Discussion of Anna J. Schwartz, "The Rise and Fall of Foreign Exchange Market Intervention as a Policy Tool"

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James R. Lothian

Distinguished Professor of Finance
Schools of Business, Fordham University
113 West 60th Street
New York, NY 10023, USA
phone: 1 212 636 6147
fax: 1 212 765 5573
emails: lothian@mary.fordham.edu;
jrmlothian@aol.com

Anna's analysis focuses on the question of why foreign exchange market intervention has fallen into disfavor in policy circles in most major countries. Only the Bank of Japan continues to intervene, Anna claims. Other central banks, including the Fed, abandoned the practice during the course of the last decade.

Anna goes on to consider the reasons underlying both developments. She begins her discussion by reviewing economic behavior during past episodes of intervention. She then turns to the evidence that economic researchers have amassed on these episodes. Based on her survey of research findings, she concludes that there is little evidence that central banks can either determine the appropriate levels of exchange rates or to stabilize exchange rates around the target levels that they actually choose. As she points out, however, not all economists agree with that assessment. She therefore goes on to discuss the arguments of several of the more articulate proponents of intervention. Then she considers the case of Japan.

I like the paper -- it provides a fine overview of the subject. I agree, moreover, with Anna's conclusions. Several issues that she raises seem to me to require somewhat more detailed discussion. One issue of some importance that gets more or less glossed over is what exactly is meant by intervention, or put differently, whether it is useful to distinguish one type of intervention from another and, if so, which criteria we should use to do so. This question first arises in the discussion of the results of intervention in the early part of the paper. It crops up again when she considers McKinnon's argument concerning Japanese monetary policy and the yen-dollar rate. McKinnon "assumes that Japanese and US authorities in their wisdom can determine the correct value of the yen dollar exchange-rate, and that they can intervene successfully for 10 to 20 years to maintain it," Anna says, but "[t]he history of intervention lends no support to these assumptions."

The question that needs to be settled from the outset is whether it is useful to distinguish between a truly fixed exchange rate regime, on the one hand, which of course involves intervention, and a dirty float or its first cousin a crawling peg,

on the other, both of which also involve intervention. For a truly fixed-rate regime, and here I have in mind the limiting case, of a currency board like that of Hong Kong today or of Ireland from 1922 to 1970, the issue of the appropriate level of the exchange rate does not arise.[1] The economy adjusts to the exchange rate rather than the other way around. In these instances, moreover, the intervention clearly works. The same thing is not true for the piecemeal interventions associated with a dirty float. One reason as Anna points out is that such intervention usually is sterilized. What though about unsterilized intervention? Does it take place on a sufficiently wide scale that we can tell? Or is it the case that all intervention of the non-fixed-rate variety is sterilized? If not an interesting question is raised. What accounts for the difference between this situation and the fixed-rate situation? Is it commitment and market expectations thereof that matter? I suspect it very well may be.

Anna goes on to discuss the reasons for intervention typically given by the authorities: disorderly markets, exchange-rates that are too high or low, the need for coordination. She dismisses disorderly markets as a reason and I think rightly so. Nevertheless such an explanation continues to have strong attraction, and not just for policy makers but for economists too. I wonder why? Perhaps it is simply product differentiation.

Now let me go on to discuss several other issues that Anna has raised. The first is the ability of exchange rate models to predict the actual behavior of exchange rates. This has been a growth industry for well over a decade. Since professional opinion on this question has itself been characterized by "excess volatility," I think it may be useful to review what has been found. The evidence here, as I see it, paints a picture that is much less grim than was thought to be the case in the mid-1980s, but that is not nearly so rosy, as was thought to be the case a decade before that (see Lothian and Taylor, 1996).

[1] The experience of Hong Kong is of course well known. On Ireland during this period see Honahan (1997).

The pendulum here has swung from one extreme to the other and then stabilized somewhere in the middle. My co-author Mark Taylor has referred to this episode as one of "mean reversion in economic thought."

What the research indicates is a tolerable, but certainly not perfect, degree of real exchange rate stability over the long run, and substantial decrease in stability over the short run. As an illustration consider the four scatter charts that follow. Plotted in these charts are changes in the yearly log nominal exchange rates and log relative price levels of 20 major countries relative to the United States over various time horizons for a 21-year period running from the early 1970s to the mid-1990s. Shown in Figure 1 are the individual yearly observation themselves; shown in Figures 2, 3 and 4 are 3-year averages, 7-year averages and full-period (i.e. 21-year) averages of these annual data. As a simple glance at the four charts indicates, over the two longer time horizons, the relationship between exchange rate changes and inflation differentials is amazingly good, while over the two shorter horizons it is very much weaker. This is evidenced further by correlations computed for these various bodies of data. These are .43, .52, .89 and .98 respectively. Purchasing power parity and models that rely on it as a building block therefore are of some use at all four time horizons but not of sufficient use at the shorter horizons of that are of principal relevance to policymakers. These findings I should add are very much in line with those reported by Milton and Anna 40 years ago in their Monetary History of the United States – yet another example of he prescience of that work. In their summary chapter, Friedman and Schwartz's wrote (1963, pp. 678-79):

> One striking example of the stability of basic economic relations is the stability of relative prices in the United States and Great Britain adjusted for changes in the exchange rate between the dollar and the pound. ... In the 79 years from 1871 to 1949, vast changes occurred in the economic structure and development of the United States, the place of Britain in the world economy, the internal monetary structures of both the United States and Great Britain, and the international monetary arrangements linking them. Yet despite these changes, despite two world wars and despite the statistical errors in the price-index numbers, the adjusted ratio on the base that makes 1929 = 100 was between 84 and 111 in all but one of the 79 years.

Somewhat of an exception to this characterization is Japan. In Japan real exchange rates appear to have followed deterministic trends as opposed to being mean reverting. This is true both in recent decades and much earlier in the period following the Meiji restoration (Lothian, 1991). A plausible explanation for this phenomenon revolves around productivity changes.

The differenced data that were just presented do not permit a test of these competing statistical characterizations. They are, however, otherwise suggestive of a longer term drift in Japanese real exchange rates. Over the full sample period, the grand mean of the changes in the log real exchange rates of he 20 countries is .43% per annum. The standard deviation of the 20 country means about this grand mean is .98% per annum. The mean rate of change of the log real yen-dollar rate in contrast is -3.26% per year. Anna is, therefore, entirely correct when she describes the difficulty of picking the right yen-dollar rate.

Now let me turn to two other Japanese-related issues. The first is the reason for the continued Japanese foreign exchange market intervention. What makes this intervention is especially puzzling, and here I am partial disagreement with Anna's analysis, is that the Bank of Japan quite some time ago did in fact, appear to come to he realization that foreign exchange market intervention and the pursuit of domestic economic goals were likely to conflict. In the late 1970s, Germany and Japan both ran into trouble intervening to support the dollar. Dollar reserves of both countries increased dramatically and in both instances translated into increased growth in the monetary base and increased inflation.

Commenting on experience during these years, high-level officials of the BOJ pointed to the fruitlessness of intervention in 1978 to quell the slide of the dollar.[2] They described their decision to tighten policy substantially in 1979, when inflation first started to rise, as the only viable response. They viewed the much milder increase in inflation in that episode, as opposed to the mid-1970s, as conclusive evidence of effectiveness of their overall policy stance. The intervention that has taken place in the 1990s is therefore more anomalous than Anna makes it out to be. Perhaps it is the case that finance ministry types are the problem here. Alternatively, it may simply be concern by all involved about export performance.

A final issue about which it might be worthwhile to elaborate is the liquidity trap notion that McKinnon has advanced. It suffers from the same problem as its intellectual ancestor. Clearly there is some change in money growth that will cause nominal spending to accelerate and the yen to weaken, if not a 5 or 10 percentage points increase then one of 20 or 30 percentage points. This is of course an argument advanced in the Monetary History, but it seems to me to be equally appropriate here.

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[2] See the discussions of Japanese policy in the papers presented by Reiichi Shimamoto, Executive Director of the Bank of Japan, and by Takeshi Ohta, the BOJ's Foreign Department Director, at a conference on central-bank policies held at the Federal Reserve Bank of New York in May 1982 and subsequently published in Paul Meek, ed. (1983).

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Figure 1. Exchange rates vs. inflation differential, yearly data

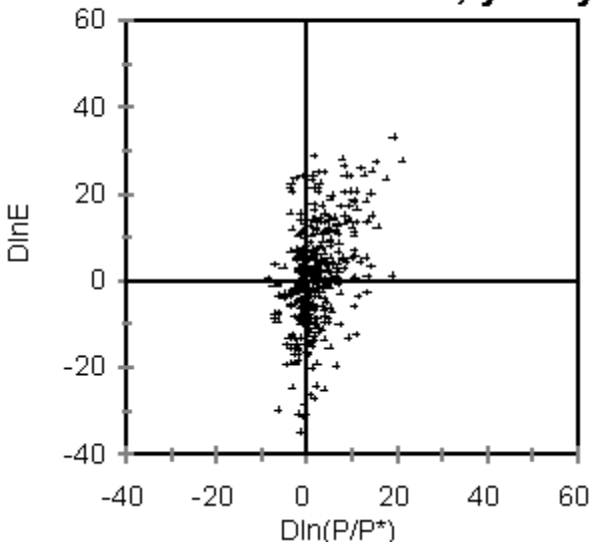

Figure 2. Exchange rates vs. inflation differential, 3-year averaged data

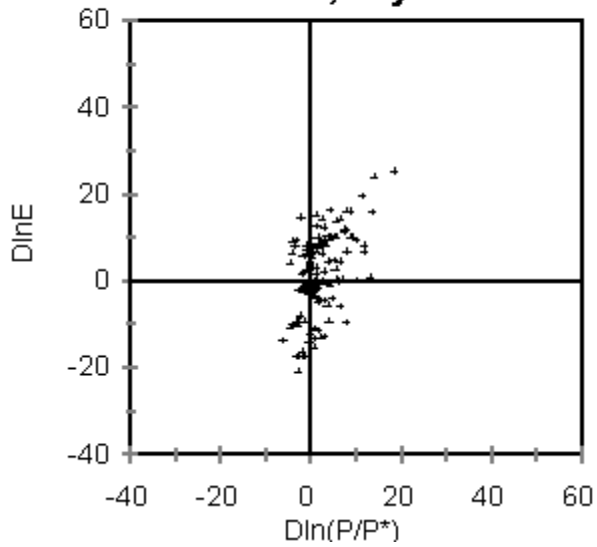

Figure 3. Exchange rates vs. inflation differential, 7-year averaged data

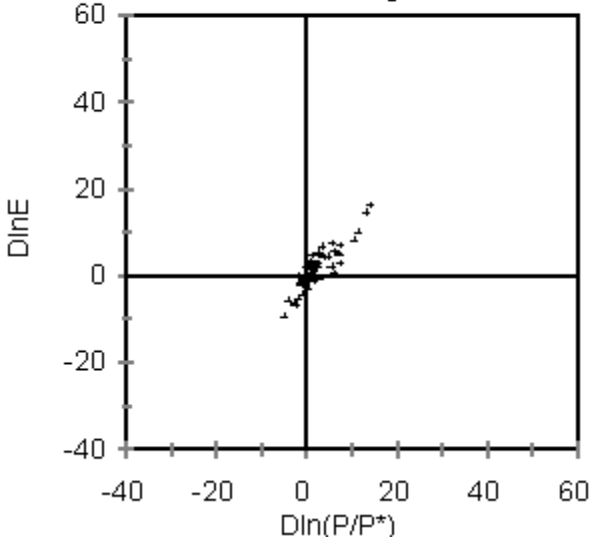

Figure 4. Exchange rates vs. inflation differential, 21-year averaged data