

is thus carried over to succeeding periods. The particular model used, a variant of the classic Metzler inventory model, theorizes that the largest portion of the ultimate, full adjustment to given-period changes in desired levels of debt is accomplished during the given period itself. In the following and subsequent periods, remaining adjustments become smaller and smaller and are finally insignificant.

Thus, both borrowers and lenders are always reacting to past as well as current changes in desired levels of debt and bond holdings. That is, past as well as current conditions influence current lending and borrowing.

(4) While the writer's model can be developed into one explaining the separate effects of credit and other conditions on lenders and State and local borrowers, this is not done in this paper. The writer plans to use a procedure, known technically as the two-stage least squares method, to identify separate borrower and lender behavior characteristics in a future study. But the partial regression coefficients²⁵ in table 1 reflect the combined actions of borrowers and lenders for such variables as interest rates which influence both groups' behavior. Other variables, such as Federal grants-in-aid, affect borrowers but not lenders; while still others affect only lenders. The interpretation of regression findings requires a judicious combination of acquaintance with economic theory, knowledge of the market being explained, and commonsense. And the attribution of influences on bond sales to borrower and lender sides of the bond market is no exception to this general principle.

(5) The reader can interpret the following findings in ways different from what the lagged stock adjustment model would indicate, if his experience or intuition suggests that both borrowers and lenders behave differently. One alternative interpretation would be that borrowers and lenders adjust very quickly to changing circumstances. If so, the partial regression coefficients in table 1 should be interpreted straightforwardly, so that an illustrative coefficient of 0.6 means that a unit change in the variable with which it is associated induces six-tenths of a unit change, and no more, in the dependent variable. By this interpretation, the negative coefficient for the lagged stock would mean that high stocks of debt (for borrowers) and bond holdings (for lenders) inhibit further borrowing and lending more than low stocks do. And in any case, the reader should still read each coefficient literally for measuring what actually happens in any given period as a result of a given-period change in, say, the spread between U.S. Government and State-local bond yields during that period. If the coefficient of this spread is 0.6, a unit change in the spread induces a six-tenths of a unit change in bond sales during the current sales.

(6) For technical reasons, all variables except ratios and a special one (called a dummy variable),²⁶ are divided through by a weighted average of current and past GNP (in current dollars) called permanent income. The nonspecialized reader can interpret this step as a means

²⁵ See footnote 9 in sec. 1 for a definition of this term.

²⁶ A dummy variable is designed to show the effect of a one-time shift in the economic environment which affects the dependent variable. The effect is simply measured by the coefficient itself for periods where the dummy variable is coded as 1. For example, an illustrative coefficient of +0.99 means that during periods when the dummy is coded as 1 the dependent variable rises by 0.99 units. For other periods, when the dummy is coded as zero, the effect is naturally zero since any number times zero equals zero.