Monetary Policy in the 21st Century: An Impossible Task?

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One of the most obvious trends over the last two decades has been the gradual erosion of central bank power by market forces. Central banks are operating under ever tighter constraints as financial markets become more integrated and more efficient, and as capital itself becomes more mobile and currencies become better substitutes for each other. Now, more than ever, central banks need to ensure that they carry the markets with them if their policies are to have any chance of success. If they fail to do so—if they engage in ill-judged attempts to manipulate interest rates or exchange rates, for example—they leave themselves open to withering speculative attack on a scale that no central bank can withstand. As recent experience has shown, the financial markets impose swift and merciless punishment on governments and central banks who try to defy them. Monetary policy has never been so constrained since the collapse of the Bretton Woods system in the early 1970s.

A New Threat to Monetary Policy: The Falling Demand for Central Bank Money

Central bankers also face a new and more dangerous threat. Long-run factors—technological ones, in particular—will not only further reduce the effectiveness of monetary policy, but are likely to destroy it altogether. These new developments threaten to reduce the demand for central bank money (the monetary base) to a level where the central bank's leverage over the monetary system—its ability to influence interest rates, exchange rates, and the money supply—effectively disappears.

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One form of base money consists of the deposits held by commercial banks for reserves or clearing purposes. However, the general trend of technological progress is already leading banks to operate with declining reserve ratios. There is also considerable competitive pressure on banks to reduce the costs of their holdings of base money. That pressure is intensified by competition from banks in other jurisdictions that are no longer obliged to satisfy minimum reserve requirements,[1] and also by financial innovations and developments in technology that give banks reserve and clearing media that are superior to central bank deposits.[2] It is therefore quite likely that bank demand for base money will fall to very low and possibly negligible levels over the foreseeable future.

The other form of base money consists of the cash held by the public for day-to-day transactions purposes. However, the public demand for cash is also likely to fall as electronic substitutes for cash become more sophisticated and more widely available (Browne and Cronin 1997). Indeed, the displacement of cash by electronic alternatives is already a well-established fact (Humphrey, Pulley, and Vesala 1996: 936) and is certain to go much further. The competition has reached the point where a number of central banks are now actively encouraging the use of electronic substitutes for cash to cope with the problems raised by the increasing sophistication of counterfeiters (Harrop 1996).

Implications of a Declining Demand for Base Money

The declining demand for base money causes major problems for central bankers. First, and most obvious, it means that base money will become increasingly insignificant as a component of the money supply. However, as base money becomes less significant, it will gradually lose its effectiveness as a channel through which the central bank can influence the broader monetary system. The fulcrum on which the monetary policy lever operates will erode away and make monetary policy less and less effective as time goes on.

Second, as the demand for base money falls, the central bank must ensure that the supply of base money also falls to avoid a major

[1]In Great Britain, for example, minimum reserve ratios were abolished in August 1981. The Bank of England had originally wanted to maintain them, but bowed to pressure from the commercial banks who argued that they would otherwise lose Eurocurrency business to non-British jurisdictions (Hall 1983: 171).

[2]For example, banks could settle interbank debts by transfers of mutual fund shares instead of writing checks against deposits at the central bank. The banks would then earn the return on the portfolios in which the mutual funds invest, instead of the (usually much lower) interest on central bank deposits.

inflation. If the demand for base money falls while its supply remains the same, the only way the market for base money can clear is for the value of base money (i.e., the value of the currency) to fall. To avoid that outcome, the central bank must reduce the supply of base money—a difficult and historically unprecedented task.[3] Such a policy would also create other problems for the central bank: it would force the central bank to buy its own currency back, the revenue from money creation (seigniorage) would become negative, and many (perhaps all) central banks would become bankrupt and need to be bailed out.[4]

Finally, the decline in the demand for base money would make prices and interest rates more vulnerable to external shocks and, in particular, to changes in the technological and other factors that influence the demand for currency.[5] To give but one example, suppose at some future date people all wake up one morning and find that a new development in e-money technology is about to make paper currency redundant. National currency would suddenly become a hot potato to be gotten rid of as quickly as possible. People would then rush to unload their cash holdings while currency still had some value, and in the process the value of currency would plummet—that is, the price level would rapidly rise. This scenario of e-money-induced hyperinflation may sound farfetched, but it is not altogether implausible. Of course, the price level also would be vulnerable to other, less dramatic changes in e-money technology.

If the demand for base money in the United States became negligible, dollar prices in the United States would become entirely dependent on the foreign demand for U.S. currency, and the U.S. price level would become hostage to whatever (largely uncontrollable) factors influence the foreign demand for dollars. Any factors that reduce that demand—for example, the successful remonetization of the former

[3]Among other things, the central bank must estimate the demand for base money and then make monetary management decisions conditional on those estimates, and therefore conditional on errors in those estimates. At the same time, the bank would have to take account of the estimated demand for the monetary base while continuing with the interest-rate, price-level, or exchange-rate targets it already had. The central bank's task, therefore, would become considerably more difficult than it already is under a fiat-money regime.

[4]In the limit, the central bank would have to buy back most, if not all, of its currency issue. In most countries, those amounts clearly exceed the value of central bank assets. Most central banks would therefore need their governments to bail them out if they were to avoid bankruptcy.

[5]An interesting analogy is with the historical gold standard, where the price level was vulnerable to changes in any factors that affected the supply of gold. Changes in the technology of gold extraction could and did have significant effects on the price level. A notable case in point was the development of the cyanide extraction process in the late 19th century, which helped fuel major increases in the price level between 1896 and 1914.

Soviet Union, which would lead citizens there to switch to local currencies, or the legalization of hard drugs, which would undercut much of the need to trade dollars in the black market—could then have devastating consequences for U.S. inflation. There is, of course, also the irony that the stability of the U.S. monetary system—and, hence, the health of the U.S. economy—would become very dependent on the activities of Colombian drug producers, the Russian mafia, and other unsavory elements.

In short, the central bank must come to terms with greater potential price instability just as its leverage (i.e., its ability to do something) gradually dissolves, and it will have to do so while buying back its own currency to prevent inflation and while earning negative seigniorage. At some point the central bank's task will clearly become impossible.

What Is to Be Done?

If the central bank can no longer manage the monetary system, it must give up the task and put the monetary system onto an automatic basis, and the only way to do that is to make the currency convertible again—that is, for the central bank to peg the price of its currency in terms of real goods or services. There are many types of convertibility, ranging from the old gold standard to more modern (albeit as yet untried) systems that aim to achieve price stability by pegging the prices of index-based financial derivatives.[6]

Serious thought would obviously have to be given to the type of system adopted, but convertibility has very definite benefits whatever precise form it takes. It puts the value of the currency on a sure footing, and thereby frees it from its dependence on the demand for base money, on the one hand, and central bank policy, on the other. Provided that private issuers are also free to issue currency of their own, the demand for central bank money can then fall to zero without

[6]For details, see Dowd (1994, 1995). Briefly put, the central bank would create a new type of financial instrument—a kind of price-level futures contract—and periodically peg its price at some par value. Arbitrage forces would then ensure that any resulting equilibrium was one with zero expected inflation. Adherence to this regime would therefore ensure that the expected price level remained roughly constant over time. The actual price level would then remain roughly constant, give or take a relatively small random error from one period to the next. This type of system would deliver the benefits of the gold standard (i.e., the benefits of an automatic discipline on the issue of currency), but without the potential disruptions that inevitably arise when the price level is tied to the vagaries of the gold market.

any serious side effects.[7] Prices, interest rates, and exchange rates would no longer be dependent on the vagaries of e-money technology or the foreign demand for currency. At the same time, the central bank would no longer face the daunting prospect of decreasing the supply of base money; instead, the bank would merely need to stand ready (along with issuers of private currencies) to buy and sell its currency on demand at a fixed price. The central bank's supply of currency could then fall to zero without any noticeable side effects. The central bank also would become one currency issuer among many, and it should be manifestly obvious by that stage that no justification exists for giving any one currency issuer—the central bank included—a privileged status over others. Federal Reserve currency could then be retired and the central bank itself abolished. The provision of currency could then be left to the institution that was always best able to provide it anyway—the market.

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[7]If the demand for central bank currency fell to zero, the convertible regime would ensure that the supply of central bank currency also fell to zero in an accommodating manner. The potential nightmare of hyperinflation would not arise because the value of the currency would no longer be determined by the supply of central bank currency, but by the nominal anchor to which the new system was tethered. Provided the anchor was suitably chosen, the demand for central bank currency could then be allowed to disappear without any noticeable inflation.