Appendix E

Sources and Methods of Estimating Tax-Exempt Holdings

Except for certain government holdings for which estimates of the Treasury Department were used, independent estimates were made of institutional and individual holdings of each major class of tax-exempt securities as of June 30 for the years 1918 to 1958. While the Treasury Department has published estimated holdings of federal and state and local securities by the principal classes of investment institutions (and trust and investment funds of states and localities) since 1937, this classification does not conform in all cases to that found most useful for purposes of this study. However, the independent estimates were compared with Treasury estimates since 1937 for comparable groupings of investment institutions, as well as for total institutional holdings, and differences were examined and reconciled where possible.

Estimates are presumed to represent par values and are rounded to the nearest $25 million. Except where noted, such estimates are take-offs of the June 30 investment figure from the most complete and reliable source available during the period. Where investments were reported only for the end of the calendar year, interpolation was made for the middle of the year by simple averaging. In many cases of rapid changes in holding over the period of the year, particularly since 1941, such interpolations in the case of municipal securities were made by reference to changes in holdings of federal securities for which data based on the Treasury survey of ownership were available.

The sources and procedures used in estimating holdings of federal and state and local securities are summarized below.

I. Total amount outstanding: *Annual Reports of the Secretary of the Treasury*. For state and local governments the Bureau of the Census was the original source of these data. Government debt includes only interest-bearing obligations estimated outstanding as of June 30.

II. Government holdings
   A. United States tax-exempt securities
      1. United States government agencies and trust funds: *Annual Reports of the Secretary of the Treasury.*
2. Federal Reserve banks: *Annual Reports of the Secretary of the Treasury*.

3. Sinking funds of states, localities, territories, and possessions: *Annual Reports of the Secretary of the Treasury*.


**B. State and local securities**

Same as the above.

**III. Taxable corporations**

**A. United States tax-exempt securities (estimated separately for non-financial corporations and financial corporations other than banks and insurance companies)**


2. 1922–1925, based on capitalization of tax-exempt income reported in *Statistics of Income*; adjusted for estimated underreporting of 15 per cent, based on experience of banks and insurance companies; and apportioned between federal and state and local securities on basis of breakdown reported in 1926 *Statistics of Income*.

3. 1926–1941, based on total investments in government securities reported in *Statistics of Income*, adjusted for estimated underreporting; allocated to United States government and other securities on basis of breakdown reported in 1926 and 1935 *Statistics of Income* "Source Book."

4. 1942–1944, derived from *Statistics of Income* and ratio of 1937–1941 corporation holdings to differences between all private holdings and all institutional holdings, adjusted to declining trend and 1941 and 1945 estimates.

5. 1945–1950, estimated from partially tax-exempt interest reported in *Statistics of Income*, capitalized at average interest rate on partially tax-exempt bonds.

6. 1951–1953, based on previous ratios of corporation holdings to differences between total private holdings and holdings of other institutions, adjusted to declining trend.

**B. State and local securities**

1. 1913–1921, same as IIA1 above.

2. 1922–1925, same as IIA2 above.
3. 1926–1941, same as IIA3 above.
4. 1942–1944, based on previous and subsequent ratios of state and local securities to total private holdings.
5. 1945–1950, based on capitalization of wholly tax-exempt interest reported in Statistics of Income, at average interest rates on state and local securities outstanding.
6. 1951–1953, based on previous relationships of corporation holdings to total private holdings.

IV. Mutual savings banks
A. United States government securities
   1. 1913–1933, preliminary tabulations of the Board of Governors of the Federal Reserve System, as of June 30.
   2. 1934–1940, Annual Reports of the Comptroller of the Currency, as of June 30.

B. State and local securities
   1. 1913–1934, preliminary tabulations of the Board of Governors of the Federal Reserve System, as of June 30.

V. Commercial bank and trust companies
A. United States government securities
   2. 1934–1940, investments as of June 30 taken from the Board of Governors of the Federal Reserve System, Banking and Monetary Statistics, supplemented by estimates of securities in closed banks, based on Annual Reports of the Comptroller of the Currency.
   3. 1941–1953, Treasury survey of ownership, Annual Reports of the Secretary of the Treasury and Treasury Bulletin, as of June 30; ratio of tax-exempt to total government bond investments applied to total investments in government securities reported by all commercial banks in Annual Reports of Comptroller of the Currency; adjusted to par values by bond-premium data supplied by Comptroller of the Currency.

B. State and local securities
   1. 1913–1933, preliminary tabulations of the Board of Governors of the Federal Reserve System, as of June 30.

3. 1941–1949, investments as of December 31 from *Annual Reports of the Comptroller of the Currency*, interpolated for June 30 on the basis of June 30 and December 31 reports of the Federal Deposit Insurance Corporation.

4. 1950–1953, data taken directly from special mid-year tabulations of the Comptroller of the Currency.

VI. Fire, casualty, and marine insurance companies

A. United States government securities

1. 1913–1931, total assets reported as of December 31 in *Spectator Year Book* allocated to United States securities by the ratio of United States government investments to total assets computed from large sample of financial statements in *New York State Insurance Reports*, Parts I and III.

2. 1932–1940, December 31 investments reported in *Spectator Year Book*, interpolated for June 30.


B. State and local securities

1. 1913–1931, same as VI A1 above.


3. 1948–1952, derived from Best and Company reports.

4. 1953, estimate on basis of previous share in total private holdings.

VII. Life insurance companies

A. United States government securities

1. 1913–1940, estimated from *Spectator Year Book* and *Institute of Life Insurance, Life Insurance Fact Book*. Ratio of United States government bonds to total bond investments reported by 49 legal reserve life insurance companies applied to total bond investments of all life insurance companies reported in *Spectator report*, as of December 31; interpolated for June 30 estimate. Data for years 1913, 1915, and 1918 not reported were interpolated from other years.

2. 1941–1953, December 31 ratio of tax-exempt to total investments in United States government bonds reported in Treasury survey of ownership, *Annual Reports of the Secretary of the Treasury* and *Treasury Bulletin*, applied to total investments in United States government securities reported by *Institute of Life Insur-
ance; interpolated for June 30 on basis of Treasury survey of ownership data.

B. State and local securities
   1. 1913–1940, estimated from reports of Life Insurance Association of America, and Spectator Year Book, as in the case of United States bond holdings.
   2. 1941–1953, *Life Insurance Fact Book*, including health and accident insurance investments. 1941–1946, December 31 data interpolated for June 30 on basis of changes in holdings of United States government securities, Treasury survey of ownership. For succeeding years, June 30 data derived from reports on monthly acquisitions and holdings. Foreign provincial and local government securities were excluded.

VIII. Fraternal societies
   A. United States government security holdings were of minor importance and are included with other tax-exempt institutions.
   B. State and local securities, 1913–1953
      Total assets reported in Statistics of Fraternal Societies, *The Fraternal Monitor*, allocated on basis of distribution of total investments as reported in *New York State Insurance Reports*, Part IV (and more recently Part III), by sample companies accounting for over 50 per cent of total assets. Projections made for 1951–1953 on basis of previous relationships.

IX. Other tax-exempt institutions
   A. United States government securities, 1913–1953
      Estimated from annual reports of the Carnegie Corporation; General Education Board; Rockefeller Foundation; and from Raymond Rich Associates, *American Foundations and Their Fields* (1942); Home Loan Bank Board, *Trends in the Savings and Loan Field*; reports of the joint-stock loan banks; *The Fraternal Monitor*; and *New York State Insurance Reports*, Part IV.
   B. State and local securities, 1913–1953
      Same as IXA above.

X. Individual holdings are residuals of gross securities outstanding and sum of estimated governmental and institutional holdings of each class of security.