rising, and banker confidence in the future is likely to be increasing. Thus excess reserves are apt to decline, with the reserve ratio rising and thereby exerting an upward influence on the money supply.

The influence of business on money—acting through its influence on the growth of the monetary base, the currency ratio, and the excess reserve ratio—is extremely complex and is not necessarily stable over time. The cyclical behavior of the monetary base and the currency and reserve ratios have in fact varied from cycle to cycle. Moreover the relative importance of these three factors in influencing the cyclical behavior of money has varied over the near 100-year period for which data are available. In part, these variations have reflected the effects of the creation and evolution of the Federal Reserve System. A detailed examination of the behavior of the monetary base, the currency and reserve ratios, and the role of business conditions in fixing their cyclical patterns is beyond the scope of this article. Recently, however, a very thorough analysis of the problem has been done for the NBER by Professor Phillip Cagan of Columbia University. He finds that "although the cyclical behavior of the three determinants [of the money stock] is not easy to interpret, it seems safe to conclude that most of their short-run variations are closely related to cyclical fluctuations in economic activity. . . . Such effects provide a plausible explanation of recurring cycles in the money stock whether or not the reverse effect occurred."[9]

The fact that the business cycle itself has an important role in determining the course of the monetary cycle seriously undermines the argument that the timing relationships of monetary cycles and business cycles point to a dominant influence of money on business. By the same token, ample room is left for the possibility that many other factors, such as fiscal policy, fluctuations in business investment demand, including those related to changes in technology, fluctuation in exports, and replacement cycles in consumer durable goods, may also exert important independent influences on the course of business activity.

MONETARY POLICY AND THE CYCLICAL BEHAVIOR OF MONEY

One important, though perhaps indirect, influence of business on money requires special mention, namely the

[9] Phillip Cagan, *Determinants and Effects of Changes in the Stock of Money, 1875-1960* (National Bureau of Economic Research, 1965), page 261.