

capital goods as the number of people in schools and passenger cars on the road have shown either very steady upward trends (people in schools) or mild fluctuations (cars on the road) which have not corresponded with postwar cycles in credit conditions. His implicit assumption that changes, not levels, of interest rates matter is supported by the postwar growth of real per capita income (helping offset the long postwar rise in interest costs) and the plausible hypothesis that shock effects of increases in rates ultimately vanish.

One puzzling feature of his procedure is his comparison of centered 12-month averages of variables thought to be influenced by interest rates with unsmoothed monthly values of the rates themselves. Literally, this implies that a change in the AAA bond rate affects bond sales or contract awards or construction equally, month by month, during the preceding as well as the following half year. Rather complicated patterns of anticipations and behavior lags would be needed to justify this very special postulated relationship.

An alternate interest rate series is plotted on chart 2 in order to test whether the conjunction of a more simple time relationship between interest rates and borrowing and an alternative measure of the cost of borrowed funds would still show the same broad relationships as those found by Morris. Since issues of State and local units of less than unassailable financial strength may be more exposed to tight money impacts than issues by very high-rated units are, the series is of bonds rated as "good" rather than "prime" in quality.² Since new issue yields may be more relevant to borrowing decisions than are the secondary market yields measured by the Moody's interest rate series,³ the series is of the Sidney Homer series on standardized new issue yields (for "good" rated municipals).⁴ And since a change in interest rates may affect most strongly State and local borrowing during the month in which it occurs, new issue yields are smoothed by the same 12-month centered moving average as that used to eliminate irregular fluctuations in bond sales.⁵

In fact, this alternative, smoothed interest rate series supports Morris' explanation better, after 1959, than his own series does. The long, gradual decline of smoothed new issue yields starting in early 1950 and ending in early 1963 corresponds more closely with the initially slow and then accelerating rise in smoothed bond issues than does the AAA bond yield series on chart 1. Before mid-1959, the two interest rate series have about the same turning points, making the unsmoothed AAA yield series used by Morris a reasonable proxy for the smoothed new issue one.

² The series is given in "An Analytical Record of Representative Municipal Yield Scales" by Quality and Maturity, 1950-65" (Solomon Brothers and Hutzler) and is of bonds of 20 years maturity. These new issue yields are estimates of the yield of a bond with standard characteristics, made judgmentally from the characteristics of actual yields of new issues during the same time period.

³ On the other hand, it could be argued that the Moody's AAA, Aa, A, and Baa yield series are more relevant to State and local financial decisions because they are widely known and are less subject to irregular fluctuations (including disturbances due to particular issue features) than are quoted new issue yields. This writer inclines to this opinion.

⁴ Throughout this paper, "municipals" means long-term security issues of State as well as local governments. This usage conforms to that in financial markets.

⁵ In other words, average bond sales (or contract awards, or construction put in place) for a 12-month period are compared with average bond yields during the same period. This gives the same weight to each month for any observation in each series.