These six most severe contractions were in fact associated with the six most severe cyclical declines in the rate of growth of the money supply, though the rankings within the six do not correspond exactly. As was argued earlier, business conditions themselves exert a reverse influence on the money supply, and it seems probable that particularly severe business declines may tend to accentuate the accompanying monetary contractions. Thus, for example, the wholesale default of loans and sharp drops in the value of securities that accompanied the 1929-33 depression helped lay the groundwork for the widespread bank failures of that period. These failures were in part caused by, but also further encouraged, large withdrawals of currency from the banking system by a frightened public. By contracting the reserve base of the banking system, in turn, these withdrawals resulted in multiple contractions of the deposit component of the money supply.

Developments of this type help to explain the association of major monetary contractions with major depressions but do not seem to account fully for it.[12] Thus it may be that catastrophic monetary developments are in fact a pre-condition for catastrophic declines in business activity. In any case, for more moderate cyclical movements, the association between the severity of monetary contractions and the severity of business contractions breaks down completely. There is virtually no correlation whatever between the relative rankings of the twelve nonmajor contractions in the 1882-1961 period and the rankings of the associated declines in the rate of monetary growth.[13] Certainly this finding does not support the theory that changes in the rate of monetary growth are of predominant importance in determining business activity.

MEASURING LAGS IN THE INFLUENCE OF MONEY ON BUSINESS

Despite their belief in the crucial role of the money supply in determining the cyclical course of business activity, some members of the money supply school nevertheless argue, as suggested at the beginning of this article, that discretionary monetary policy is a clumsy and even dangerous countercyclical weapon. The starting point for this view is again the fact that peaks and troughs in the level

[12] See Phillip Cagan, *op. cit.*, pages 262-68.

[13] The Kendall coefficient for the twelve nonmajor contractions is a statistically insignificant .03, while the corresponding Spearman coefficient is .01.