forego debt service on some of their loans over the next ten years in an amount totaling approximately \$15 million per year, this would provide the Government of Jordan with fiscal space to issue \$100 million in ten-year dinar-denominated bonds that could be used to fill most of the funding gap in the ERfKE II program.<sup>viii</sup> Japan or Germany alone has sufficient debt service payments to make this possible. A joint effort involving several major creditors would allow for smaller amounts to be provided by each country.

The DCDB bonds would be no different than other general obligation bonds currently issued by the Government of Jordan. No special administrative structure would be needed to issue the bonds and thus the cost of issuing them would be low. The interest rate on the bonds would be significantly higher than the converted foreign debt (perhaps 8% to 10% compared to 0% to 4.5% on the ODA debt). However the additional interest payments would go to domestic investors rather than foreign governments and Jordan would no longer be exposed to the exchange rate risk of foreign currency debt. (As an example of the latter risk, over the past decade the value of the Jordanian Dinar relative to the Japanese Yen has declined 60%, making the real costs of servicing loans to Japan corresponding higher.)

The Government of Jordan could issue several tranches of DCDBs with maturities of 5 years or less. Better yet, it could use this opportunity to push out the government bond yield curve by issuing bonds with longer maturities, for example by issuing ten year bonds to match the fiscal space provided by the ten year period of donor debt conversions. This would take the market one step closer to having the capacity for the private sector to issue longer tenor bonds to meet its long term financing needs.

The debt conversions would reduce Jordan's external debt service obligations, while the issuance of DCDBs would increase its domestic debt service obligations. However, the government's domestic debt service burden is not increased as the future DCDB payments are matched by the savings on foreign debt service. Thus the DCDB would have a positive impact on the country's creditworthiness and should not negatively influence its current sovereign foreign currency and local currency issuer ratings (S&P: BB/BB+; Moody's: Ba2/Ba2).

## **Conditions Conducive to DCDBs**

DCDBs are not appropriate as a means of development finance in all countries or in all circumstances. Several conditions need to be met:

- The beneficiary country must have outstanding debts with creditors who are willing to have these obligations converted into DCDBs. The type of debt most commonly used in the past has been concessional bilateral official development assistance (ODA) loans. However, other types of debt can be used if the creditors are willing.
- The expectation must be that the beneficiary government is likely to service these loans. Otherwise their conversion would not provide fiscal space in the beneficiary government's budget.
- The country should have a need for an immediate and significant increase in social and economic development spending. This usually means that there are good reasons for the government to significantly increase capital expenditures in the short term. Care needs to be taken to ensure that once the additional temporary funding provided DCDBs is no longer available, there will be adequate funding from the government's budget to meet any continuing expenses necessitated by these investments.
- The country should be able to effectively utilize a significant increase in funds. If the country is already showing signs that it cannot effectively use more money, say by the evidence of widespread construction bottlenecks, raising more money by issuing bond may not be warranted.
- The country should have a sufficient investor base to absorb the bonds. In many, but not all, developing countries the rapid growth in pension funds and insurance companies and other institutional investors means that there is good demand for longer term, high quality assets such as DCDBs. Banks are also potential investors, but they usually only invest in bonds with short tenors (five years or less).
- The government should already have established its ability to issue long-term debt at reasonable real fixed interest rates. (Nominal interest rates in most developing countries appear high, but if the inflation expectations upon which they are based prove to be correct, the real interest rates may not be high.)

Even given the restrictions outlined above, the number of countries that could issue DCDBs is substantial. Given the rapid progress many countries are making in establishing local bond markets, this number will continue to grow. The amount of potential conversions depends on the types and amounts of each country's outstanding debts and the willingness of donors to make these available. As the majority of low-income countries had the bulk of their debts forgiven in recent years due to the Heavily Indebted Poor Country and Multilateral Debt Relief initiatives, the greatest potential will likely be for upper-middle-income and lower-middle-income economies.<sup>ix</sup>

While most development assistance is focused on the low-income countries, there is still a need for additional financial assistance to the poor in middle-income countries. As is often pointed out, there are more poor people living in such countries than there are in the lowest-income countries.<sup>x</sup> And the need for emergency aid, for example to assist refugees, can arise in middle-income countries as well as low-income countries.

The following table lists examples of countries where DCDB might be used. These are countries that have at least nascent domestic bond markets and a significant amount of outstanding official bilateral concessional debt.

<b>Bilateral Concessional Debt (mil. \$US, end 2010)</b>			
<b>Low Income</b>		<b>Upper Middle Income</b>	
Bangladesh	\$ 2,832	Angola	\$ 3,911
Kenya	\$ 2,426	Algeria	\$ 1,755
<b>Lower Middle Income</b>		Bulgaria	\$ 800
Cameroon	\$ 1,381	Colombia	\$ 365
Côte d'Ivoire	\$ 3,326	Costa Rica	\$ 373
Egypt	\$ 17,532	Ecuador	\$ 910
El Salvador	\$ 636	Jamaica	\$ 835
Ghana	\$ 1,320	Jordan	\$ 2,834
Indonesia	\$ 42,193	Kazakhstan	\$ 1,043
India	\$ 24,299	Lebanon	\$ 902
Mongolia	\$ 6,647	Malaysia	\$ 3,427
Morocco	\$ 716	Peru	\$ 2,429
Pakistan	\$ 15,834	Romania	\$ 850
Philippines	\$ 14,533	Serbia	\$ 3,162
Sri Lanka	\$ 7,050	Thailand	\$ 6,630
Vietnam	\$ 12,603	Tunisia	\$ 3,396
Zambia	\$ 303	Turkey	\$ 5,952
<i>Source: World Bank Global Development Finance Databank</i>			

DCDBs are a means for providing financial aid. They are like a grant provided by the donor-giving the funds by forgoing the debt stream payments.

It is important to make clear that the motivation behind DCDBs is not debt relief. Debt conversions in the past have often been used as a tool for addressing the high debt service burdens of developing countries. Provision for them has been made in debt restructuring agreements as an option for providing debt relief. In some cases creditors have found debt conversions attractive primarily because it appeared that the debts would not be fully serviced and had already been discounted in the creditor's accounts.

In contrast, when used for DCDBs, debt conversion frees fiscal space to allow for future debt service payments only if the beneficiary country would otherwise have serviced the external debt. This is why DCDBs should not harm a beneficiary country's debt service rating. DCDBs should in fact strengthen the beneficiary country's foreign currency debt service rating as it reduces foreign debt. The impact on the beneficiary country's domestic currency debt service rating should be neutral. The DCDBs will add to the domestic debt stock but without increasing the debt service burden.

## Conclusion

For DCDBs to be used as a means for providing financial assistance for development under the conditions described above requires only that creditors and beneficiaries be willing. No new organization is necessary. And the cost of implementation is low.

To avoid additional fragmentation in aid delivery, it would be best if DCDBs are used to help fill the funding gaps in the recipient governments' own development programs and not be earmarked for specific projects or sectors. However, it is likely that donor governments will seek some degree of control over the use of the funds raised by DCDBs and monitoring of allocations and outcomes. Earmarking of the funds may be appropriate when DCDBs are used in emergency situations, such as in providing support for refugees and displaced persons.

*DCDBs are primarily a means  
for providing additional  
financial aid – not debt relief  
for overly indebted countries*

DCDBs can be scaled up and replicated in many middle and low-income countries. The scope for DCDBs will grow as the financial markets in other countries develop to the point that their governments gain the ability to issue domestic bonds.

## End Notes

<sup>i</sup> The concept of DCDBs was first developed in 2011 as part of a project commissioned by UNESCO for the Advisory Panel of Experts on Debt Swaps and Innovative Approaches to Education Funding and funded by the Open Society Institute. For details see UNESCO, [Debt Swaps and Debt Conversion Development Bonds for Education](#), Paris, August 2011. This report is available at <http://unesdoc.unesco.org/images/0021/002111/211162e.pdf>

<sup>ii</sup> While DCDBs can be created on a bilateral basis, between one creditor and one beneficiary country, they could also be implemented on a multilateral basis, with several creditors working together to provide the fiscal space needed for a DCDB. Bilateral DCDBs should not be significantly more difficult to implement than traditional bilateral debt conversions. Multilateral DCDBs are likely to be more difficult to implement.

<sup>iii</sup> According to the IMF “Before the HIPC Initiative, eligible countries were, on average, spending slightly more on debt service than on health and education combined. Now, they have increased markedly their expenditures on health, education, and other social services. On average, such spending is about five times the amount of debt-service payments.” IMF, “Debt Relief Under the Heavily Indebted Poor Countries (HIPC) Initiative,” 2012, Washington, D.C. Available at <http://www.imf.org/external/np/exr/facts/hipc.htm>

<sup>iv</sup> Budgetary systems vary widely across donor governments and determine how debt conversions are treated. In some cases they require that budgetary authority be provided upfront for multi-year commitments such as debt conversions. In others the budget impact is recognized at the time the debt service payments would have been made. But in both cases the real impact on the donor government’s deficit occurs when the payments would have been due, that is, spread over future years. A good discussion of these issues is provided in Benjamin Leo, “Can Donors Be Flexible within Restrictive Budget Systems? Options for Innovative Financing Mechanisms” 2010, Center for Global Development Working Paper 226, Washington, D.C... This paper is available at [http://www.cgdev.org/files/1424497\\_file\\_Leo\\_Budget\\_Systems\\_Paper\\_FINAL.pdf](http://www.cgdev.org/files/1424497_file_Leo_Budget_Systems_Paper_FINAL.pdf)

<sup>v</sup> Garrett Wright, David Stevens and David de Ferranti, “Tapping into \$1.1 trillion of Domestic Development Aid Funding,” 2010, Results for Development, Washington, D.C. This report is available at <http://www.resultsfordevelopment.org/sites/resultsfordevelopment.org/files/resources/Pension%20Fund%20Article.pdf>

<sup>vi</sup> A number of efforts to support the development of local currency bond markets in developing countries were endorsed by the G-20 Heads of State meeting in 2011. These are described in a report available at [http://www.g20-g8.com/g8-g20/root/bank\\_objects/0000005999-G20-AP\\_PostCannes.pdf](http://www.g20-g8.com/g8-g20/root/bank_objects/0000005999-G20-AP_PostCannes.pdf) See also a 2012 progress report on these efforts at [http://siteresources.worldbank.org/EXTPREMNET/Resources/489960-1340717984364/Supporting\\_Development\\_Local\\_Currency\\_Bond\\_Markets.pdf](http://siteresources.worldbank.org/EXTPREMNET/Resources/489960-1340717984364/Supporting_Development_Local_Currency_Bond_Markets.pdf)

<sup>vii</sup> This illustration is based on information gathered during a visit by the author to Jordan July 27-August 1, 2012. Details on ERfKE II can be found at [http://www.moe.gov.jo/Files/\(23-7-2012\)\(12-30-05%20PM\).pdf](http://www.moe.gov.jo/Files/(23-7-2012)(12-30-05%20PM).pdf)

<sup>viii</sup> This assumes a 9% rate of interest for the domestic bonds.

<sup>ix</sup> In the past most of the debt that has been used for debt conversions has been official bilateral concessional loans from members of the Paris Club. And this will likely continue to be the case. Official creditors who are not members of the Paris Club have to date delivered only 40 percent of their share of HIPC Initiative debt relief, and about one third of these creditors have not delivered any relief at all. They are thus potential donors for those few HIPC countries (for example Zambia) that otherwise present the necessary conditions for issuing DCDBs.

<sup>x</sup> According to recent IDS reports, 80 per cent of the world’s poor (those living on less than \$2 per day) live in middle-income countries and the split between LICs and MICs is likely to decline to only 50/50 by 2030. Andy Sumner, “Where Will the World’s Poor Live? Global Poverty Projections for 2020 and 2030,” August 2012, IDS, In Focus Policy Briefing 26, Brighton, UK. <http://www.ids.ac.uk/files/dmfile/InFocus26-Final2.pdf>

## **What are DCDBs?**

DCDBs are bonds issued by a developing country government, the future debt service payments of which are matched by the fiscal space created by creditors forgoing future debt service payments on selected loans outstanding to the developing country.

## **Why can DCDBs be useful?**

“Cost spreading” over time via debt conversions allows donors to provide increased aid. “Front loading” the benefits from these conversions through domestic debt issuance provides beneficiary countries with the funding they need today.

## **Where can DCDBs be used?**

Any country that has a functioning domestic bond market and outstanding external debts that are being serviced can utilize DCDBs. The primary purpose of DCDBs is to provide financial aid—not debt service relief.

## **When can DCDBs be used?**

When donors wish to help fund infrastructure projects, maintain or increase aid during periods of donor fiscal austerity or meet emergency funding requests.