

political subdivisions) rose from 3,319 issues for \$1.2 billion in 1946 to 6,059 issues for \$11.1 billion in 1965. Over the 20-year period a total of \$122.8 billion of bonds were sold, of which \$48.7 billion were sold during 1961-65. A comprehensive study of municipal bonds sold during 1957-65 finds that: (1) competitive bidding (as contrasted to negotiated sales) accounted for a rising trend of general obligation and revenue bond issues; (2) there is a heavy preponderance of general obligation issues for the shorter maturities and a dominance of the longest maturities by revenue issues; (3) there has been no marked change in the distribution of purposes for which bonds have been issued (aside from the volatile movements of bond refundings when municipal interest rates were low; that is, 1962-63 fiscal year); (4) while the proportion of borrowing accounted for by school districts has been stable, there has been a pronounced rise in borrowings by special districts and statutory authorities (from \$1.3 billion in 1957 to \$3.8 billion in 1965); and (5) among the regions, the South has increased most rapidly in terms of dollar volume of bonds.

(2) *General Obligation Bonds*.—The dollar volume of general obligation bonds rose from \$1 billion in 1946 to \$7.4 billion in 1965, but as a percent of total bonds issued, it has decreased from 83 to 67 percent over the two decades. The declining relative use of general obligation bonds may be attributed to (1) the narrow spread in interest costs between general obligation and revenue bonds; (2) the growth of public authorities that issue bonds payable solely from revenues of income-producing properties; (3) constitutional, statutory, and home rule charter limitations on general obligation indebtedness (usually expressed as a percentage of the assessed valuation of taxable property); and (4) the comparative ease of authorizing revenue bonds (no approval by the electorate required and no tax increase need be voted upon).

(3) *Revenue Bonds*.—New issues of revenue bonds have grown from \$0.2 billion in 1946, or 17 percent of the total, to \$1.7 billion in 1955, or 29 percent, and to \$3.6 billion in 1965, or 33 percent. In the past two decades the single most important development in revenue bond financing has been the broadened concept of public purpose so that it now embraces, in addition to the traditional water and sewer facilities, such facilities as toll roads, bridges, airports, public parks, recreation areas, power projects, stadiums, rapid transit facilities, public markets, college dormitories, and port facilities. Other major developments have been the growth of public authorities and, more recently, nonprofit corporations; and the increasing use of advance refunding (designed to replace high interest bonds with lower priced obligations). Significant changes in prevailing attitudes regarding bond security requirements include: stricter debt service coverage requirements, provision of a debt service reserve of at least 1 year's debt service (interest plus amortized principal), greater use of a reserve for repairs and replacements, and stricter earnings' tests governing the issuance of additional *pari passu* revenue bonds. Other significant developments include greater use of subordinated liens (in light of the stricter earnings' tests), a gradual lengthening of the repayment period; and more common use of capitalization of interest out of revenue bond proceeds.

(4) *Lease Rental Municipal Bond Financing*.—This is being carried out in three ways: (1) industrial aid revenue bonds wherein a municipality issues bonds to buy or build a plant and equipment that are