

Foreign Currency Debt, Financial Crises *and* Economic Growth: A Policy Note for the GEMLOC Project

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Our research studies the association between foreign currency debt and financial crises and then from crises to lower growth. We propose the following chain of logic based on a long run empirical analysis: currency crises happen when capital flows have been abnormally large and when international capital markets suspect a country has weak credibility; currency crises (i.e., large depreciations in exchange rates) raise the value of hard currency debt; when both high levels of hard currency debt and currency crises are present, debt crises are quite likely; financial crises, especially currency and debt crises significantly lower growth; countries rarely seem to make up lost growth; if this is the case, hard currency debt indirectly may play a role in lowering living standards.

We also sound a skeptical note about the alleged corrosive effects of hard currency debt by itself because hard currency debt does not always seem to imply economic and financial fragility. Countries with high levels of hard currency debt outstanding relative to the total do not necessarily need to get into financial trouble if sound fundamentals are in place. Simple prudent policies that maintain adequate reserves, sensibly regulate the banking sector, provide a credible lender of last resort and a solvent fiscal policy maker are key here. Such countries seem to be able to weather the financial storms and the vulnerabilities of hard currency debt.

Nevertheless reducing foreign currency denominated debt, other things equal, can reduce the likelihood of financial crises, which in turn indirectly lead to lower growth and welfare. Hence lower hard currency debt can typically ameliorate these effects.

Our framework for thinking about currency crises focuses on the importance of balance sheets. Countries that receive capital inflows from abroad are prone to build up mismatches in their aggregate ‘balance sheets’. Such mismatches are based on having hard currency debt and local currency revenue or depend on the fact that investment projects are long-term while debt is of shorter duration. If there is a drop in international liquidity, the countries with the weakest balance sheets will be at risk for currency speculation. This could lead to a self-fulfilling depreciation which would naturally exacerbate any currency mismatch. At this point, many countries are likely to be unable or unwilling to repay debts in the face of a sharp rise in the value of debt repayment. Debt crises, untypically low investment, and slow economic growth are the outcomes.

Our evidence in support of this framework is based on a body of research by ourselves and other scholars that has investigated the long run causes and consequences of foreign currency debt. This research relies on observations of macroeconomic data from two periods of financial globalization 1880 to 1913 and 1972 and 2002. It suggests that many advanced countries have always had low levels of hard currency debt and financial stability. Some advanced emerging markets in the nineteenth century period of globalization did have high foreign currency exposure but they also had relatively high financial stability. An intermediate group of countries had some exposure to hard currency debt although historically many such emerging markets have tried to avoid and minimize it. For these countries, hard currency debt is positively associated with increased financial instability. The bottom line implication is that other factors are at work and hard currency debt is not the only problem.

We also supplement our knowledge of the historical record with an econometric investigation of the hypothesized determinants of currency crises and debt crises. To this end we use probit regressions where the dependent variable is a currency or a debt crisis; the independent variables are fundamentals such as the reserve to money stock ratio, foreign interest rates (a proxy for global liquidity), foreign capital inflows, and whether there was a banking crisis in the previous period. Finally we include the ratio of hard currency debt to total debt or to total international debt as a measure of the currency mismatch exposure.

Our sample covers two periods of extreme international financial integration 1880-1913, and 1972-1997. We have evidence from 18 countries in the first period and 45 countries in the second period. Our findings are very consistent with the framework sketched above.

For currency crises, the key determinants seem to be whether there was a banking crisis in the previous period and the level of capital inflows in the previous year. Both are positively associated with crises in both periods. We also find some evidence that hard currency debt is itself a determinant of currency crises in the latter period but not the first.

Currency crises then feed into the likelihood of debt crises via their impact on hard currency debt. Debt crises seem more likely when there is a high ratio of hard currency debt and a currency crisis. Sharp currency depreciation raises the costs of servicing hard currency debt often to the point where countries choose to stop paying.

After investigating the determinants of crises, we look at such events as a determinant of the growth of GDP per capita. This provides a link between growth and hard currency debt since we have already found a contribution to crises from hard currency debt. We study growth over five year periods and include other standard controls in the econometric models such as savings rates, human capital investment proxies, openness to international trade, fixed country effects and the initial level of GDP per capita in each period.

We find that when all debt outstanding is hard currency debt it could subtract two percent from growth rates over the short term in the first period of globalization and 0.22 percent in the second period of globalization. This occurs because hard currency debt is associated with a higher likelihood of a financial crisis. This inference is made when countries have financial fundamentals which are “unsound.” Sound fundamentals (e.g., a strong reserve position, no banking or currency crises etc.) paired with a 100 percent ratio of hard currency debt to the total then seem to shield countries from instability. Growth is not decreased due to hard currency debt in this case.

We also look at the marginal impact of hard currency debt for fixed fundamentals. Reducing hard currency debt ratios from 100 percent to 50 percent could eliminate these growth reductions considerably for countries with poor fundamentals. In the first period

of globalization, the gain is one percent and in the second wave of globalization the gain in growth rates is 0.19 percent.

Policy Implications

1. Financial stability and growth are intertwined. Crises are costly events that lower growth in the short term. Countries in our sample do not seem to be able to “make up” for lost growth and so crisis events seem to have a permanent downward level effect on GDP per capita.

2. Financial stability depends on sound institutions and policies that maintain credibility, keep borrowing at sustainable levels and fortify and insure countries in case negative shocks occur.

3. Having local currency denominated debt can help countries with poor fundamentals because we find that in cases of less than superb fundamentals hard currency debt interacts with these fundamentals raising the probability of crises to very high levels. This implies that developing local currency debt is a force for stabilizing growth *ceteris paribus*.

4. But history tells us that eliminating hard currency debt took a long time. Perhaps this is because starting up local currency debt markets carry other private and social costs. Many countries took another route to stability. These nations had relatively well regulated financial systems, carried good reserve positions, had lower currency mismatches, and prudently borrowed for investment and infrastructure projects with high economic payoffs.

5. Moreover, while reductions in the propensity to have a crisis are likely when countries reduce their hard currency exposure, they still need sound fundamentals. Countries with only half their debt denominated in hard currency *but* with poor fundamentals are 20 times more likely in the first wave of globalization, or 10 times more likely between 1972 and 2002, to have a debt crisis than countries with good fundamentals in such a position.

Our final three points are the following:

- Financial instability leads to lower economic growth and living standards.

- Establishing local currency debt markets *can* help reduce exposure to financial crises but the likelihood of a crisis is still non-trivial unless countries also have sound fundamentals.
- Developing sound institutions and policies can be just as important as eliminating hard currency debt and may sometimes be easier in the short run. The long run illustrates that these changes could eventually lead to the endogenous development of local currency markets.