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This publication primarily presents economic research aimed at improving policymaking by the Federal Reserve System and other governmental authorities.

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## *In This Issue . . .*

### **Pricing Money**

In "Should Currency Be Priced Like Cars?" (p. 3), Thomas M. Supel and Richard M. Todd discuss the difficult conceptual and practical problems associated with providing and pricing currency. They acknowledge that the familiar par pricing system—in which, for example, a \$5 bill can be exchanged on demand for five \$1 bills—is very convenient and requires little bookkeeping. They point out, however, that under this system the different denominations and types of currency the public chooses to use need not be related in any way to the different real costs the government incurs in producing them. Since with par pricing the public does not face the proper incentives, it can choose a mixture of currency that is needlessly expensive to produce. The challenge the government faces, therefore, is to provide incentives for the public to choose a low-cost currency mix without destroying the advantages of par pricing.

The U.S. government has recently attempted several times to respond to that challenge by offering the public lower-cost substitutes for the \$1 bill—none of which the public accepted. Supel and Todd describe these attempts and conclude by suggesting for further study some different types of responses which might improve our currency system.

### **Monetarist Arithmetic**

In "Some Pleasant Monetarist Arithmetic" (p.15), Michael R. Darby takes issue with the practical significance of a central conclusion reached in an earlier *Quarterly Review* article, Thomas J. Sargent and Neil Wallace's "Some Unpleasant Monetarist Arithmetic." In their article, Sargent and Wallace showed that when the real interest rate exceeds the economy's real growth rate, monetary and budget policies must be coordinated. Under their assumption, a permanent increase in the government's deficit net-of-interest must eventually be accommodated by increases in the monetary base and so must eventually lead to higher inflation.

Darby disagrees, maintaining that monetary and budget policies can be changed independently of each other. He demonstrates that as long as the real interest rate is below the economy's real growth rate, a permanent increase in the deficit need never be accommodated by monetary policy. Since theory does not favor either Sargent-Wallace's or Darby's assumption over the other, Darby attempts to resolve the issue by examining U.S. data to see which one is most in accord with

historical experience. He determines that the evidence favors his assumption and, thus, his pleasant conclusions.

In their "Reply to Darby" (p.21), Preston J. Miller and Thomas J. Sargent argue that Darby's empirical evidence is not sufficient in more general models where the real interest rate depends on the monetary and budget policies in place. Darby's evidence on average rates of real growth and real interest was taken from a time when budget policy kept the deficit net-of-interest close to zero. But in the context of more general models, his evidence is insufficient to predict whether or not monetary accommodation will be necessary when budget policy is changed to one of permanent deficits. Based on their interpretation of the data, Miller and Sargent conclude that Sargent-Wallace's unpleasant arithmetic may be the right one in present circumstances.