theless, several characteristics of the two demands—for construction and for long-term borrowed funds-stand out in postwar experience. One is the weight of evidence in the empirical studies reviewed in part 1 that interest cost fluctuations affect administrative decisions 20 on at least the timing of bond issues. Another is the impact of Federal grants-in-aid on at least one major component of State and local capital spending (highways and bridges) in periods like 1957-58 when the interstate highway program was getting underway. A third is an apparent lack of influence of long-run changes in interest rate levels on State and local contract awards and construction put in place. A fourth is the difficulty of empirical measurement of real stocks of State and local capital facilities and of relating them to flows of services provided, suggesting that some other variable might be preferable in any model attempting to relate State and local borrowing (or borrowing and taxation) to adjustments between desired and actual flows of services from capital goods and currently consumed factors of production.

(5) State and local borrowing is only a small part of total borrowing. If we confine our attention to the long-term side of the market and look at borrowing net of retirements, we find that net State and local bond issues were only 16 percent of the sum of net bond issues, mortgage lending, and term loans made by all domestic and foreign borrowers in the American market in 1965. Because more than fourfifths of State and local borrowing is always long term, this percentage would be lower if total net borrowing were compared.<sup>21</sup> Because of this low percentage and the unique tax-exemption features of State and local bonds, we might hypothesize that influences flowing from interest rates in general to State and local borrowing would be very much stronger than influences running in the opposite direction.

(6) The market for State and local securities is to a large extent a perfect market, if the latter is defined as one in which funds can always be raised at a price. Most borrowing, measured by volume, is not affected during periods of tight money by the nonprice rationing which is frequently alleged to exist in the market for business loans by commercial banks and other institutional lenders. Evidence for these conclusions is: The similarity of fluctuations in Aaa and Baa municipal bond yields during periods of tightening and easing credit conditions,22 the absence of effective legal constraints on interest rates such as usury laws to preclude voters and officials from raising funds; 23 the marked

<sup>20</sup> And voter decisions, insofar as interest rate ceilings are included in bond referendums

<sup>&</sup>lt;sup>20</sup> And voter decisions, insofar as interest rate ceilings are included in bond referendums proposals.

<sup>21</sup> The numbers behind the percentage are taken from Sidney Homer, "Factors Determining Municipal Bond Yields" (Solomon Bros. & Hutzler).

<sup>22</sup> In four periods of rising and four periods of falling interest rates on long-term State and local securities, between the end of 1951 and the first quarter of 1966, the Aaa and Baa bond yield indexes (Moody's) changed by much the same number of basic points in all but one case, if account is taken of the long decline in the risk differential since the late 1950's. Only in the first upswing of interest rates (first 1952 quarter to the third 1953 quarter) did the Baa yield rise appreciably more than the Aaa bond yield. Because of the structurally higher level of Baa yields, this indicates that Baa yields fluctuated somewhat less, in percentage terms, than did Aaa yields.

<sup>23</sup> State constitutional and other interest rate ceilings on general borrowing have been high enough, up to recently at least, as not to constrain demand by most lenders. Of course, this does not apply to the frequent specification of interest rate maximums for specific bond issues, in bond referendums or by administrative authority. But such ad hoc decisions on specific bond issues should be viewed as part of the decision mechanism rather than as a given constraint. If voters or officials decide that a project to be financed by a bond issue is undesirable at a rate of more than a percent, they should not be surprised that their action may inhibit sale of the issue when it is negotiated.