Significant aspects of national debt management policy 1935-1950

Dorothy Betty Thurston

Atlanta University

Follow this and additional works at: http://digitalcommons.auctr.edu/dissertations

Part of the Business Administration, Management, and Operations Commons

Recommended Citation
SIGNIFICANT ASPECTS OF
NATIONAL DEBT MANAGEMENT POLICY
1935-1950

A THESIS
SUBMITTED TO THE FACULTY OF ATLANTA UNIVERSITY IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF MASTER OF BUSINESS ADMINISTRATION

BY
DOROTHY BETTY THURSTON

DEPARTMENT OF BUSINESS ADMINISTRATION

ATLANTA, GEORGIA
AUGUST 1957
The enormous national debt of over two hundred and seventy billion dollars directly affects the life of every American citizen. To repay the debt would require approximately $1,660.00 from each man, woman and child in the country. If the national income of the year 1950 had been applied to repaying the debt of that year, there would have been "no change;" the national debt equaled the national income. The interest charge alone on the public debt is the staggering sum of some $6 billion.

When the public debt is large relative to other economic magnitudes, it produces effects in an increasing number of areas. The techniques employed by the Treasury of the United States in the borrowing of funds, their repayment or other disposition and the policy decisions related thereto are generally termed "debt management." Procedures used to manage the debt inevitably influence the level of prices, the income people receive, the future value of savings, the level of taxation, the volume of credit, the value of the dollar and a host of other economic variables of immediate concern to the taxpayer and citizen.

The years 1935-1950 saw the evolution of debt management policy through three highly different stages of the economic life of the country, a depression of unprecedented proportions, a world war of unparalleled cost and a postwar period of recovery. The purpose of this study is to consider significant aspects of debt management policy in each successive phase and to assess the relative merits of courses of action pursued
against suggested policies of the critics as both affect the economic welfare of the country.

The first section of this study is a brief survey of the historical background of the national debt and the people and circumstances which shaped it from colonial times to the present day. Chapter one deals with the depression period and the Treasury policy of deficit financing as a means to recovery. Chapter two considers the Treasury's policy of financing the second World War at low stable rates and issuing securities designed to meet the needs of the varied investor classes. Chapter three considers the postwar period and the Treasury's policy centering around repayment of the debt, maintenance of the wartime policy of stabilization of the Government securities market and techniques of framing the maturity schedule of the debt. The final section highlights the main points of the thesis and contains a summary of observations by the writer.

It is hoped that the significance of this study will lie in its bringing together a host of controversial debt management policy decisions during periods which are representative of the highly varied nature of the American economy together with the opinions of the learned opposition in an effort to evaluate past performances as a basis for future action.

The writer is indebted to Dr. Samuel Z. Westerfield whose erudite grasp of economic principles and theory inspired the writer to attempt a study of a dynamic and highly important phase of economic life in the United States, the national debt.
TABLE OF CONTENTS

PREFACE ........................................... ii

LIST OF TABLES. .................................. v

INTRODUCTION

A HISTORY OF THE NATIONAL DEBT .............. 1
The Colonial Period ................................ 1
The Revolutionary War and the Postwar Period .... 4
The War of 1812 and the Postwar Period .......... 6
The Civil War and the Postwar Period ............. 8
World War I and the Postwar Period ............. 10
The Depression Decade ............................ 10
World War II and the Postwar Period ............. 11
The Korean War ................................... 12
The Debt and Interest .............................. 13
Debt Repayment ................................. 15
Growth of Government Expenditures ............. 15

Chapter

I. RECOVERY FROM DEPRESSION 1935-1941 .......... 17
The Keynesian Influence .......................... 17
Economic Conditions and Fiscal Policy .......... 19
The Interest Rate and Pattern of Debt Holding ... 22
Depression Fiscal Policy Evaluated ............... 22
Pro and Con Government Debt ...................... 27

II. THE WAR YEARS 1941-1945 .................... 31
The Prewar State of the Economy ................. 31
War Finance and Its Effects ...................... 32
Stabilization of the Interest Rate ............... 35
Tailor-made Securities ........................... 37
Bank-held Government Debt ....................... 39
The Debt and Other Financial Institutions ...... 43

III. THE POSTWAR YEARS 1945-1950 ............... 48
The Postwar State of the Economy ............... 48
Treasury vs Federal Reserve Controversy ......... 51
The Changing Significance of the Interest Rate .. 58
The Composition of the Debt and the Maturity Schedule. 62

SUMMARY AND CONCLUSIONS ....................... 68

BIBLIOGRAPHY. ................................... 79
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gross Debt of the United States and Related Data for Selected Years 1790-1950</td>
<td>2</td>
</tr>
<tr>
<td>2. Holders of Public Debt, Various Dates</td>
<td>23</td>
</tr>
<tr>
<td>3. Budgetary Expenditures Fiscal Years 1941 through 1945</td>
<td>33</td>
</tr>
<tr>
<td>4. Gross Debt Outstanding and Per Capita Debt for the Years 1941 through 1945</td>
<td>33</td>
</tr>
<tr>
<td>5. Public Debt of the United States: Interest-Bearing Debt, Computed Annual Rate of Interest and Interest Payments for the Fiscal Years 1941 through 1945</td>
<td>36</td>
</tr>
<tr>
<td>6. Interest-Bearing Government Securities, Estimated Ownership Outstanding 1941, 1946</td>
<td>40</td>
</tr>
<tr>
<td>7. Wartime Changes in Loans and Investments of Insured Commercial Banks</td>
<td>43</td>
</tr>
<tr>
<td>8. Relative Importance of Federal Debt to Financial Institutions</td>
<td>44</td>
</tr>
<tr>
<td>9. Asset Structure of Life Insurance Companies</td>
<td>45</td>
</tr>
<tr>
<td>10. Composition of the Interest-Bearing Debt, December 31, 1949</td>
<td>63</td>
</tr>
<tr>
<td>11. Maturity Schedule of Interest-Bearing Public Marketable Securities of the United States, as of December 31, 1945 and 1950</td>
<td>66</td>
</tr>
</tbody>
</table>
INTRODUCTION

A HISTORY OF THE NATIONAL DEBT

The Federal government of the United States is the largest single debtor in the country today. In the fiscal year 1956 its obligations totaled approximately $272.8 billion owed to a multitude of individuals, business enterprises, sovereign states, local governments and financial institutions.¹

Tracing the historical development of the financial activities of the Federal government reveals, among other things: the factors which have contributed to the growth of such an enormous debt; the various and changing attitudes toward government spending which have taken place over the two hundred odd years since the establishment of the Republic; the expanding sources of government revenue, which although large, have been insufficient to meet the ever increasing costs of public spending; the declining course of interest rates on public debt instruments; and the changing pattern of debt retirement. A brief summary of national debt figures and related data for selected years from 1790 to 1950 is presented in Table 1.

The Colonial Period.—The financial history of the United States has roots in the experiences of the thirteen colonies. As they were established at different times and under different motivations, it was natural that they should have a variety of revenue measures including

<table>
<thead>
<tr>
<th>Date</th>
<th>Gross Amount (Millions)</th>
<th>Debt Per Capita</th>
<th>National Income (Millions)</th>
<th>Gross Debt as % of Nat. Inc.</th>
<th>Int. Pay. on Debt (Millions)</th>
<th>Int. Pay. as % of Nat. Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1790(12/31)</td>
<td>76a</td>
<td>19.19a</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1792</td>
<td>80a</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>3.2a</td>
<td>--</td>
</tr>
<tr>
<td>1799</td>
<td>83a</td>
<td>15.66a</td>
<td>677a</td>
<td>12.3a</td>
<td>3.2a</td>
<td>0.47a</td>
</tr>
<tr>
<td>1803</td>
<td>86a</td>
<td>14.21a</td>
<td>--</td>
<td>--</td>
<td>3.8a</td>
<td>--</td>
</tr>
<tr>
<td>1804</td>
<td>82a</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>4.2a</td>
<td>--</td>
</tr>
<tr>
<td>1809</td>
<td>53a</td>
<td>7.35a</td>
<td>915a</td>
<td>5.8a</td>
<td>2.9a</td>
<td>0.31a</td>
</tr>
<tr>
<td>1815</td>
<td>127a</td>
<td>14.67a</td>
<td>--</td>
<td>--</td>
<td>5.8a</td>
<td>--</td>
</tr>
<tr>
<td>1816</td>
<td>116a</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>7.2a</td>
<td>--</td>
</tr>
<tr>
<td>1819</td>
<td>89a</td>
<td>9.24a</td>
<td>876a</td>
<td>10.2a</td>
<td>5.2a</td>
<td>0.59a</td>
</tr>
<tr>
<td>1829</td>
<td>49a</td>
<td>3.78a</td>
<td>975a</td>
<td>5.0a</td>
<td>2.5a</td>
<td>0.28a</td>
</tr>
<tr>
<td>1835</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1849(12/30)</td>
<td>63a</td>
<td>2.72a</td>
<td>2,420a</td>
<td>2.6a</td>
<td>3.6a</td>
<td>0.15a</td>
</tr>
<tr>
<td>1851</td>
<td>68a</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>3.7a</td>
<td>--</td>
</tr>
<tr>
<td>1859</td>
<td>59a</td>
<td>1.93a</td>
<td>4,311a</td>
<td>1.3a</td>
<td>2.6a</td>
<td>0.06a</td>
</tr>
<tr>
<td>1865(9/1)</td>
<td>2,846a</td>
<td>81.90a</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1867(6/30)</td>
<td>2,650a</td>
<td>73.19a</td>
<td>--</td>
<td>--</td>
<td>143.8a</td>
<td>--</td>
</tr>
<tr>
<td>1869</td>
<td>2,545a</td>
<td>67.41a</td>
<td>6,827a</td>
<td>37.3a</td>
<td>130.7a</td>
<td>1.92a</td>
</tr>
<tr>
<td>1879</td>
<td>2,299a</td>
<td>47.05a</td>
<td>7,227a</td>
<td>31.8a</td>
<td>105.3a</td>
<td>1.45a</td>
</tr>
<tr>
<td>1889</td>
<td>1,250a</td>
<td>20.39a</td>
<td>10,701a</td>
<td>11.7a</td>
<td>41.0a</td>
<td>0.38a</td>
</tr>
<tr>
<td>1893</td>
<td>961a</td>
<td>14.49a</td>
<td>--</td>
<td>--</td>
<td>27.3a</td>
<td>--</td>
</tr>
<tr>
<td>1899</td>
<td>1,437a</td>
<td>19.33a</td>
<td>15,364a</td>
<td>9.4a</td>
<td>39.9a</td>
<td>0.26a</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Gross Amount (Millions)</th>
<th>Debt Per Capita (Millions)</th>
<th>National Income (Millions)</th>
<th>Gross Debt as % of Nat. Inc.</th>
<th>Int. Pay. on Debt (Millions)</th>
<th>Int. Pay. as % of Nat. Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1905</td>
<td>1,132 a</td>
<td>13.50 a</td>
<td>21,428 a</td>
<td>5.3 a</td>
<td>24.6 a</td>
<td>0.11 a</td>
</tr>
<tr>
<td>1910</td>
<td>1,147 a</td>
<td>12.69 a</td>
<td>28,166 a</td>
<td>4.1 a</td>
<td>21.3 a</td>
<td>0.08 a</td>
</tr>
<tr>
<td>1915</td>
<td>1,191 a</td>
<td>11.83 a</td>
<td>32,533 a</td>
<td>3.7 a</td>
<td>22.9 a</td>
<td>0.07 a</td>
</tr>
<tr>
<td>1919</td>
<td>26,957 a</td>
<td>250.18 a</td>
<td>62,945 a</td>
<td>42.2 a</td>
<td>619.2 a</td>
<td>0.98 a</td>
</tr>
<tr>
<td>1920(6/30)</td>
<td>24,295 a</td>
<td>228.33 a</td>
<td>68,454 a</td>
<td>35.5 a</td>
<td>1,020.3 a</td>
<td>1.49 a</td>
</tr>
<tr>
<td>1921</td>
<td>23,976 a</td>
<td>221.10 a</td>
<td>56,689 a</td>
<td>42.8 a</td>
<td>881.8 a</td>
<td>1.76 a</td>
</tr>
<tr>
<td>1925</td>
<td>20,516 a</td>
<td>177.82 a</td>
<td>70,051 a</td>
<td>29.3 a</td>
<td>678.3 a</td>
<td>1.26 a</td>
</tr>
<tr>
<td>1929</td>
<td>16,931 a</td>
<td>139.40 a</td>
<td>79,498 a</td>
<td>21.3 a</td>
<td>659.3 a</td>
<td>0.85 a</td>
</tr>
<tr>
<td>1930(12/31)</td>
<td>16,026 a</td>
<td>129.66 a</td>
<td>72,398 a</td>
<td>22.1 a</td>
<td>689.4 a</td>
<td>1.54 a</td>
</tr>
<tr>
<td>1935(6/30)</td>
<td>22,533 a</td>
<td>179.21 a</td>
<td>64,713 a</td>
<td>50.4 a</td>
<td>820.9 b</td>
<td>1.46 b</td>
</tr>
<tr>
<td>1935</td>
<td>22,824 b</td>
<td>257.95 b</td>
<td>66,254 c</td>
<td>58.3</td>
<td>749.4 b</td>
<td>1.55 b</td>
</tr>
<tr>
<td>1936</td>
<td>38,497 b</td>
<td>300.63 b</td>
<td>64,911 c</td>
<td>66.5</td>
<td>866.4 b</td>
<td>1.77 b</td>
</tr>
<tr>
<td>1937</td>
<td>41,088 a</td>
<td>318.95 b</td>
<td>73,618 c</td>
<td>55.8</td>
<td>926.3 b</td>
<td>1.87 b</td>
</tr>
<tr>
<td>1938</td>
<td>42,018 b</td>
<td>323.65 b</td>
<td>76,581 c</td>
<td>62.3</td>
<td>940.5 b</td>
<td>2.91 b</td>
</tr>
<tr>
<td>1939</td>
<td>45,890 b</td>
<td>350.63 b</td>
<td>72,755 c</td>
<td>65.0</td>
<td>1,040.9 b</td>
<td>1.41 b</td>
</tr>
<tr>
<td>1940</td>
<td>48,496 b</td>
<td>387.73 b</td>
<td>73,900 c</td>
<td>65.6</td>
<td>1,110.7 b</td>
<td>1.30 b</td>
</tr>
<tr>
<td>1941</td>
<td>55,332 b</td>
<td>415.40 b</td>
<td>84,900 c</td>
<td>66.2</td>
<td>1,206.1 b</td>
<td>1.17 b</td>
</tr>
<tr>
<td>1942</td>
<td>76,991 b</td>
<td>571.72 b</td>
<td>108,100 c</td>
<td>71.2</td>
<td>1,808.2 b</td>
<td>1.31 b</td>
</tr>
<tr>
<td>1943</td>
<td>140,796 b</td>
<td>1,031.49 b</td>
<td>138,200 c</td>
<td>101.9</td>
<td>2,609.0 b</td>
<td>1.67 b</td>
</tr>
<tr>
<td>1944</td>
<td>202,626 b</td>
<td>1,467.23 b</td>
<td>156,400 c</td>
<td>129.6</td>
<td>3,617.0 b</td>
<td>2.20 b</td>
</tr>
<tr>
<td>1945</td>
<td>259,116 b</td>
<td>1,855.90 b</td>
<td>164,300 c</td>
<td>157.7</td>
<td>4,722.0 b</td>
<td>2.53 b</td>
</tr>
<tr>
<td>1946</td>
<td>279,764 b</td>
<td>1,989.83 b</td>
<td>179,577 c</td>
<td>161.0</td>
<td>4,958.0 b</td>
<td>2.55 b</td>
</tr>
<tr>
<td>1947</td>
<td>258,376 b</td>
<td>1,792.67 b</td>
<td>197,168 c</td>
<td>131.0</td>
<td>5,211.1 b</td>
<td>2.55 b</td>
</tr>
<tr>
<td>1948</td>
<td>252,366 b</td>
<td>1,721.21 b</td>
<td>221,641 c</td>
<td>153.9</td>
<td>5,340.0 b</td>
<td>2.45 b</td>
</tr>
<tr>
<td>1949</td>
<td>252,798 b</td>
<td>1,694.93 b</td>
<td>216,193 c</td>
<td>117.9</td>
<td>5,613.0 b</td>
<td>2.30 b</td>
</tr>
<tr>
<td>1950</td>
<td>257,317 b</td>
<td>1,696.81 b</td>
<td>257,400 c</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


tariffs, property and personal taxes, and volunteered services. Colonial governments were of a simple type; support of the governor was usually the most burdensome single charge placed on a colony. Except during periods of war, demand on colonial treasuries was not burdensome or excessive; and the adjustment of revenue to expenditures was easily made.¹

The Revolutionary War and the Postwar Period. — The Revolutionary War was the first large scale common effort for which funds had to be raised by a central body. Up until that time fiscal operations were handled by the individual colonies. The First Continental Congress of 1774, organized to consolidate and direct resistance against the dictates of the British Crown, had no effective tax powers but relied heavily on the issuance of bills of credit. All their efforts to support the credit of the bills failed; and the currency became in the phraseology of the day, "not worth a continental." The States were asked to contribute fixed sums, but the mildness of the request elicited only a weak response. During the years following the conclusion of the peace, as a result of the inflationary effects of the paper money issued by the Congress and the unwillingness of the States to cooperate in meeting their tax levies, the credit of the ineffectual government was impaired. The Treasury was continually embarrassed by being unable to meet its obligations; the fiscal machinery had broken down and further borrowing at home and abroad had become impossible. This unfortunate financial situation resulted in the Convention of 1787 formed for the purpose of framing a new constitution.²

²Ibid., p. 7.
In the Constitution Congress is given the power "to lay and collect taxes, duties, imposts and excises, to pay the debts, and provide for the common defense and general welfare of the United States." This section of the Constitution, known as the "General Welfare" clause, was the basis for differences of opinion regarding the extent to which the Federal government might determine the amount and type of public services. Alexander Hamilton, first Secretary of the Treasury, believed that the Federal government might spend for any purpose favorable to the general welfare. It was his contention that heavy government spending would result in a strong central government. Thomas Jefferson, whose position on federal spending was the antithesis of Hamilton's, believed that Congress had power to tax only to implement powers expressly granted to it by the Constitution. A cleavage of opinions exists regarding interpretation of the Constitution to this day. Nevertheless, there have been a variety of objective factors which have forced the Federal government to assume responsibility for an ever greater portion of total annual spending. Secretary Hamilton, who has been referred to as the architect of the national financial system, clearly conceived a system which would establish the national credit. He proposed that the Government fund the national debt, i.e., convert it into long-term bonds; provide sufficient revenue to pay its interest charges, and ultimately retire it. He also suggested that the Federal government assume the obligations of the States under a similar funding plan. He further proposed that the Government sell public lands on credit to encourage expansion, establish a national bank to help with federal financial problems, and institute

1U. S., Constitution, Art. 1, sec. 8.

national coinage to strengthen its credit. Hamilton’s Funding Plan of 1790 resulted in the struggling young nation’s assumption of a debt of approximately $77 million.

During the last half of the eighteenth century sizable federal expenditures were made because of strained relations with France. Outlays for national defense and the purchase of Louisiana raised the government debt to a peak of $86.4 million in 1803. During the next four years bountiful revenues from customs coupled with the conservative policies of President Jefferson enabled Gallatin, his Secretary of the Treasury, to cut the debt to $45.2 million by 1811.

The War of 1812 and the Postwar Period. National government was more firmly established by the time of the War of 1812, but neither Congress nor the Treasury had a financial policy adequate to meet the demands of war. It was recognized that revenues from tariffs were imperiled during wartime; and that the country had need of a more flexible, adaptable tax system. Secretary of the Treasury Gallatin believed that wars should be financed wholly by loans. About 57 per cent of the total costs of the War of 1812 was met by borrowing and about 43 per cent was raised by taxation and from other receipts. By the close of the War the gross debt was raised to a new peak of $127.3 million but reduced sharply in the postwar years. After

---

2Ratchford, op. cit., pp. 131-134.
3Dewey, op. cit., p. 10.
an interruption of several years, caused by disturbed financial conditions, in 1825 debt retirement was resumed on a large scale.1

The controversy continued between those who favored a policy of heavy government spending and those who favored a restricted policy. John Quincy Adams, who assumed the Presidency in 1824, urged Congress, without success, to construct canals, build roads and make grants for education. Andrew Jackson, who succeeded Adams, favored minimum federal expenditures and taxation insisting that internal improvements be left to the States.2 It is significant that at no time before 1860 did the national debt exceed $130 million. By the end of 1834 the entire debt had been repaid or funds had been deposited for repayment; in fact, feeling against government spending ran so high that in 1835 and 1836 Treasury surpluses were distributed to the States. For those two years there was no federal debt; on the contrary, for many years thereafter revenues outran expenditures. During the last half of the nineteenth century the lack of a progressive tax system retarded the growth of government spending. A common complaint was that the burden of heavy government expenditures created a high incidence of taxes on the small businessman and farmer.3

It may be said that the first seventy-five years of the Republic were a period of experimentation in an effort to find productive taxes. The search for adequate revenues during this period was facilitated by several factors: the rise in real income of the country, the rise in population,

1Hatchford, op. cit., p. 131.


3Ibid., p. 11.
the increasing productivity of new territories, the slow down of government expenditures, the sale of public lands, and the strength of the high tariff protectionist sentiment.¹

The Civil War and the Postwar Period.—When Abraham Lincoln took office in March of 1861, the debt was approximately $75 million. Congress was slow to increase taxes for financing the Civil War; and during the first year of the conflict 90 per cent of the cost was financed by borrowing.² The Treasury had for three years preceding the war been weakened by deficits and consequently had considerable difficulty borrowing money. Due to the suspension of specie payments by the private banks, and shortly thereafter a like suspension by the Government, the money markets of the country fell into a state of acute disorganization. New issues of government bonds could not be absorbed except at prices far below par. In order to provide the Government with the money it needed to conduct the war, the Treasury resorted to the issuance of paper money known as Greenbacks. This paper currency steadily depreciated in value as the war progressed and contributed to a highly inflationary economy. The debt reached the Civil War peak of $2,846 million on September 1, 1865. During the next six years it was reduced steadily and substantially due to the vigorous tax policy adopted by Congress. The then vast cost of the conflict required the introduction of untried taxes; and excise taxes covering many commodities at low rates were adopted. The tax system which relied very heavily on foreign trade was again found to be inelastic - inadequate in war and redundant in peace. An income tax

¹Dewey, op. cit., p. 3.
²The Committee on Public Debt Policy, loc. cit.
was adopted late in the war years, however, it was repealed in 1872 because it was considered inequitable.\(^1\) The Federal debt at the end of the Civil War amounted to 40 per cent of the Gross National Product of that year; and it is interesting to note that during the period up until the Civil War per capita debt never exceeded $20.00 and was usually under $10.00.\(^2\)

Despite the Civil War experience our tax structure remained inelastic. Postwar foreign trade rose over high tariff walls and from 1880 to 1890 revenues from that source constituted from 55 to 60 per cent of total federal revenues.\(^3\) In 1885 per capita debt hit a high point of around $80.00. With a declining debt and a rapidly growing population per capita debt declined steadily thereafter to a low point of slightly less than $12.00 in 1915. Beginning in 1880 there were large Treasury surpluses each year until 1893 when the debt was reduced to the Civil War low of $961 million. Current deficits and the Spanish American War raised the total debt to $1,437 million in 1899 of which $300 million was repaid during the next six years. Thereafter, the debt was practically stationary until 1916.\(^4\)

An important measure of the debt is its relation to national income. If the debt or any sizable portion of it is to be repaid, comparison of the debt with national income figures is revealing. Before 1900 national income figures are sketchy and not altogether comparable with figures of recent years, however, rough comparisons are possible. Before the Civil War

\(^{1}\)Poole, op. cit., p. 18.

\(^{2}\)Ratchford, op. cit., p. 132.

\(^{3}\)Poole, loc. cit.

\(^{4}\)Ratchford, loc. cit.
the national debt never exceeded 15 per cent of national income, and in most years before 1900, it constituted less than 10 per cent of national income.\footnote{Ibid., p. 134.}

\textbf{World War I and the Postwar Period.}—Total borrowings of more than $25 billion during World War I put the debt at a peak of $26,957 million on August 1, 1919 and per capita debt at $250.00 or three times the per capita amount in 1865. Almost 40 per cent of the debt increase was incurred making loans to allies. After the War our national debt was close to 40 per cent of national income.\footnote{Ibid., p. 132.}

The traditional policy of the United States has always been reasonably rapid repayment of war debt; and $9 billion of the World War I debt was repaid in ten years. This was possible because of prosperous conditions even though there were sharp reductions in income tax rates and receipts. Rigidities present in our Federal debt today, caused by modern war and its aftermath, and also present in the debt structure of the twenties, prevented the degree of reduction in government spending desired by the Republicans after World War I.\footnote{Poole, op. cit., p. 11.} However, eleven years after 1919 debt repayment was averaging almost $900 million per year; and the postwar low in debt was reached in December of 1931.\footnote{Ratchford, op. cit., p. 133.}

\textbf{The Depression Decade.}—Then came the depression of the thirties when the concept of the balanced budget had to be revised in the interests
of economic recovery. Budgetary deficits arising from undertaking an extensive program of public works, increased relief payments and government subsidization of various sectors of the economy weakened antagonism towards high government spending.\(^1\) John Maynard Keynes, distinguished British economist, espoused the concept of government spending for recovery. By this means, he maintained, the size of the income stream would be increased and unemployment reduced. Government spending was to be maintained at continuously high and expanding levels to compensate for the supposedly insufficient distribution of purchasing power by private enterprise. High spending was to be assisted by continuous borrowing. Debt reduction, because of its deflationary effects, was decreed to be unwise and harmful. Taxation was to be concentrated on incomes with high propensities to save rather than on incomes with low propensities to save. During this period public finance abandoned one by one the traditions of orthodox economic theory and adopted a new rationale. Although it was commonly accepted that government finance was of economic importance, there was much controversy as to the degree of importance.\(^2\) During this period national debt was for the first time in history one-half the amount of the national income; and the per capita debt figure was increasing steadily reaching $368.00 in 1940.\(^3\)

**World War II and the Postwar Period.** World War II and the defense program were responsible for an increase of $231 billion in the gross debt;

---

and over 80 per cent of the present national debt was created as a consequence of that war. The debt reached a record high of $279.8 billion on February 28, 1946. From 1940 to 1946 new high per capita debt records were set each month; and at the debt's peak in 1946 per capita debt was approximately $1,990.00 or almost eight times the amount after World War I. In 1940 the debt stood at 65.2 per cent of the national income; and after 1940, though income more than doubled, the debt increased much faster. In 1943 debt surpassed income; and in 1947 debt was 157 per cent of current income. Three policies of the Federal government contributed greatly to the large additions to debt during this period; and each will contribute large amounts to retire the debt. These policies were the Treasury practice of carrying sizable cash balances, the Lend-Lease program and large government investments in war equipment and stockpiles. Altogether, the three policies mentioned required $85 billion and by 1947 the Treasury's cash balances had been reduced, foreign loans had been partially repaid and surplus materials had been sold to yield all told around $30 billion for debt retirement.¹

The Korean War.—The outbreak of hostilities in Korea in June 1950 did not have the same effect on the public debt as World War II. This was mainly due to the enactment of the Revenue Act of 1950 which raised federal tax receipts by some five to six billion dollars. Furthermore, Congress applied itself to a retroactive excise profits tax. This, along with the general tax increase, resulted in the Treasury's having a net cash operating income in excess of cash outgo of $796 million. The gross debt in the year 1955 was some $274 billion, which was very close to the World War II

¹Ibid., p. 133.
peak of 1946.1

The Debt and Interest.—An important aspect of the debt is the annual servicing charge. Although a sovereign power may have considerable alternative for repaying the principal, if it is not to default, it must also make provision for interest payments which fall due. Interest payments have fluctuated widely in keeping with a widely varying debt over the course of the years. In colonial days interest payments averaged about $3 million per year; and the largest annual interest cost before the Civil War was little more than $7 million paid in 1816. In 1867 interest amounted to $143.8 million, an insignificant part of the total budget. In 1923 interest payments were $1,056 million, one-third of the total government expenditures for that year. In 1932 interest payments declined to $600 million; but by 1947 they had skyrocketed to approximately $5 billion. By 1950 interest was $5.5 billion; and during the fiscal year 1955 interest payments were $6.4 billion.2

Long-run interest payments have not increased nearly as much as the debt due to a decline in the interest rate. In 1867 the average interest rate paid on interest bearing debt was 6.3 per cent; and in 1947 the average interest rate was only 2 per cent. Due to the decline in interest rates since the time of the Civil War the proportion that the interest on the public debt comprised of the Gross National Product was only about as great in 1950 as it was in 1866.3

2Ratchford, op. cit., p. 136.
3Ibid.
We should also note that the pattern of rates on United States and other high-grade securities since the thirties has consistently been one in which short-term rates have been lower than long-term rates. Prior to the thirties, however, the pattern was just the reverse. The reversal of the customary pattern came about after the bank holiday of the thirties. During this period short-term security yields declined to a zero or negative point while long-term securities sold at prices to yield over 3 per cent. The yield of stocks and bonds at that time was so low that it ceased to be an attractive alternative for holding cash. Remembering interest rates of 6 per cent, investors regarded rates of 3 or 4 per cent as only temporary. Therefore, they feared capital losses if they bought long-term securities. Instead they held cash or bought short-term government bonds whose capital values were almost perfectly fixed because their maturity was so near. The strong demand for such liquid short-term securities caused their prices to rise and their yields to go down to a fraction of one per cent. As the long expected return to high interest rates failed to materialize, banks and insurance companies realized the loss they were sustaining by not investing in long terms. Slowly, they began to buy long-term securities thus bidding up their prices and bringing down their yields. The pattern of yields between the two types of securities flattened considerably during this decade; but short-term securities never regained position to yield higher than long terms.\(^1\)

Another important aspect of the evolution of the role of interest in debt management policy is the fact that in the nineteenth century debt management was guided by the conditions of the money market; and funding

and refunding of the public debt were adjusted to market interest rates and the other requirements of the private economy. After World War II, when for the first time in the history of the nation the national debt exceeded the annual national income, the requirements of the private money market were completely subordinated to the requirements of the government bond market. The Treasury came to dictate monetary as well as fiscal policy.¹

Debt Repayment.--In the past the United States has been the only large power with the distinction of adhering to its policy of debt retirement. This occurred on three different occasions, in 1815, 1865 and 1919. Reductions were made possible during these years because of vigorous reduction of government expenditures from wartime levels and increased national income. The depression of the thirties prevented complete repayment of the debt occasioned by World War I. Though in the past federal debt had been rapidly reduced through the application of surpluses, with the gigantic increase in federal expenditures resulting from World War II, it became doubtful whether the economy could ever again achieve complete debt retirement.²

Growth of Government Expenditures.—Growth in government expenditures in the face of insufficient revenues from taxation has resulted in an expanding public debt. The function of government originally was to furnish minimum protection which individuals had to supplement with protection measures of their own. The scope of government activities has expanded to include developmental, social-welfare and economic functions. As Studenski and Kroos point out, "The remote protective state became the all

¹Studenski and Kroos, op. cit., p. 8.
²Ibid.
pervasive state, the 'welfare' or 'social' state and according to some prophets, it is fast becoming an 'economic control' state. The causes of growth in federal outlays and the consequent increase in interest burden are numerous. John F. Due gives the following reasons for increased government expenditures: (1) Each major war has required huge federal expenditures. World Wars I and II resulted in permanently higher yearly costs of support for the major branches of the services. Extensive veteran payments were assumed in addition to the initiation of a costly program of foreign aid. (2) The Depression of the 1930's, characterized by substantial unemployment, was alleviated by large relief payments and sizable outlays for public works. During this period welfare programs and agricultural aid were introduced and have since become a permanent part of the expenditure structure. (3) The attitude of many persons toward the responsibility of government for eliminating unemployment and supporting persons unable to achieve satisfactory living standards by their own efforts has changed substantially in the last twenty-five years. There has been increased recognition of the community benefits accruing from government supported education, public health and recreation. As a result there has been increased support for extension of these facilities. It should also be noted that a substantial portion of the increase of federal expenditures in absolute figures is due to population increases and a rise in the general price level.

1Ibid., p. 3.

CHAPTER I

RECOVERY FROM DEPRESSION 1935-1941

The Keynesian Influence.--The decade of the thirties was characterized by severe economic distress. Among Franklin D. Roosevelt's advisers in the New Deal was the British economist, businessman and government counselor, John Maynard Keynes. Keynes, one of the most influential thinkers of the twentieth century, in his work, The General Theory of Employment, Interest and Money,\(^1\) gave an explanation of what determines the volume of employment and hence the level of income of an economy at any given time. In a world in which economic conditions are highly uncertain and solutions to the problems of depression and inflation are of crucial significance, The General Theory has become not only a classic of economic thought but a source of valuable policy-making ideas.

Keynes maintained that the level of income or employment in an economy depends upon total demand for currently produced goods and services. Total demand is comprised of consumption and investment demand; and as income increases, he stated, consumption demand also increases but not as much as the increase in income. In order then to have enough demand to support an increase in employment, there must be an increase in investment demand equal to the gap between income and consumption demand out of

that income. Employment cannot increase unless investment increases. The key to economic prosperity and stability, therefore, is to secure and maintain a sufficiently high but not excessive level of expenditures, public and private. There is in a free enterprise economy, however, no self-adjusting mechanism which assures that a full employment level of expenditures will be maintained so that neither inflation nor deflation develops. Fiscal policy may be the adjusting mechanism called for to increase or decrease the total demand for goods and services. It may accomplish this directly by changing the level of public expenditures or indirectly by affecting the level of private expenditures through government spending. Keynes viewed fiscal policy, i.e., government spending, taxing and borrowing as the most important weapon in attacking unemployment. He explained that there was a need for positive fiscal policy because at a level of income corresponding to full employment the gap between total income and total consumption is so great in advanced industrial economies that private investment is not adequate to fill it. If unemployment is to be avoided, the gap must be bridged either by filling in with government expenditure or by reducing the size of the gap by increasing the tendency to consume. In a capitalist economy, characterized by wide inequalities in the distribution of income and other factors which make for a high propensity to save, the propensity to consume cannot easily be raised enough to have a significant affect upon employment. Therefore,


the maintenance of high levels of employment must be met by public expenditures.¹

It is difficult to say when the Roosevelt administration began to think of public spending as a means to recovery. Undoubtedly, many persons within the administration favored deficit spending as a deliberate policy for recovery before any such course of action was initiated. The beginning of a conscious awareness of the possibilities of public spending dates from Keynes' visit to this country in June 1934, when he said that if we sustained a deficit of $200 million a month, we would go back to the bottom of the depression; if we spent $300 million monthly, we would hold even; and if we spent $400 million a month, the debt would bring full recovery.²

Economic Conditions and Fiscal Policy.—A look at some of the events of 1929-1941, with special emphasis from 1935 on, will give us some insight into national debt policy during this period. The broad outlines of economic development in the United States between these years may be summarized briefly as follows. The depression, which began in 1929, reached a low point in the winter of 1932, followed by a rapid expansion between 1933 and 1937. In 1937 a sharp recession occurred; expansion began again in 1938 and continued into the defense period beginning in 1940. Up until 1935 measures designed to revive economic activity failed to yield the complete recovery which President Hoover declared was just around the corner. The main emphasis for promoting recovery up until that time was monetary policy. An early program of public works, the National Reconstruction Administration,

¹Dillard, op. cit., p. 103.

amounted to very little, and there seems to have been minor emphasis on deficit spending as the means to recovery. The federal deficits were defended mainly on humanitarian grounds as necessary to provide temporary relief for unemployment until recovery could be achieved by other means. In 1935 conditions changed and a definite upswing set in which continued into 1936. The Government expanded its public works expenditures and relief program and continued to run heavy deficits. In 1936 well over a million dollars was distributed to veterans in the form of a bonus. There began to be a feeling of prosperity for at least part of the people.\footnote{Albert Gailord Hart, \textit{Money, Debt and Economic Activity} (New York, 1953), p. 324.}

Tremendous excess reserves had been built up in the commercial banks during the early part of the decade as a result of several factors: the reevaluation of gold which was instrumental in causing an influx of gold from foreign countries; the leniency of Federal Reserve reserve requirements for member banks which was to so inflate the money supply and lower the rate of interest that private investment would be stimulated; and the lack of business activity and demand for money. The Administration realized that this was a potentially explosive situation and that the first signs of prosperity could portend an uncontrollable inflation.

In 1937-1938 the object of government policy was to taper off the expansion, but what happened was a sharp recession. Relief expenditures were reduced and pressure for public works relaxed. Reserve requirements for member banks were raised and excess reserves cut down. Like 1929, 1937 experienced serious declines of spending. Consumers cut down their expenditures and food prices fell sharply. Department stores and others
practically stopped placing new orders. It was evident that an expansive public policy was necessary. Work relief was increased and reserve requirements for member banks were lowered. This action stopped the shrinkage of bank loans and investments and business activity responded. By the time the recovery was well underway in 1938 a European war seemed imminent. Consequently, from the beginning, the economic recovery of 1939-1941 had an element of war activity in it.¹

Expenditures in the fiscal year 1935 for recovery and relief were in the amount of some $3 billion. Of this sum approximately $1.9 billion was spent for relief and $1 billion for public works. During this period there were very few months in which the debt did not increase. Total expenditures in the fiscal year 1936 were $8.3 billion and in the fiscal year 1937 $8 billion. The recession of 1937-1938 was a shock to the optimism of both businessmen and government; for business had long maintained that if government would step out of the market it could successfully take over. Although federal expenditures were reduced after June 1937, in the last nine months of 1938 there was a lively return to heavy government spending in an attempt to lift the country out of the new depression.² The net deficit for the last six months of the calendar year 1937 was only $607 million while for the last six months of 1938 it was almost six times as large.³

¹Ibid., p. 328.
³Ibid., p. 45.
The Interest Rate and Pattern of Debt Holding.—Two areas of public debt during the thirties merit attention here mainly because of their subsequent significance. They are the interest rate on public debt and the pattern of debt holding. The Treasury was able to make greater use of long-term securities after the refunding of the First and Fourth Liberty Loan bonds in 1935. As a result, the volume of outstanding notes and Treasury bills declined. The interest rate on the public debt fell to new low levels in 1938 because of the refunding, an influx of gold and the absence of competition from private capital issues. The average interest rate on the whole debt at the end of 1930 was 3 3/4 per cent; at the end of 1934 it was 3 per cent and it continued to fall to between 2 1/2 per cent and 2 5/8 per cent at the end of 1938. The decline in interest rates was most spectacular on short-term obligations.\(^1\)

Table 2 shows the distribution among the holders of the public debt, direct and guaranteed, for the years 1930, 1935 and 1938. At the end of 1938 over half of the debt was held by banks; members of the Federal Reserve, mutual savings banks, and non-member banks.\(^2\)

Depression Fiscal Policy Evaluated.—If Keynes' thesis is correct, how do we account for the fact that federal expenditures failed to bring about total recovery in the thirties? Keynes' chief criticism of the New Deal loan-expenditure program was that it was inadequately planned and poorly executed, and that it was on too small a scale to achieve full recovery. At the end of the thirties there had been no test of how large

\(^1\)Mitchell, op. cit., p. 45.

\(^2\)Ibid., p. 46.
### Table 2

**Holders of Public Debt, Various Dates**

<table>
<thead>
<tr>
<th></th>
<th>June 30, 1930</th>
<th>June 30, 1935</th>
<th>June 30, 1938</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Obligations</strong></td>
<td>$15,138,000,000 (%)</td>
<td>$31,033,000,000 (%)</td>
<td>$58,316,000,000 (%)</td>
</tr>
<tr>
<td>Holdings of Member banks</td>
<td>7.6</td>
<td>12.3</td>
<td>9.8</td>
</tr>
<tr>
<td>Holdings of all commercial banks</td>
<td>36.3</td>
<td>46.0</td>
<td>43.6</td>
</tr>
<tr>
<td>Holdings of U. S. Fed. Res. banks</td>
<td>3.9</td>
<td>7.8</td>
<td>6.7</td>
</tr>
<tr>
<td>Holdings of U. S. Govt. Agencies</td>
<td>1.3</td>
<td>4.3</td>
<td>5.5</td>
</tr>
<tr>
<td>Holdings of Life Insurance Cos.</td>
<td>1.7</td>
<td>6.0</td>
<td>10.3</td>
</tr>
</tbody>
</table>

---

the expenditure would have to be to lift the economy to full employment. The nature of government spending during this period was of the pump priming variety which assumes that a temporary priming of the economic system by government expenditure will set the private enterprise going on its own power. This proved to be an erroneous assumption. As long as loan expenditure continued it appears to have acted as a stimulant to total economic activity. National income increased not only by the amount of government spending but by several times that amount. This increase verified Keynes' theory of the multiplier effect of government investment. Failure of the economic system to attain a high level of employment at any time during the thirties despite the multiplying effect of government loan-expenditures indicated to Keynes that full employment could only be attained with a much larger volume of expenditures than was forthcoming under the New Deal program of that period.

Although there are many economists who disagree with the Keynesian philosophy of government intervention, public investment and other forms of economic policy designed to fill the gap in the private enterprise economy, there is a wide and growing acceptance of the fundamental principles behind it. Dudley Dillard states that this growing acceptance is demonstrated in the economic policies of the New Deal, the Murray Full Employment Bill of 1945 and the Employment Act of 1946, all of which would have the Government assume responsibility for public spending in periods

1Dillard, op. cit., p. 129.

2Multiplier effect denotes multiples increases in national income resulting from increases in investment.
when private spending falters.¹

We know that Keynesian economics of necessity abandons the balanced budget in the traditional sense. The deficits of the thirties produced a fifty per cent debt increase from the 1929 figure. Depression economics had many critics; those who objected to an expanded federal debt per se, and those who totally disagreed with Keynesian philosophy that government spending need be the equalizing factor in the gap of spendability.

The late Henry C. Simons, through his writings and teachings at the University of Chicago, slowly established himself as the head of a school of thought which contra to the thinking of Keynes proposed to maintain the system of laissez faire. His contention was primarily that the free market system, repudiated by Keynes, would steadily gain in strength if only it were free of widespread state interference.²

We have previously noted Keynes' thesis that in a highly industrialized economy such as ours private investment is unable to make up the gap between income and consumption. This contention is based upon the concept of secular stagnation which pervades Keynes' General Theory and has been more fully developed by Alvin Hansen.³ Secular stagnation asserts that the marginal efficiency of capital⁴ slowly declines because investment opportunities in the present stage of capitalist development are less

¹Dillard, op. cit., p. 2.
³Alvin H. Hansen, Full Recovery or Stagnation (New York, 1938).
⁴Marginal efficiency of capital, simply stated, is the rate of return on investment compared with the rate of interest or cost of borrowing to invest.
than they were in the earlier centuries of capitalism due to a decline in
dynamic growth factors such as rate of population growth, territorial ex-
pansion and technological change.¹ Simons refuted Hansen's thesis that
the marginal efficiency of capital during the thirties was zero because
investment opportunities were exhausted. He maintained that the reason
low interest rates and abundant money failed to induce large investments
and eliminate unemployment was the fact that government policy was adverse
to investors and private enterprise during this period. He contended that
the marginal efficiency of capital was zero because prospective yields at
prospective prices and wage rates were low. Certain legislative measures
encouraging labor monopolies, as Simons calls them; and subsidization of
farmers and retailers created inflexibilities in the price structure which
inhibited private investment.² Simons agreed that investment was the way
to economic stability, but insisted that at some level the choice between
governmental and private investment is the choice between ways of life,
authoritarian or individualist. He objected to Hansen's negative atti-
tude toward private investment in areas other than those where competi-
tion is inadequate (e.g. public utilities). Simons declared that public
investment should be limited because it is free from the exact social
accounting of business and more irresponsible. Government investment,
he said, misses areas where complete governmental control is indicated and
plunges into miscellaneous undertakings where it has little competence and
inhibits private enterprise. He stated that in a progressive society where
government enterprise can expand, the complement of private business may be

¹Dillard, op. cit., p. 153.
²Simons, op. cit., p. 196.
lost from sheer atrophy.\footnote{Ibid., p. 197.}

Pro and Con Government Debt.—Since the trend of economic policy in the United States is towards an expanding public debt, some consideration of the ramifications of such a debt could not be without value here. To avoid debt is a well established principle of individual and group behavior. Public debt is often considered in the same light as private debt. Some economists hold, however, that public debt is different from private debt in that it is internally held. To use an oft repeated phrase, "we owe it to ourselves." Professor Lerner says:

A nation owing money to other nations (or to the citizens of other nations) is impoverished or burdened in the same kind of way as a man who owes money to other men. But this does not hold for national debt which is owed by the nation to citizens of the same nation. There is no external creditor. "We owe it to ourselves."\footnote{Abba P. Lerner, "The Burden of the National Debt," Income, Employment and Public Policy (New York, 1948), p. 256.}

Professor Lerner states further that neither the principal nor the interest on the debt constitutes a burden because the principal does not have to be repaid and the interest payments need not be financed out of additional taxes raised for the purpose but may themselves be financed by borrowing.\footnote{Ibid.} This view is not supported by all economists. Seymour Harris questions whether as a matter of practical policy it would be possible, as Mr. Lerner indicates, to allow debt to grow while interest payments are financed through additional borrowing. Because of the inflationary effects of government spending, Harris states, taxation would be necessary.\footnote{Seymour E. Harris, The National Debt and the New Economics (New York, 1947), p. 213.}
If we grant the argument that the public debt is a burden not because of its size but because of its cost, this cost has meaning, some economists say, only in relation to the annual national income. If, by increasing the national debt by $1 billion, the national income is increased by a multiple of that debt, the taxation necessary to support the debt is insignificant by comparison. Although the debt has risen to astronomical figures, the interest payment on that debt has not gone very much above 2 per cent of the national income at any time. The problem of the debt then is essentially a problem of achieving a growing national income.¹

An opposition position is taken by Professor Benjamin U. Ratchford who says that the interest payments necessary to finance a growing debt are a deterrent to business and investment and actually reduce the national income. In order to raise the taxes necessary to pay the interest on the debt a steeply progressive tax system, which is unavoidable, is necessary and incompatible with the free flow of investment funds.²

Another aspect of the same problem is the effect of the debt upon the distribution of income. Income is redistributed whenever any portion of government either taxes or spends. John H. Adler in his study on the effects of the fiscal system upon the distribution of income comments that the operations of the fiscal system bring about a redistribution of income of considerable proportions in favor of the lower and to the disadvantage of the higher income groups. This is a result of the progressive tax struc-


ture which, as Mr. Adler says, sets politically well with a distribution of benefits of government services that has strong humanitarian and social equity tendencies. The economic effects of this redistribution depend upon the extent to which the aggregate expenditure pattern of the economy is affected. If we assume that the propensity to consume of lower income groups is higher than that of higher income groups, and if we further assume that the propensity to invest in corporate enterprises is determined to a large extent by the level of consumer demand, we must conclude that the redistribution of income through the fiscal system operations has a strong positive effect on the maintenance of high levels of economic activity.¹

Henry Wallich supports the expansionist effect of the public debt through the redistribution of income by pointing out that the tax burden incident to the public debt is considerably less than the total interest charge in view of the fact that the holders of government bonds must pay a considerable tax on the interest earnings received. He further points out that the net deflationary effect of transfer from taxpayer to interest recipient is relatively small.²

A commonly held view is that a large public debt has inflationary tendencies. Henry M. Oliver says that the public debt has an inflationary potential only if that debt takes the form of bank deposits; but he also adds that counter-inflationary measures may with the proper discretion be administered by Congress, the Treasury and the Federal Reserve System.³


It is the contention of many persons that an expanding public debt composed of public investments is leading the country towards a collectivist type economy which threatens the life of the free enterprise system. Hansen refutes this contention and declares that through active management and control of the state for the common good, the people of the United States have achieved as never before a high degree of personal liberty and freedom.  

---

CHAPTER II

THE WAR YEARS 1941-1945

The Prewar State of the Economy.—Economic revival from the depression dated from the outbreak of war in Europe in September of 1939. The problem of increasing total spending was facilitated by the necessity for war production; and the impact upon American markets was immediate as memories of the first World War set the business world off on a speculative boom. Employment in manufacturing and payrolls rose substantially by the end of the year. The Federal Reserve Index of Industrial Production, which stood at 106 per cent of the 1935-1939 average in August, rose to 125 in December. Further expansion of our production was the first task of the defense authorities. By July of 1940 Congress had authorized defense expenditures of $12 billion; nine months later the appropriations had risen to $35 billion, an amount greater than the entire cost of World War I.1

The United States' entrance into the war as a belligerent on December 7, 1941 gave added stimulus to an already high rate of economic activity. The economy was from that point on engaged in total war; and the object of that war was to win it with the least possible disruption to the economic system. These two goals were at many points in conflict; and some aspects of these two seemingly irreconcilable objectives are presented in the following pages.

---

War Finance and its Effects.—In the fiscal years of war from July 1, 1941 through June 30, 1946 the United States spent $370 billion. Of this total 46 per cent came from taxes and the balance of 54 per cent was met by borrowing. Although by absolute standards this was not the most desirable arrangement for financing the war, it was a great improvement over the war years of 1917-1918 when current revenues supplied only 28 per cent of government expenditures. Of the $199 billion borrowed by the Treasury during the five year period 60 per cent came from non-bank investors, 10 per cent from the Federal Reserve and the balance of 30 per cent from commercial banks.¹

The importance of government buying in the market place during the war period is evident from the fact that federal government spending accounted for 40 per cent of aggregate spending and reached a peak of almost 50 per cent in the fiscal year 1945.² Table 3 indicates the growth of expenditures during the 1941-1945 period and points up the increasingly large percentage which was for war and related activities.

Plants were built and operated by the government. There were vast increases in spending for the several branches of the armed services. A substantial part of the debt incurred resulted from the Treasury practice of maintaining large cash balances; the Lend-Lease program which was vital to the strengthening of our allies, and the stockpiling of critical and strategic materials and supplies. Table 4 shows the gross debt outstanding and the per capita debt for the period.

¹The Committee on Public Debt Policy, op. cit., p. 53.
²Ibid.
TABLE 3
BUDGETARY EXPENDITURES, FISCAL YEARS
1941 through 1945
(Billions)

<table>
<thead>
<tr>
<th>Fiscal Yr.</th>
<th>War</th>
<th>War Related</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amt.</td>
<td>%</td>
<td>Amt.</td>
<td>%</td>
</tr>
<tr>
<td>1941</td>
<td>6.3</td>
<td>49.3</td>
<td>1.8</td>
<td>13.8</td>
</tr>
<tr>
<td>1942</td>
<td>26.0</td>
<td>80.1</td>
<td>1.9</td>
<td>5.9</td>
</tr>
<tr>
<td>1943</td>
<td>72.1</td>
<td>92.2</td>
<td>2.5</td>
<td>3.2</td>
</tr>
<tr>
<td>1944</td>
<td>87.0</td>
<td>92.8</td>
<td>3.6</td>
<td>3.8</td>
</tr>
<tr>
<td>1945</td>
<td>90.0</td>
<td>89.7</td>
<td>7.4</td>
<td>7.4</td>
</tr>
<tr>
<td>Total</td>
<td>281.5</td>
<td>88.6</td>
<td>17.2</td>
<td>5.4</td>
</tr>
</tbody>
</table>


TABLE 4
GROSS DEBT OUTSTANDING AND PER CAPITA DEBT
FOR THE YEARS 1941 THROUGH 1945

<table>
<thead>
<tr>
<th>June 30</th>
<th>Gross Debt (In Millions)</th>
<th>Per Capita Debt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1941</td>
<td>42,986</td>
<td>367.97</td>
</tr>
<tr>
<td>1942</td>
<td>48,961</td>
<td>541.39</td>
</tr>
<tr>
<td>1943</td>
<td>72,422</td>
<td>1,020.38</td>
</tr>
<tr>
<td>1944</td>
<td>136,896</td>
<td>1,455.67</td>
</tr>
<tr>
<td>1945</td>
<td>201,003</td>
<td>1,852.74</td>
</tr>
</tbody>
</table>


The growth of the debt increased the total assets of every segment of the population. This money was created by the expansion of credit of the commercial banks which were permitted to open deposit accounts in favor of the United States Treasury and to pay for security purchases by crediting those accounts. By so doing, they could buy without putting up any money
until the Government drew on its accounts. There were a number of inducements and preferential treatment measures designed to encourage the commercial banks to buy government securities. They were able, therefore, to meet without strain all government needs for funds not filled from other sources. As a result of war financing, the money supply expanded greatly and during this period the main function of commercial banks shifted from that of short-term loans to business to short, medium and long-term investments in Governments.¹

Charles C. Abbott in his volume, *The Federal Debt*, makes an excellent commentary on the growing importance of the debt. He says:

When a public debt is small compared with the volume of private debt outstanding and with other economic magnitudes, such as national income or the amount of invested capital, Treasury securities can be regarded as simply one type of investment, and the debt can be properly studied in the context of the general capital market. When the public debt reaches great size, however, and especially if further increases are in prospect, its position in the economy changes. When the total of federal obligations outstanding exceeds that of all other kinds of debt, and when Treasury securities constitute something like half the assets of banks and insurance companies, the debt begins to assume a new character. When it is made up of various kinds of issues which differ among themselves, not only in their rates of interest and the length of their maturities, but in other respects, such as marketability, eligibility for purchase by different classes of buyers, the prerogatives attached to them, and the purposes for which they were issued, the debt becomes an object of study in its own right and for its own sake. When certain types of issues are continuously offered at fixed prices, either at fixed or almost fixed prices, federal securities begin to take on, from the point of view of the individual the characteristics of a bank account. When the federal government holds a large and growing portion of its own obligations in its own investment accounts as reserves against its own liability to pay out sums in connection with social security, unemployment or the claims of deposits of closed banks, the debt takes on a complexion wholly new in the country's experience.

In short, when these things occur the debt ceases to be simply an outlet for investment funds of persons and institutions. It becomes a vehicle capable of expanding or contracting the deposit structure,

quite independently of whether the government has a surplus or a deficit on current operating account. It becomes, in some measure, an institution itself.¹

Stabilization of the Interest Rate.—The United States entered World War II with interest rates at an unprecedentedly low level. Memories were fresh of the experience of World War I which was financed on steadily rising rates. The Treasury took the position, which was supported by financial leaders, that the war should be financed as far as possible at a stable level of interest rates; and since the war promised to be expensive, that the level should be low. According to an agreed pattern, rates were to run from 3/8 per cent for 90 day Treasury bills, 7/8 of 1 per cent for one-year certificates of indebtedness, and up to 2 1/3 per cent for long-term bonds. This pattern was decided upon because it was reasonably in line with the interest rates then being paid on the long-term securities of financial institutions.² To finance a war on such a pattern was an experiment in monetary control; and the cooperation of the Treasury, the Federal Reserve System, commercial banks and principal investors was required. The Federal Reserve by market purchases undertook support of the prices of issued securities in order to keep their yields down, i.e., the Reserve banks stood ready to buy stipulated government securities usually at par or above. As a result the Reserve System purchased all securities not desired by other sectors of the market; and more important Governments, under the support plan acquired as high a degree of liquidity as cash. On the whole the program went forward as planned; and the debt was financed at stable rates. Table 5 shows the average interest rate and annual payments on interest-bearing


debt during this period.

TABLE 5

PUBLIC DEBT OF THE UNITED STATES; INTEREST BEARING DEBT, COMPUTED ANNUAL RATE OF INTEREST AND INTEREST PAYMENTS FOR THE FISCAL YEARS 1941 THROUGH 1945

<table>
<thead>
<tr>
<th>Years</th>
<th>Int. Bear. Debt (In Billions)</th>
<th>Annual Rate of Interest</th>
<th>Int. Pay. (In Billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1941</td>
<td>54,747</td>
<td>2.44</td>
<td>1,335</td>
</tr>
<tr>
<td>1942</td>
<td>76,517</td>
<td>2.26</td>
<td>1,729</td>
</tr>
<tr>
<td>1943</td>
<td>139,472</td>
<td>1.98</td>
<td>2,759</td>
</tr>
<tr>
<td>1944</td>
<td>201,059</td>
<td>1.92</td>
<td>3,869</td>
</tr>
<tr>
<td>1945</td>
<td>256,766</td>
<td>1.94</td>
<td>4,989</td>
</tr>
</tbody>
</table>


The stabilization of interest rate policy had inherent contradictions and some proved weaknesses. First, there was some question as to whether the proper pattern had been established. If, for example, bonds had been sold at a somewhat higher rate, possibly still more might have been taken and kept by non-bank investors and less might have been placed in commercial banks. Second, as months went on banks grew almost too confident in the power of the Federal Reserve and the Treasury to maintain stable rates and prices for government securities and this led to increased speculation. By 1945 people found that they could buy longer term securities and sell them later at a profit. This was known as "playing the pattern of rates." Investors or speculators regarded their bonds as just as safe as short-term Governments, because with government maintained prices there was almost no risk of loss. As a result too much money that should

have been short term was put into longer term bonds.\textsuperscript{1} Henry C. Murphy says:

If three month money was going to continue at 3/8 per cent, one year money at 7/8 per cent, 10 year money at 2 per cent and 25 year money at 2 1/2 per cent all having an indefinite period, why should any investor no matter how short his actual requirements accept the lowest rate? Why take 3/8 per cent on a 3 month bill when you can buy a 7/8 per cent certificate at par and sell it 3 months later at a premium. Why for that matter buy a certificate? Why not buy a 2 per cent or even a 2 1/2 per cent bond (if you are eligible) and sell it at the end of 3 months thus obtaining 2 per cent plus or 2 1/2 plus on a 3 months investment?\textsuperscript{2}

It is evident then that the setting of a pattern of interest rates in a measure defeated its own purpose. E. A. Goldenweiser says that the policy served no useful purpose. He adds that it probably did not save the Treasury interest charges because a more realistic rate on short money would have enabled the Treasury to sell more short-term securities, thus diminishing the required volume of long-term bonds with their higher rates. Whether this would have been the case, however, cannot be proved, he declares.\textsuperscript{3} All are not in agreement as regards this policy; many feel that the maintenance of a stable pattern of low rates was essential to the general wartime government control over the economy. Under conditions of war there is less likelihood that free market processes will be relied upon than is the case when there is no danger to the relatively smooth operation of the economic system. The conflict arising out of the question of whether such control is appropriate for a peacetime economy is discussed in Chapter three.

Tailor-made Securities.----One of the most characteristic differences between war finance in World War I and World War II was the conscious effort

\begin{itemize}
\item \textsuperscript{1} The Committee on Public Debt Policy, \textit{op. cit.}, p. 86.
\item \textsuperscript{2} Murphy, \textit{The National Debt in War and Transition}, p. 103.
\item \textsuperscript{3} Goldenweiser, \textit{op. cit.}, p. 191.
\end{itemize}
of the Treasury to fit its security issues to the needs of different classes of investors. In World War I a single security bond - Liberty Bonds - were prescribed for practically every investor. Henry Murphy says, "In World War II by contrast the ideal was a basket of securities from which each investor could select a security most fitted to his needs." The most fundamental step in the direction of fitting securities to the needs of different types of investors was the decision to finance a substantial part of the cost of the war by issuance of short-term securities which were to be refunded into new short-term securities as they matured. This anticipated the need of a large number of investors for liquid investments.¹

Former Secretary of the Treasury Morgenthau said that the policy of fitting the security to the needs of the investor makes it inevitable that a large portion of the debt consist of short-term securities; and added that this was a good thing for the investor, for the government and for the economy because it permitted liquid funds to be shifted readily from one bank to another and from one section of the country to another without strain on the money market. It also permitted corporations and other businesses to apply their reconversion reserves to the expansion of reconversion without strain.²

In arranging the maturity of the debt the Treasury has in theory always borne in mind the fact that the time which the original purchaser of a security will hold it depends mainly upon his own future convenience and needs and very little upon normal maturities of the security. The indiscriminate issuance of long-term securities to all classes of investors does

¹Murphy, The National Debt in War and Transition, p. 104.
not insure their being held to maturity by their original purchaser, but merely results in premature market liquidation. Charles Abbott says that not only the needs of the investing public have determined the maturity schedule of the debt, in fact, but the Treasury's offering policy as well.\footnote{Op. cit., p. 45.} This policy resulted in almost 50 per cent of the debt being in short-term securities as of December 1945. The consequences of a maturity schedule heavily weighted in short-term securities causes the Treasury considerable time and expense in refunding operations.\footnote{Murphy, The National Debt in War and Transition, p. 104.} This problem is discussed in greater detail in Chapter three.

Bank-held Government Debt.—As a result of the Treasury's method of financing the war through the commercial banking system, the bulk of the debt reposed with the commercial banks. Table 6 shows the ownership of government interest-bearing securities over the five year period 1941-1946. On July 1, 1941 commercial banks held $24.0 billion of interest bearing government securities. By June 30, 1946 their holdings were $89.2 billion, an increase of some 270 per cent. Of course, the assets of all sectors of the economy increased as a result of the growth of the debt, but despite this huge increase the percentage of bank holdings to total debt actually declined from 36 per cent to 31 per cent.\footnote{The Committee on Public Debt Policy, op. cit., p. 55.} Simeon E. Leland says that the independence of bank action which results from large holdings of government securities which are highly liquid, especially during the war period when the Federal Reserve supported the market price of bonds, weakens the effectiveness of measures for controlling and arresting the develop-
<table>
<thead>
<tr>
<th>June 30</th>
<th>Total All</th>
<th>Commercial Banks</th>
<th>Federal Reserve Banks</th>
<th>Total Banks</th>
<th>Individuals</th>
<th>Insurance Cos.</th>
<th>Mutual Savings Banks</th>
<th>Other Corporations</th>
<th>State and Local</th>
<th>U.S. Govt. Trust Funds</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1941</td>
<td>77.2</td>
<td>24.0</td>
<td>2.2</td>
<td>26.1</td>
<td>19.4</td>
<td>9.3</td>
<td>3.9</td>
<td>3.7</td>
<td>4.5</td>
<td>10.0</td>
<td>50.8</td>
</tr>
<tr>
<td>1946</td>
<td>265.4</td>
<td>89.2</td>
<td>23.8</td>
<td>113.0</td>
<td>69.8</td>
<td>26.3</td>
<td>11.5</td>
<td>26.4</td>
<td>8.8</td>
<td>29.6</td>
<td>172.4</td>
</tr>
</tbody>
</table>

opment of inflation. Whenever they want to expand their loans, banks need only sell government securities or allow some of their holdings to run off so as to increase excess reserves.¹ Several proposals have been advanced to combat this problem of bank-held government debt. One is that the banks exchange their present holdings of government securities for a special non-marketable security required to be held as a reserve against either the volume of deposits or their increase during some given period.² The Committee on Public Debt Policy suggests that the debt be distributed as widely as possible among non-bank investors to reduce the inflationary money supply that accompanies a national debt heavily concentrated in the hands of the banking system. The Treasury, during the war years, in an effort to achieve this end, followed a policy of selling bonds as widely as possible to individuals, corporations and institutions other than banks. An added advantage of wide distribution of the debt is the psychological effect of having a great number of shareholders who are vitally concerned with debt management.³

A prolonged policy of price supports for the government bond market has a double danger: the possibility of bank credit expansion when the Central bank absorbs the Governments to keep the price up; and the longer term result of destroying the only reason for the bank's sacrificing yield by the purchase of short rather than long-term securities. The danger of price fluctuations in long-term Governments has been eliminated; and the


³The Committee on Public Debt Policy, op. cit., pp. 152-159.
Government is protecting the banker's profits. On the other hand, if no artificial support level can be counted on, the temptation to stray from a sound maturity policy consistent with the character of their deposits, i.e., a general policy of investing little less than their total of time deposits in real estate and long-term securities, is lessened. Considerable holdings of Governments by the banking system increase the problem of the Central bank concerned with control during a period of inflationary tendencies; however, they have certain advantages. Unit banks make local loans that often have no other market; and they find government obligations an advantageous method of adjusting their investment position to the varying needs of their customers. Substantial holdings of Governments provide a method of shifting banking pressures from the local to the national money market.¹

In 1940 government securities comprised 40 per cent of all bank loans and investments; by the end of 1945 the ratio had nearly doubled to 70 per cent. Table 7 shows the wartime changes in loans and investments of insured commercial banks. One of the consequences of our huge public debt during this period was that commercial banks became more investing institutions in government securities than lending institutions to private enterprise. The expanded holdings of government securities and loans enabled banks to more than cover the large wartime increase in operating expenses and taxes. As a result their net operating earnings rose during the war and postwar years. Before the war bank losses and charge-offs usually were more than profits on security sales. From 1943 through 1946,

however, profits on sales of securities plus recoveries of previous losses on loans topped the current losses and charge-offs.\(^1\)

**TABLE 7**

**WARTIME CHANGES IN LOANS AND INVESTMENTS OF INSURED COMMERCIAL BANKS**

(In billions)\(^a\)

<table>
<thead>
<tr>
<th></th>
<th>Dec. 31 1939</th>
<th>Dec. 31 1945</th>
<th>Increase Amount Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government securities</td>
<td>$15.6</td>
<td>$88.9</td>
<td>$73.3</td>
</tr>
<tr>
<td>Loans</td>
<td>16.9</td>
<td>25.8</td>
<td>8.9</td>
</tr>
<tr>
<td>Other securities</td>
<td>6.9</td>
<td>7.1</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$39.4</td>
<td>$121.8</td>
<td>$82.4</td>
</tr>
</tbody>
</table>

\(^a\)The Committee on Public Debt Policy, op. cit., p. 55.

The Debt and Other Financial Institutions.—Another important consequence of the growth of the debt is its rise to a preeminent position in the field of investment and its effect upon the portfolio composition of not only the banking system but of other financial institutions. Financial institutions are founded upon the existence of debt; banks, central and commercial, life insurance companies, savings banks and savings and loan associations cannot exist without a large supply of debt investments.\(^2\) Table 8 indicates the relative importance of federal debt to our financial institutions. The growth of holdings of Treasury securities meant for certain classes of holders that interest received on such investments became a much more significant part of their income than ever before.

\(^1\)Ibid., pp. 71-27.

\(^2\)Ibid., p. 253.
## TABLE 8
RELATIVE IMPORTANCE OF FEDERAL DEBT TO FINANCIAL INSTITUTIONS

<table>
<thead>
<tr>
<th>A. Percent to Assets Excluding Cash</th>
<th>1940</th>
<th>1945</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial banks</td>
<td>38.5</td>
<td>72.0</td>
</tr>
<tr>
<td>Federal Reserve banks</td>
<td>66.7</td>
<td>90.0</td>
</tr>
<tr>
<td>Life Insurance Cos.</td>
<td>23.1</td>
<td>50.0</td>
</tr>
<tr>
<td>Savings banks</td>
<td>29.1</td>
<td>65.3</td>
</tr>
<tr>
<td>Savings and Loan Assns.</td>
<td>2.5</td>
<td>31.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Total Assets Excluding Cash (billions of dollars)</th>
<th>1940</th>
<th>1945</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial banks</td>
<td>44.4</td>
<td>123.3</td>
</tr>
<tr>
<td>Federal Reserve banks</td>
<td>3.3</td>
<td>27.0</td>
</tr>
<tr>
<td>Life Insurance Cos.</td>
<td>25.6</td>
<td>41.1</td>
</tr>
<tr>
<td>Savings banks</td>
<td>11.1</td>
<td>16.4</td>
</tr>
<tr>
<td>Savings and Loan Assns.</td>
<td>4.2</td>
<td>7.8</td>
</tr>
</tbody>
</table>

*Guthmann, loc. cit., p. 257.

Life Insurance companies, for example, get the major part of their money from premiums; but investment income is of major importance. The composition of insurance assets has changed with the emergence of the growing national debt. Table 9 indicates the asset structure of life insurance companies for the years 1940 and 1945. The holdings of United States Government securities by insurance companies has never constituted as large a proportion of total assets as of other major institutional investors; however life insurance companies are the largest owners of Treasury long-term securities. Low rates on this class of investment discourage the insurance company market for long-term Governments.\(^1\) Since the end of World War II,

\(^1\)The Committee on Public Debt Policy, op. cit., p. 137.
life insurance companies have reduced their holdings of such securities sharply. At the same time they have made very large purchases of corporate bonds which are of higher yield than Governments. The essence of insurance is safety, however, as with all financial institutions the question arises as to the degree of profitability attainable with the greatest amount of safety.

**TABLE 9**

**ASSET STRUCTURE OF LIFE INSURANCE COMPANIES**

(billions of dollars) {

<table>
<thead>
<tr>
<th></th>
<th>1940</th>
<th>1945</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Assets</td>
<td>30.8</td>
<td>44.8</td>
</tr>
<tr>
<td>Mortgages</td>
<td>6.0</td>
<td>6.6</td>
</tr>
<tr>
<td>All Securities</td>
<td>17.5</td>
<td>33.6</td>
</tr>
<tr>
<td>U. S. Governments</td>
<td>5.9</td>
<td>20.6</td>
</tr>
<tr>
<td>Per cent of U. S. Gov'ts. to Total Assets</td>
<td>10.3</td>
<td>46.0</td>
</tr>
</tbody>
</table>

^aGuthmann, loc. cit., p. 287.

Mutual savings bank investments are devoted exclusively to concentration in the field of mortgages and bonds. Because of their low cash reserves and investment policy, a relatively heavy portion of their long maturities are in government holdings. The mutual savings banks are not under compulsion to earn a high, or any particular, rate of return as they are under no obligation to pay dividends; consequently, they are less eager than some other financial institutions to switch from Governments to other investments. They concentrate their purchases in the bond field rather in shorter maturities. Investment in long-term Governments has increased from

$0.5 billion in 1930 to $3.2 billion in 1940 and then a very rapid rise during the war period. Between 1945 and 1948 these banks were the only institutional group to show an increase in their holdings of Governments, a peak of $12.0 billion being reached in the year 1947.¹

The savings and loan associations invest almost exclusively in first mortgages on residential property; however, during the early 1930's some associations started the practice of building a liquid investment fund to consist exclusively of Governments. As recently as 1941, however, the total of such investments amounted to only $100 million. During the second World War, when construction practically ceased, these associations invested heavily in Governments, the total amounting to $2.5 billion or about 40 percent of the $6.3 billion of capital in 1945. When home building was renewed after 1945, the demands for mortgage money were heavy and the accumulation of Governments was reduced in the following three years to $1.5 billion. These associations pursue somewhat the same policy as the mutual savings banks, investment in long-term maturities.²

The thrift institutions on the whole in their constant comparison of yields are always alert to changing markets. They shift their holdings to bring market prices into alignment so that yields will differ no more than is warranted by differences in risk and other factors such as maturity, tax exemptions and marketability. For them the market place is impersonal.³

²Ibid., pp. 285-286.
³Ibid., p. 298.
Future earnings of thrift institutions will depend very much upon the Treasury's interest rate and debt management policies. We should also be aware that these institutional investors have great importance to the Treasury as a market for selling government securities and refunding the debt.
CHAPTER III
THE POSTWAR YEARS 1945-1950

Postwar State of the Economy.—After the surrender of the German and Japanese armies in 1945, war production began to slacken. Federal expenditures had hit their peak in 1944; but two years later government spending had been reduced by 80 per cent. Military manpower was demobilized rapidly; and war equipment was stored away or sold as surplus. There was uncertainty as to whether inflation or deflation should be most feared in the re-conversion period. A sharp unemployment crisis was predicted in the spring of 1946 by one group of economists which assumed that the demand for labor would be considerably less than the supply. The forecasters' biggest mistake was in their underestimation of pent-up consumer demand which had gone unsatisfied during the war years. The excess of well-financed demand over the supply of goods for sale set off an inflationary charge.1

Debt Repayment.—It is traditional for the United States to pay down its war debts promptly; and public sentiment favored repayment at the end of World War II. However, it should be noted that reduction of the debt has serious repercussions upon the economy dependent upon the rate, timing and method of repayment.2 The ultimate measure of the impact of debt

---


2Harris, op. cit., p. 258.
repayment is the effect it has upon total spending. Especially important is the distribution of issues redeemed between the banks and the public. When a budgetary surplus is used to redeem securities held by the banks, that payment reduces bank deposits and the money supply, provided of course, that the banks don't expand credit in other ways. This deflationary effect is multiplied when Federal Reserve banks hold the retired debt; repayment reduces reserves of commercial banks and encourages further credit contraction. ¹ Seymour Harris says that debt repayment is in order on both fiscal and monetary grounds if a significant inflation prevails or seriously threatens. Then the subtraction of purchasing power through taxation - the proceeds being used to repay the debt - will tend to reduce inflationary pressures not only because monetary supplies are reduced but also because the rate of interest may rise and investment thereby be discouraged. Debt repayment under unfavorable conditions is an unwise policy because if, as is the case, the banking system holds a considerable portion of the debt, deposits are reduced and a tight money market results at a time when an expanded money supply would be most beneficial. He adds that repayment of debt should be allowed only under appropriate circumstances, i.e., inflationary conditions. ²

In 1946 it was apparent that the thing to fear was inflation not deflation. The public debt reached a postwar peak of $279.8 billion on February 28, 1946. During the last ten months of that year the public debt was reduced by $20.3 billion, of which was commercial bank-held debt. The source of this reduction was primarily excess

¹The Committee on Public Debt Policy, op. cit., p. 32.
²Harris, op. cit., p. 261.
Treasury balances built up by the Victory Loan, the last of the war loan series. Inasmuch as these cash balances were held inactively on deposit in the banks, their cancellation with a corresponding amount of debt was neither inflationary nor deflationary. ¹ Although the reduction of the debt was counter-balancing, it had a restraining influence on the economy in two ways: (1) It negatively used up government deposits before they became a part of the economy. (2) Since some of the retired debt had been held by the Federal Reserve and was not replaced, this liquidation diminished the volume of member bank reserves.²

In 1947 "inflationary forces" were still of major importance in the economy. Industrial production increased and declined and later recovered showing a slight gain for the year.³ During the calendar year 1947 the changes in the amount and ownership of the debt were smaller in size but of greater economic significance than those in 1946. The total debt was reduced by $2.4 billion but holdings by the banking system were reduced by $6.5 billion while holdings by non-bank investors increased by $4.1 billion.⁴

In the calendar year 1948 the Treasury operated at a surplus of $5.2 billion, an all time record. The total amount of the Federal debt during this year was reduced by $4.1 billion; a reduction of $6.1 billion for the commercial banking system offset by an increase of holdings by

---

¹Murphy, op. cit., pp. 227-228.
²Goldenweiser, op. cit., p. 198.
³Ibid., p. 199
⁴Murphy, op. cit., p. 229.
the Federal Reserve and non-bank investors. The net reduction in the debt
during the year 1948 occurred entirely from funds provided by the budget
and so had the maximum anti-inflationary effect.\(^1\)

The first half of 1949 was a time of major change in debt manage-
ment and monetary policy. At the beginning of the year these policies were
directed at combating inflation but towards the end of the year decisive
steps had to be taken in the direction of fighting deflation and recession.
The trend of prices, production and income was generally down in the first
half of the year. The Federal surplus, which had been instrumental in dis-
couraging inflationary pressures, came to an end due to tax reductions and
increased expenditures for defense and foreign aid. During the first six
months of the year the Federal government operated at a budget deficit of
$0.2 billion, however, the debt was reduced by $0.1 billion as a consequence
of the reduction in the holdings of the Federal Reserve banks. The Reserve
System in an effort to prevent the prices of long-term securities from rising
substantially above the support price engaged in substantial open market op-
erations. The year 1949 saw the end (to date) of a declining national debt.
As of June 30, 1950 the gross debt of the United States stood at $257.4 bil-
ion.\(^2\)

**Treasury vs Federal Reserve Controversy.**—At the end of the war the
interest rate structure that had been frozen in 1942 was still in effect.
Despite the return of peace the fiscal authorities gave no indication that
they had any immediate intention of changing their interest policy.\(^3\)

\(^1\)Ibid., pp. 231-232.

\(^2\)U. S. Chamber of Commerce, *The Annual Report of the Secretary of
the Treasury for the Fiscal Year ended June 30, 1950*.

\(^3\)Abbott, op. cit., p. 61.
In the postwar period the decision to maintain the wartime pattern of rates was for the purpose of keeping down the cost of the debt, preventing depreciation in the capital values of outstanding government securities and preventing a rise in the price at which government securities would have to be refunded.¹

In 1946 it was clear that inflationary forces were at work in the economy. The Federal Reserve, our central banking organization, is charged with the duty and has the authority to control the money supply of the country which influences the movement of interest rates. During boom periods the Reserve System ordinarily takes steps to tighten up the availability of bank money by increasing member bank reserves thereby encouraging high interest rates.² The Treasury, charged with the task of managing a gargantuan debt, aimed at keeping the interest rate on government securities low. In order to accomplish this the Federal Reserve had to support the price of Governments in the market place by being ready to purchase Governments at stipulated prices. This gave federal securities a high degree of liquidity which was particularly distressing because of the concentration of the economy's assets in federal securities. With such a high degree of liquid debt the money supply could in effect be expanded or contracted without action by the central bank. The Federal Reserve was unable to control the money supply and at the same time support the Treasury in its efforts to keep the interest rate low.


²The Committee on Public Debt Policy, op. cit., p. 279.
The development of inflation after the war was made possible primarily by the large volume of liquid assets built up during the period of war finance, the accompanying shortage of goods and deferred demand in addition to the postwar expansion of credit to private borrowers. Liquidation of government securities, which we have indicated previously was possible at little or no loss due to Federal Reserve support of the Government bond market, was an important source of funds for current spending and credit expansion.¹

Thomas B. McCabe, Chairman of the Board of Governors of the Federal Reserve System in 1949, said that the Reserve officials were thoroughly aware of the dilemma presented by the conflicting problems of debt management and monetary policy during the postwar period; and that they tried by various means to restrict credit expansion while at the same time stabilizing government securities.² Measures by the Treasury and the Federal Reserve to accomplish these ends were of a varied nature. A brief summary of developments follows.

The practice of "playing the pattern of rates" increased considerably in 1945 and became most prevalent in 1946. It resulted in such a rise in bond prices that market yields on long-term restricted bonds declined to below 1 1/2 per cent. The short-term securities sold were primarily purchased by the Federal Reserve and the bank reserves created gave birth to a larger volume of bank credit expansion. This practice


could have been eliminated by narrowing the spread between the yields on short and long-term securities and permitting short-term rates to rise to a point at which shifts would not have been sufficiently profitable, but the Federal Reserve authorities realized that this would be disadvantageous to the Treasury as well as disturbing to the Government securities market. Attempts were made to solve the problem by other means.¹

In 1946 the wartime preferential discount rate to bankers of 1/2 per cent on discounts secured by short-term government securities was discontinued, but since bank indebtedness was small at that time this had only slight significance. E. A. Goldenweiser says that Federal Reserve policy was essentially static during 1946 with little done to counteract inflationary forces.²

We have previously noted that during 1946 a large volume of government balances was utilized in debt reduction and that although this was a counter-balancing operation some of the debt retired was held by the Federal Reserve and was not replaced, thus diminishing member-bank reserves.

In 1947 the economy was still feeling inflationary pressures. The Treasury concurred with the Federal Reserve in the discontinuance of its 3/8 per cent buying rate on bills; by the end of the year the bill rate had advanced to almost 1 per cent, increasing their attractiveness to the market. Federal Reserve holdings of bills went down to $3 billion. The Treasury also increased rates on certificates offered in exchange for maturities. Average yields on certificates increased from 7/8 per

¹Ibid., pp. 27-28.
cent to slightly over 1 per cent by the end of the year.\(^1\) Again in 1947 the Treasury, this time by the use of surplus cash to retire bank-held securities became the dominant anti-inflationary factor in the economy.\(^2\)

In 1948 the bond support policy became more clear cut as an issue. In December of 1947 the support price of bonds was reduced to par or slightly above. The Federal Reserve during the ensuing year was forced to make large scale purchases. Industrial activity at this time was at high levels but there were still many unsatisfied demands. During this period the impossibility of restraining credit expansion while carrying out a policy of supporting bonds at par was clearly demonstrated. Sales of government bonds by non-bank holders, particularly insurance companies, resulted under the policy of support in the creation of additional bank reserves, the bonds being purchased by the Reserve System.\(^3\) In an effort to combat this inflationary action, the New York discount rate was raised to 1 1/2 per cent and the Secretary of the Treasury let it be known that new certificates to be issued in October would be raised from 1 1/8 to 1 1/4 per cent.\(^4\) Also during 1948 the Board of Governors of the Federal Reserve requested additional authority to raise the reserve requirements of member banks and obtained part of the authority requested on a temporary basis.\(^5\)

\(^1\)Ibid., p. 200.
\(^2\)Board of Governors of the Federal Reserve System, "Reply of the Chairman," p. 29.
\(^3\)Goldenweiser, op. cit., p. 206.
\(^4\)Abbott, op. cit., p. 64.
As previously mentioned, the Treasury was able to effect a reduction of $4.1 billion in the public debt concentrating direct reductions on debt held by the Federal Reserve for the purpose of keeping the commercial banks under constant pressure to replenish their reserves by sales of securities to the Federal Reserve banks thus keeping them in a conservative frame of mind. Once again the Treasury's ability to reduce potentially inflationary debt constituted the most important anti-inflationary factor operating in the economy that year.¹

In 1949 because of the Federal Reserve's policy of selling securities on the open market in sufficient volume to prevent any major changes in the pattern of rates, the total Federal Reserve portfolio declined rapidly. At the same time the forces of inflation in the economy petered out. Prices, production and income turned down and at that same time the decline in the Federal Reserve portfolio was reflected in a corresponding decline in total deposits and currency. The federal surplus, which had done so much to keep inflation in bounds in the earlier period had come to an end. It was apparent that a change in monetary policy was necessary.²

The Federal Open Market Committee issued a statement which said that its activities would in the future be primarily directed towards meeting the needs of the general business and credit situation and that the maintenance of a fixed pattern of rates had the undesirable effect of absorbing reserves from the market at a time when the availability of credit should have been increased. The market interpreted this press release

¹Murphy, op. cit., pp. 232-233.
²Ibid., p. 247.
as an indication that the Federal Reserve would no longer resist a rise in
the market.¹

This attitude of the System was destined to be subjected to a test
in the very near future. In 1950 economic conditions showed a definite
reversal of the 1949 trend. Industrial production and employment advanced,
unemployment diminished, banks resumed expansion of loans and prices were
rising. When war broke out in Korea a spurt of precautionary buying re-
sulted in rising prices and in the further advance of industrial activity.
On August 18, 1950 the Treasury announced that it intended to maintain the
pattern of rates. This sentiment was expressed in spite of the fact that
its refunding operations of late had been successful only because of the
Federal Reserve's taking up the slack in buying. The Federal Reserve au-
thorities on the same day, August 18, announced that they would use every
means at their command, including presumably an increase in rates, to re-
strict credit expansion.²

The conflict between the Federal Reserve and the Treasury con-
tinued until March 4th, 1951 when the Secretary of the Treasury and the
Chairman of the Board of Governors released for publication the following
announcement:

The Treasury and the Federal Reserve System have reached a full accord
with respect to debt-management and monetary policies to be pursued
in furthering their common purpose to assure the successful financing
of the government's requirements and at the same time to minimize mone-
tization of the public debt.³

¹Ibid., pp. 247-248.
³Ibid., p. 107.
At the same time in line with the new policy the Treasury commenced changing its offering policy and announced that it would offer in exchange for bank-restricted 2 1/2 per cent issues which had been saturating the market, a long-term nonmarketable 2 3/4 per cent obligation. On March 5, it was obvious that the Reserve System was withdrawing its support of Treasury obligations, and prices of government securities worked to lower levels. By the middle of the month the prices of all bank-restricted issues had dropped below par. The Treasury announced that the new type of security it was offering would be a 2 3/4 per cent nonmarketable obligation redeemable in twenty-five years and maturing in thirty years. Although these bonds were nonmarketable, holders could optionally exchange them for marketable five year 1 1/2 per cent notes, which they would then be able to sell if in need of cash. The prices at which these notes would sell was not being guaranteed, however. From the fiscal authority's viewpoint, this security had the advantage of nonmarketability and eliminated the possibility, as with redeemable issues, of large and uncertain demands on the Treasury for funds. From the owner's viewpoint, it had the advantage of optional exchange and ready conversion into cash.¹

¹Ibid., pp. 107-108.
The interest rate as a factor in both economic theory and practice has been considerably weakened as a result of the growth of the debt and the drop in the interest rate. The debt has given new importance to the interest rate as an influence on the redistribution of national income, the income of certain groups, and the value of capital assets.\(^1\) Roland Robinson says that interest rates which were once the pet of economic theory in general have fallen in regard; and that the modern significance of the interest rate is primarily as a distributive share. He adds that more important than the interest rate in economic decisions is the availability of credit. Credit restraint may be extremely effective and involves the use of direct and indirect controls, i.e., the rediscount rate, changes in reserve requirements, consumer credit control and stock market regulation. He further states that empirical evidence supports the view that interest rates themselves do not influence investment or savings decisively.\(^2\) Mr. Wallich says that the importance which economists in the past have given to the interest rate as an instrument of monetary control has been exaggerated as proved by our experience of the thirties when reduction of the interest rate to unprecedentedly low levels failed to stimulate investment and restore high levels of economic activity. He remarked that the supposed effect of the interest rate upon the volume of savings and investment is inconclusive.\(^3\) Lawrence Seltzer concludes that in a period of prosperity a mild rise in

---


\(^3\)Wallich, loc. cit., p. 764.
the interest rate would probably do little to restrain expansion and a severe tightening of credit might overshoot the mark and perhaps throw us into a downward spiral.\(^1\) Thus as an anti-cyclical and anti-inflationary device, interest policy appears to be ineffective. We must conclude then that the importance of the interest rate is not in its effectiveness as an instrument of monetary control but in its other effects.

There is no doubt but that low interest rates reduce the charges on the federal debt. Henry Wallich, declares, however, that the amount of interest burden attached to the debt is unquestionably overrated due to the recoupment of part of this payment through taxes, the interest respent by recipients, the non-collection of taxes to cover interest on E bonds and the idle savings taxed away out of income other than from interest.\(^2\) We should also note that the Government's method of stabilizing the interest rate at low levels advanced the inflation which occurred after World War II. It is questionable whether there was not, in effect, an offsetting cost to low interest rates accomplished in this manner. Due to the rise in the price level both the Government and the taxpayer have to pay more for their goods and services. The holders of government securities whose interest the Treasury is supposedly protecting must also suffer a loss of purchasing power as a result of the increase in the price level. It is possible, however, for interest rates to be maintained at low levels through the action of the central bank; this method of maintaining a low interest rate would probably do little to restrain expansion and a severe tightening of credit might overshoot the mark and perhaps throw us into a downward spiral.\(^1\) Thus as an anti-cyclical and anti-inflationary device, interest policy appears to be ineffective. We must conclude then that the importance of the interest rate is not in its effectiveness as an instrument of monetary control but in its other effects.

There is no doubt but that low interest rates reduce the charges on the federal debt. Henry Wallich, declares, however, that the amount of interest burden attached to the debt is unquestionably overrated due to the recoupment of part of this payment through taxes, the interest respent by recipients, the non-collection of taxes to cover interest on E bonds and the idle savings taxed away out of income other than from interest.\(^2\) We should also note that the Government's method of stabilizing the interest rate at low levels advanced the inflation which occurred after World War II. It is questionable whether there was not, in effect, an offsetting cost to low interest rates accomplished in this manner. Due to the rise in the price level both the Government and the taxpayer have to pay more for their goods and services. The holders of government securities whose interest the Treasury is supposedly protecting must also suffer a loss of purchasing power as a result of the increase in the price level. It is possible, however, for interest rates to be maintained at low levels through the action of the central bank; this method of maintaining a low interest rate would probably do little to restrain expansion and a severe tightening of credit might overshoot the mark and perhaps throw us into a downward spiral.\(^1\) Thus as an anti-cyclical and anti-inflationary device, interest policy appears to be ineffective. We must conclude then that the importance of the interest rate is not in its effectiveness as an instrument of monetary control but in its other effects.

---

\(^1\)Lawrence H. Seltzer, "Is a Rise in Interest Rates Desirable or Inevitable?" *American Economic Review*, XXXV (December, 1945), pp. 831-850.

rate need not be as expansionary in its effects as Treasury policy during and after the war.

One telling argument against the maintenance of low rates is that such a policy fails to view interest as an income as well as a cost to society. Although low interest rates may save people as taxpayers, they penalize people as recipients of interest income. Low rates reduce the investment earnings of savings banks and thus cut the interest paid to millions of savers. Low interest rates increase the cost of pension plans which business concerns have set up for millions of employees. Low interest rates mean that those who save to buy annuities for their old age cannot get the incomes they might have earned in the past. Low interest rates adversely affect educational, scientific and charitable organizations whose income is largely derived from investments. The contribution which these organizations make to the high standard of living existing in the country today cannot be measured. Low interest rates increase the cost of insurance to a large segment of our population because of the inability of insurance companies to meet their obligations on decreased returns from investments.\(^1\) If the Government is unprepared to take over the functions performed by these groups, it should give serious consideration to encouraging higher rates as a subsidy of sorts and a fair return to savers.

The effect of the interest rate on government debt and the resultant redistribution of national income is a necessary consideration in any evaluation of interest rates, high or low. John H. Adler says, in his examination of the redistribution of income resulting from interest payments on government debt raised through taxation or borrowing, that the redistribution works towards the benefit of the lower income groups and towards the

---

\(^1\)The Committee on Public Debt Policy, op. cit., pp. 91-92.
disadvantageous of the higher income groups. He also adds that the income distribution after the incidence of taxes and benefits is likely to be more conducive to the maintenance of high-level employment than the distribution before taxes due to the increase in consumer spending resulting from fiscal operations.\(^1\) There is, of course, a negative aspect to this positive conclusion. The equalization of income through the fiscal system entails considerable losses of disposable income to the highest income groups, and especially to corporate entities. These losses may under certain conditions exert a negative effect on the volume of investment, thus counteracting the positive effects of the increased consumer demand caused by the income gains in the lower income brackets. Henry Wallich suggests that in considering the effects of interest rates on national income a low interest rate might be defended on the grounds of social equity.\(^2\)

Another important consideration is the effect of changes in rates on the capital value of assets and their subsequent influence on price. Wallich says that although reevaluation of capital assets which is primarily a result of changes in the interest rate does not enter immediately into national income, it is apt to affect the expenditures of capital gainers or losers. The important consideration here, he says, is how far movements primarily due to interest rates lead to cautious or enthusiastic spending.\(^3\)

The Composition of the Debt and the Maturity Schedule.—One last significant aspect of debt management policy deserves attention and that is the composition of the debt and the maturity schedule. During World War II

\(^1\) Adler, loc. cit., pp. 404-405.


\(^3\) Ibid.
an important principle of debt management policy was formulated, fitting the securities to the needs of the investor. This principle is well founded if only on the grounds that the public debt is nearest to equilibrium when each class of investor holds those securities most fitted to its needs.\(^1\)

The nature of the securities comprising the public debt on December 31, 1949 together with the average interest rate on each class of security is shown in Table 10.

### TABLE 10

**COMPOSITION OF THE INTEREST-BEARING DEBT**

**DECEMBER 31, 1949\(^a\)**

<table>
<thead>
<tr>
<th>Type of Security</th>
<th>Amount (billions of dollars)</th>
<th>Average Interest Rate</th>
<th>Proportion to Total (Per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nonmarketable Securities:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Series E Savings Bonds</td>
<td>33.8</td>
<td>2.90</td>
<td>13</td>
</tr>
<tr>
<td>Other Savings Bonds</td>
<td>22.9</td>
<td>2.53</td>
<td>9</td>
</tr>
<tr>
<td>Savings Notes</td>
<td>7.6</td>
<td>1.36</td>
<td>3</td>
</tr>
<tr>
<td>Special Issues</td>
<td>33.9</td>
<td>2.62</td>
<td>13</td>
</tr>
<tr>
<td>All Other</td>
<td>1.7</td>
<td>1.38</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Nonmarketable Securities:</strong></td>
<td>99.9</td>
<td>2.59</td>
<td>39</td>
</tr>
<tr>
<td><strong>Marketable Securities:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bills</td>
<td>12.3</td>
<td>1.09</td>
<td>5</td>
</tr>
<tr>
<td>Certificates</td>
<td>29.6</td>
<td>1.22</td>
<td>12</td>
</tr>
<tr>
<td>Notes</td>
<td>8.2</td>
<td>1.38</td>
<td>3</td>
</tr>
<tr>
<td>Bk. Eligible due or callable in 10 years</td>
<td>61.0</td>
<td>2.16</td>
<td>20</td>
</tr>
<tr>
<td>Bk. Eligible not due or callable in 10 years</td>
<td>4.3</td>
<td>2.60</td>
<td>2</td>
</tr>
<tr>
<td>Bk. Restricted Bonds</td>
<td>49.6</td>
<td>2.45</td>
<td>19</td>
</tr>
<tr>
<td><strong>Total Marketable Securities:</strong></td>
<td>155.1</td>
<td>1.96</td>
<td>61</td>
</tr>
<tr>
<td><strong>All Securities</strong></td>
<td>255.0</td>
<td>2.22</td>
<td>100</td>
</tr>
</tbody>
</table>

\(^a\)Henry C. Murphy, "Debt Management," ed. Poole, *op. cit.*, p. 172.

\(^1\)Ibid., pp. 169-170.
Public credit instruments differ in their time of maturity; and in general, borrowing is classed as short term, intermediate and long term. Treasury bills and certificates are short-term obligations; and the intermediary security is the Treasury note running from one to five years in maturity. Short-term securities because of their high liquidity are sold in large part to banks; private corporations also buy them in sizable quantities to provide temporary employment for surplus cash retained especially in anticipation of tax payments. The long-term credit instrument is the bond of which the best known, although not the most important, is the non-negotiable Series E individual savings bond. Negotiable coupon bonds of varying maturities constitute the marketable long-term debt. The foregoing does not exhaust the list of securities issued by the Federal government; however, among the others are the special issues designed to settle accounts between the Treasury and its various trust funds, such as Social Security and National Life Insurance.\(^1\)

Nearly 39 per cent of the federal securities outstanding are classified as nonmarketable issues which are chiefly in the form of savings bonds restricted to certain classes of investors. This is in strong contrast to the situation ten years earlier when only 13 per cent of the interest-bearing debt was comprised of nonmarketable securities.\(^2\) The trend toward a greater use of nonnegotiable securities is one of the most significant developments in modern debt management policy and obviously makes easier the Treasury’s job of refunding the debt. It should be noted that a substantial part of the nonmarketable issues are demand obligations of the government. This

---


\(^{2}\)Murphy, "Debt Management," *loc. cit.*, p. 171.
rise in the outstanding volume of nonmarketable demand obligations in a sense makes the Treasury's position precarious, since the amount of cash that could be demanded from it at a moment's notice was thereby increased. The problem of the nonmarketable debt is one of active promotion of new sales of nonmarketable issues that will equal or exceed redemptions.

In November of 1945 Under Secretary of the Treasury, Daniel W. Bell, made a speech which gave an explicit statement of the ways in which different types of debt had been adapted to the needs of investors and the results achieved under that policy. He said:

First of all we have arranged the debt so that each investor class holds securities which are appropriate to it. Over 60 per cent of the securities held by the commercial banks are due or callable in less than five years. On the other hand, insurance companies hold only about 10 per cent of their portfolios in the form of securities due or callable within five years, and 90 per cent in longer categories. Individuals largely hold Series E, F, and G savings bonds, which they may either cash when the need arises or continue to hold at an ascending rate of interest. About half of the holdings of individuals is in the form of Series E bonds, a security designed exclusively for the average investor.

Corporations other than banks and insurance companies hold close to one-third of their Government securities in the form of savings notes—a highly flexible instrument which may be turned in on taxes, redeemed for cash or held for investment at increasing rates of interest. The bulk of the remainder of corporation holdings is in the form of short-term securities, largely certificates of indebtedness.1

In 1946 Secretary of the Treasury Snyder also made one of the few official references to the maturity schedule of the debt and its suitability to the needs of the investing public. He said:

One aspect of public debt management which is frequently discussed has to do with the size of the short-term debt. The distribution of the debt by maturity classes is primarily a function of the distribution of ownership—that is to say, securities are tailored to the needs of the investor classes as much as possible. Thus short-term securities go to the banks and to business organizations. Almost half of bank holdings are due or callable in less than one year. In the case of nonfinancial corporations four-fifths of United States Government

---

security holdings are either presentable on demand or fall due within one year.

In contrast, longer term securities are designed for long-term savings investors, such as insurance companies, savings banks, and individuals. Three-fourths of the Federal securities held by insurance companies and savings banks are not due or callable for more than ten years. In the case of individuals, more than two-thirds of United States securities held are savings bonds, which are designed to avoid the risk of market fluctuations....

Accordingly, this tailoring of securities to meet investors' needs sets the maturity structure almost automatically; and has resulted in a substantial volume of short-term securities.

Table 11 shows as of the end of 1945 and 1950 the maturity schedule of the public marketable issues.

**TABLE 11**

<table>
<thead>
<tr>
<th>Due or First Becoming Callable</th>
<th>December 31, 1945</th>
<th>December 31, 1950</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount</td>
<td>Per cent</td>
</tr>
<tr>
<td>Total</td>
<td>$198,663</td>
<td>100.0</td>
</tr>
<tr>
<td>Within 1 year</td>
<td>70,420</td>
<td>35.3</td>
</tr>
<tr>
<td>1-5 years</td>
<td>35,392</td>
<td>17.8</td>
</tr>
<tr>
<td>5-10 years</td>
<td>33,025</td>
<td>17.0</td>
</tr>
<tr>
<td>10-15 years</td>
<td>17,239</td>
<td>8.6</td>
</tr>
<tr>
<td>15-20 years</td>
<td>17,796</td>
<td>8.9</td>
</tr>
<tr>
<td>Over 20 years</td>
<td>24,781</td>
<td>12.4</td>
</tr>
</tbody>
</table>

of issues outstanding in the five-to-ten year maturity bracket was almost cut in half. The amount of debt with a maturity or call date in excess of ten years fell decidedly, from $59.8 to $43.6 billion; and the debt with a maturity or call date in excess of twenty years disappeared. Thus the average maturity of the marketable debt shortened substantially.

Charles Abbott comments that the Treasury officials fail to do justice to the influence exercised by Treasury offering policy on the maturity schedule of the debt. After the completion of the Eighth War Loan in December of 1945, the Treasury ceased to offer marketable securities of longer than twelve months maturity; and maturing obligations that were not redeemed were refunded into this short-term paper. Mr. Abbott further states that on a number of occasions market conditions would have permitted successful offerings of a maturity longer than twelve months. Thus, he says, the existence of so large a volume of short-term floating debt was a direct result of Treasury policy.¹ The Treasury policy of shortening the maturity schedule lowered the interest charge on the public debt since the interest rate on the debt redeemed was less than that paid on the obligations retired or refunded, however, the short-term debt makes more difficult and expensive the Treasury’s refunding problems.

¹Ibid., p. 45.
SUMMARY AND CONCLUSIONS

The financial activities of the United States Government have evolved from the simple operations of colonial governments to the highly complex functioning of our modern fiscal machinery. The national debt has risen from the modest sum of $75 million in 1790 to the astronomical amount of $279 billion at its peak in 1946.

Colonial governments were of a simple type; and the adjustment of revenues to expenditures was easily made. The Revolutionary War the first large scale common effort for which funds had to be raised by a central body. Because the First Continental Congress lacked adequate tax powers, after the War it found itself unable to meet its financial obligations.

The Constitution of the United States gave the Congress the power to raise revenues to provide for the common welfare. From that point on in our history the finances of the country took on a semblance of order. The Government had the legal power to tax and borrow and spend. Throughout this early period, as now, there was great controversy over the scope of government spending as set forth in the "General Welfare" clause of the Constitution. Alexander Hamilton represented a faction which believed that the Government was empowered to raise monies and spend whatever it deemed necessary to provide for the general welfare of the country. Thomas Jefferson and others believed that the power of the Government to tax was limited to raising revenues for those duties specifically dele-
gated to it in the Constitution.

Except during times of war with one or two exceptions, notably the Louisiana Purchase, government spending during the first seventy-five years of the history of the country was not extensive. In fact, in 1835 and 1836 the public debt was completely paid off and Treasury surplus distributed to the States. Before 1865 the debt did not exceed $130 million.

The early years of the Republic were a period of experimentation in an effort to find satisfactory sources of revenue. The Treasury primarily relied on the tariff, excise taxes and monies from the sale of public lands. Tariff revenues were bountiful during times of peace but not reliable in time of war, and it was apparent in the early nineteenth century that the country had need of a more elastic revenue system. It was not until 1914, however, that the progressive income tax and the corporation tax were adopted and provided the elastic revenue necessary to support increased government spending.

Although sources of funds have increased greatly, government outlays since the Civil War have exceeded the rise in receipts. The causes of the increases in spending are multiple, but the primary source of the indebtedness can be traced to the increased costliness of waging war. In the wake of each great war has been left a huge public debt. 80 per cent of the current debt is directly or indirectly an outgrowth of government spending during World War II. To the cost of wars as a reason for the increase in the growth of the debt must be added interest on the debt, foreign aid, education, housing, social welfare, health and security and a host of other functions. The scope of government activity has grown from that of a minor protective function to include developmental,
social-welfare and economic functions. Although the major portion of government spending represents unavoidable elements, the remainder reflects the changing attitude of the American public towards the function of the State. The Federal Government is taking on an increasing number of activities that were formerly within the domain of the individual, the State or local governments.

An important aspect of the debt is the annual interest charge which must be paid as it falls due. Interest payments have fluctuated widely in keeping with a widely varying debt over the course of the years. In colonial days interest payments averaged about $3 million per year. During the fiscal year 1955 interest payments were $6.4 billion. Interest payments as a percentage of the debt have not increased by as much as the debt due to the decline in the interest rate. In 1867 the average interest rate paid was 6.3 per cent and in 1947 only 2 per cent.

Another measure of the debt is its relation to national income. If the debt or any portion of it is to be repaid, it must be repaid out of current income. Before the Civil War, the national debt never exceeded 15 per cent of the national income; in 1950 the debt equaled the national income. More important than the principal of the debt is the relation of the annual servicing charge to the national income. From .47 per cent of the national income in 1799, interest payments have increased until they were approximately 2.10 per cent of the 1955 national income.

The United States is the only world power which has consistently adhered to a policy of paying down its war debts. This was done after each great war until World War I when complete repayment of the war debt
could not be accomplished because of increased expenditures and reduced revenues occurring during the decade of the depression. The World War II debt was reduced in the postwar years by relatively small amounts; but in 1950 the national debt began to rise again from a postwar low of $252 billion. Because of the increased debt resulting from that war it became doubtful whether the United States would ever again achieve complete debt repayment.

The depression years of the thirties saw a revolution taking place in fiscal policy. The country was suffering a paralysis of economic activity of unparalleled proportions. Unemployment was disastrously high and the production wheels of the country were barely turning in the absence of effective demand. A learned and imaginative economist, John Maynard Keynes, was propounding public spending as the only possible road to recovery. Following Keynes' lead, consciously or otherwise, the United States increased its spending by unprecedented amounts on a program of public works and welfare payments designed not only to relieve the needs of the public but to put into their hands the purchasing power necessary to call forth increased private investment. There were indications that recovery was on the way when the outbreak of war in Europe and the resultant demand for defense goods accelerated the recovery which the New Deal economists had been predicting would be the result of their fiscal policy.

There was considerable opposition to the Government's program of deficit spending. Many believed that public spending was not the ideal means to recovery. The late Henry Simons, learned Professor of Economics and Money and Banking at the University of Chicago, felt that the inflexibility of the price structure accounted for the nation's failure to
revive from the depression, and that investment was low during this period because the prices of the factors of production were not allowed to fluctuate according to the free play of market forces. Many were alarmed at the growth of the debt during the depression years, however, just a few years later the debt was to increase by more than six times its size at the end of the depression.

World War II and the defense program were responsible for increasing the debt by $231 billion. The Treasury of the United States was determined that the cost of financing the war should be kept as low as possible. Enlisting the aid of the central banking authorities, the Treasury embarked upon a program of establishing a pattern of rates for government securities ranging from $3/8 of 1 per cent on Treasury bills to 2 1/2 per cent on long-term bonds and stabilizing the price of these securities through Federal Reserve support of the bond market. The support program meant that Government securities were a favored investment having high liquidity and an assured market. Government spending during the war years swelled the assets of every sector of the economy. The high liquidity which the support program gave to Federal securities was not an inflationary force during the war, merely a potential one, because of the dearth of investment opportunities - the production of the country being primarily devoted to defense goods.

After the war, however, it became clear that pent-up consumer demand plus the sizable store of liquid assets that had been accumulated during the war were creating a highly inflationary situation. The Treasury, however, concerned with continuing to keep the cost of financing the debt low and maintaining the capital value of Government securities outstanding
had no intention of abandoning the wartime pattern of interest rates and the necessary corollary, Federal Reserve bond market support. The Federal Reserve, whose function is the regulation of credit and the money supply of the country in the interest of national economic welfare was a rather unwilling accomplice to the Treasury's devices. It was committed to continued support of the bond market thereby impairing its own ability to function properly. As an illustration, in 1948 in order to keep the price of Government long-term bonds from rising substantially above the support points which had prevailed during 1948, the Federal Reserve engaged in sizable open market operations by the sale of long-term securities from its own portfolio. This would have been all to the good had the forces of inflation continued to be pressing in the economy. But during the first half of 1949 these forces petered out. Prices, production, and incomes turned down, and the decline in the Federal Reserve portfolio was reflected in a roughly corresponding decline in total deposits and currency. The maintenance of a relatively fixed pattern of rates had the undesirable effect of absorbing reserves from the market at a time when the availability of credit should have been increased. The Federal Reserve, realizing the untenable nature of its position, in August 1950 took an independent stand regarding support and pledged itself to meet the needs of commerce, business and agriculture rather than the needs of the Treasury exclusively.

In March of 1951 the Treasury and the Federal Reserve issued a statement known as "The Accord" in which they said that they had reached agreement regarding debt management and monetary policy.

During the war the Treasury formulated a policy of tailoring its securities to meet investor needs based on the principle that the debt is
nearest to equilibrium under these circumstances. As a result the major part of the debt is in short-term securities which create a refunding problem for the Treasury. A more accurate appraisal of the reason why almost one-half of the debt is in short-term instruments is that the Treasury, carrying out its policy of minimizing the interest cost of the debt, continually refunded long and intermediate debt in exchange for short-term debt with lower interest rates. After World War II the Treasury failed to offer any long term securities for sale although there were probably a number of occasions when market conditions would have been appropriate for such offerings.

The United States reduced its debt considerably in the postwar years with excess funds from the final war loan and with surplus budget cash. These reductions were made in bank-held debt which is potentially the most inflationary repository for the debt because of its deposit expansion potential. The reduction accomplished with the surplus budgetary cash occurred during an inflationary period and contributed greatly to anti-inflationary forces.

The national debt of approximately $270 billion, if managed wisely, need not be a threat to the economic welfare of the country. Sound management requires above all else that the policy makers consider what effects their policies will have upon all sectors of the economy.

The public debt may well be a burden, however, it has offsetting advantages. Among these are the expansion of liquid assets which contribute to the maintenance of demand in periods when it is deficient; the contribution of debt growth to necessary supplies of money which would prevent our economy from expanding; and the rise of income and savings
which have gone hand-in-hand with the growth of the debt. If the tax burden is greater as a result of the debt, the capital assets which increase with the debt are also greater.

The problem of a large debt, seems to the writer, to be a problem of an expanding national income out of which the debt and its service charges must eventually be paid. The critics of the debt should devote their time and energies to considering ways and means of fostering an expanding national income.

There is little doubt that should a depression of the proportions of the thirties beset our economy, public spending would be the weapon relied upon to promote recovery. Because of the permanent nature of the price structure inflexibilities to which Henry Simons attributes our failure to recover from the depression, there is little likelihood that the semi-planned economy which had its birth in the depression decade is likely to revert to the truly free market. The die is cast and if the job is a bad one there is nothing to be done but to make the best of it. It is doubtful that private investment would be capable of promoting full employment.

The concern of the modern world is security for itself and its posterity. The public is not willing to trust the unreliable free market process, which has failed dismally on numerous occasions, to ensure its economic welfare.

The Federal Government through its history has learned the lesson of trying as far as possible to finance wars out of current receipts and this is the best possible arrangement. In the future should such a calamity as a world war befall us, even greater taxation would be advisable. Of course, because of the political nature of such action there is little
likelihood that substantial gains will be made in that direction. The increased cost of modern war makes such action partially doomed to failure at the outset. Borrowing during wartime will probably always be necessary. In the opinion of the writer, the wartime program of borrowing was a huge success. Suggestions have been made that the Treasury should have allowed a higher rate of interest on Government securities and this suggestion has definite merit. Although the war was financed successfully at the lowest rate of interest of all time, as surely as war comes, peace follows, at least it has done so in the past, and it is highly unlikely that even though the wartime interest structure is inappropriate for a peacetime economy that the pattern will be changed. When Federal securities constitute such a large part of the portfolios of all sectors of the economy, the Government in its own self interest must of necessity try to maintain the price of its outstanding securities lest their depreciation be considered a breach of faith and further lest the cost of refunding the debt be increased. The argument that low interest rates encourage peacetime inflation is not conclusive because of the demonstrated weakness of the interest rate in decisions to save or invest. If credit is easily obtained and business prospects are good, the interest rate will probably have little effect on decisions to invest as long as the marginal efficiency of capital is high.

The interest rate has more important effects than as an instrument of monetary control. As stated in our thesis, it effects the redistribution of national income significantly, the capital value of assets; and the income of certain groups. On balance, the writer favors the maintenance of low interest rates which are consistent with price stability. I
also believe that the pattern of rates should have been slightly higher during the war years on equitable as well as economic grounds because of the undesirability of adjusting the interest rate to a peacetime economy. Savers are penalized by too low interest rates, and the Treasury should be cognizant of the fact that the taxes necessary to service the debt are an income to some other sector of the economy, a portion of which will be returned to the Government in the form of taxes and a portion of which will reenter the spending stream. The Treasury, I believe, places entirely too much emphasis on the cost of the debt and not enough emphasis on the damage done to the economy by attempting to keep the cost of the debt low. I realize, of course, that this is political meat and that it is necessary that great concern be shown, however, the interests of the entire economy should not be servant to those of the Treasury.

Treasury and debt policy should be integrated with monetary and related policies but the integrity of the Central bank should be maintained. The Federal Reserve should be free to regulate the money supply in accordance with sound central banking principles cooperating with the Treasury insofar as its powers to act are not impaired.

The Treasury policy of distributing the debt more widely through the sale of bonds to individuals is highly desirable and should be expanded if possible to make more people more concerned about public debt management and to remove as much of the debt as possible from the banking system which is a potentially inflationary repository for the debt and makes difficult for the Federal Reserve the job of credit control. The Treasury should continue its offering of nonmarketable debt and should make conscious efforts to lengthen its portfolio to meet the needs
of such investors as the insurance companies which in the past have been the market for as much as one-half of the long-term debt of the country.

As a final observation the writer suggests that the concept of the balanced budget be reconsidered and reevaluated against the merits of a budget of the Swedish type which equilibrates the economy by subsidizing demand through government spending when demand is deficient and retiring debt during periods of inflation. If the "New Economics" is to be practiced in earnest then a necessary corollary of this adoption would, it seems, be an adaptation of "Functional Finance."
BIBLIOGRAPHY

Books


Public Documents


Articles


Seltzer, Lawrence H. "Is a Rise in Interest Rates Desirable or Inevitable?" American Economic Review, XXXV (December, 1945), 831-850.


Unpublished Material

"Reply of the Chairman of the Board of Governors of the Federal Reserve System" to the Questionnaire of the Subcommittee of the Joint Congressional Committee on the Economic Report, November, 1949.