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## State-contingent debt instruments for sovereigns: Can they be made «to work»

by


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# Making a Reality of GDP linked bonds

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There is increased consensus of the need for more stable capital flows to help moderate boom-bust patterns of capital flows that are damaging to the real economy and which can cause costly financial crises. It is therefore important to develop market instruments that can diminish this boom-bust pattern. Growth-linked bonds are an excellent example.

The global financial crisis focused attention on instruments that allow countries to minimize risks associated with increasing capital flows. The idea of a growth-linked debt instrument is not new. John Maynard Keynes sketched the concept for allowing space for counter-cyclical fiscal policies; he also designed a bisque clause, that allowed UK to pay less on its debt to the US, after World War II, in years when its economic conditions deteriorated, paying normally when the economy grew more.

A first wave of interest in indexing debt servicing to GDP emerged in the 1980s and received fresh impetus after frequent debt crises. The idea was supported by several of the most distinguished economists such as Nobel-prize winners Robert Shiller, who pioneered interest on this topic, and Joseph Stiglitz, and by John Williamson. The IMF also studied and took a favourable position on these instruments. Recently, the Bank of England has contributed important research on the topic, and worked with private sector to design a standardized term sheet for such a GDP linked security, as well as help launch a valuable initiative in the G-20.

The main challenge is for countries with good macro-economic fundamentals to start issuing GDP linked bonds in a precautionary way, as self-insurance mechanism. For these countries, investors should be keener to buy them than in bad times. Any premium paid on the new instrument should hopefully be relatively low, if risks are correctly priced. However, in good times, governments should have less incentive to issue such bonds, as they see downturns or crises as unlikely, especially during their mandate. Nevertheless, countries adopted other self-insurance mechanisms on a significant scale, such as accumulating foreign exchange reserves, with relatively high costs. If the additional cost of issuing GDP-linked bonds proved to be relatively low, the incentive for governments to issue them could become strong.

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GDP-indexed "warrants" have been issued, as discussed elsewhere in this book, in a handful of sovereign debt restructurings since the late 1980s. However, the 2007/8 global financial crisis, as well as many preceding ones, made the case for fully fledged GDP-linked bonds, that share risk on both the upside and the downside, far stronger. World economic recovery makes this a good time to issue growth- linked securities now.

There are important advantages to both issuing countries and investors of issuing GDP linked bonds, as discussed in this book (see also Griffith-Jones and Hertova, 2012). The system-wide benefits provided by these instruments are greater than those realized by individual investors or countries. Hence, there are externalities that do not enter considerations of individual financial institutions or countries.

There are coordination problems, whereby a fairly large number of countries have to issue a new instrument in order for investors to be able to diversify risk.
GDP -indexed securities can be viewed as desirable vehicles for international risk sharing and avoiding the disruptions arising from formal default. The dead weight costs of long debt restructuring, at times of crises would be avoided, as debt was automatically modified (Bank of England, 2016).

GDP-linked bonds have characteristics of a public good as they generate systemic benefits above those accruing to individual investors and countries. If GDP-linked bonds lower risk of default, they would make remaining conventional bonds safer, in the same country. By reducing likelihood of defaults, they would also benefit a broader range of investors than those directly affected, -as well as economies, not issuing them, but which would reduce their chance of contagion from other countries, as well as economies and multilateral institutions that may finance bail-out packages.

John Williamson(forthcoming) notes that the interests of the borrowers, the international financial system and the ultimate lender or investor, might not necessarily coincide with financial intermediaries who benefit from market instability. The important political economy question is whether an instrument that is likely to reduce market instability may have difficulty in winning acceptance in some parts of the financial industry. Some traders can see the emergence of these instruments as a threat to profits. Also there may be unwillingness to introduce innovations, due to inertia, both by issuing countries and investors.

For all these reasons steps by public institutions, and specifically multilateral or regional development banks, and IMF, seem highly desirable to facilitate the creation of such instruments, to showcase their advantages and help create a market for them.

Multilateral or regional development banks could play an active role as “market makers” for GDP-linked bonds. They could begin by developing a portfolio of loans, the repayments on which could be indexed to the growth rate of the debtor country. Once they have a portfolio of such loans to different emerging and developing countries, they could securitize and sell them on the international capital markets. Such a portfolio of loans could be particularly attractive for investors, as would offer the opportunity to take a position on growth prospects of a number of economies simultaneously. Alternatively, the multilateral development banks could buy GDP-linked bonds that developing countries would issue via private placements.

As economies' growth rates are less correlated globally, the World Bank may be best placed to perform such securitization, as it lends across a wide range of emerging and low- income countries. Regional development banks, such as particularly the European Investment Bank, which lends to developed, emerging and low-income countries, could play a valuable role. The new development banks, owned exclusively or largely by emerging and developing economies, such as the AIIB (Asia Infrastructure Investment Bank) and NDB (or New Development Bank) could be innovative, and lend in ways that the repayments on these loans be indexed to growth rate of debtor countries. As many of these new banks' lending is for infrastructure investment, they could use other state contingent instruments, such as debt servicing linked to revenue streams of these projects.

Once financial markets and borrowers become familiar with such instruments, and their advantages, these multilateral or regional development banks could reduce their role. This initial show-casing by development banks would be similar to the pioneering role they played in helping introduce local currency debt.

Another avenue for GDP linked bonds to be issued could be for developed countries, whose GDP growth typically varied less than that of emerging and developing economies, to start issuing such bonds. This was a fruitful avenue for financial innovation, as occurred with introduction of collective action clauses into debt contracts, done first by developed economies, then followed by emerging economies.

A third path would be to deal with the collective action problem, which implies that a first issuer would have to pay higher premiums, by encouraging a number of emerging economies to issue GDP linked bonds simultaneously. As Bank of England, op cit argues, the more countries issued at the same time, this would lower spreads; it would also enhance market infrastructure and standards.

The related problem of initial illiquidity would make it difficult for these GDP- linked bonds to be traded in secondary markets, reducing appetite of investors to buy them. This could lead to a large " novelty " premium, which would discourage countries from issuing. Standardized contracts would help reduce this premium. The work the Bank of England did in a working group with private investors, in producing a model contract, called *The London Term Sheet* for GDP-linked bonds, is an important step .

There is a question though over whether the model contract that has been arrived at is the optimal one. Further work needs to be done to socialise it beyond the international investor groups that have already engaged and contributed to its drafting, to domestic investor groups too, and also for national debt management offices to engage further. Conceivably there could be variations of the model contract depending on each issuing jurisdiction's particular set of preferences. Against this, standardisation and liquidity would be eroded.

The involvement of the IMF could be key, going well beyond their valuable contribution to research (see for example Pienkowski and Ostry, in this volume, for recent contributions,). The IMF could help countries analyze cost-benefit of introducing GDP linked bonds into its debt structure. This could be done during Article IV consultations. When countries go to the IMF for financing, this could

be a good moment to encourage major re-shaping of a sovereigns' debt structure, as IMF influence is at its highest point, though clearly it is better for countries to issue GDP linked bonds in good times. As the Bank of England paper, op cit argues, the IMF could amend its debt sustainability analysis framework to make clear, the benefits offered through GDP-linked bonds

A long-standing issue that allegedly is a problem is that it is said that GDP is difficult to measure, with estimate prone to revision, re-basing, and in extreme cases manipulation. Borensztein and Mauro, opcit, Griffith-Jones and Sharma (2006) and Brooke et al (2013) suggest, these problems have been exaggerated, and can be overcome, if really are significant. Firstly, economic authorities in issuing countries do not have an incentive to manipulate data, to under-estimate growth; indeed, as governments seeking re-election, if anything they would prefer to over-estimate their growth record, and certainly not under-estimate it. To reduce the unlikely problem of manipulation of GDP data further, support from international institutions that revise data on GDP, such as the United Nations and the IMF, could be used. Modifying a proposal from Bank of England, opcit, the IMF's SDSS (Special Dissemination Standards) could be used, by including a clause in the GDP linked contract that the issuing country would be obliged to meet these standards.

Data revisions can be dealt with by linking debt servicing to lagged data of GDP, (for example, six months lag), that would incorporate initial revisions, but would not affect the counter-cyclical nature of the servicing of the GDP-linked bonds.

A key next step is to go beyond the outreach to the private sector done by the IMF and as part of the work on *The London Term Sheet*, which identified real money investors as the natural holders of these instruments, and do more targeted work on the likely investor base. This may include investors beyond traditional purchasers of fixed-rate conventional bonds, as GDP linked bonds would have some equity elements. So equity investors, and investors interested in hybrid instruments, need also to be targeted as potential purchasers.

One interesting issue is whether the GDP linked part of the debt servicing could be allowed to be detached from the rest of the bond, which could then become plain vanilla. This would attract other potential investors for both parts. This requires further study, to ensure that for example greater volatility of the value of these bonds is not caused by having the GDP linked part sold separately, possibly to more short term financial actors.

It would also be valuable if meetings were organized between different categories of investors and potential country issuers of GDP linked bonds. Such meetings may benefit from support and participation, or even the initiative, from institutions like the IMF, the multilateral development banks, and institutions like the Bank of England. Such meetings could be combined with presentations about advantages of GDP bonds to both issuers and investors, as well as discussions of how to overcome possible remaining problems.

Whilst further analysis is always welcome, the key focus should be making GDP linked bonds happen. Issuing such bonds would have clear economic benefits and help the financial sector community, as well as governments regain trust from the rest of society that they can deliver instruments, beneficial for increasing countries' welfare.

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