

Central Banks Long Term Systemic Risk. More Harm Than Good?

Central Banks. Long Term Systemic Risk.

The history of central banks is interesting. The world's first was Sweden's Riksbank, the phoenix rising from the ashes of Stockholms Banco, a private concern which leveraged itself into insolvency. The second was the Bank of England, technically, an off-sovereign balance sheet funding vehicle created expressly to monetize debt which no private investor would underwrite, the national debt of the UK. The US Federal Reserve system is in fact the 3rd incarnation of central bank in the US, the first two having passed amid turbulent times, stock market and banking crises and periodic recessions. It seems that central banks were born as a fix to situations of acute economic and financial stress. Their appropriateness under non-stress conditions, and indeed their contribution to subsequent stress situations should be questioned.

Should central banks be targeting inflation and growth in the first place?

Given the natural endowments of land, labour, capital and knowledge in an economy, and given the organizational structure of that economy, there exists a natural potential growth rate. Unfortunately it is not possible to estimate with any accuracy what that growth rate is. Central banks, where they do attempt to encourage growth, work towards an implicit or explicit target growth rate, which is this unobservable potential growth rate. Given that it is unobservable and that estimates are unreliable, the probability that policy is appropriately calibrated is low.

Most central banks pursue an objective of price stability, and

some have explicit inflation targets. The appropriate or desired level of inflation is not well defined. Instead, central banks seem to be advised by past traumatic experiences of inflation which tend to be the result of loss of confidence or patently ill-advised policy, rather than naturally overheating economies. Likewise, current wisdom about deflation is colored by the Japanese experience of the last quarter of a century. Inflation is an aggregate measure prone to errors in specification. Is deflation due to deficient demand or to innovation and productivity? Is inflation due to real economic constraints or to monetary and financial factors? It is impossible to resolve these questions within a single measure. Inflation targeting is complicated and confounded by these issues.

Is active monetary policy useful?

The economy is a dynamic system which is the amalgamation of multiple dynamic markets. Even if it was possible to resolve monetary policy for a single market, and I argue that we cannot, it is difficult to resolve monetary policy across this aggregation of markets. Input and output markets may lead and lag each other with significant phase differences. Which market should policy be aimed at?

Each market is dynamic and dynamic systems confound policy. The complexity of the economy is such that central banks can only guess at how they work. Without a comprehensive knowledge of the inner workings of the economy, monetary policy is vulnerable to mistakes. In a static system with stochastic parameters, policy has unpredictable results. In a dynamic system with stochastic parameters, policy is even more unpredictable. A dynamic system can be characterised as having a certain quantity of energy within it. Policy, whether in the short term it is countercyclical or not, adds energy to the system, while the longer term counter or pro cyclicalities of the policy is unknown. The energy is not dissipated but is accumulated and can manifest itself pro-cyclically in the

future.

One topical example of how a dynamic system confounds policy is the concept of moral hazard. Each time a financial crisis occurs, the threat of contagion and recession prompts central banks to cut interest rates, or more recently, to ease counter-cyclical prudential regulation. The asymmetrical reaction to losses and falling asset prices increases the risk taking culture in the economy, not diminishes it.

Is current regulation effective?

In an effort to prevent a repeat performance of 2008/2009 where taxpayers had to rescue an overleveraged, overly risked banking system, central banks and regulators have required banks to hold more capital and to restructure their capital structures to be more robust for the protection of taxpayers and depositors. In many ways, bankruptcy codes in the developed world are sufficiently defined to deal with bank insolvencies. However, the political implications of bailing in deposits necessitated a different approach. In some way, shape or form, it was necessary to subordinate senior unsecured claims to deposits. To further protect depositors and taxpayers, banks have been required to raise more capital in the form of equity and contingent capital. There has been less pressure to realize losses and correctly classify non-performing assets. The speed of rehabilitation has varied from country to country.

Regulation of a fractional reserve banking system has always been a balance between efficiency and stability. Following a crisis, it is fully expected that regulation should lean towards stability. More capital and a clarification of the capital structure of banks is a sensible route to greater stability. The price of this stability, however, is efficiency. At a time when central banks are trying to spur growth and credit creation, this leads to contradictory signals to banks. On the one hand they are required to be more

conservative, and on the other they are encouraged to lend.

One example of this dilemma is the 2011 ECB LTR0s which were used by the commercial banks not to make new loans to the private sector but which encouraged banks to buy low capital consuming national sovereign debt. Subsequent LTR0s were aimed at spurring private sector lending and carried conditions encouraging this. These LTR0s have tended to be much less enthusiastically received given the capital requirements.

One side effect of the new Basel III capital rules has been a significant reduction in bond market liquidity as banks reduced inventory now deemed too expensive to hold. At the same time, central bank policy depressed interest rates encouraged businesses with access to bond markets to greatly increase issuance, and thus balance sheet leverage. By depressing short term interest rates, central banks have been successful in encouraging investors to assume more risk and lower yields to meet the supply of debt issuance. Retail mutual funds and ETFs have been an important channel for matching demand and supply of bonds.

As is often the case, regulation in one area forces capital elsewhere. In this case, the shadow banking system, the debt capital markets, have replaced the banks as a repository of wealth. Risk has been redistributed and not diminished.

Are current debt levels a significant risk?

Debt financing for non-investment purposes, such as for consumption and purchase of primary residence is not productive. This is not to say that it is not a good thing. Non investment debt allows consumers to temporally redistribute their consumption. A successful consumption strategy requires that the consumer is able to fund the debt, and to repay it when it comes due, at which time current consumption must fall. Since the financial crisis of 2008, households have reduced debt levels and debt service has

fallen as interest rates have fallen. Households may one day increase leverage once again, however, they may be more circumspect in the next cycle while lenders will also face tighter capital constraints.

Assumption of debt for investment purposes is a legitimate use. In this case it is important that the investment generates sufficient return to repay the interest and the principal. The interest rate is not only a cost but an important hurdle rate to investment. The higher the interest rate, the higher the hurdle rate, and the more selective the capital allocation decision needs to be. Artificially low interest rates therefore encourage overinvestment, overcapacity, disinflation, and misallocation of capital.

Government debt has grown substantially since the global financial crisis of 2008. As interest rates and bond yields fell over a three decade period, governments have found increasing debt levels easier to service and thus issued more debt. In the wake of the 2008 crisis, bailouts of the banking sector by governments led to a surge in public debt levels. In the US the federal public debt as a percentage of GDP has risen from 30% in the early 1980s to 65% in 2007 and then to 105% in 2016. External demand from international reserves of USD funded by trade deficits, low capital requirements for financial institutions, a savings glut, asymmetrical interest rate policy responses to recessions and market volatility, benign inflation and most latterly, QE, have kept debt service declining and allowed governments to continually roll over, refinance, and increase their borrowing over these three decades.

As long as governments and corporates can continue to refinance cheaply, current debt levels are a risk unlikely to materialize. Threats to this dynamic include loss of foreign demand in the case of deficit countries, inability of current holders to maintain positions, rising inflation, or a loss of confidence for whatever reason. Slower moving phenomena may

get us to any of these points such as slow growth leading to political or social instability, slow growth leading to poorer cash flow and inability to pay down debt, and ill-advised policy leading to runs on currencies.

Given the current balance of risks it is unlikely that any central bank would intentionally raise interest rates significantly under the best of circumstances. Under the current uncertainty, the prospect of raising interest rates is low barring a currency crisis (and hence defense), or runaway inflation, (usually a case of loss of confidence.) The most significant realistic risk is therefore a crisis of confidence leading to currency stress and a loss of internal and external purchasing power.

Market pricing.

Asset prices have been artificially inflated due to central bank intervention. Assets are valued on a relative, not absolute basis. Equity and bond valuations which may look high in isolation look reasonable when compared to sovereign yields. Low discount rates also inflate discounted cash flows leading to higher valuation multiples and higher prices. The response of central banks to any market distress also encourages excessive risk taking which artificially supports markets. The corollary of this is that all types of asset prices have become highly dependent on sovereign term structures. Correlations between assets have risen due to dependence on a proxy asset, sovereign bonds.

With central bank intervention suppressing volatility, the observed market price of risk is depressed. It is unsurprising that there should be an excess demand for risk and an over accumulation of the stock of risk. The difference between the efficient market price of risk and the current market price of risk is unobservable, however, a protracted suppression of market risk is itself a risky strategy. Eventual price discovery may be turbulent and disruptive. It may also be

difficult to reduce the intervention since the amount of risk has risen under the regime.

Negative interest rates have become common. France, Germany, Japan, Switzerland, Netherlands and Sweden have negative 5 year bond yields. Intended to spur credit circulation negative interest rates are threatening the profitability and solvency of the banks and insurance industry not to mention pensions. Assets returns are reduced while liabilities are amplified. In extreme cases, negative interest rates can lead to a reduced money supply, some insurers have begun to hoard physical cash in vaults, and can perversely push up the cost of credit. Negative interest rates are an unnatural state and price of money. Again, if the price of money is suppressed, it will theoretically be under supplied and over demanded. The fact that it is under demanded is partly an ominous sign, and partly the result of monetary policy and banking regulation being at odds.

Practical matters:

- Central banks should not blindly target inflation and growth since they don't know what long term potential inflation and growth rates are. They should instead target full labour employment, if they are to do anything at all.
- Central banks should arguably not even attempt monetary policy since the results are highly uncertain at best. Market solutions should be sought. Central banks should retain a regulatory role.
- Regulation is moving in the right direction but should avoid political influence. Retail money should be well protected but there is no substitute for educating the investing public and providing them the flexibility to choose.
- Regulation of the shadow banking system should be light touch and focused on transparency rather than limited access.

- There is too much debt. It is not a problem now because low interest rates have kept debt service in check but the global economy cannot tolerate higher interest rates.
- Central banks are keeping interest rates too low for too long. They will find it hard to raise rates because they do not know how markets will react or if the economy can refinance itself otherwise.
- Negative interest rates are unnatural and will denude the pension, bank and insurance industries. Rates can not only not be cut further but cannot be sustained at current negative levels for too long.