upsurge in issues of relatively high-risk industrial aid bonds during the first half of 1966, a tight period; the additional leverage for overcoming lender risk-aversion which the tax-exemption feature gives to yield differentials; and the impersonal nature of relationships between borrowers and ultimate lenders in a market dominated by public offerings of securities. Each of these statements is subject to some modification; one thinks, for example, of the many symbiotic ties among local governments, banks, and individual large investors. But many of these modifications, upon further examination, would seem to favor rather than inhibit fund raising by low-rated or unrated State and local borrowers. Others, such as the lack of a positive association between size of issue and interest cost of borrowed funds which was found by Roland Robinson and Charlotte Phelps,[24] give small borrowers more leeway during tight-money periods. The general conclusion is still that price factors are dominant in State and local security markets.

The foregoing characteristics of postwar borrowing and capital outlays by State and local governments and of the investors purchasing their obligations suggested a model explaining State and local bond sales which is reviewed step by step in the technical appendix For the nonspecialized reader, the following description of the model may be adequate for him to appraise the multiple regression findings in table 1.

(1) Institutional peculiarities affecting the behavior of both State and local borrowers and individual and institutional lenders are not overlooked. Instead, variables expressing their impacts on borrowers and lenders are included in the model.

(2) During any given period (the writer hypothesizes), borrowers and lenders in the municipal bond market attempt to change their respective long-term debt and municipal bond holdings to new levels because of changing conditions and (possibly) changes in expectations. If, for example, Federal grants-in-aid generally have a positive effect on the willingness of State and local governments to go into debt (because they find it more convenient to borrow to finance a part of the matchings sums required), an increase in these grants-in-aid will raise the desired stock of debt for State-local borrowers.

As this example may suggest, we hope that we can infer what the average of the desired levels of debt (for borrowers) and bond holdings (for lenders) is, even if we cannot directly observe it, by means of putting observable variables explaining that average into the regression explanation of bond sales. The writer interprets all variables in the left column stub of table 1 except the lagged stock variable (S_{t-1}) as helping to explain, in any given period, the level of State and local debt desired jointly by borrowers and lenders.

(3) But during any given time period, the adjustment process described in the preceding two paragraphs is necessarily incomplete because of administrative and bond referendums lags on the State and local borrower side and inertia, brokerage costs of switches, and uncertainty on the lender side. A portion of the adjustment caused by given-period changes in the financial and economic environment

[24] Roland Robinson, "The Postwar Market for State and Local Securities," 1960, table 18. The Phelps finding was that size of issue was positively related to the interest rate on bonds. One reason for this surprising result is that increasing the size of a bond issue generally necessitates bringing more partners into a bond underwriting syndicate. In addition, syndicates have to reach out for more buyers, because of the general preference of both individuals and financial institutions for diversification of portfolios.