

QE, Debt Monetization and Hyperinflation Risk

The rescue efforts from 2008 – 2012 to bail out the global economy have resulted in a massive inflation of sovereign balance sheets almost everywhere from the US Fed, to the Bank of England, the Bank of Japan, the Peoples Bank of China, and even the ECB.

Central banks have become some of the largest buyers of their own countries' debt issues. Holdings of US treasuries have surged not only at the US fed but by the US private commercial banks as well. Regulations such as Basel 3 encourage banks to purchase assets which do not consume capital (as assets risk weighted zero under Basel 3 are treated.) High grade sovereign bonds are risk weighted zero and even dodgy sovereign bonds face a lower risk weight than better quality SME loans. The result is a buying frenzy of government bonds.

There are two reasons a country would seek to buy its own bonds, whether directly through its central bank, or indirectly through its state pensions or private commercial banks. One is to increase the money supply in the hope of boosting nominal output growth, in the further hope of generating real output growth. Two is to compensate for any shortfall in demand for the country's bonds, that is to act as lender of last resort to oneself.

Chart: Fed System Balance Sheet:



$M \cdot dV + dM \cdot V = P \cdot dQ + dP \cdot Q$ is the relationship between money supply, velocity of money, inflation and real output.

Since 2008, the efforts of central banks to increase the right hand side of this equation, that is nominal output, has seen a drastic increase in the money base and the assets of the banking system. Central banks have levered their banking systems between 3 to 5 times over. Unfortunately for both real and nominal output, the

velocity of money has simply compensated for the increase in the money base so that nominal output growth has been tepid. A proxy for the velocity of money is the money multiplier.

Chart: Money Multiplier:



For an economy not at full employment, the hope is that real output rises instead of prices. Apparently the global economy is not at full employment. The risk of inflation is thus low. This analysis does not take into account some psychology.

Given how widespread money printing is globally, and given the scale of the monetary expansion, consumers and investors would be reasonably expected to be concerned about how this policy can be retracted once full employment is restored. Further, given that money printing debases its value in real terms purely as a store of value, one may reasonably be concerned about the inflationary impact of protracted and continued debt monetization. In addition, at least thus far, quantitative easing has been seen as a part of expansionary monetary policy and not as debt monetization from an excess supply of debt perspective. Any loss of confidence may lead inflation expectations to rise. Even a real recovery might boost inflation expectations. In itself, inflation expectations can be benign but in the context of the scale of leverage in the banking and sovereign debt system, inflation expectations demand answers to difficult questions: how will financial system wide balance sheet leverage be reduced when full employment or inflation threatens?

The world's economies and markets are all acutely dependent on low interest rates. If central banks were forced to withdraw liquidity, a way would have to be found which would keep rates suppressed, an almost contradictory condition. Selling bonds would be highly risky given the impact on interest rates. The borrowing requirements also suggest that the treasury will need to refinance itself well into the future.

The 30 year bull market in bonds, the agency issues with central bank 'puts', have brought us deep into a game of chicken played on a suspension bridge. Its not clear

how long we can carry on, but neither can we flinch.