A DISCUSSION OF FOREIGN CURRENCY DEBT IN EMERGING MARKET Economies

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At a time when Ireland faces sovereign debt issues of its own, the difficulties that emerging market economies face in financing their sovereign debt should not be dismissed. While we take it for granted that Ireland's sovereign debt is almost entirely in euro, developing countries are forced to issue much of their debt in foreign currencies. Grace Walsh provides an insightful analysis into the merits of foreign currency debt, ultimately concluding that the pros are outweighed by the

cons.

Introduction

In the wake of the recent financial crisis emerging market economies have become the darlings of investors seeking above average returns when global yields are low. The 'North Atlantic Crisis' gravely affected vulnerable developing economies by reducing the developed world's demand for imports, supply of capital flows and need for foreign workers. Russian GDP fell by 9.5% in 2009 (The Economist, 2009) whilst Cambodia's foreign direct investment fell by 50% compared to 2009. These figures illustrate the extent to which the financial crisis affected emerging market economies.

The importance of emerging market economies as engines of global economic growth has become more important than ever. In 2000 emerging market economies contributed 37% of world output, and by 2008 their share amounted to 45%. The BRIC economies' (Brazil, Russia, India and China) share of world output rose from 16% to 22% during the same period. Of the increase in world output from the year 2000 to 2008, 60% took place in the BRICs alone (The Economist 2009). Thus the economic consequences generated by the activities of emerging markets will impact on all countries, developing and developed.

The purpose of this paper is to explore the pros and cons of foreign currency debt with regard to emerging market economies. Foreign currency debt usually takes the form of sovereign bonds or international bailout packages from institutions such as the International Monetary Fund.

Borrowing: A Necessary Evil?

Since the 18th century, debt issued on the international markets has been denominated in the currency of the market of issue and the currency of the issuing country (Bordo and Meissner, 2006). Developed countries such as the United States and United Kingdom issue debt in their domestic currency, as not only does demand exist to hold such liabilities but the stability of the domestic economy and exchange rate provide assurance to international investors that the value of their investment is not likely to experience a severe depreciation. Developed countries typically have a larger proportion of their sovereign debt denominated in the domestic economy than emerging market economies whilst emerging market economies in contrast hold a higher proportion of their sovereign debt in foreign currencies (Cottarelli et al., 2008).

Emerging markets traditionally experience less demand for their domestic currency denominated bonds. This is partially due to the instability associated with the macroeconomic policy of emerging market economies. Emerging markets typically suffer from high inflation, low levels of capital, low levels of labour productivity, low domestic savings rates and under-developed financial systems. These factors can act as a deterrent to foreign capital flows. Additionally, emerging market currencies are empirically less stable than those of developed economies. For example, Argentina suffered currency crises in June 1975, February 1981, July 1982, September 1986, April 1989, February 1990 and again in 2002. Mexico suffered a currency crisis twice in 1982 and again in December 1994 (Calvo and Reinhart, 1999). In 1982, five Latin American countries suffered a currency crisis including Chile, Bolivia and Uruguay. Such regular crises actively deter investors from investing in emerging market economies, as not only is exchange rate risk prohibitive but past performance also suggests poor economic governance is a future possibility, raising the risk profile of the sovereign's debt.

The Composition of Emerging Market Debt

Emerging market economies have a different debt structure to developed economies. Investment in the sovereign debt of emerging market economies is quantifiably riskier than that of developed economies. This reflects the risk premium investors require for holding such debt. The composition of emerging market economy debt may make such economies more prone to crisis in the event of a default, as a currency depreciation or banking crisis may soon follow. Cottarelli et. al. (2005) illustrate that developed economies, such as the US, have debt almost entirely denominated in the home currency, in contrast to emerging market economies whose foreign currency debt typically stands at 42% and amounts to 63%, on average, in the year prior to default. A study by Cottarelli et al. (2005) makes clear that the composition of the debt is an important factor in whether or not default occurs, as emerging market economies have a larger share of floating rate or indexed debt than developed countries. Ceteris paribus, should interest rates increase average borrowing costs will also rise. This may increase pressure on the sovereign's ability to repay its debt and increase the temptation to default if the cost of repayment rises to a prohibitive level.

Secondly, emerging market economies borrow for shorter periods of time than developed countries, whether borrowing in their own currency or another. Jeanne (2003) argues that foreign currency debt, especially of the short-term variety, is the most dangerous form of sovereign debt. The study by Cottarelli et al. (2010) clearly indicates that difficulties in repaying sovereign debt arise from a combination of long maturities and the composition of debt, which for emerging market economies is mostly composed of foreign currency borrowing, floating rate and indexed debt. These characteristics of emerging market debt combined with historical evidence indicates that investing in emerging market economy debt is riskier than that of developed market economies who tend to borrower for longer periods in their own currency. The next two sections will go on to discuss the pros and cons of foreign currency debt.

Advantages of Foreign Currency Debt

Foreign currency debt has many advantages for the borrower. It provides access to financial capital to fund investment, increases financial globalization and promotes better macroeconomic policy and governance in the borrowing country.

The issuance of foreign currency debt is a method of financing domestic investment which otherwise may not be possible if there is a low level of domestic demand for bonds or if domestic saving is low. The benefits of investment are manifold. It creates employment and generates a stream of revenue, which benefits the state in terms of increased tax revenue and consumers who receive higher levels of income. Investment increases the national income of the country and subsequently GDP per capita indicating increased economic welfare, it increases the productivity of labour and facilitates convergence to the level of developed economies. Though the Lucas Paradox (Lucas, 1990) and findings by Prasad, Rajan and Subramanian (2007) effectively illustrate that capital does not flow to poor countries from rich countries in the volumes predicted by theory, for countries with low levels of domestic financing foreign currency debt is an essential source of finance.

Issuing foreign currency debt forces the government to adopt better policies to ensure that its level of sovereign risk does not deter debt issuance or equity flows in the country. Thus it is important for international markets and investors to observe prudent economic management in the borrowing country, Kose et al. (2009) argue that increased financial globalization 'unleash[es] forces that result in better public and corporate governance' in addition to imposing discipline on macroeconomic policy. Improved governance and disciplined monetary and fiscal policy enhance economic growth and stability.

Thirdly, Jeanne (2000) argues that borrowing in a foreign currency is a powerful commitment device. The borrower has more incentive to repay its loan and build a credible relationship with

international investors. Jeanne uses a model of an entrepreneur borrowing from abroad to illustrate the strong incentive for the sovereign to pay back its foreign debt. In this model the failure to achieve high returns early in the project is punished by termination of the loan. Thus the borrower has strong incentive to make his venture successful and deliver high returns to investors. Lenders are aware of this and subsequently charge a lower rate of interest than the entrepreneur could have attained in the domestic market.

Extrapolating this example to emerging market economies, we see that it may be more cost efficient to raise capital abroad rather than at home, especially if there is a low level of domestic demand for sovereign debt. It is evident from this model that there is strong incentive not to default on the loan and to deliver returns to investors as they fall due, to ensure continued access to the capital markets. The maturity mismatch of borrowing and lending debt is explored in the next section.

Thus there are numerous positive benefits of foreign currency debt for emerging market economies. We will now turn to analyze the disadvantages of this activity.

Disadvantages of Foreign Currency Debt

Borrowing in a foreign currency creates numerous potential difficulties. Jeanne (2000) argues that large quantities of short-term foreign currency liabilities have made crises in the borrowing country deeper, more contagious and generally more difficult to manage. Krugman (1999) argued that foreign currency debt amplifies financial crises to the point of making them self-fulfilling.

The primary issue with accumulating foreign currency debt is the obligation to repay investors in a currency which the government has no control over. A country whose liabilities are denominated in a foreign currency is unable to hedge exchange rate risk which leaves it greatly exposed to global financial forces outside of its control. The country in whose currency the debt is denominated may set interest rates and influence exchange rates according to the domestic situation, which may not suit the borrower and make repayment more difficult. Bordo and Meissner (2006) argue that countries whose foreign currency liabilities are not matched by foreign currency assets may find it more difficult than countries with comparably more foreign assets to repay their foreign currency debts in the event of depreciation. Emerging market economies, especially those with floating exchange rates, often experience currency depreciation caused by sudden stops in capital inflows, loose monetary policy or disadvantageous terms of trade (Bordo and Meissner, 2006). This explains why emerging markets often peg the exchange rate to that of larger developed economies such as the US, a phenomenon known as a 'fear of floating' (Calvo and Reinhart, 1999). These combined factors make the repayment of foreign debt more challenging, increasing the risk of default, reducing external funding and potentially causing economic collapse.

If the exchange rate floats and depreciation occurs, the currency mismatch will cause bankruptcies. This, however, provides greater incentive for investors to hedge their positions. A greater incentive and propensity to hedge by investors reduces exchange rate exposure meaning that large exchange rate fluctuations will not cause financial crises (Eichengreen and Hausmann, 1999). However, floating exchange rates are just as likely to cause default as pegged exchange rates, if not more so, as the country is more vulnerable to global shocks originating in the developed world or other developing markets.

In an increasingly globalised world the effects of sovereign debt default or crisis are not limited to the borrowing country should default occur. Argentina's 2001 default on \$81 billion illustrates the negative consequences of default externally and domestically. The default occurred following three years of severe recession, a dramatic reduction in foreign direct investment, high inflation, high interest rates and a large budget deficit. GDP declined by 10.9% (The Economist, 2010). When the Argentine government announced its default its sovereign debts amounted to \$144.5 billion, equating to 53% of national GDP (Shapiro and Pham, 2006). One hundred and fifty-three bonds in seven currencies and eight national jurisdictions were defaulted on. 53% of the debt was denominated in US dollars and 33% in euros. In a study by Shapiro and Pham (2006), direct costs for worldwide investors amounted to \$83.6 billion in capital losses, interest payments never received and foregone investment returns. The Argentine default caused the devaluation of the peso against the dollar, euro and other major currencies reducing the value of existing investments in Argentina by those investors. It resulted in the direct loss of \$83.6 billion in taxes paid by Argentine bondholders to their national governments. Finally, the default required a substantial bailout package to be compiled by the IMF. This \$23.2 billion package was funded by taxpayers across the world. Thus, in addition to the loss of funding experienced by the borrowing sovereign, a default on foreign currency debt also negatively impacts a number of other international parties.

No discussion of emerging market economies' foreign currency debt is complete without a discussion of original sin. The case of original sin emphasizes two negative facets of foreign currency debt – currency mismatch and maturity mismatch. Eichengreen (2001) defines original sin as when the home currency cannot be used to borrow abroad or to borrow long-term, even domestically. Latin American countries such as Mexico, Uruguay and Colombia are the most notorious victims of original sin.

Currency mismatch arises because projects that generate pesos or francs will be financed with dollars. Maturity mismatch arises because long-term projects will be financed by short-term investments. When original sin prevails, both fixed and floating exchange rates represent serious challenges. If the exchange rate floats, a large depreciation could cause bankruptcies and an eventual default on foreign currency debt. A fixed exchange rate defended by the sale of reserves and interest rate increases precipitates defaults on domestic debt (Eichengreen and Hausmann, 1999). Eichengreen and Hausmann (2005) showed that countries with higher levels of original sin have a greater exchange rate volatility and higher macroeconomic volatility than those with lower levels of original sin. The only viable solution is dollarisation (or its euro equivalent) as income flows are then in the same currency as liabilities.

The case of Uruguay illustrates that dollarisation can in fact be a temporary solution to original sin whilst the sovereign rebuilds its credibility, whilst the success of Panama illustrates how effective long-term dollarisation can be. Panama has followed a policy of dollarisation since 1904. The benefits of pursuing this policy include the lowest rate of inflation in Latin America, full integration into the US financial system, high economic growth rates and stable access to international capital markets.

It is possible for sovereigns to redeem themselves through good behavior, eradicating the blemish of original sin. This may entail reform of macroeconomic policies including the temporary adoption of dollarisation, improved political stability and the development of a deep, liquid financial system to restore international faith in the domestic currency so that the sovereign can use it to borrow abroad and domestically.

Conclusion: Is Foreign Currency Debt Unavoidable?

In light of the disadvantages of foreign currency debt, is it possible for emerging market economies to borrow in a foreign currency and not bear the risk associated with foreign currency borrowing? As discussed above, one such method of this is dollarisation. If the liabilities of the emerging markets are in the same currency as their assets then many of the negative consequences associated with foreign currency borrowing could be eradicated. Dollarisation is not a miracle cure nor does it ensure sound fiscal management, but it provides relief against many of the pressures of exchange rate risk. An alternative solution is the introduction of a common, global currency for all countries. However, the real-life difficulties of achieving this prevent it from being a realistic or credible option. Unless the borrower can borrow in its own domestic currency, foreign currency debt will always pose significant advantages and disadvantages for emerging markets. Thus they must find credible ways of coping with the risks and opportunities foreign currency borrowing brings, in order to converge to the level of developed economies.

The purpose of this paper was to evaluate emerging market economies' foreign currency debt. For small emerging market economies, repayment of sovereign debt is challenging as they struggle with large government deficits, reduced capital flows and reduced western demand for exports (IMF, 2010). Throughout the course of this essay, having compared the advantages and disadvantages of foreign currency debt, it is apparent that the negative consequences of such debt for emerging markets outweigh the advantages. Exchange rate risk, liability mismatch and the international effects of default illustrated, using Argentina's 2001 expreience as a case study, the dangers of foreign currency debt, particularly when it is of the short-run variety. Despite this, Shapiro and Pham (2006) provide evidence that foreign lending by investors to emerging market economies has increased despite 59 sovereign debt defaults during the period 1976 to 2004, 16 of which have occurred since 1998. However, markets have short memories and investors will always seek high levels of returns and diversification of their portfolios, just as emerging market economies will continue to finance growth by borrowing from abroad. Borrowing and investing in foreign currency debt will continue into the future, just as the benefits of borrowing in foreign currency for emerging market economies will most certainly be a mixture of the pros and cons discussed in this paper.

References

Bordo, M. and Meissner, C., 2006. 'The Role of Foreign Currency Debt in Financial Crises: 1880-1913 versus 1972-1997'. *Journal of Banking and Finance*, 30(12), pp.3299-3399.

Calvo, G. and Reinhart, C., 1999. 'When Capital Flows Come to Sudden Stop: Consequences and Policy Options'. *Working paper no.6982*, [Online]. Available at: http://ideas.repec.org/p/pra/mprapa/6982.html

Cottarelli, C., Forni, L., Gottschalk, J. and Mauro, P., 2010. 'Default in Today's Advanced Economies: Unnecessary, Undesirable and Unlikely'. *IMF Staff paper*, [Online]. Available at: www.imf.org/external/pubs/ft/spn/2010/spn1012.pdf

Eichengreen, B. and Hausmann, R., 1999. 'Exchange Rates and Financial Fragility'. Federal Reserve Bank of Kansas City, *Proceedings*, [Online]. Available at: http://ideas.repec.org/p/nbr/nberwo/7418.html

Eichengreen, B., 2001. 'What Problems Can Dollarization Solve?' *Journal of Policy Modeling* 23(3), pp.266-267. [Online]. Available at: http://ideas.repec.org/a/eee/jpolmo/v23y2001i3p267-277.html

Eichengreen, B. and Hausmann, R. 2005. *Other people's money: debt denomination and financial instability in emerging market economies*. Chicago: University of Chicago Press.

Jeanne, Olivier., 2000. 'Foreign currency debt and the global financial architecture'. *European Economic Review*, 44, pp.719-727.

Jeanne, Olivier., 2003. 'Why do Emerging Market Economies Borrow in Foreign Currency?'. IMF, *Working Paper*. [Online]. Available at: www.imf.org/external/pubs/ft/wp/2003/wp03177.pdf

IMF (International Monetary Fund), 2010. 'World Economic Outlook Update'. *IMF*, [Online] 26 January. Available at: http://www.imf.org/external/pubs/ft/weo/2010/update/01/

Lucas, R., 1990. 'Why Doesn't Capital Flow from Rich to Poor Countries?'. *American Economic Review*, 80(2), pp.92-96. [Online]. Available at: http://ideas.repec.org/a/aea/aecrev/v80y1990i2p92-96.html

Krugman, P., 1999. 'Balance Sheets, the Transfer Problem and Financial Crisis'. In: P. Isard, A. Razin and A. Rose, eds. International Finance and Financial Crisis, Essays in Honor of Robert P. Flood. Norwell. Massachusetts: Kluwer Academic Publishers.

Kose, M., Prasad, E., Rogoff, K. and Wei, S., 2009. 'Financial Globalization: A Reappraisal.' IMF, *Staff Papers*. [Online]. Available at: http://www.palgrave-journals.com/imfsp/journal/v56/n1/abs/imfsp200836a.html

Overseas Development Institute (ODI). 'The Global Financial Crisis and Developing Countries: What Happened, and What Have We Learned?'. *ODI*, [Online] 19 March. Available at: http://blogs.odi.org.uk/blogs/main/archive/2010/03/19/52457.aspx

Prasad, E., Rajan, R. and Subramanian, A., 2007. 'The Paradox of Capital'. *Finance and Development*, 44(1). [Online]. Available at: www.imf.org/external/pubs/ft/fandd/2007/03/prasad.htm

Shapiro, R. and Pham, N., 2006. 'Discredited – The Impact of Argentina's Sovereign Debt Default and Debt Restructuring on U.S. Taxpayers and Investors'. *American Task Force Argentina*, [Online] October. Available at: www.sonecon.com/docs/studies/argentina_1006.pdf

The Economist, 2009. 'Not Just Straw Men'. *The Economist*, [Online] 18 June. Available at: http://www.economist.com/node/13871969

The Economist, 2010. 'Default Settings'. *The Economist*, [Online] 31 March. Available at: http://www.economist.com/node/15814868?story_id=15814868