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The low-interest-rate trap

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Should the crisis spur central banks to change how they conduct monetary policy? This column argues that strict inflation targeting, which ignores financial fragility, can produce interest rates that push the economy into a "low-interest-rate trap" and increase the likelihood of a financial crisis.

There is a fundamental flaw in the way central banks set official interest rates. This flaw has created what might be called the "low-interest-rate trap". Low rates induce excessive risk taking, which increases the probability of crises, which in turn, requires low interest rates to keep the financial system alive. The flaw behind all this is the failure of central banks to take account of the probability of financial crises when setting interest rates.

Liquidity crises

By its very nature, every modern financial system is continually stalked by financial crises. The essence of a financial crisis is the breakdown of the process of "liquidity transformation". Such breakdowns occur whenever providers of the short-term funds fear that their ability to access their money at short notice may be impaired by the behaviour of other market participants trying to do the same. This makes liquidity needs correlated, even in the absence of significant outside disturbances. This source of fragility has long been recognised. Indeed, the Federal Reserve System was conceived precisely as an institution capable to dealing with liquidity crises more effectively.

Liquidity crises are a disruptive and self-magnifying phenomenon especially in the present-day financial system characterised by:

- Multiple layers of markets and intermediaries (which magnify information asymmetries);
- Capital-saving trading techniques like dynamic hedging, and;
- Gigantic development in the use of securities and derivatives,

which have multiplied counterparty risk and the risk of contagion.

Central banks have fallen behind market developments

Central banks have not kept sufficiently in touch with many of these developments. The liquidity crises of yesteryear hit banks – institutions that central banks knew well. But developments in securities markets mean that central banks have lost the ability to obtain the information they need to map out systemic risks among regulated banks and also beyond them. This is a problem because liquidity breakdowns produce spikes in the demand for means of payments and riskless stores of value – assets that only central banks can provide.

The need for a monetary policy “re-think”

Has the crisis taught us anything about how central banks should set monetary policy? There was not much that we did not know about how central bankers should behave once a crisis has developed; central bankers should be flexible in a financial crisis. And indeed in this crisis flexibility has been critical at avoiding a financial meltdown and an even deeper recession. But what about monetary policy in “normal times”? Has the crisis dented central banks’ recent faith in inflation targeting’?

Apparently not, according to a number of recent speeches given by Fed Chairman Ben Bernanke. While acknowledging the importance of monetary-policy transmission channels that work through financial markets, Bernanke has argued that central banks continue to pursue price stabilising policies (without prejudice to economic activity). The mainstream view in the central banking community is that the pursuit of price stability remains their main task, and that financial stability is something for regulators – not central banks – to deal with. Regulators, after all, have more appropriate tools, such as policies aimed at discouraging leverage (through high capital requirements) and decreasing aggregate risks, for example with rules on derivatives trading.

We understand this view. It is the product of an important intellectual and institutional evolution that has brought about the independence of central banks, as well as the technique of inflation targeting. A narrow mandate, coupled with independence, safeguards central bankers from undue influences from special interests, making them more effective. These developments deserve credit for the long period of low inflation and high growth experienced in the advanced economies before the crisis.

But the crisis has taught us that central banks, when they set interest rates, should also be concerned about the fragility of the financial system. Interest rates should reflect the value of liquidity, and this should take into account the fact that crises are spikes in the value of liquidity. If they fail to do so, central bankers run the risk keeping interest rates too low – specifically, keeping them below the shadow price of liquidity – which is the value of liquidity when you take into account the probability of spikes that come with crisis-linked liquidity shortfalls. Underpricing liquidity in this way makes crises more likely.

In other words, since in the event of a crisis the price of liquidity goes up, central bankers should keep policy rates higher than those they would set with the sole objective of price stability. Such a deviation from simple inflation targeting would have the important effect of signalling to all financial market participants that liquidity is not as abundant as they perceive in normal times, but can dry out unexpectedly and dramatically. By charging the "true" price of liquidity (i.e. its shadow price), central banks will help dampen excessive risk taking.

The low-interest-rate trap

Strict adherence to inflation targeting can produce interest rates that are too low, pushing the economy into a "low-interest-rate trap." Low interest rates induce too much risk taking and thus increase the probability of crises. Crises, in turn, require low interest rates to prop up the financial system. In a weakened financial system raising rates becomes extremely difficult, so central banks remain stuck in a low-interest-rate equilibrium, which in turn induces excessive risk taking.

What we have experienced in the past few years closely resemble this paradigm. A more resilient financial system requires better regulation, but it also requires some fresh thinking on the way central banks set interest rates.