

## *Comments and Discussion*

Christopher Sims expressed skepticism about the way Jeffrey Frankel had used the mean-variance approach to assess the importance of variations in risk premiums in explaining exchange rate movements. In Sims's view it is inappropriate to assume that the risk characteristics of U.S. debt are invariant to changes in fiscal policy, particularly when one is trying to assess the consequences of the projected stream of structural federal budget deficits. Fear of an impending apocalypse of the kind described by James Tobin would change agents' perception of the relative riskiness of different assets—risk parameters estimated from historical data underestimate the current risk on government bonds.

William Nordhaus noted that studies of domestic financial markets indicate that the mean-variance approach used by Frankel is incapable of explaining the risk premiums on domestic assets without assuming coefficients of relative risk aversion four to twenty times as large as those that Frankel has assumed. While such large values of this crucial parameter would help the theory explain exchange rate variations, they are themselves so implausible as to cast doubt on the relevance of the theory. Sims noted that the covariance structure of the interest rates on government debt or other nominal assets may itself be an inappropriate indicator of the risk relevant to exchange rates. The fact that the U.S. government is running a budget deficit and financing it by running a current account deficit does not mean that foreigners are increasing their holdings of U.S. government debt by the amount of the deficit. The risk relevant to investors holding a higher proportion of their portfolios in the form of claims on capital in the whole U.S. economy may be quite different from the risk characteristics of nominal assets; this might drastically affect Frankel's calculations of interest rate effects of deficits.

Walter Salant observed that much of the discussion had focused on the effect of government budget deficits on the supply of bonds and suggested that it is important to remember that it is not the absolute supply of bonds but the supply of bonds relative to the supply of money that is relevant to the level of interest rates, both nominal and real.

George Perry said that it was an implausible property of Frankel's bubble model that, as a currency appreciates and thus has further to fall, the probability of collapse gets smaller. Rather than regarding this as a counterintuitive result, and taking seriously its implication that it is more likely that all of, rather than only a part of, the appreciation is a bubble, it should be recognized as an unfortunate built-in assumption of the model. An alternative specification that could avoid this property might allow the market's perception of the equilibrium exchange rate,  $\bar{s}$ , to be altered by the experienced exchange rate,  $s$ . Also, so as to keep speculators indifferent for any given probability of collapse, the (momentary) expected appreciation should be steeper the further above equilibrium the exchange rate is.

William Poole was troubled that so much discussion of the current dollar exchange rate, at the Panel and among the public at large, assumes the existence of some historical equilibrium rate to which the dollar is going to return. He observed that such an assumption is inconsistent with the theory of efficient markets, according to which, asset prices in general and exchange rates in particular are unpredictable (except for interest parity). Nor did he believe that assumption to be consistent with the time series evidence indicating that relative prices of all kinds, as well as other important economic variables, such as real GNP and the velocity of money, essentially follow random walks. He observed that although few predicted the sustained appreciation of the real yen-dollar rate over the past twenty years, no one now expects the yen to return to its pre-1965 level. The yen's secular appreciation reflects the unpredicted, yet in retrospect evident, growth of the productivity of the Japanese economy. He also thought the current value of the dollar consistent with not unreasonable expectations—that some action will be taken to change the unsustainable constellation of fiscal policies in the United States, that adjustments will be made abroad, and that growth in Europe and Latin America will resume.

Franco Modigliani was less confident than Poole that exchange markets are rational. He argued that a fundamental fact is that the richest

country in the world will, in the long run, supply capital rather than borrow huge amounts from abroad. Hence, he contended that the United States will have to turn from a deficit to a surplus in the current account of the balance of payments, and was confident that with some adjustment for structural changes, the real exchange rate will have to return to its level of four years ago. He also argued that the current level of the U.S. government budget deficit, which is 10 to 15 percent of the world's saving, would, in the long run, have a significant effect on the supply of capital and thereby make the world poorer. Henry Wallich agreed with Rudiger Dornbusch and Richard Cooper that the U.S. current account deficit, large as it is by historical standards, is far less cosmic than is sometimes believed. He argued that perhaps as much as half of the current account deficit reflects the cyclical phase of the world's economies and that changes in the dollar claims of the world on the United States due to the deficit are modest compared with changes in stock market values or changes in the dollar itself. For example, he noted that a year's deficit at the current rate is less than the change in the value of the world's dollar portfolio in a recent month resulting from the drop of the dollar.

Fred Bergsten expressed skepticism about attributing the high value of the dollar to foreigners moving into the U.S. stock market. If that were true, he argued, we should see a concurrent drop in foreign stock markets. But instead, foreign stock markets have risen tremendously in the last two years, while the dollar has broken all records in its upward surge.

Wallich stated that he believed that much of the difficulty in predicting the dollar exchange rate reflects the fact that the dollar has become a kind of joker in the international monetary system. It is no longer a price whose function is balancing current accounts and allocating resources. Rather, it has become the price of an asset almost like gold, whose value is unrelated to the performance of the U.S. economy. Under these circumstances it is impossible to predict the future value of the dollar. Wallich sees the greatest danger, if the dollar stays at its present high level, to be the resurgence of protectionism in the United States.