Barrels, Bushels, and Bonds: How Commodity-Exporters Can Hedge Volatility

The prices of hydrocarbons, minerals, and agricultural commodities have been on a veritable roller coaster. While commodity prices are always more variable than those for manufactured goods and services, commodity markets over the last five years have seen extraordinary, almost unprecedented, volatility.

Countries that specialize in the export of oil, copper, iron ore, wheat, coffee, or other commodities have been booming, but they are highly vulnerable. Dollar commodity prices could plunge at any time, as a result of a new recession, an increase in real interest rates in the United States, fluctuations in climate, or random sector-specific factors.

Countries that have outstanding debt in dollars or other foreign currencies are especially vulnerable. If their export revenues were to plunge relative to their debt-service obligations, the result could be crises reminiscent of Latin America's in 1982 or the Asian and Russian currency crises of 1997-1998.

Many developing countries have made progress since the 1990's in shifting from dollar-denominated debt toward foreign direct investment and other types of capital inflows, or in paying down their liabilities altogether. But some commodity exporters still seek ways to borrow that won't expose them to excessive risk.

Commodity bonds may offer a neat way to circumvent these risks. Exporters of any particular commodity should issue debt that is denominated in terms of the price of that commodity, rather than in dollars or any other currency. Jamaica, for example, would issue aluminum bonds; Nigeria would issue oil bonds; Sierra Leone would issue iron-ore bonds; and Zambia would issue copper bonds. Investors would be able to buy Guatemala's coffee bonds, Côte d'Ivoire's cocoa bonds, Liberia's rubber bonds, Mali's cotton bonds; and Ghana's gold bonds.

The advantage of such bonds is that in the event of a decline in the world price of the underlying commodity, the debt-to-export ratio need not rise. The cost of debt service adjusts automatically, without the severe disruption that results from loss of confidence, crisis, debt restructuring, and so forth.

The idea is not new. So, why has it not been tried before? When one asks finance ministers in commodity-exporting debtor countries, they frequently reply that they fear insufficient demand for commodity bonds.

That is a surprising proposition, given that commodity bonds have an obvious latent market, rooted in real economic fundamentals. After all, steel companies have an inherent need to hedge against fluctuations in the price of iron ore, just as airlines and utilities have an inherent need to hedge against fluctuations in the price of oil.

Each of these commodities is an important input for major corporations. Surely there is at least as much natural demand for commodity bonds as there is for credit-default swaps and some of the bizarrely complicated derivatives that are currently traded!

It takes liquidity to make a market successful, and it can be difficult to get a new one started until it achieves a certain critical mass. The problem may be that there are not many investors who want to take a long position on oil and Nigerian credit risk simultaneously.

A multilateral agency such as the World Bank could play a critical role in launching a market in commodity bonds. The fit would be particularly good in those countries where the Bank is already lending money.

Here is how it would work. Instead of denominating a loan to Nigeria in terms of dollars, the Bank would denominate it in terms of the price of oil; it would then turn around and lay off its exposure to the world oil price by issuing that same quantity of bonds denominated in oil. If the Bank lends to multiple oil-exporting countries, the market for oil bonds that it creates would be that much larger and more liquid. It can serve an additional important pooling function in cases where there are different grades or varieties of the product (as with oil or coffee), and where prices can diverge enough to make an important difference to the exporters. The Bank could link the bond it issues to an oil price index, a weighted average of various product grades.

An alternative for some commodity exporters is to hedge their risk by selling on the futures market. But an important disadvantage of derivatives is their short maturity. A West African country with newly discovered oil reserves needs to finance exploration, drilling, and pipeline construction, which means that it needs to hedge at a time horizon of 10-20 years, not 90 days.

Another disadvantage of derivatives is that they require a high degree of sophistication – both technical and political. In the event of an increase in a commodity's price, a finance minister who has done a perfect job of hedging export-price risk on the futures market will suddenly find himself accused of having gambled away the national patrimony. This principal-agent problem is much diminished in the case of commodity bonds.

If the international financial wizards can get together and act on this idea now, commodity exporters might be able to avoid calamity the next time the world price of their product takes a plunge. The World Bank should take up the cause.