ing services regarding the ability of an issue to withstand default and capital loss over long periods of time. Two of the bond advisory services use letter symbols to measure bond quality, with the highest grade assigned a rating of Aaa, and the third makes qualitative judgments on principal economic and financial factors affecting credit worthiness. Bonds are appraised according to two basic risk factors—the risk that bond quality will be diluted by an inordinate increase in debt and the risk that ability to meet maturing bond principal and interest may be impaired under depressed business conditions. One of the two bond rating services employs 13 people in its municipal bond department and the other employs 12. Of necessity, both rating services limit their efforts to issuers with substantial bonded debt, at least \$600,000 for

one service and \$1 million for the other.

Of the approximately 92,000 issuers of municipal bonds, ratings have been assigned to about 20,000, leaving many issuers (generally small) in the nonrated category. A survey of G.O. bonds sold during 1957-61 found that rated bonds accounted for 85 percent of their value, but only 43 percent of the number of issues. Approximately 70 percent of the issues rated by the two services have similar ratings, but the other 30 percent have different ratings. The difference of a notch in a rating, or between similar bonds, one rated and the other unrated, is reflected frequently by 25 to 50 basis points in the interest rate payable by the public borrower. In recent years there has been much discussion regarding (1) the undue dependence by financial institutions upon ratings in determining municipal bond investments, (2) the higher interest costs to borrowing municipalities because of a lowered rating or the absence of a rating, (3) the lack of verified information to support ratings (resulting from a lack of a uniform financial reporting system among the States, reliance upon the issuers to supply their periodic financial data, and inadequate staff to ascertain completeness or biases), and (4) possible conflicts of interest wherein the bond rating services also function as advisers to investors and as consultants to governmental bodies.

(3) Postwar Default Experience of Municipal Bonds.—The record of State governments, municipalities, and special districts in meeting their debt obligations in the World War II period has generally been excellent. Two large defaults have occurred in connection with toll revenue projects; and investor losses on other limited liability municipals have resulted from faulty governing legislation and poor planning. Though somewhat reassuring, the postwar experience stands to be marred further by recent marginal financing and others

being planned. (4) Credit Problems of Small Municipalities.—Small municipalities tend to pay higher interest rates on their long-term bond issues because of such factors as (a) unfamiliarity by large investors, (b) inadequate financial information supplied to investors and bond analysts, (c) failure to obtain expert advice regarding bond specifications and mechanics of sale, (d) absence of a bond rating, (e) high overhead costs in bond marketing relative to the small size of issue, and (f) relatively small bond size and infrequent sales that lead to unfamiliarity, lack of technical know-how as to bond marketing and comparatively high marketing and advisory costs on a per bond basis. Earlier studies found that small municipalities need help in preparing