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INTERVENTION AND STERILISATION - 1987 - 1988

1. Definitions

Heavy intervention to prevent sterling rising, as with the $25bn in 1987-8, will, as a first stage, immediately:

(i) increase the sterling money supply, and

(ii) reduce market interest rates.

Sterilisation takes place when the effect on "monetary conditions" is contemporaneously neutralised. Depending on whether one interprets such "conditions" in terms of money supply or interest rates, this in turn implies that either:-

(a) the money supply, however defined, is not allowed to expand and is maintained at its original quantity, or

(b) market nominal short term interest rates, however defined, are maintained at their original levels.

The normal academic and IMF definition of sterilisation is in terms of the money supply [(a) above]. But since we use interest rates as the instrument and money growth as the target, the Bank would naturally think of sterilisation in terms of keeping short-term nominal interest rates unchanged [sense (b) above] rather than in terms of the target money growth.

2. Money Market Management as Sterilisation

The Bank would argue that as a rule all intervention is sterilised. Money market operations would, at the end of the day, remove any surplus cash at the prevailing intervention

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nominal interest rate. [sense (b) above]. The excess sterling due to intervention would be mopped up by the Bank selling bills or repos, so as to prevent a fall in short-term interest rates in the money market. In this interest-rate sense the intervention is automatically sterilised.

But since interest rates are unchanged, such sterilised intervention does not keep the exchange rate from rising. The only way to contain the exchange rate is to yield to market pressure and allow the nominal interest rate to fall. Then there is an associated expansion in the money supply through unsterilised intervention and residual money market management - to support this lower level of interest rates.

It is the persistence in pegging the exchange rate which is the proximate cause of the monetary expansion. The exchange rate peg (together with the rate of expected inflation) determines the nominal interest rate required which in turn determines the quantity of money needed to validate the fixed exchange rate. The circle is closed. As for unsterilised intervention, it is part of monetary policy and affects monetary growth and interest rates. If per contra it be sterilised, the monetary growth and exchange rates are not affected.

With sterilised intervention the private sector ends up with the same amount of money and with more bills (correspondingly the Bank's bill mountain melts down). In order to accommodate this increased supply of short-term liquid assets relative to long, there is likely to be some pressure to increase the downward slope of the yield curve by reductions in long rates. But this is likely to be a small effect and can be safely ignored.

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3. **Intervention as a "Cause" of Monetary Growth in 1987-1988**

In essence the proximate cause of the monetary growth of 1987-8 was the consequent need to validate the pegging of sterling to the 3.00 Dmark level when current market conditions required an exchange rate far higher at perhaps 3.30 to 3.35. Reductions of interest rates and associated monetary growth were required to hold the rate at 3.00. Unsterilised intervention contributed to the monetary growth, but that was a consquential required expansion and was determined by the 3.00 Dmark peg.

4. **Funding**

The full-fund rule is designed to ensure that the public sector financial balance has no effect on the money supply. What money is taken in tax receipts over and above public spending is put back into the private sector by purchases of gilts. The result - a level playing field.

In my view this is a good policy. It is easily understood by the market. Debt-management policies are therefore predictable with low levels of uncertainty.

It would be a mistake to use "over-funding", that is buying more gilts than needed for full-fund, with the objective of reducing monetary growth. First, it would cause needless consternation in the markets (as we saw some weeks ago when over-funding was, falsely, rumoured to be returning). Secondly, provided that we continue to control monetary growth through the instrument of interest rates, over-funding would then have to be offset by assistance to the money market. The conclusion is that if we judge that potential inflation requires an increase in the severity of the monetary squeeze, then we should pursue a clear policy of increasing short-term interest rates and not confuse this by arbitrary activity in the gilt market.

5. Short-term effects and "psychology".

The evidence from every study I have seen is that sterilised intervention has only a positive effect which can be measured only in hours (in sophisticated markets) or a few days (in less sophisticated markets). Then it is gone. Nevertheless it is asserted that this fly-by-night effect is useful psychologically, particularly in falling markets, because it shows that the authorities "really care" and are not happy with these consequences of monetary policy.

I am not a psychologist (but nor are they who make such allegations!). Furthermore, I have seen no studies, by psychologists or laymen, of these psychological effects. I remain very doubtful if such alleged positive effects outweigh the portfolio losses which are incurred in such intervention.

The Treasury and Bank sometimes point out that the intervention is not sterilised immediately and so may have some effects on exchange rates. Because of the operation of our money market assistance, etc, and the interest rate definition of sterilisation, I do not see how that can be of any quantitative importance. Of course even with fixed nominal interest rates there will generally be some effect on the quantity of money (the relationship between money and nominal interest rates is not tight) and the Treasury or Bank may be anticipating, at fixed interest rates, some quantity-of-money effect on the exchange rate. But that must be both relatively small and unpredictable in magnitude on the exchanges.

6. The "Genius" Case for Intervention (unsterilised).

If we knew that a substantial increase in the demand for sterling was transitory and if we knew precisely the magnitude and duration, when it would subside and to what level, then e

there is a case for intervention to prevent the exchange rate movement occuring - "ironing out the bumps". Broadly speaking this is the view that the Chancellor took in 1987-8, and it is a policy promoted by some academics (eg Ronald McKinnon of Stanford). The trouble is that no-one could ever have sufficient knowledge to pursue such a policy. We do not know, even after the event, how the demand for sterling moved, what part was transitory and what part permanent. How much more difficult it is, then, to forecast successfully such movements before they take place. The attempt to insulate the exchange rate from market oscillations usually gives rise only to distortions and sudden reversals.

7. **The Main Problem of 1987-8**

In response to your request for my view whether intervention or constraining interest rates was more damaging, the answer is clearly the interest rate. In our system, this determines monetary policy and the permissible extent of unsterilised intervention.

AW

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cc Professor Brian Griffiths
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