borrowers are more influenced by expectations of future bond yields, while lenders are more influenced by current spreads between yields on tax-exempt municipals and yields on taxable bonds and mortgages. This hypothesis appears plausible on several counts. Within broad limits, both institutional and individual investors can rearrange their portfolios at their own discretion, enabling them to react quickly to new situations. On the other hand, State and local borrowers are inhibited against one form of arbitrage—selling tax exempts and investing the proceeds in higher yielding U.S. Government securities—by the fear that they will be charged with abusing the tax exemption privilege. And while some State and local units have issued callable bonds, decisions to call or not to call require the formation of expectations on future interest rates just as much as do decisions on whether to postpone (or to accelerate) a bond issue for financing construction of facilities.

Hence, we might expect that bond buyers would generally react to the current situation, avoiding the troublesome business of peering into a murky future; while State and local borrowers would attempt to forecast because such forecasts and actions based on them offer the only means of minimizing interest costs of borrowing in the long run. Accordingly, the writer interprets the interest rate spread coefficient as measuring primarily the responses of bond buyers, while the expectations coefficient measures the responses of State and local borrowers to changing interest rates.

The institutional variables in table 1 generally performed well in each regression, having the expected sign (positive in each case) and being much higher than their standard errors.[29] The common stock price index (expressed as a percent of permanent income) is hypothesized to measure deviations in the wealth of high-bracket individual taxpayers from the wealth of the community (measured by permanent income itself). The regulation Q dummy variable was included to test whether the great expansion of time and savings deposits at commercial banks after the end of 1961 had the expected positive effect on overall supplies of funds to State and local borrowers. The positive sign of the regulation Q coefficient, as well as the repeated good results from another bank demand variable tried (time and savings deposits as a percent of permanent income), tends to confirm the relationship just hypothesized. Federal grants-in-aid apparently have a complementary rather than a substitutive relationship to State and local borrowing, partly because many grants are on a matching basis.

The variable, compensation of employees plus nonconstruction capital outlays plus miscellaneous purchases, was tested as an index of State and local needs for construction outlays. Besides being a better theoretical measure of these needs than the two other variables tried (contract awards and construction put in place),[30] it generally produced more stable regression coefficients in the regression runs.

[29] The standard error of a partial regression coefficient is an index of the extent to which the value of the coefficient could vary as a result of random or quasi-random factors. The higher the value of the coefficient relative to its own standard error, the less will be the proportional variation of coefficients found by repeated drawings of data for regression purposes.

[30] State and local governments faced with an expansion of needs for services can react immediately by hiring more employees, while construction of new facilities takes time. Compensation of employees is also better for a technical reason: Its regression coefficient is less apt to be biased by the feedback of changes in bond sales on the independent variable than is that for either contract awards or construction.