Discussion: From Chronic Inflation to Chronic Deflation

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Without a doubt, the financial crisis of 2008 and its long lingering effects have changed the lens through which macroeconomists view the world. While previously developed markets were characterized as having frictionless and benign financial markets, the 2008 financial crisis that originated in the developed world dispelled all notions of this. As a consequence it is now near impossible to discuss macroeconomics without explicitly describing the interactions of economic agents and the imperfect world of finance.

However, it is important to highlight that for international macroeconomists, of which Guillermo Calvo is most prominent, the failures of financial markets have been at the center of understanding the economies of emerging markets, economies that have routinely been buffeted by financial and debt crisis. This gives Guillermo who is one of the leading experts on emerging market crisis an edge over other macroeconomists in analyzing this crisis and pointing us to lessons for the future of macroeconomics. This is why his contribution to this conference is so valuable and I thoroughly enjoyed reading his paper.

Guillermo makes several important points in the paper of which I will highlight a few, but I encourage the reader to delve into the many other contributions in the

paper. Guillermo flags two major blindspots that policy makers have ignored at the peril of their economies. The first is the power of expectations to drive self-fulfilling crisis when policy makers suffer the original sin of not being able to commit, so-called *expectations dominance*. The second is that *liquidity scarcity* can arise rapidly, have long lasting effects on the economy and conventional monetary policy can fail to rescue the economy. As Guillermo goes on to describe, there are two important policy recommendations that follow from this: First, there is a need to ensure sufficient supply of safe/liquid assets. Second, the world benefits from a global coordination of policies so expectations are coordinated on the good equilibria. I will reinforce both of these points.

As Guillermo highlights the inability of even social welfare maximizing central bankers to commit to policy was a major factor in the hyperinflations of the past. This is tied to the time inconsistency problem where monetary authorities would like to commit to not inflating ex-ante but then ex-post have every incentive to general surprise inflation so as to stimulate the economy, increase seignorage and lower the real value of nominal debt. Forward-looking private agents of course expect this and raise prices in anticipation thereby raising equilibrium inflation.

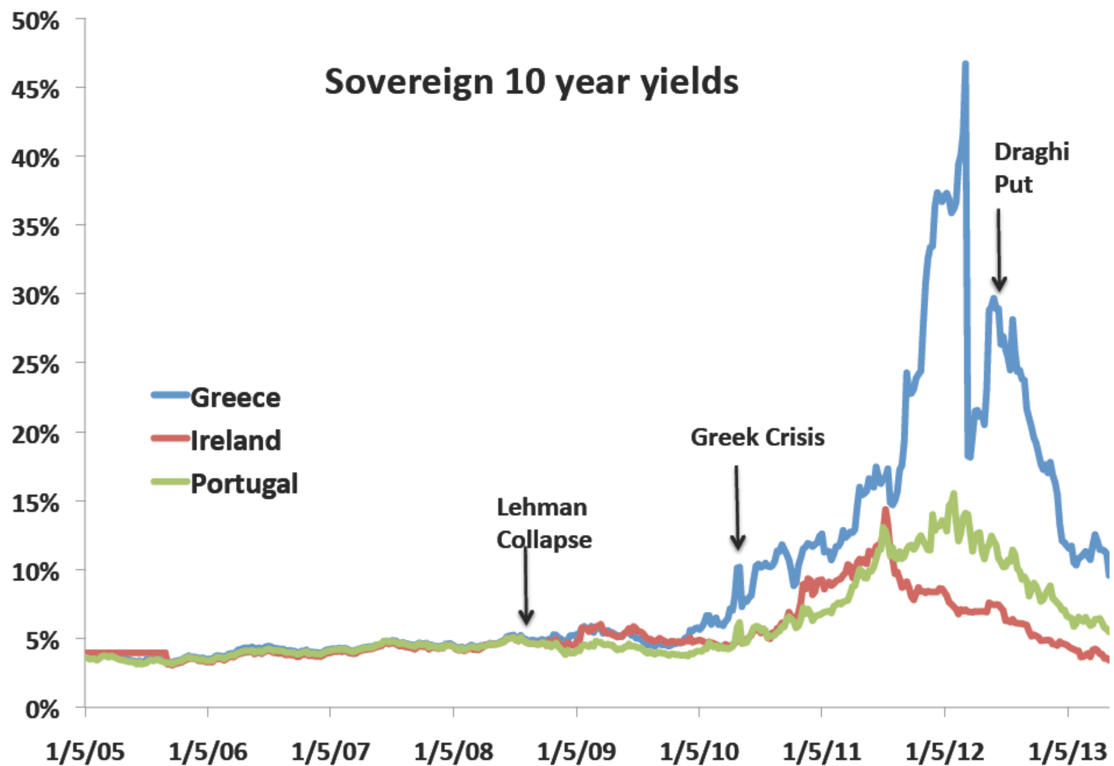
Similarly, expectations can generate temporary booms that eventually go bad and governments can misinterpret the cause of the boom. As an example Guillermo points to the consumption booms that followed exchange rate based stabilizations in emerging markets. He argues that it is expectations of the failure of the

stabilization reform measures that generate a temporary consumption boom as agents front-load purchases of goods in anticipation of a return to high inflation in the future.

The importance of expectations dominance and self-fulfilling crisis was evident in the 2012 debt crisis in the Eurozone. As yields on government debt rose rapidly in Greece and spilled over to Ireland, Portugal, Spain and Italy, the European Central Bank's (ECB) president Mario Draghi promised to do whatever it takes to save the euro including possibly buying stressed government debt. The mere promise of this brought yields down rapidly even in the absence of any purchases by the ECB. This event not only highlights the role of expectations dominance in generating crisis but importantly points out the errors of the framers of the common currency area who restricted the ECB from being the lender of last resort. Aguiar, Amador, Farhi, Gopinath (2015) describe self-fulfilling crisis in monetary unions and the important role of central banks to intervene in a state-contingent manner to alleviate such crisis.

Aguiar, Amador, Farhi, Gopinath (2014) also describe how the ability to inflate does not necessarily reduce the potential for self-fulfilling crisis. In the midst of the Greek crisis it was argued by several leading economists that the problem arose because Greek debt was real, as the Greek's did not control the supply of the currency in which the debt was denominated, and required fiscal surpluses to pay in down. In contrast if the debt had been denominated in a currency over which the country has

direct control as in the case of U.S. and Japanese debt then governments also have the option of inflating some of the debt so as to make it easier to repay. This argument is flawed to the extent that it ignores the role of expectations. When debt is in nominal terms and if lenders expect the use of inflation to reduce the real value of debt then this gets priced into nominal interest rates and consequently there is no additional gain from being able to control the currency in which debt is denominated.



A second theme in Guillermo's essay is about liquidity and its fragility. Clearly it can be tricky to describe what a liquid asset is, something Guillermo gets into at some length, but the point that there can be a sudden collapse in liquidity relative to the demand for it that in turn can have important negative and lasting consequences for

the economy is a point that has been emphasized recently by many economists. In the 'safe assets' literature Caballero and Farhi (XX) point to the collapse in safe assets following the 2008 financial crisis as important for understanding the decline in real interest rates, the drop in output and increase in risk premia in equity markets. The excess demand for safe assets also calls for unconventional monetary interventions such as the purchase by the central bank of toxic assets as opposed to more conventional purchase of safe treasuries.

Whether there continues to be a liquidity crisis is up for debate, however there is little doubt that the world needs to be prepared for future financial crisis that may arise from China. With China's debt exceeding 240% of GDP and the on going credit boom there is sufficient cause for concern.

A theme in the paper that I have spent little time discussing is the "Price Theory of Money". Guillermo argues that the reason people hold certain currencies is because prices denominated in that currency tend to be pre-set and staggered and therefore deliver predictable output. This is an appealing argument but of course one could ask what comes first. The reason prices are sticky in a currency is plausibly because of the faith in the monetary authorities that manage the currency to keep inflation low.

I look forward to reading future work by Guillermo on this and related issues so as to gain important insights into the functioning of the world economy, something Guillermo has delivered in spades over the last many years.

References

1. Aguiar, Mark, Manuel Amador, Emmanuel Farhi, and Gita Gopinath. 2015. "Coordination and Crisis in Monetary Unions." Quarterly Journal of Economics 130 (4): 1727-1779.

2. Aguiar, Mark, Manual Amador, Emmanuel Farhi, and Gita Gopinath. 2013. "Crisis and Commitment: Inflation Credibility and the Vulnerability to Sovereign Debt Crises". NBER Working Paper 19516

3. Caballero, Ricardo and Emmanuel Farhi. 2014. "The Safety Trap". NBER Working Paper 19927.