1956

A Study of the Counter-Cyclical Aspects of Total Government Fiscal Policy, 1929-1940.

Ansel Miree Sharp

Louisiana State University and Agricultural & Mechanical College

Follow this and additional works at: https://digitalcommons.lsu.edu/gradschool_disstheses

Recommended Citation

Sharp, Ansel Miree, "A Study of the Counter-Cyclical Aspects of Total Government Fiscal Policy, 1929-1940." (1956). *LSU Historical Dissertations and Theses*. 181.
https://digitalcommons.lsu.edu/gradschool_disstheses/181

This Dissertation is brought to you for free and open access by the Graduate School at LSU Digital Commons. It has been accepted for inclusion in LSU Historical Dissertations and Theses by an authorized administrator of LSU Digital Commons. For more information, please contact gradetd@lsu.edu.

Copyrighted
by
Ansel Miree Sharp
1957

A STUDY OF THE COUNTER-CYCLICAL ASPECTS OF TOTAL
GOVERNMENT FISCAL POLICY, 1929-1940

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The Department of Economics

by
Ansel Miree Sharp
B.S., Howard College, 1949
M.A., University of Virginia, 1951
August, 1956

ACKNOWLEDGEMENT

I wish to express my appreciation for the cooperation and guidance given to me by Professors: W. D. Ross, H. L. McCracken, J. B. Trant, B. F. Sliger, J. W. Chisholm, and V. J. Parenton. I am especially indebted to the Chairman of my Committee, Professor W. D. Ross, for his valuable advice and suggestions.

TABLE OF CONTENTS

	Page
I INTRODUCTION	1
Methodology	2
Limitations	5
Organization	8
II DEVELOPMENT OF COUNTER-CYCLICAL FISCAL THEORY	10
The Theoretical Structure	12
Multiplier and Acceleration Principles	20
Fiscal Policy Theory	30
Appendix to Chapter II	53
III THE COUNTER-CYCLICAL ASPECTS OF FEDERAL, STATE, AND LOCAL FISCAL POLICY, 1929-1940	57
Federal, State, and Local Tax Revenues, 1929, 1940	62
Federal, State, and Local Tax Revenues, 1929-1933	64
Federal, State, and Local Tax Revenues, 1933-1937	74
Federal, State, and Local Tax Revenues, 1937-1940	80
State-Local Borrowing, 1929-1940	85
Federal Borrowing, 1929-1940	93
Federal Grants, 1929-1940	98
Federal, State, and Local Spending, 1929-1940	102
Federal, State, and Local Spending 1929-1933	102
Federal, State, and Local Spending, 1933-1937	115
Federal, State, and Local Spending, 1937-1940	121
Federal, State, and Local Net Spending, 1929-1940	124
Net Effect of Federal-State-Local Fiscal Policy, 1929-1933	127
Net Effect of Federal-State-Local Fiscal Policy, 1933-1937	140
Net Effect of Federal-State-Local Fiscal Policy, 1937-1940	152
IV COUNTER-CYCLICAL ASPECTS OF LOUISIANA FISCAL POLICY, 1929-1940	157
Louisiana State Revenues and Borrowing, 1929-1940	158
Louisiana State Tax Revenues, 1929-1931	160
Louisiana Tax Policy, 1931-1937	163
Louisiana State Tax Revenues, 1937-1940	174

	Page
Louisiana Federal, State, and Local Tax Revenues, 1932 and 1942	176
Governmental Spending In Louisiana, 1929-1940	182
State Spending, 1929-1931	182
Louisiana State Spending in 1931 and 1937, and Louisiana State and Local Highway Spending, 1931-1937	187
Louisiana State Spending, 1937-1940	191
State and Local Spending in Louisiana, 1932 and 1942	196
Net Effect of Louisiana State Fiscal Policy, 1929-1940	200
Net Effect of Louisiana State Fiscal Policy, 1929-1931	201
Net Effect of Louisiana State Fiscal Policy, 1931-1937	210
Net Effect of Louisiana State Fiscal Policy, 1937-1940	218
V CONCLUSIONS AND IMPLICATIONS	225
Conclusions	226
Factors Which Limit the Possibility of a Coordinated Federal, State, and Local Fiscal Program	226
Factors Which Facilitate the Possibility of a Coordinated Federal, State, and Local Fiscal Program	233
Implications	240
Bibliography	317
The General Appendix	253
Vita	327

LIST OF TABLES

Appendix to Chapter II

	Page
I Table A - Model Sequence of National Income for Selected Values of Marginal Propensity to Consume and Acceleration Coefficient	54
II Table B - Forces Influencing Spending	55
III Table C - The Multiplier Principle	56
Chapter III	
IV Table A - Upper and Lower Turning Points in Selected Statistical Series, 1929-1940; Percentage Changes in Selected Statistical Series During Contraction and Expansion, 1929-1940	58
V Table B - Total Federal, State, and Local Tax Revenues, Adjusted Tax Revenues, and Tax Burden, 1929-1933	65
VI Table C - Federal and State Taxes that Tend to Fall on Consumption and Saving, 1929-1933	72
VII Table D - Total Federal, State and Local Tax Revenues, Adjusted Tax Revenues, and Tax Burden, 1933-1937	78
VIII Table E - Total Federal, State, and Local Tax Revenues, Adjusted Tax Revenues, and Tax Burden, 1937-1940	81
IX Table F - Gross State and Local Borrowing, Long Term and Temporary Borrowing	87
X Table G - Percentage of State and Local Bond Sales Bearing Interest Rates Higher than 5 Percent	88
XI Table H - Average Interest Rates Payable on Debt at End of Calendar Year, 1929-1940	89
XII Table I - Federal Interest-Bearing Debt Outstanding, June 30, 1929-1940	94
XIII Table J - Federal Net Debt and Federal Surplus or Deficit	95
XIV Table K - Average Rate of Interest on the Federal Debt, 1929-1940	96
XV Table L - Percentage Distribution of Federal Net Debt by Interest Rates, 1930-1940	97
XVI Table M - Federal Grants to State and Local Governments, 1929-1940	100
XVII Table N - Federal, State, and Local Spending in Selected Fiscal Years	103

	Page
XVIII Table O - Federal, State, and Local Expenditures on Public Works, 1927-1938	107
XIX Table P - Private Consumer and Investment Spending, 1929-1940	109
XX Table Q - State and Local Direct Expenditures for Capital Outlays and Public Welfare in Selected Fiscal Years, 1927-1934	111
XXI Table R - Total State Spending, State Aid to Local Governments, and Federal Grants to State Governments, 1927-1934	114
XXII Table S - Total State and Local Spending, Exclusive of Federal Grants, and Local Spending Exclusive of State Aid to Local Governments, 1933-1938	119
XXIII Table T - Total State Spending Exclusive of Federal Revenue, and State Aid to Local Governments, 1933-1938	120
XXIV Table U - Government Net Spending, 1930-1933	128
XXV Table V - Federal Reserve Bank Credit Outstanding	133
XXVI Table W - Federal, State, and Local Net Spending as a Percent of Total Net Spending, 1930-1933	138
XXVII Table X - The Average Monthly Changes and Yearly Percentage Changes in Government Net Spending, 1933-1937	141
XXVIII Table Y - Deficiency in Private Investment Compared to Government Net Spending, 1933-1937	142
XXIX Table Z - Changes in Certain Monetary Factors, 1933 - 1937	144
XXX Table AA - Net Government Spending at the Federal, State, and Local Levels, 1933-1937	150
XXXI Table BB - Government Net Spending, 1937-1940	153
XXXII Table CC - Total Net Spending, Federal Net Spending, State Net Spending, and Local Net Spending, 1937-1940	155
Chapter IV	
XXXIII Table A - Louisiana State Tax Revenues by Type of Tax, 1928-1931	161
XXXIV Table B - Louisiana State Tax Revenues by Type of Tax, 1931-1937	166
XXXV Table C - Per Capita State Tax Revenues and Tax Burden in the United States and 13 Southern States in 1931 and 1937	173
XXXVI Table D - Federal, State, and Local Tax Revenues in Louisiana and All States in 1932 and 1942	178

Page vii lacking in number only.

UNIVERSITY MICROFILMS

	Page
XXXVII Table E - State Tax Collections as a Percentage of Total State-Local Tax Collections, 1932 and 1942	180
XXXVIII Table F - Total State Spending in the United States and 13 Southern States in 1929 and 1931	184
XXXIX Table G - Total State Aid to Local Governments in the United States and 13 Southern States, 1929-1940	186
XL Table H - Louisiana State and Local Highway Expenditures, 1929-1940	188
XLI Table I - Total State Spending in the United States and 13 Southern States in 1931 and 1937	190
XLII Table J - Total State Spending and State Aid Spending in the United States and 13 Southern States, 1937-1938	193
XLIII Table K - Total State Spending Expressed as a Percentage of Income Payments in the United States and 13 Southern States, 1937-1940	195
XLIV Table L - Total State Spending as a Percentage of Total State-Local Spending in the United States and 13 Southern States, 1932 and 1942	197
XLV Table M - Total Expenditures, Capital Expenditures and Operational Expenditures for All States and Louisiana, 1932 and 1942	198
XLVI Table N - Louisiana State Net Spending, Highway Spending and Net Debt, 1929 and 1931	202
XLVII Table O - Absolute and Percent Changes in State Net Spending Compared to Absolute and Percent Changes in Selected Economic Variables Between 1929 and 1931	205
XLVIII Table P - Percent Change in Selected Economic Variables in the United States and 13 Southern States, 1929-1933	213
XLIX Table Q - Louisiana Economic Variables, 1933-1937	215
L Table R - Louisiana State Net Spending Compared to Selected Economic Variables, 1937-1940	219
LI Table S - Absolute and Percent Changes in State Net Spending, Income Payments, and Bank Deposits in the United States and 13 Southern States Between 1937 and 1938	221
LII Table T - Southern States Which had 1938 Level of Net Spending in Excess of Six Million Dollars	222

The General Appendix

LIIII	Table I - Total Net Income-Increasing Expenditures of All Government Units by Months, 1929-1939	Page 254
LIV	Table II - Net Income-Increasing Expenditure of State and Local Governments	255
LV	Table III - Net Income-Increasing Expenditure of the Federal Government	256
LVI	Table IV - Total Government Net Spending Compared with Selected Economic Variables, 1929-1940	257
LVII	Table V - Total Net Government Spending, Federal Net Spending, State Net Spending, and Local Net Spending, 1929-1940	263
LVIII	Table VI - Changes in State Revenues and State Expenditures of 13 Southern States During Cyclical Fluctuations of 1929-1938	266
LIX	Table VII - Changes in Selected Economic Variables in All States and 13 Southern States in Selected Years, 1929-1940	268
LX	Table VIII - Percentage Changes in Selected Economic Variables in All States and 13 Southern States in Selected Years, 1929-1938	274
LXI	Table IX - Changes in Sales, Number of Employees, and Pay Roll at the Retail Level, in All States and 13 Southern States, 1929, 1933, 1935, and 1939	279
LXII	Table X - Gross Debt and Net Debt Outstanding in All States and 13 Southern States, 1929-1940	282
LXIII	Table XI - Federal, State, and Local Total Revenues, Tax Revenues, Inter-government Revenues, and Non-Tax Revenues, 1929-1940	284
LXIX	Table XII - Federal and State Tax Sources, 1929-1940	287
LXX	Table XIII - Federal and State Taxes that Tend to Fall on Consumption and Saving, 1929-1940	290
LXXI	Table XIV - Local Revenues, 1927-1940	293
LXXII	Table XV - State Expenditures in Selected Years, 1927-1940	294
LXXIII	Table XVI - Local Spending in Selected Years, 1927-1940	295
LXXIV	Table XVII - State and Local Expenditures in Selected Years, 1927-1940	297
LXXV	Table XVIII - Federal Expenditures, 1929-1940	299
LXXVI	Table XIX - Louisiana State Expenditures and Debt Redemption, 1928-1940	300
LXXVII	Table XX - Federal Interest-Bearing Debt Outstanding, June 30, 1929-1940	303

	Page
LXXVIII Table XXI - Louisiana State Revenue and Borrowing in Selected Years, 1929-1940	304
LXXIX Table XXIII - Louisiana Tax Revenue by Type of Tax, 1928-1940	306
LXXX Table XXIII - Per Capita Tax Revenue and Tax Burden in All States and 13 Southern States, 1929-1940	308
LXXXI Table XXIV - State and Local Total Tax Reve- nues, Property Tax Revenues, and Aid Received from Other Governments in All States and 13 Southern States, 1932 and 1942	310
LXXXII State and Local Total Expenditures, Operation Expenditures, Capital Expenditures, and Interest Expenditures in All States and 13 Southern States in 1932 and 1942	312
LXXXIII Table XXVI - State and Local Gross Debt, Per Capita Gross Debt and the Debt Burden in All States and 13 Southern States, 1932 and 1942	314

ABSTRACT

The task of this Study is to determine the feasibility of coordinating state and local fiscal policy with federal fiscal policy in order to stabilize employment at high levels without inflation. The method used is the income approach - the study of government fiscal policy in terms of income and employment, and the period selected for study is 1929-1940.

There are serious limitations to a coordinated federal, state, and local fiscal program for economic stabilization. These limitations are: (1) the bias of state and local tax structures in favor of taxing consumption, and the inflexibility of state and local tax structures; (2) legal, institutional and market difficulties experienced by state and local governments in obtaining credit; (3) the inability of state and local governments to stabilize capital expenditures; (4) the overall failure of total government net spending to be properly timed, coordinated, and of a sufficient magnitude to replace the deficiency in private spending.

A long-run vision will envisage progress in overcoming many of the difficulties of state and local governments; however, the immediate emphasis of this Study is on the encouraging findings that would seem to verify the feasibility of a coordinated fiscal program. These encouraging factors are: (1) Social

and economic conditions fostered a higher level of federal-state spending, reflecting a growing sense of responsibility for economic stabilization. (2) State-local tax and spending structures have become more centralized, with state taxes and spending a larger ratio of the total. States are in a better position to pursue a counter-cyclical fiscal policy than local governments. States have more and better administered tax sources, better borrowing facilities, and a more flexible, dispersed spending program than local governments. (3) Federal grants and federal loans to state and local governments offer a means by which federal, state, and local fiscal policy can be coordinated. During depressionary times, federal grants may be increased. During inflationary periods, federal grants may be decreased. Federal agencies could buy state and local issues when private credit is unavailable, or when available only at abnormally high prices, and sell them when the market for them has improved. (4) State aid to local governments offers a way by which state-local fiscal policy may be coordinated. When local units decrease spending as a result of loss of revenues during a depression, state aid could be increased; during inflationary periods, state aid could be decreased. State aid could be in the form of buying or guaranteeing the sale of local securities as well as direct grants and shared receipts. (5) States play a greater role in economic stabilization than is

usually realized. State spending increased throughout the period, and increased at faster rates than state taxes until 1935. The net effect of state fiscal policy was to add to the income flow in every fiscal year except 1937. (6) Government net spending was counter-cyclical in its effect in many instances. Government net spending was income-maintaining during the 1929-1933 contraction and net spending probably played an important role in the recovery of economic forces.

The logic of an ideal counter-cyclical fiscal policy may imply that economic security is desirable at all costs - even to the giving up of present economic institutions. This need not be the case. Instead, realistically viewed, a coordinated fiscal policy for economic stabilization may be an alternative to a socialized economic system. Actually, a coordinated fiscal program at the federal, state, and local levels is desirable and feasible without basically altering fiscal structures and fiscal responsibilities.

Chapter I

INTRODUCTION

The purpose of this thesis is to investigate the counter-cyclical aspects of federal-state-local fiscal policy during the period of 1929-1940, and to consider the implications of this analysis as to the feasibility of coordinating counter-cyclical fiscal policy at the federal-state-local levels. There appears to be a consensus among economists in the United States today that state and local fiscal policies should be coordinated with federal fiscal policy in order to meet effectively and adequately the vital problem of stabilizing national income and employment at high levels, without inflation.¹ The opinion among economists is less definite concerning the positive nature of state-local fiscal policy in stimulating employment and controlling inflation.² The task of this investigation is to test the idea that fiscal policy should be coordinated at federal, state and local levels, and to examine

¹Alvin H. Hansen and Harvey S. Perloff, State and Local Finance in the National Economy (New York: W. W. Norton and Co., Inc., 1944), p. 194; Gerhard Colm, "Fiscal Policy and the Federal Budget," Income Stabilization For a Developing Democracy, ed., Max F. Millikan (New Haven: Yale University Press, 1953, p. 226; John F. Due, Government Finance (Homewood, Illinois: Richard D. Irwin, Inc., 1954, P. 547.

²Hansen and Perloff, loc. cit.; Clarence Heer, "Stabilizing State and Local Finance," Problems in Anti-Recession Policy (New York: Committee for Economic Development, 1954), p. 134; Due, loc. cit.

more closely the role which state and local governments may be expected to play. The latter is attempted in this Study through a case study of the fiscal policies of the State of Louisiana during a period of depressed business conditions. The economic antecedents of the state spending program which was conducted in Louisiana during this period are difficult to determine. This was the period of the Huey Long "Share-the-Wealth Program" from which the federal New Deal may even have taken some ideas.

Methodology:

The central problem of this work is that of studying the effects of fiscal policy on total spending.³ By focusing attention on total spending, fiscal policy can be evaluated in terms of national income and employment levels. For example, the primary consideration of a bonus payment to veterans will not be its social and political desirability or undesirability, but rather, the influence of bonus payments on total spending with the consequential results on income and prices. Such an analysis of fiscal policy has the advantage of isolating the

³There are many modern treatises that seem to take this approach. For example, see Harold M. Somers, Public Finance and National Income (Philadelphia: The Blakiston Co., 1949), pp. 485-527; Richard W. Lindholm, Introduction to Fiscal Policy (New York: Pitman Publishing Corp., 1948), pp. 34-48; A. P. Lerner, Economics of Employment (New York: McGraw-Hill Book Co., Inc., 1951), pp. 122-137.

strategic economic factors involved in stabilizing policies.

In this Study a tax is not viewed primarily in its traditional sense as having the essential purpose of financing needed expenditures. Instead, tax revenues and changes in tax revenues are considered as having the primary function of reducing consumer spending and/or investment spending.⁴ As a consequence, the economic effects of tax revenue sources and changes are judged in accordance to their relative impact on consumption and investment.

Similarly, government spending is viewed as adding to the spending stream. Services which government spending provides are given secondary attention, the main consideration being whether or not government spending is performing the primary task of stabilizing income at high levels.

Government borrowing and debt repayment offer some real difficulties when analyzed essentially in terms of their impact on total spending. To the extent that government borrowing withdraws money from the spending stream, and debt repayment replenishes the spending stream, government borrowing and debt

⁴This adoption of Lerner's functional finance concepts does not necessarily mean that I adhere completely to these concepts; however, his ideas are extremely useful in an analysis such as that attempted in this study.

repayment may have an impact on total spending similar to that of government taxing and government spending. On the other hand, to the extent that government borrowing taps funds outside the spending stream, and debt repayment adds to funds outside the spending stream, borrowing and debt repayment will have no appreciable influence on total spending.⁵

Government borrowing and debt repayment may influence total spending indirectly through their influence on the rate of interest. Ceteris paribus, an increase in government borrowing will increase the demand for loanable funds and, therefore, increase the rate of interest. Debt repayment, by increasing the supply of loanable funds, tends to lower the rate of interest. However, even this influence of government borrowing and debt repayment may not take place in a society where the supply of loanable funds can be changed by the money creating activities of banks. For example, an increase in demand for loanable funds by government agencies may be met by the banking system's creating new funds in the form of demand deposits. Also, government debt repayments may simply increase hoarded funds without increasing the supply of loanable funds.

⁵It is generally considered that taxes differ from borrowing as revenue sources in two important ways: borrowing is more likely to tap relatively idle funds, and borrowing does not drastically reduce the liquidity positions of the lenders. See, Mary Jean Bowman and George Leland Bach, Economic Analysis and Public Policy (New York: Prentice-Hall, Inc., 1949), pp. 775-776.

Therefore, the rate of interest may be unaffected.

Of even greater importance is the fact that government borrowing indicates deficit spending which is expansionary while debt repayment indicates government surpluses which are contractionary. When government spending exceeds tax revenues, borrowing is usually necessary to finance this deficit. This deficit indicates the net addition to the income stream. When tax revenues exceed government spending, a surplus is incurred. This surplus may be used to repay the debt or be kept in reserve. In either case, the surplus shows the net subtraction from the income stream.

An attempt is made to establish certain criteria for judging the relative impact of tax revenues and government spending on the flow of consumer and investment spending. Methods are devised for measuring the "net effect" of government fiscal policy, i.e., the difference between what is taken out of the income stream in the form of tax revenues and what is put into the income stream in the form of spending.

Limitations:

There are obvious limitations inherent in the method of approach employed in this study. There are also limitations in the subject under study - fiscal policy at the federal

level and especially at the state-local level.⁶ This approach intentionally ignores many important problems of public finance. Equity considerations, administrative problems, jurisdictional problems, over-lapping tax sources, individual expenditure programs, etc.,⁷ are given only secondary attention. When these problems are analyzed, they are analyzed in terms of their counter-cyclical effects.

The limitations of a counter-cyclical policy at state-local levels are inherent in the nature of the services which state and local governments supply, the character of their tax revenue sources, the credit which is available to them, Many institutional and political factors limit the possibilities of

⁶There are limitations to a positive fiscal policy at the federal level; for example, unemployment may result because of monopolistic restraints, maladjustments in prices and costs, etc. In these cases, increased government spending would not get to the root of the problem, since unemployment was not the result of inadequate spending. See Arthur Smithies, "Federal Budgeting and Fiscal Policy," A Survey of Contemporary Economics ed., Howard S. Ellis (Philadelphia: Blakeston Co., 1949), pp. 176-179.

⁷Excellent discussions of these problems may be found in most modern treatises on Public Finance. See John F. Due, Government Finance, pp. 405-412; Harold M. Groves, Financing Government, (3rd Edition; New York: Henry Holt and Co., 1950), pp. 435-439.

state-local fiscal policy.⁸ Most state and local expenditures cannot be subjected to the flexibility that a counter-cyclical fiscal policy may dictate; for example, education, welfare, protection, and similar services do not depend on the ups and downs in business conditions but rather on the number of the people in the community and the quality of service desired. The tax and credit sources of state and local government are even more inflexible than state and local expenditures. Unlike the federal government, these governmental units do not have the power to print money or the power to use, at their discretion, the credit of the Federal Reserve Banking System; therefore, state and local units cannot pursue deficit spending when and as desired. Also, state and local governmental units rely on tax sources such as sales, excise, and property taxes that are relatively insensitive to cyclical changes and have a relatively deflationary bias. Besides these limitations, probably the most serious obstacles to a rational fiscal policy at the state-local level are the institutional factors such as statutory limitations on debts, uninformed political leaders, deep-seated traditional beliefs concerning the autonomy of

⁸George W. Mitchell, Oscar F. Litterer, and Evsey D. Dormar, "State and Local Finance," Public Finance and Full Employment, Postwar Economic Studies, No. 3 (Washington: Board of Governors of the Federal Reserve System, 1945), p. 123; Hansen and Perloff, State and Local Finance in the National Economy, pp. 194-220

the different levels of government, and inter-governmental competition for tax sources. The magnitude of these problems does not necessarily rule out the possibility of an integrated federal-state-local fiscal policy. However, it does suggest the difficulties of the task.

There is the further limitation that the state will have a relatively insignificant impact on the total flow of spending. Also, the fiscal policies of one state may have only a minimum influence on income and employment within its own boundaries. The economic effects of borrowing and spending by states will not be limited to their local economies.⁹ The income generating effect of spending transcends state boundaries. Similarly, state borrowing typically takes place by the tapping of loanable funds both inside and outside the given state. To the extent that the latter occurs, borrowing will have no restricting influence on local spending within the state. Clearly the national and the local importance of fiscal policy at the state level will depend in part upon the extent to which such action is concerted.

Organization:

The organization of this thesis is as follows: Chapter II discusses the development of counter-cyclical fiscal theory,

⁹B. U. Ratchford, American State Debts (Durham, North Carolina: Duke University Press, 1941), pp. 547-549.

and presents a theoretical structure which forms the basis for the analysis which follows. Chapter III presents an analysis of the counter-cyclical aspects of federal, state and local fiscal policy during 1929-1940, and Chapter IV presents a similar analysis of Louisiana's tax, expenditure, and debt policies during the same period. The fifth and last Chapter presents the implications and conclusions of the Study.

· Chapter II

DEVELOPMENT OF COUNTER-CYCLICAL FISCAL THEORY

The salient characteristic concerning the development of economic knowledge is the dynamic and realistic quality of economic knowledge. Economic theories and the development of theoretical structures have not been conceived in a vacuum, but rather, in the midst of the living economic organism with its mental and physical depressions and apprehensions. As Wesley C. Mitchell appropriately phrased it, "Economic theory has developed out of an intellectual response to the problems of the day."¹ Adam Smith's propaganda tract refuting mercantilistic doctrines came at a time when mercantilism was already in the process of decay.² The premise may be advanced that the development of economic thought received greater impetus from David Ricardo than from Thomas Malthus, not because Ricardo was more profound, or possessed with a deeper insight into economic variables; time has shown, perhaps, the opposite to be true. Instead, Ricardo's dominance in economic thought over Malthus is due to Ricardo's theories appealing to the rising capitalistic class - a class that found a

¹Wesley C. Mitchell, Lecture Notes on Types of Economic Theory (New York: Augustus M. Kelley, 1949), p. 3.

²Loc. cit.

theoretical justification for its "struggle for power."³

A similar view concerning the development of economic theory and economic policy is held by John H. Williams. According to Williams, economic theory is a "rationalization" of experience: "There is an inevitable human tendency to rationalize experience, and as events have unfolded over the past decade there has been much shifting of positions as to theories and policies."⁴ It is accepted without question that events do shape man's thoughts, but man's theories and ideas may be just as instrumental in shaping and influencing social and economic events. The social events which give birth to the social problem, and the intellectual response to the problem go hand and hand. One does not precede the other - both the theory, which attempts to explain the social event, and the event itself evolve out of and within the same social process. Therefore, it is not so much a "rationalization" that brings forth new theories and policies; instead, it is an intellectual response to social reality that causes old theories to be changed and replaced by new theories. As Keynes so clearly

³Ibid., pp. 117-183.

⁴John H. Williams, "Deficit Spending," Readings in Business Cycle Theory, ed., American Economic Association (Philadelphia: The Blakeston Co., 1944), p. 272.

understood: "Practical men, who believe themselves to be quite exempt from any intellectual influences are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back."⁵

This Chapter examines the intellectual responses to economic conditions in the thirties, and the ensuing theories of fiscal policy which developed. However, the primary purpose of the Chapter is to construct a theoretical structure within which fiscal theory may be discussed, and fiscal policies may be analyzed.

The Theoretical Structure:⁶

The social climate and the economic conditions of unemployment of the thirties were a challenge to the development of a new philosophy of fiscal policy - a philosophy that would marshall the forces of government spending, taxation, and borrowing against the problem of unemployment. This challenge was met. In the political arena, New Deal legislation paved the way for concerted action. In the field of ideas, economic

⁵John M. Keynes, The General Theory of Employment, Interest, and Money (New York: Harcourt, Brace and Co., 1937), p. 383. (In the future this reference will be referred to as Keynes, The General Theory).

⁶See appendix to this Chapter for outline of the theoretical structure.

theorists such as Keynes, R. F. Kahn, J. M. Clark, A. H. Hansen, and W. C. Mitchell, devoted their mental energies to the task of developing concepts and tools that would make fiscal policies more effective in solving the economic and social problems of unemployment. It takes a well-knit theory, a structure to give a new philosophy lasting permanence. Keynes, in his classic treatise The General Theory of Employment, Interest and Money provided this theoretical framework.⁷ Therefore, it is appropriate to begin the discussion of current fiscal theory with a brief discussion of this systematic framework within which fiscal "tools of analysis" have developed. The following theoretical structure is, however, a synthesis of Keynesian and other concepts.

According to this theory, the level of income is a function of total spending. Thus, when total spending increases, income increases, and when total spending decreases, income decreases. Total spending represents what producers receive in the form of consumer and investment spending. Income represents what producers pay out in the form of wages, interest, rent, and profits. Therefore, when producers receive in the form of consumer and investment spending more than they pay out in the form of wages, interest, rent, and profits, production will

⁷John F. Due, Government Finance, An Economic Analysis, p. 471.

tend to expand, and along with it income and prices will rise. On the other hand, when producers receive, in the form of consumer and investment spending, less than they pay out in the form of wages, interest, rent, and profits, production, income and prices will tend to decline. It may be concluded, then, that income fluctuates until total spending equals the cost of producing the national output.⁸

The level of income in society is not only a function of the levels of consumer plus investment spending, but also a function of the distribution of consumer and investment spending. A situation may arise in which either consumer or investment spending is inadequate and yet total spending is at a sufficient level. In this case, an undesirable tendency may develop, not because there is not enough spending, but because there are not the right proportions of consumer and investment spending. Two types of problems may arise. An inadequate ratio of investment spending may seriously impede the rate of economic progress. An inadequate ratio of consumer

⁸This is just another way of saying that income will fluctuate until intended saving equals intended investment. See Paul A. Samuelson, Economics, An Introductory Analysis (New York: McGraw-Hill Book Co., Inc., 1951), p. 276. Also see, Alvin Hansen's comment showing how the critics of Keynes' confused the equality of saving and investment with their equality at equilibrium: A Guide to Keynes (New York: McGraw-Hill Book Co., Inc., 1953), p. 59.

spending may create a problem of over-investment. Thomas Malthus was one of the first economists to clearly visualize this problem. Despite its importance, the problem of the distribution of spending is still often disregarded.⁹

Consumer spending depends on current and prospective incomes and prices, and on consumers' tastes and preferences, which are influenced by the supply of money, government spending and taxing policies, investment spending, and general economic conditions. The consumption function is the relation between income and consumption, and the marginal propensity to consume, which shows what will be spent out of any change in income, may be derived from it.¹⁰

Investment spending may be divided into replacement investment, induced investment, and autonomous investment.

⁹Harlan L. McCracken, Value Theory and Business Cycle (Binghamton, New York: Vail-Ballou Press, Inc., 1933), pp. 137-141.

¹⁰Keynes made two assumptions concerning the consumption function that have been subject to wide debate. One, the position of the function is fairly stable, and two, the slope of the curve is such that as income increases, consumption increases less than the increase in income. Sometimes Keynes made a third assumption - as income increases, the percentage consumed decreases. See Keynes, The General Theory, pp. 96-97. See the following criticisms of Keynes' assumptions concerning the consumption function: A. F. Burns, The Frontiers of Economic Knowledge (Princeton: Princeton University Press, 1954), p. 16; J. A. Schumpeter, Capitalism, Socialism and Democracy (New York: Harpers, 1942), pp. 394-395; also, Hansen's rationalization of Keynes' position in A Guide to Keynes, pp. 71-81.

Replacement investment will depend on the current consumption level;¹¹ induced investment will depend on the change in consumption,¹² and autonomous investment will depend on innovations and public investment.¹³ The inducement to invest is a function of the marginal efficiency of capital (rate of discount which equates the prospective net income to the supply price of the asset) and the rate of interest. The net profits "Expected" from buying a new capital asset depends on the existing supply of similar assets, prospective costs and prices, prospective consumer spending, the availability and cost of money, government spending and taxing policies, and general economic conditions in the present and expected in the future. The rate of interest, the other factor determining the inducement to invest, is the price paid for loanable funds, and like any price will be determined by all of the forces behind the demand for and the supply of loanable

¹¹Alvin H. Hansen, Fiscal Policy and Business Cycles (New York: W. W. Norton and Co., Inc., 1941), pp. 274-275; David McCord Wright, Capitalism (New York: McGraw-Hill Book Co., Inc., 1951), pp. 137-141.

¹²Wright, loc. cit.

¹³James A. Estey, Business Cycles (3rd Edition; New York: Prentice Hall, 1941), p. 279.

funds.¹⁴ The forces that may be said to be operating on the demand side are profit expectations from investing, the public's desires and expectations concerning holding assets in the form of cash, money destroying activities of the monetary system, and borrowing policies of the government. The forces operating behind the supply of loanable money are preferences of future consumption over current consumption, the public's desires and expectations concerning holding assets in a non-liquid form, the money creating activities of the monetary system, and the lending and debt repayment policies of the government.

A new capital asset is preferred to an old capital asset when it is cheaper to buy a new capital asset; that is, when the marginal efficiency of capital is greater than the rate of interest. When this is the case, the value or cost of the old asset, which is found by discounting prospective net yields by the rate of interest, is greater than the supply price or replacement cost of a new capital asset, which

¹⁴The following is an attempt to synthesize the liquidity preference theory of the rate with the loanable funds theory. See A. P. Lerner, "Alternative Formulations of the Theory of Interest," The New Economics, ed., Seymour E. Harris (New York: Alfred A. Knopf, 1950), pp. 634-654; Hansen, A Guide to Keynes, pp. 140-153; D. H. Robertson, "What Has Happened to the Rate of Interest," Utility and All That (New York: The MacMillan Co., 1952), pp. 83-96.

is found by capitalizing future net yields by the marginal efficiency of capital. Under these conditions, new capital assets would be forthcoming as new assets can be bought for less than the cost of existing capital assets. However, as the supply of new capital assets increases, the cost of these assets will increase and the prospective net return from selling the output of the new asset will decrease; new capital assets begin to compete with each other, and bid up the costs of producing the asset and lower the prices of the products of the asset. The rate of return over cost (marginal efficiency of capital) decreases as the supply of new capital assets increases. At the same time, certain forces in the market cause the value of old assets to fall. The building of new capital assets increases the demand for loanable funds, and thereby the rate of interest is increased.¹⁵ Thus, with the value or cost of new capital assets rising (marginal efficiency of capital falling) and the value or cost of old capital assets falling (rate of interest rising), a point is reached when it is no longer rational to buy new capital assets. It may be concluded that the the volume of investments will increase up to the point where the marginal efficiency of capital equals the rate of interest.¹⁶

¹⁵Unless there is an increase in the supply of money.

¹⁶Keynes, The General Theory, pp. 136-137.

Once the holder of wealth decides not to buy new capital assets, he has two remaining alternatives. He may hold his assets in the most liquid form, cash, and/or hold his assets in the next most liquid form, debt. Whether he prefers cash over debts depends on the future rate of interest. If the future rate of interest is expected to rise, cash will be preferred because: a) the price for securities will be lower in the future; b) the current cost of holding cash is low relative to anticipations. As Keynes lucidly states, the holders of wealth are always in the process of weighing alternatives, and if real capital assets are to be preferred to debts and cash, then the price of these assets will shift until, "having regard to their prospective yields and account being taken of all those elements of doubt and uncertainty,...which affect the mind of the investor, they offer an equal apparent advantage to the marginal investor."¹⁷

Consumer spending and investment spending are not only important per se in determining the level of income, but also they are important because they mutually influence each other via the multiplier principle and the acceleration principle. The multiplier principle shows investment spending stimulating

¹⁷J. M. Keynes, "The General Theory," in, The New Economics, ed., Seymour E. Harris, p. 188.

consumer spending and respending.¹⁸ The acceleration principle shows changes in consumer spending inducing investment spending. The marginal propensity to consume is a strategic factor both in determining the "multiplier effect" of primary investment and of investment induced by consumption; the amount of extra consumer spending arising out of a change in income is determined by the marginal propensity to consume.

Multiplier and Acceleration Principles:

The development and refinement of the multiplier and acceleration principles and their interaction have been extremely useful in explaining the income creating activities of government spending. As Hansen states, the multiplier principle, that is the relation between investment spending and income, had been recognized before in business cycle literature, but it had been presented in some vague form - typically a "statement of tendency."¹⁹ During the Great Depression, and since, intellectual energies have been channeled toward developing a more systematic understanding of these concepts.

R. F. Kahn is given credit for first presenting the

¹⁸The multiplier principle is usually stated in this way; however, the multiplier principle may apply to changes in consumer spending as well as to changes in investment spending. See Hansen's, A Guide to Keynes, p. 90.

¹⁹Loc. cit.

multiplier concept in his article in the Economic Journal in June, 1931;²⁰ indeed, Hansen states that Kahn's article on the multiplier "is one of the great landmarks of economic analysis."²¹ J. B. Clark worked out the multiplier notion at about the same time, but Clark's concern with the multiplier was in explaining "the expansion phase of a normal business cycle, and had nothing to do with public stimulating spending."²² Keynes followed the lead of Kahn and made vital use of the multiplier concept in manifesting the importance of investment spending. Actually, Kahn's multiplier is an "employment" multiplier, and Keynes' multiplier is an investment multiplier. Keynes noted the difference between the two multipliers and concluded that there is no reason to think that the two multipliers will be equal to each other.²³ According to Hansen, however, the two multipliers are, for all general

²⁰R. F. Kahn, "The Relation of Home Investment to Unemployment," The Economic Journal, June, 1931, pp. 173-198.

²¹Hansen, A Guide to Keynes, p. 88.

²²J. M. Clark, "An Appraisal of the Workability of Compensatory Devices," Readings in Business Cycle Theory, ed., American Economic Association (Philadelphia: The Blakeston Co., 1944), pp. 300-301.

²³Keynes, The General Theory, p. 115.

purposes, the same.²⁴

The acceleration principle has been developed and refined by J. M. Clark,²⁵ Simon Kuznets,²⁶ A. C. Pigou,²⁷ and R. F. Harrod.²⁸ The name of Keynes is conspicuous in its absence from this list. However, Harry Williams, Jr., in a paper presented before the Southwestern Social Science Association may have solved the mystery of why Keynes did not discuss the acceleration principle by suggesting that Keynes purposely ignored the acceleration effect "in order to draw attention to the fact that it was investment and not consumption that was so necessary to make the capitalistic mare go."²⁹ It is Hansen who developed the concept

²⁴The employment multiplier shows how many times a change in investments must be multiplied to get a given total change in employment, while the investment multiplier shows how many times a change in investments must be multiplied to get a given change in total income. See Hansen, A Guide to Keynes, p. 87.

²⁵J. M. Clark, Economics of Overhead Costs (Chicago: The University of Chicago Press, 1923), pp. 389-403.

²⁶Simon Kuznets, "Relation Between Capital Goods and Finished Products in the Business Cycle," Economic Essays in Honor of Wesley Clair Mitchell (New York: Columbia University Press, 1935), pp. 209-267.

²⁷A. C. Pigou, Industrial Fluctuations (2nd Edition; London: MacMillan and Co., 1929), pp. 107-113.

²⁸R. F. Harrod, The Trade Cycle (Oxford: The Clarendon Press, 1936), pp. 53-106.

²⁹Harry Williams, Jr., "Twenty Years of General Theory," Paper presented before the Southwestern Social Science Association, Dallas, Texas, April, 1955. (unpublished).

of the "leverage coefficient," which attempts to show the interaction of the multiplier and the accelerator.³⁰ Also, Samuelson demonstrated the ramifications of this interaction between the multiplier and accelerator in his oft-quoted article published in 1939 in The Review of Economic Statistics.³¹

The key to an understanding of the investment multiplier lies in : a) understanding that one person's expenditures are another person's income, and b) part of income received may be taken out of the income stream. When public expenditures are increased, there will be not only a primary increase in income, but also a secondary increase in income;³² the recipients of the initial public spending will increase their spending for goods and services, thereby, creating income for someone else. Thus, a chain of spending and respending is started throughout

³⁰Alvin H. Hansen, Fiscal Policy and Business Cycles, p. 264.

³¹Paul A. Samuelson, "Interaction Between the Multiplier Analysis and the Principle of Acceleration," The Review of Economic Statistics, XXI, February, 1939, 75.

³²Secondary increases in income will not occur if the marginal propensity to consume is zero. See appendix to this Chapter, Case V.

the economic system. The total income eventually created and the tapering off of this chain of responding depend on the part of the income that is held outside of the income stream.³³

The part of the increment of income that is held outside the income stream depends on the marginal propensity to consume, since it is the marginal propensity to consume which determines the part of the increased income that will be consumed. The larger the marginal propensity to consume, the larger the secondary increases in income will be and the smaller the leakages from the income stream. On the other hand, the smaller the marginal propensity to consume, the smaller will be the secondary increases in income and the larger the leakages from the income stream.³⁴

³³Some important instances when part of the income received is being held outside of the income stream are: 1) debts are repaid; 2) idle bank deposits increase; 3) income is used to buy imports; 4) income is used to buy securities, proceeds of which are held idle; 5) stocks are not replaced as a result of purchases. See Hansen, A Guide to Keynes, pp. 89-90.

³⁴The "multiplier" is usually described as being the numerical coefficient that one must multiply by the original change in investment in order to get the total change in income. And this numerical coefficient is found by taking the reciprocal of one minus the marginal propensity to consume $\left(\frac{1}{1-MPC}\right)$ or the reciprocal of the marginal propensity to save $\left(\frac{1}{MPS}\right)$.

It should be noted that the marginal propensity to consume does not determine exactly what the leakages will be; the marginal propensity to consume shows what is available to be held outside the income stream, not what is held outside the income stream. A part of the income received that is not consumed may get into the income stream in the form of investment spending. To this extent, secondary increases in income will be maintained at their previous level, for the income created from previous spending returns to the income stream in the form of either consumer or investment spending.³⁵

A distinction may be drawn between the pump priming concept and the multiplier concept. The pump priming concept evolved out of the thirties when many writers adhered to the belief that public spending would break the "log-jam," and permit the flow of private spending to go on its way toward full utilization of resources without further need of public spending.³⁶ To the contrary, the investment multiplier principle demonstrates that even a continuous injection of public spending will increase the level of income until public spending equals new saving not matched

³⁵See Appendix to this Chapter, Case II.

³⁶Hansen, Fiscal Policy and Business Cycles, p. 262.

by private investment.³⁷ The multiplier concept says nothing concerning the ability of public spending to be withdrawn after a certain time. If anything, the multiplier principle suggests the opposite. Only in one special case would recurring public spending necessarily lead to full employment and inflation. Assuming a continuous injection of public spending and a marginal propensity to consume equal to unity, any increase in public spending that is maintained would send the economy spiraling.³⁸

As public investment spending or private investment spending generate income through inducing consumer spending and respending, changes in consumer spending induce further changes in investment spending. The influence of consumer spending on investment spending is determined by the accelerator coefficient, and will depend on a multitude of factors such as the phase of the cycle, and the type and kinds of consumer and investment goods involved.³⁹ An accelerator coefficient of one means that a change in consumption of, let us say, one billion dollars will induce a change in investments of a similar amount; a

³⁷See Appendix to this Chapter, Case III.

³⁸See Appendix to this Chapter, Case VI.

³⁹Hansen, Fiscal Policy and Business Cycles, pp. 274-276.

coefficient of two means that a change in consumption of one billion dollars will induce a change in investments of two billion dollars, and so on.

The common sense notion of the acceleration principle is that small changes in consumer demands may result in relatively large changes in the demand for investment goods, thereby indicating the volatile nature of investments.⁴⁰ A simplified example will make this clear. Assuming the estimated life of a machine is ten years, and that each machine can produce one hundred units, consumer sales of one thousand units will necessitate the use of ten machines. As long as consumer sales stay at the present level of one thousand units, only one machine needs to be bought each year, and this is for the purpose of replacing the machine that is wearing out.⁴¹ Now, an increase in consumer sales of ten per cent will result in a one hundred per cent increase in the demand for machines; a new machine to produce the additional one hundred units is needed as well as a new machine to replace the one that has worn out. This significant change in the demand for machines will mean that the

⁴⁰Gottfried Haberler, Prosperity and Depression (3rd Edition, Enlarged by Part III; Lake Success, New York: United Nations Press, 1946), p. 88.

⁴¹It is assumed that the machines have been bought in such a way as to assure that one is wearing out each year.

machine producer will now have to double his production, attracting resources and increasing incomes and employment in the process. However, if consumer sales level off at the new volume, only a replacement machine will be needed the following year. As a consequence, the demand for new machines will drop to zero with the ensuing results of falling incomes and unemployment in the machine producing industry.

Hansen and Samuelson worked out four cases that show all of the possible variations that can happen when the interaction of consumer and investment spending are taken into consideration.⁴² These four cases are presented in the Appendix of this Chapter. Under normal circumstances, induced investment is not strategic in determining what the eventual level of income will be; instead, induced investment influences the route which income takes to get to a certain level. This follows because new investments are induced only when there is a change in consumption as a result of a change in income.⁴³ Once there is no further change in income, induced investments will

⁴²Paul A. Samuelson, op. cit., p. 75; Hansen, Fiscal Policy and Business Cycles, p. 285.

⁴³The change in consumption may take place as a result of a change in tastes or changes in the distribution of income.

not be forthcoming. Also, induced investment is geared to the rate of change in consumption; when the rate of change in consumption decreases, induced investments will decrease.

In Case 1, the marginal propensity to consume is .5, and the accelerator coefficient is zero. In this instance, of course, only the multiplier effect is operating. Thus, a continuous injection of public investments will result in a steady increase in the level of income until a new level of income is reached which is greater by twice the amount of the original change in investment.⁴⁴

In Case 2, the marginal propensity to consume is again .5, but the accelerator coefficient is 2. Under these assumptions, the level of income will rise much more rapidly, reach a peak, decline and then begin to rise again. The fluctuations in income will be regular and around the multiplier level. The decline in income will go below the level of income in Case 1 even though a continuous flow of public investment is taking place.⁴⁵ This demonstrates that an expansion may come to an

⁴⁴This is true because at the new level of income, saving would have increased sufficiently to offset the new investment.

⁴⁵This is true because with an accelerator coefficient as high as 2, any change in consumption will have twice the effect on investments; therefore, any decrease in the rate of consumption will induce much less investment and thereby much less income.

end in spite of the fact that public investment is continuing at a steady rate.

Case 3 and Case 4 are both explosive. In Case 3 (coefficient 2 and multiplier $2\frac{1}{2}$) the cyclical fluctuations are increasing in severity. In Case 4, the marginal propensity to consume and the acceleration coefficient are both very high, .8 and 4 respectively. Under these extreme conditions, the level of income would continue to rise, approaching a compound interest rate of growth.

The vital conclusions which may be drawn from the above multiplier and acceleration analyses are three: first, a continuous level of public investment is essential for income to be maintained; second, under most conditions, the acceleration principle accounts only for the cyclical fluctuations in income; third, under certain circumstances, even a continuous level of public spending might fail to keep income at a high level.

Fiscal Policy Theory:

An attempt has been made to show that the level of income and employment is a function of consumer and investment spending and their interaction via the multiplier and accelerator principles. This theoretical discussion of the basic forces determining and influencing the flow of spending has established the necessary setting for the development of a theory of fiscal policy. The way in which government spending,

taxing, and borrowing policies may influence the flow of spending has been implied and even stated in many instances. Now the purpose and scope of modern fiscal policy theory at the federal level may be presented.

Modern fiscal policy is a conscious attempt to shape and to direct government taxation and spending so as to stabilize the level of income and production at high levels without inflation.⁴⁶ It was the latter thirties before the federal government of this country consciously pursued such a policy. In the early thirties, a policy of deficit spending was practiced, based on the pump priming idea. In the confusion of the day, the policy makers felt that government spending in excess of tax revenues was only a temporary phenomenon. As Arthur Smithies states, "There was little thought of a systematic anticyclical policy, far less of the need to adapt fiscal policy to long-run economic objectives."⁴⁷ The slump in the latter half of 1937 coupled with the writings of Keynes, Hansen and others brought about a fundamental change in belief as to the role of fiscal policy in economic affairs. Deficit

⁴⁶Samuelson, Economics, An Introductory Analysis, p. 395.

⁴⁷Smithies, "Federal Budgeting and Fiscal Policy," A Survey of Contemporary Economics, ed., Howard S. Ellis (Philadelphia: The Blakiston Co., 1949), p. 175.

spending was no longer conceived of as a stimulating device needed because private investment was temporarily depressed; instead, deficit spending came to be considered as a permanent means for compensating for the lack of private investment.⁴⁸

Also, it may be noted that the post-war problem of inflation brought about another change in emphasis. In the thirties, the emphasis was placed on increasing government spending as a means of promoting recovery. The possibility that decreasing taxes was an alternative, or that increasing government spending and decreasing taxes would enable the problem to be approached on two fronts received little attention.⁴⁹ However, post-war thinking concerning the role of taxes as a compensating device has received wide attention.

While it appears that most economists accept the thesis that the federal government has a responsibility for the problems of unemployment and inflation, there is disagreement

⁴⁸Williams, "Deficit Spending," p. 278.

⁴⁹Smithies, op. cit., p. 176. Also, see Henry H. Villard's discussion which shows how a reduction in taxes is an alternative to increasing government spending in: Deficit Spending and the National Income (New York: Farrar and Rinehart, Inc., 1941), pp. 109-110.

as to the ultimate goal of fiscal policy.⁵⁰ One viewpoint gives fiscal policy the goal of off-setting extreme fluctuations in the business cycle. This position considers fiscal policy as a short-run counter-cyclical device, necessitating a budget deficit in bad years and a budget surplus in good years. The budget surplus in good years would be used to pay off the debt incurred during the bad years, so the budget would be balanced over the cycle. This view looks at fiscal policy as a balancing wheel, and attempts to prevent secondary cumulative movements that might lead to serious deflations and inflations. This fiscal theory tolerates some unemployment, and is subject to criticism on this account. On the other hand, it does allow the system a relatively high degree of freedom in which to function under its own forces.

⁵⁰For alternative fiscal policy theories see Samuelson, Economics, An Introductory Analysis, p. 395; George Leland Bach, Economics, An Introduction to Analysis and Policy (New York: Prentice-Hall, Inc., 1954), pp. 582-585; Somers, Public Finance and National Income, pp. 513-527; Due, Government Finance, 470-474; Richard A. Musgrove, "Alternative Budget Policies for Full Employment," The American Economic Review, XXXV (June, 1945), 387. In the above references only Samuelson fails to treat a "balanced budget" as a stabilizing policy. A balanced budget may have a stabilizing influence through redistributing income in the appropriate manner. See Samuelson's defense of his position in "The Theory of Pump-Priming Re-examined," The American Economic Review, XXX (September, 1940), 503-504.

The second viewpoint of modern fiscal theory gives fiscal policy the more important task of assuring full or very high employment levels. Government spending would exceed government taxation in any year that full utilization of resources would make it necessary. A budget surplus would be called for only when higher total spending would lead to no further increase in production levels. This fiscal theory has been championed by the exponents of the secular stagnation thesis, and may be criticized on this account; also, this position has the disadvantage of having an inflationary bias, and of necessitating an ever increasing public debt.⁵¹

The appropriate fiscal policy depends on the phase of the cycle, whether society is a high saving or a high consuming society, and the basic cause or causes of the economic fluctuation.⁵² Thus, it is impossible to present a fiscal policy that is applicable to all societies and to all situations. However, under given conditions, specific fiscal policies may be suggested. For the purposes of this Study it is assumed that

⁵¹A. P. Lerner, Economics of Control (New York: The Macmillan Co., 1949), pp. 302-322.

⁵²Lerner does not think it is necessary to know the cause of economic fluctuation in order to have the appropriate fiscal policy to correct the economic fluctuation. See his Economics of Employment, p. 307. This position seems somewhat untenable. What if unemployment is caused because labor has priced itself out of the market? See H. L. McCracken, "Economic Contradictions," The Southern Economic Journal, XIII (April, 1947), 356.

the basic cause of the cycle is not institutional factors such as monopolistic practices, maladjustments in price-cost relationships, inadequate monetary policies, but rather that economic fluctuations are caused by "too much" spending at times and "not enough" spending at other times. It is further assumed that the United States society is basically a high income saving society, but that there is no immutable law concerning the ratio of consumption to income. Instead, the relationship between income and consumption is subject to wide variations depending on consumer tastes and on anticipations concerning the future.⁵³ Also, society is visualized as having ample investment outlets, but investments are subject to wide variations in accordance to changes in profit expectations. Under these assumptions, what is the appropriate fiscal policy for each phase of the cycle?

Fiscal policies are typically presented only for the prosperity and depression phases of the cycle. One reason that

⁵³The instability of the consumption function has been demonstrated from the various studies done on this subject. See Harry Williams, Jr. "Twenty Years of General Theory;" Also, see Hansen's discussion of Dusenberry's thesis that the marginal propensity to consume is higher in a boom than it is when the recovery gets under way. Hansen, A Guide to Keynes, pp. 102-103.

may be offered to explain this is that during these periods the appropriate fiscal policy is more easily defined. However, it would seem that the crucial role of fiscal policy is that of shaping the flow of spending during the upper and lower turning points so that secondary cumulative movements do not cause a serious depression or inflation. For this reason attention is given first to fiscal policy during the upper and lower turning points, or recessionary and revival phases of the cycle. Attention is then given to fiscal policy during the prosperity and and depression phases of the cycle.

The characteristics that are assumed to be prevalent in the economy during the recessionary phase are: (1) employment is still very high, but unemployment is increasing in important segments of the economy; (2) production has caught up with demand, and prices are showing downward tendencies; (3) costs and prices are high, and buyers are showing reluctance to pay these prices; (4) private investment spending is falling off, especially in the construction goods industries; (5) spending on consumer durable goods is likewise falling off; (6) inventories are not being replaced as rapidly as before; (7) excess bank reserves are low and the rate of interest is relatively high; (8) profit expectations are narrowing as rising costs are not being off-set by rising prices. What is the role of fiscal policy under these conditions? The problem

is not to permit the leveling off of production to develop into a cumulative downward movement via the multiplier and acceleration principles, and yet, at the same time to permit competitive forces to adjust production to consumption, and to bring about a better relationship between costs and prices.

Under the above conditions, government spending should be gradually increased relative to taxes, thereby, putting more money into the income stream in the form of spending than is taken out of the income stream in the form of taxes. This can be accomplished in one of several ways. Government spending may be maintained at its present level, and tax rates may be reduced; tax rates may be kept the same, and new spending may be financed from borrowed funds; both tax rates and spending may be increased, but spending increased at a faster rate; or tax rates may be reduced and spending increased. Decreasing tax rates and maintaining the present level of spending is preferred in this instance for several reasons. In the first place, decreasing tax rates and maintaining government spending gives competitive forces the maximum opportunity to solve their own problems; second, decreasing tax rates fosters a great deal of optimism, as more purchasing power is available for spending; third, decreasing tax rates increases disposable income, and as a consequence, will stimulate more spending; fourth, maintaining government spending rather than increasing government

spending implies a great deal of confidence in competitive forces, and has the further advantage of not "frightening" private investors.

Taxes that fall directly on consumer spending, such as sales taxes, and taxes that fall directly on investment spending, such as corporate and progressive personal income taxes, should be lowered. In the very early stages of the recession, when production levels, and consumption levels are still high, taxes that may retard investment spending should probably be reduced in preference to taxes that tend to reduce consumer spending.⁵⁴ The reason is that investment spending seems to be a more crucial factor in bringing expansion to a halt than consumer spending.⁵⁵ Net new investment primarily depends on profit expectations, and these are the investments that need to be encouraged if production and income are to be maintained at high levels. A reduction in the level of private investment will reduce the level of income in a cumulative fashion, depending on the marginal propensity to consume. However, if new

⁵⁴this preference for reducing taxes that fall on investment spending is one of degree, and should not be interpreted as a preference for investment over consumption.

⁵⁵This may not be true in all situations, but most business cycle studies stress the relatively volatile nature of investment spending. See Thomas Wilson, Fluctuations in Income and Employment (London: Pitman Publishing Corporation, 1948), p. 42.

investments fail to result from tax reductions on savings, then taxes that reduce savings relative to consumption will fail to impede the downward trend. As downward forces become stronger, more emphasis should be placed on reducing taxes on consumption spending, for, high levels of consumption are a prerequisite to high employment levels. The salient characteristic of an adequate tax reducing policy is that it foster a larger flow of both consumer and investment spending; changes in emphasis from reducing taxes upon investment funds to reducing taxes which bear directly upon consumption and vice-versa should be made as the economic conditions warrant.

The type and level of expenditure will depend on the severity of the downward forces and the flexibility that might be needed. It is probably advisable, under the above assumed conditions, that government spending be maintained at its current level, or slightly increased, and be confined to regular functions such as education, health, welfare, unemployment compensation, defense, etc. These regular government expenditures minimize the possibility of private investment spending's being "frightened away". Any new type of spending necessary should be selected on the basis of its flexibility; highway spending might be an example. Fiscal preparedness requires a more detailed plan of spending if secondary cumulative forces set in;

government spending on hydro-electric systems, flood control systems, vast highway systems, improvement of living conditions in rural and urban areas, and school construction might be added. As the severity of recession increases, the level of government spending should be increased, and the type of expenditure should be selected on the basis of its income generating effect rather than on the basis of its flexibility in timing. For example, increasing relief payments and teacher salaries would be more flexible, but would not increase incomes as much as construction of highways and schools.⁵⁶ It is important to change both the level and the type of spending in accordance with the income stimulating effect that is needed as well as in accordance with the flexibility needed.

The tax reducing policy suggested above would necessitate increased government borrowing, and/or a reduction in surplus reserves, assuming that such reserves are available. If borrowing is used, funds should come largely from new money created by the banking system, since this would have the minimum impact on the flow of spending. If budget surplus funds

⁵⁶Henry M. Oliver, "Fiscal Policy, Employment and the Price Level," Fiscal Policies and the American Economy, ed., Kenyon Poole (New York: Prentice-Hall, Inc., 1951), p. 118.

are available, they could be used to finance the new spending and to retire non-bank held debt. The retiring of non-bank held debt increases the liquidity of the public, and therefore, tends to increase spending.

These fiscal policies coupled with appropriate monetary policies, and assuming some degree of flexibility in costs and prices, would help to prevent a serious downward spiral such as occurred from 1929 to 1932.

The characteristics that dominate the economic system during the recovery phase are: (1) prices have ceased to drop, and in some segments of the economy show signs of an upward movement; (2) profit expectations are increasing as the price-cost relationship becomes more favorable; (3) inventories are at very low levels; (4) equipment is beyond its normal replacement age; (5) excess bank reserves are relatively high, and the rate of interest is relatively low; (6) production and employment in the investment goods industries have begun to increase. Under these circumstances, the fiscal policy that is required is one that will encourage a rapid but stable expansion via the multiplier and acceleration principles.

As the recovery phase advances, the government should continue to run a budget deficit, gradually reducing the deficit as cumulative upward forces become stronger. As the upward

phase begins definitely to get under way, tax rates should gradually be increased so that a larger percentage of government spending is being financed from tax revenues. This has the advantage of fostering an orderly expansion, but cautious steps have to be taken in order not to stop the expansion before high production levels are reached. When taxes can be increased without seriously impeding expansionary forces, taxes that fall on consumption should probably be increased somewhat more than taxes that have adverse effects on investments.⁵⁷ This seemingly precarious position may be supported in two ways. In the first place, in order for production to be expanded to high levels, autonomous investments need to be encouraged. These investments depend on profit expectations, and are mainly independent of current consumer levels.⁵⁸ Investments that are induced by consumer spending via the acceleration principle are usually prone to be inadequate to sustain the expansion;

⁵⁷Hansen would agree, assuming the expansion is primarily based on the dynamic elements of growth. See Hansen, Fiscal Policy and Business Cycles, pp. 296-297.

⁵⁸David McCord Wright gives three ways in which new investments may increase even if consumption is falling. See Wright, Capitalism, p. 140; Also, see Thomas Wilson, Fluctuations in Income and Employment, p. 46.

therefore, whether the expansion reaches desirable levels depends on the dynamic forces which stimulate new, innovating investments. Also, if induced investments are high because of a high accelerator coefficient, the expansion may be explosive and lead to over expansion and/or inflation.⁵⁹ To the extent that this may be true, increasing consumption taxes somewhat more than taxes on investments will reduce the change in consumption spending, and therefore alleviate the impact of consumption changes on new investments, thus decreasing the possibility of an explosive upward movement. However, it should be stressed that the impact of taxes on both consumption and investments should be minimized, and the preference shown investments is only one of degree, the degree of preference changing if consumption levels proved to be inadequate to support a high level of income.⁶⁰

Government spending should be continued at a steady rate until the expansion is well under way, and only gradually decreased as high production levels are reached. Government

⁵⁹Ibid., pp. 296-297.

⁶⁰The problem here, of course, is to know when consumption levels might prove inadequate. This problem may not be as unsurmountable as it appears, for data on changes in consumption, investment, saving, etc. should give some indication.

public investment expenditures, along with unemployment compensation and relief payments should be made. Expenditures on public investment projects should be gradually tapered off as the cumulative expansion forces significantly increase the flow of income. However, the slump in 1937 is a warning that there is no magic potion for public investment spending. A sudden withdrawal of a flow of government spending may halt the recovery and send the economy downward.⁶¹

In the early stages of the recovery, government borrowing should come from funds created by the banking system. As the expansion progresses, the government should attempt to tap voluntary savings of the public, as this will tend to keep the expansion steady, and decrease the chances of over expansion.

Assuming an overall depressed economy, government taxes should be drastically reduced, and government spending drastically increased, thereby increasing significantly the income stream. All taxes on consumption, such as sales and excise taxes, should be greatly reduced; income tax rates should be lowered, especially in the lower brackets, the reason being that it is desirable to reduce taxes the most on the income groups which have a high propensity to consume - namely the

⁶¹Kenneth D. Roose, The Economics of Recession and Revival: An Interpretation of 1937-38 (New Haven: Yale University Press, 1954), p. 5.

lower and middle income groups. Reducing rates at the upper end of the income brackets may simply result in increased hoarding, and hence have no influence on the flow of spending.⁶² Also, efforts to increase profit expectations by decreasing corporate income tax rates may be self-defeating; giving tax relief to investors may have an unappreciable influence in stimulating investments in the face of very low levels of consumption. Only when consumer spending is high and shows signs of rising will higher profit expectations become strategic and influence the upward movement.⁶³

During a depression, government spending should be greatly increased. Not only should government spending on highways, education, health, etc. be increased, but also, government outlays should be expanded into such areas as urban redevelopment and housing and resource development such as the Tennessee Valley Project. Also, it may be desirable to do what

⁶²Oliver, "Fiscal Policy, Employment and the Price Level," Fiscal Policies and the American Economy, p. 119.

⁶³This statement does not conflict with previous statements indicating the relative independence of investments. During periods of depression when idle capital equipment and idle resources are dominant characteristics in our society, new capital assets are simply not needed. (Marginal expected profits are low or negative.)

Hansen calls the "subsidization of mass consumption" which includes: government spending for public housing, special family allowances, minimum food budgets, and the purchase of consumer durable goods such as furniture, refrigerators, automobiles, etc.⁶⁴

Hansen favors subsidizing mass consumption as a means of getting full employment; whereas the program presented here is advanced only as a means of getting out of a serious depression.

When very high production levels are accompanied by rising consumer and investment spending, there is always a danger of a runaway or a hyper-inflation.⁶⁵ Under these circumstances, taxes should be increased, especially taxes on consumption. The income tax should be increased and made more progressive so that investment spending will be discouraged. A higher corporate income tax and an excess profits tax would have restrictive effects on investment spending. During inflationary conditions, government spending should be reduced in

⁶⁴Alvin H. Hansen, Fiscal Policy for Full Employment (New York: New York University Institute on Postwar Reconstruction, 1946), p. 23.

⁶⁵Inflation may start even before full employment is reached because of the enhanced bargaining power of labor, bottlenecks in production and the law of diminishing returns. See Dudley Dillard, The Economics of John M. Keynes (New York: Prentice-Hall, Inc., 1948), pp. 227-228.

as many fields as possible without jeopardizing service standards and living standards. However, unless inflationary forces really get out of control, an overall reduction in government spending should not be necessary. In most circumstances, increasing taxes on consumption and investment will be adequate to reduce the flow of spending so that it is more in keeping with the production potentials of the economy.

As far as the debt is concerned, the budget surplus could be used to pay off part of the debt that has been incurred in previous years. The public debt is held by three main groups - Federal Reserve Banks, commercial banks, and the non-banking public. The economic effects of retiring the debt differ slightly depending on the portion of the debt retired. Also, the economic effects of retiring the debt differ depending on whether the retiring of debt per se is considered or the total economic effects of the budget surplus and debt retirement are considered.⁶⁶ A budget surplus will have the net effect of reducing bank deposits and excess bank reserves. Using the surplus to pay off part of the non-bank held debt will have the effect of restoring bank deposits and bank reserves to

⁶⁶J. A. Nordin and Virgil Salera, Elementary Economics (New York: Prentice-Hall, 1953), p. 556.

their original level;⁶⁷ retiring commercially held debt will increase bank reserves but not bank deposits unless banks increase their loans and investments as a result of having increased excess reserves because of the redemption of bonds.⁶⁸ Retiring the debt held by Federal Reserve Banks will leave commercial bank reserves and demand deposits unaffected.⁶⁹ Thus the over-all effect of using the budget surplus to retire the public debt would be neutral in the case of retiring non-bank held debt, anti-inflationary in the next two instances, but more anti-inflationary in the case of retiring Federal Reserve Bank held debt. Under the assumption of strong inflationary pressures, it would be preferable to retire bank held debt only; a change to the retiring of non-bank held debt should be made as inflationary forces lessen.

To summarize, an effective fiscal policy implies many

⁶⁷Loc. cit.

⁶⁸Samuelson, Economics, An Introductory Analysis, p. 426.

⁶⁹The budget surplus would have, of course, decreased demand deposits and cash reserves, but the retirement of Federal Reserve held debt will decrease U. S. Government securities outstanding in Federal Reserve Banks and decrease U. S. Treasury balances.

things: first, a knowledge of basic economic forces and the relative importance of consumer and investment spending in the various phases of the cycle; second, an ability to time appropriately the use of the instruments of fiscal policy. Third, fiscal policy has to be coordinated with monetary policy in order to be most effective. Fourth, there has to be a certain amount of "fiscal integrity," that is, fiscal powers have to be used, but with restraint, and used to combat both inflation and deflation. Fifth, the aim and scope of fiscal policy has to be agreed upon. A decision has to be made concerning whether fiscal policy is to be used to protect and maintain a private enterprise economic system, or is to serve as a means of replacing the present economic system. As J. M. Clark states, "The fact that we have learned that deficit spending can really stimulate business may be one of the most dangerous results of the depression."⁷⁰

It must be added that fiscal policy, even assuming that it could be appropriately timed and coordinated with monetary policy, would not be a panacea for all economic problems of stabilization. The introduction of labor saving devices, the pricing of labor by monopolistic pricing and producing policies,

⁷⁰Clark, Studies in the Economics of Overhead Costs, p. 306.

international trade problems, etc. may upset the most carefully planned counter-cyclical fiscal policies. "The task of maintaining high level production and employment is too big to be accomplished by any single device. Fiscal policy can be effective only when reinforced by many other policies."⁷¹

What are the possibilities of a coordinated fiscal policy at the federal, state and local levels? It is generally believed that effective fiscal policy at the federal level necessitates some kind of fiscal coordination at all levels of government. Gerhard Colm notes that a federal fiscal policy cannot be truly effective "unless it co-ordinates Federal, state and local action, or at least prevents state and local government from being driven into a policy contrary to the Federal policy."⁷² Similarly, Hansen and Perloff note, "It is intolerable that the local units of government shall pursue policies which intensify the cycle, thereby forcing the national government to counter not only fluctuations in private

⁷¹Gerhard Colm, Essays in Public Finance and Fiscal Policy (New York: Oxford University Press, 1955), p. 177.

⁷²Gerhard Colm, "Fiscal Policy," The New Economics, ed., Seymour E. Harris (New York: Alfred A. Knopf, 1950), pp. 462-463.

enterprise but also those of local governmental units."⁷³

Thus, it is at least hoped that state and local governments might be able to pursue fiscal policies that do not undermine appropriate fiscal policy at the federal level.

Why have state and local governments pursued fiscal policies that have intensified the cycle in the past? What are the conditions that would make it possible for state and local governments to pursue counter-cyclical fiscal policies? Some of the structural limitations on a counter-cyclical fiscal policy at the state-local level such as the inflexibility of their credit market and the many institutional factors are mentioned in Chapter I. An examination of state-local fiscal policies from 1929-1940, with special attention to the State of Louisiana, provides a more complete answer to these questions.

The fiscal policy of the State of Louisiana during the 1929-1940 period is analyzed because this was one state in which counter-cyclical action was taken at the state and local levels during the Great Depression. It would be of no particular value to this Study to evaluate the Huey P. Long "share-the-

⁷³Hansen and Perloff, State and Local Finance in the National Economy, p. 194.

wealth" philosophy which guided this action;⁷⁴ however, it is worthwhile to analyze the actions of a state that, whether by conscious effort or by coincidence, pursued a fiscal policy that had some counter-cyclical aspects.⁷⁵

⁷⁴Huey P. Long, Every Man A King (New Orleans: National Book Co., Inc., 1933), pp. 338-339.

⁷⁵Forrest Davis, Huey Long (New York: Dodge Publishing Co., 1935), pp. 148-149.

APPENDIX
CHAPTER II

TABLE A

Model Sequences of National Income for Selected Values
of Marginal Propensity to Consume and Acceleration Coefficient

Period	Case 1	Case 2	Case 3	Case 4
	a = .5 b = 0	a = .5 b = 2	a = .6 b = 2	a = .8 b = 4
1	1.00	1.00	1.00	1.00
2	1.50	2.50	2.80	5.00
3	1.75	3.75	4.84	17.80
4	1.875	4.125	6.352	56.20
5	1.9375	3.4375	6.6256	169.84
6	1.9688	2.0313	5.3037	500.52
7	1.9844	.9141	2.5959	1459.592
8	1.9922	-.1172	-.6918	4227.704
9	1.9961	.2148	-3.3603	12241.1216

Source: Paul A. Samuelson, "Interaction Between the
Multiplier Analysis and Principle of Accle-
ration," The Review of Economic Statistics,
XXI (February 21, 1939), 77.

a = Marginal Propensity to Consume.

b = Acceleration Coefficient.

TABLE B

FORCES INFLUENCING SPENDING¹

¹Influence of International Trade excluded.

TABLE C

THE MULTIPLIER PRINCIPLE

Case 1 - Non-recurring investment expenditure with true leakages.

Case 2 - Non-recurring investment with the part not consumed invested.

Case 3 - Recurring investment with leakages.

Case 4 - Non-recurring investment with no leakages.

Case 5 - Non-recurring investment with marginal propensity to consume zero.

Case 6 - Recurring investment with marginal propensity to consume unity.

Source: Alvin H. Hansen, A Guide to Keynes, pp. 91-95.

CHAPTER III

THE COUNTER-CYCLICAL ASPECTS OF FEDERAL, STATE, AND LOCAL FISCAL POLICY, 1929-1940

The purpose of this chapter is to present the taxing, spending, and borrowing policies of federal, state, and local governments, and to analyze the net effects of these policies during the period of 1929-1940. Since the duration, amplitude, and timing of economic fluctuations are of special relevancy to a discussion of government fiscal policy, a brief discussion of the fluctuations in personal income, production, employment, and prices is given. The discussion of these four important economic variables delineates the upper and lower turning points in these economic series.

Table A shows the upper and lower turning points, and the percentage changes during the two contractions and the two expansions in the selected economic series and the series developed by Wesley C. Mitchell.¹ Production, prices, and employment reached peak 1929 levels in July, one month after Mitchell's aggregate economic series reached an upper

¹Mitchell defines the culmination of a business-cycle expansion or contraction as a "cluster of specific-cycle turning dates." See his What Happens During Business Cycles (New York: National Bureau of Economic Research, Inc., 1951), p. 11.

TABLE A

Upper and Lower Turning Points in Selected
Statistical Series, 1929-1940

	Upper		Lower	
I. Mitchell's Aggregate Economic Series	June, May,	1929 1937	March, June,	1933 1938
II. Personal Income	August, June,	1929 1937	March, June,	1933 1938
III. Production	July, May,	1929 1937	July, May,	1932 1938
IV. Prices	July, April,	1929 1937	February, August,	1933 1939
V. Employment	July, July,	1929 1937	July, June,	1932 1938

Percentage Changes in Selected Statistical Series
During Contraction and Expansion, 1929-1940

	Contraction Period	Percent Decrease	Expansion Period	Percent Increase
I. Personal Income	1929-1933 1937-1938	51 12	1933-1937 1938-1940	80 25
II. Production	1929-1932 1937-1938	54 33	1932-1937 1938-1940	128 72
III. Prices	1929-1933 1937-1938	37 15	1933-1937 1939-1940	47 7
IV. Employment	1929-1932 1937-1938	41 25	1932-1937 1938-1940	86 37

Sources: Mitchell, What Happens During Business Cycles,
p. 12; Table IV in the General Appendix.

turning point and one month before personal income reached its peak. The severity of the downward forces is indicated by the fact that personal income dropped 51 percent, production 54 percent, prices 37 percent, and employment 41 percent during the 1929-1933 contraction. The duration of the downward forces was different for different economic series. The lower turning point was July, 1932, for both production and employment; however, the lower turning point for prices was February, 1933, and Mitchell's aggregate economic series and personal income series reached their lower levels at the same time, March, 1933. National income, which is available only on an annual basis, was \$87 billion in 1929, and dropped to \$40 billion in 1933 when measured in current prices and to \$57 billion when measured in 1929 prices.² This means that resource owners received 54 percent less income in 1933 for their productive services when measured in current prices and 34 percent less when measured in constant prices.

The recovery was slow and incomplete. Prices and personal income had not regained their 1929 levels, and production and employment had only slightly exceeded their 1929 levels when a sharp contraction commenced in 1937 in all major series.

²U. S. Department of Commerce, Bureau of the Census, Historical Statistics of the United States, 1789-1945 (Washington: U. S. Government Printing Office, 1949), p. 12.

During the 1933-1937 expansion, personal income had increased 80 percent, production 128 percent, prices 47 percent, and employment 37 percent. When the contraction came in 1937, unemployment was 7.7 million.³

The 1937-1938 contraction lasted approximately twelve months. Mitchell's aggregate economic series and production reached an upper turning point, May, 1937, and a lower turning point, June, 1938. The upper and lower turning points for personal income were in June, 1937, and June, 1938, respectively. Employment levels reached their upper turning point in July, 1937, and lower turning point in June, 1938. However, prices reacted differently from the other economic series, reaching an upper turning point earlier, April, and a lower turning point much later, August, 1939. During this twelve-month decline, production fell 33 percent, employment 25 percent, personal income 12 percent, and prices 15 percent. Unemployment was 10.4 million in 1938, as compared to 7.7 million in 1937.⁴ Income, production, prices, and employment started expanding in the latter part of 1938, and by 1939 personal income had

³W. Nelson Peach and Walter Krouse, Basic Data of the American Economy (4th Edition; Homewood, Illinois: Richard D. Irwin, Inc., 1955), p. 31.

⁴Loc. cit.

risen 25 percent, production 72 percent, prices 7 percent, and employment 37 percent.

One of the outstanding characteristics of the changes in these economic series is the more volatile nature of the production series. Production contracted more and expanded more than the other economic variables, and in most instances reached upper and lower turning points before the other economic variables. Another feature worth noting is that prices did not typically fluctuate as much as the other variables; the exception was during the 1937-1938 contraction when prices decreased slightly more than personal income.

Federal, State, and Local Tax Revenues, 1929-1940

The following discussion of tax revenues is an attempt to give some indication of the effect of taxes on the income flow during the period under analysis. Three criteria are used to indicate the relative impact of taxes. First, tax revenues are discussed in terms of constant purchasing power. Since taxes are normally expressed in market prices, any change in the price level will affect the relative significance of any change in tax receipts. The real change in tax revenues, i.e., tax revenues adjusted for price changes, tends to measure the change in tax rates or in the tax base. Secondly, tax revenues are expressed as a percentage of national income. This gives an indication of the relative burden of taxes. The relative impact of taxes is a function of the size of the income stream. A given level of tax revenues will have a larger relative impact on a diminishing income stream and a smaller relative impact on a rising income stream. Third, the relative impact of tax receipts depends on the tax revenue sources used and whether the tax sources tend to fall predominantly on consumer spending or saving. Classification of tax sources as to their relative impact on consumer spending and on saving requires arbitrary decisions in many instances, since it may be impossible to determine the exact incidence of a tax.

The principle used to classify taxes as to their relative impact on consumption and saving is as follows: Taxes that are usually accepted as having regressive effects, such as sales and excise taxes, are assumed to have a relatively greater effect upon consumer spending since these taxes tend to tax income groups that allocate a large percentage of their income to consumption, rather than to saving. Progressive taxes, such as income taxes (personal and corporate income taxes), death taxes, and gift taxes are assumed to tax savings more heavily since these taxes tend to affect predominantly income groups that allocate a relatively large percentage of their income to saving, rather than to consumption. Taxes which are more difficult to classify as to their relative effect upon consumer spending and/or saving, such as property and license taxes, are assumed to fall on both consumption and saving.

A. Federal, State, and Local Tax Revenues, 1929-1933.

Total tax collections at all three levels of government - federal, state, and local - were approximately \$10 billion annually before strong depressionary forces began to set in in 1929 and 1930.⁵ The figures for the fiscal year ending June, 1931, show that all government tax collections were still very high, withdrawing \$9.7 billion from a diminishing income stream. Nevertheless, this was approximately \$1 billion less than the previous fiscal year. As economic activity continued to turn downward, total federal, state, and local taxes decreased approximately \$1 billion, and \$370 million in fiscal years 1932 and 1933, respectively. This reduction in tax revenues of \$2.6 billion between 1929 and 1933 did not, however, reduce the impact of taxes on the income stream. Several reasons may be given in support of this conclusion.

Sixty-one percent of the decrease in tax revenues between the fiscal years 1929 and 1933 is accounted for by a reduction in tax revenues at the federal level. (Table B) This is to be expected when the reduction in tax revenues is due to a reduction in income rather than to a reduction in tax rates; for, the income tax was the primary tax source in the federal

⁵Local tax data are not available from 1929-1931. See Table XI in the General Appendix for local data used during these years.

TABLE B

Total Federal, State, and Local Tax Revenues, Adjusted Tax Revenues¹ and Tax Burden²
1929-1933

Governmental Unit	1929	1930	1931	1932	1933
ALL UNITS					
Tax Revenues (\$ billions)	10.3	10.8	9.7	8.1	7.7
Adjusted Tax Revenues (\$ billions)	10.3	11.9	12.6	12.0	11.0
Tax Burden (percent)	11.8	14.4	16.4	18.4	19.5
FEDERAL GOVERNMENT					
Tax Revenues (\$ billions)	3.5	3.6	2.8	1.9	1.9
Adjusted Tax Revenues (\$ billions)	3.5	4.0	3.8	2.8	2.7
Tax Burden (percent)	4.0	4.8	4.8	4.5	4.7
STATE GOVERNMENT					
Tax Revenues (\$ billions)	2.0	2.1	2.0	1.9	1.7
Adjusted Tax Revenues (\$ billions)	2.0	2.3	2.7	2.8	2.4
Tax Burden (percent)	2.2	2.8	3.5	4.5	4.4
LOCAL GOVERNMENT					
Tax Revenues (\$ billions)	4.8	5.1	4.9	4.3	4.1
Adjusted Tax Revenues (\$ billions)	4.8	5.6	6.1	6.4	5.9
Tax Burden (percent)	5.6	6.8	8.1	9.4	10.4

Sources: Tables IV and XI in the General Appendix, and U. S. Bureau of Census, Historical Statistics of the United States, 1789-1945.

¹Tax Revenues are adjusted for price changes by using the wholesale price index and 1929 as the base year.

²Tax Revenues are expressed as a percentage of national income.

tax structure;⁶ therefore, a diminishing income stream would result in a reduction of tax revenues from this source even if tax rates stayed the same.⁷ On the other hand, state and local tax revenues changed very little from their pre-depression levels. (Table B) Total state taxes were \$2 billion in 1929 as compared to \$1.7 billion in 1933; whereas, local taxes were \$4.8 billion in 1929, as compared to \$4.1 billion in 1933. State and local tax structures, depending essentially on sales and property taxes as their tax sources, are much more insensitive to the downward turn in economic activity. Also, state and local governments increased their tax rates and expanded their tax sources in an attempt to maintain their revenues. Even where state and local governments maintained the same tax rates, the impact of these taxes on the flow of spending was increased because of falling incomes.

The magnitude of the impact of taxes on the flow of spending during 1929-1933 is revealed when tax revenues are adjusted for changes in the price level since 1929. Allowing

⁶Individual and corporate income taxes were 66% of federal tax revenues in 1929. See Table XII in General Appendix.

⁷Federal individual and corporate income taxes fell approximately 68% between 1929 and 1933. See Table XII in the General Appendix.

for changes in the purchasing power of the dollar, total federal, state, and local tax revenues were higher in every year during the 1929-1933 period than they had been in 1929 (Table B). A breakdown of total tax revenues shows federal tax collections decreased \$.8 billion during the period, and state and local tax collections increased \$1.5 billion; therefore, state and local tax collections account completely for the real increase in tax collections.

Another measure of the relative impact of taxes on the income stream is provided by expressing tax revenues as a percentage of national income. When this is done, it is again evident that the impact of taxes became greater as the depression increased in severity, and the heavier state and local tax burdens explain this intensifying effect of taxes. (Table B)

In 1929, total federal, state, and local taxes were approximately 12 percent of national income. In the 1929-1933 period, total taxes at all levels of government became a progressively greater percentage of national income, reaching 19.5 percent in 1933. This was a percentage increase of 65 percent. The tax burden of federal taxes increased only 17 percent. Federal taxes were 4.7 percent of national income in 1933 compared to 4 percent in 1929. The burden of state and local taxes approximately doubled over this same period. (Table B)

State and local tax revenues had a greater deflationary effect on the economic system during the early thirties because tax rates were maintained or increased; the tax burden increased as the income level declined, and state and local tax structures are heavily biased in favor of taxes which bear heavily upon consumer spending.⁸ Any tax may reduce spending, but taxes that fall directly on the income groups that spend a much larger percentage of their income on consumption goods, such as sales taxes and taxes that are easily shifted to the consumer in the form of a higher prices, such as business and payroll taxes, withdraw much more from the spending stream than taxes that fall more directly on the high income saving groups, such as income taxes and death taxes. This is especially true when secondary cumulative forces have set in as they had in 1930. When profitable investments are unavailable, taxes that fall on savings may not reduce investment spending, since investments may not be forthcoming even if savings are available.

The tax policies of local governments were particularly regressive in their effects on spending. Depressionary 1929-1933

⁸G. W. Mitchell, D. R. Letterer, and E. D. Domar, "State and Local Finance," Public Finance and Full Employment, Postwar Economic Studies, No. 3 (Washington: Board of Governors of the Federal Reserve System, 1945), p. 47. (In the future this reference will be referred to as Postwar Economic Studies.)

forces fell heavily on the tax structures of local governments. Local tax structures depended almost completely on the property tax source. For example, in 1927 and 1932, the two years when reliable data are available, property taxes were 97 percent of total tax collections. (Table XIV in the General Appendix) Cyclical decreases in the value of property tend to decrease the tax revenue potential of local governments. Attempts to maintain property tax revenues by increasing property tax rates were largely self-defeating, and had adverse effects on spending.⁹ Property taxes constitute a fixed cost for individuals and businesses, and in face of declining incomes, higher property tax rates lead to foreclosures and tax delinquencies. Even if tax rates stay the same, the property tax has a serious impact on the spending power of tax payers since adjustments in the assessed values of property do not normally keep pace with declines in property values and incomes. A study by F. L. Bird for Dun and Bradstreet reveals that tax delinquencies in cities with populations of over 50,000 increased from 10

⁹Alvin H. Hansen and Harvey S. Perloff, State and Local Finance in the National Economy (New York: W. W. Norton and Company, Inc., 1944), pp. 67-68. (In the future this reference will be referred to as Hansen, State and Local Finance).

percent in 1930 to 26 percent in 1933.¹⁰ A Census publication of a special study of assessed valuation of property shows that assessed values decreased only 17 percent between 1929-1933.¹¹ On the other hand, market valuations decreased a great deal more. For example, the market value of buildings and land on Manhattan Island decreased 47 percent over this same period.¹²

Local property taxes reduce the spending stream not only because of the tendency to increase rates and the lag in adjustments in assessment values during a depression, but also because a good portion of property taxes are paid on an important item of consumption, namely housing.¹³ Hansen and Perloff estimate that "about one-third to one-half of all real property taxes are imposed on residential real estate."¹⁴ The burden of this tax is most likely on the owner-occupier or on the

¹⁰F. L. Bird, Trend of Tax Delinquency, 1930-1946 in Cities of Over 50,000 Population (New York: Dun and Bradstreet, 1947), p. 10.

¹¹U. S. Department of Commerce, Bureau of the Census, A Decade of Assessed Valuations: 1929-1938, State and Local Government Special Study, No. 14 (Washington: U. S. Government Office, 1941), pp. 4-5.

¹²U. S. Department of Commerce, Bureau of the Census, Historical Statistics of the United States, 1789-1945, p. 11.

¹³Hansen, State and Local Finance, pp. 38-39.

¹⁴Ibid., p. 16.

tenant. It reduces prospective spending for other items by increasing the cost of housing. This increased cost of housing tends to place an undue burden on lower income groups since families in lower income groups spend a larger percentage of their income for housing than do other income groups.¹⁵

Table C indicates the extent to which federal and state taxes fall on consumption and saving. Using the system of classification explained above 27 percent of total federal and state taxes in 1929 are found to have fallen predominantly on consumption, while 45.5 percent of total federal and state taxes largely affected consumption spending in 1933. In contrast, federal and state taxes that tend to fall on savings decreased from 50 percent to 28.2 percent of total federal and state taxes during the same period. This increase in the relative impact of federal and state taxes on consumer spending was not due alone to the increased regressiveness of state tax policies. Federal taxes that tend to fall on consumer spending increased from 29.8 percent to 57.4 percent of total federal taxes during the 1929-1933 period. This significant increase in federal consumption taxes at a time when economic activity was at its

¹⁵Clarence Heer, "The Property Tax As A Measure of Ability," Viewpoints on Public Finance, ed., H. M. Groves (New York: Holt & Co., 1948), p. 50.

TABLE C

Federal and State Taxes that Tend to Fall on Consumption and Saving, 1929-1933

	1929		1930		1931		1932		1933	
	Add	Per	Add	Per	Add	Per	Add	Per	Add	Per
	ooo,ooo	Cent	ooo,ooo	Cent	ooo,ooo	Cent	ooo,ooo	Cent	ooo,ooo	Cent
<u>FEDERAL-STATE</u>										
Total Tax Revenues	5491	100.0	5734	100.0	4850	100.0	3779	100.0	3579	100.0
Taxes on Consumption	1486	27.0	1560	27.0	1393	28.7	1288	34.8	1629	45.5
Taxes on Saving	2746	50.0	2930	51.0	2276	46.9	1406	37.5	1029	28.2
Taxes on Both	1269	23.0	1244	22.0	1181	27.4	1085	27.7	921	26.3
<u>FEDERAL</u>										
Total Tax Revenues	3540	100.0	3626	100.0	2808	100.0	1889	100.0	1855	100.0
Taxes on Consumption	1055	29.8	1052	29.0	833	29.6	735	38.9	1065	57.4
Taxes on Saving	2393	67.5	2514	69.3	1888	67.2	1105	58.5	781	42.1
Taxes on Both	102	2.7	60	1.7	87	3.2	49	2.6	9	.5
<u>STATE</u>										
Total Tax Revenues	1951	100.0	2108	100.0	2042	100.0	1890	100.0	1724	100.0
Taxes on Consumption	431	22.0	508	24.0	560	27.4	553	29.2	564	32.7
Taxes on Saving	353	18.0	416	19.7	388	19.0	301	15.9	248	14.3
Taxes on Both	1167	59.8	1184	56.1	1094	52.2	1036	54.9	912	53.0

Sources: Tables XII and XIII in the General Appendix.

lowest ebb was the result of the Revenue Act of 1932, which placed a federal excise tax on many products, including gasoline, alcohol, and certain manufactured products.¹⁶ Increasing yields from the gasoline tax and adoption of the general sales tax explain the increased regressiveness of state taxes. State taxes classified in this Study as consumption taxes constituted 22.0 percent of total state taxes in 1929 and 32.7 percent in 1933.

Tax policy at the federal, state, and local levels appears to have been unsound in view of the economic conditions of 1929-1933. A sound tax policy for this period, according to counter-cyclical criteria, would have included a reduction in tax rates, and a tax structure orientated toward the tapping of "idle funds" and minimizing tax effects on consumption.

Instead, the reverse policy was pursued. Tax rates were increased, and new tax sources were found that had a tendency to reduce consumption spending. According to James A. Maxwell, the shift to consumption taxes by state governments and the increased rates of local property taxes were the

¹⁶Annual Report of the Secretary of the Treasury on the State of Finances, Fiscal Year, 1940 (Washington: United States Government Printing Office, 1940), p. 7.

result of "difficulties in borrowing arising from weakened credit, legal and constitutional limitations and inhibitions against borrowing in depression."¹⁷ Also, states were encouraged to shift to consumption taxes in order to obtain revenues that would enable them to qualify for the Works Progress Administration and federal grants.¹⁸ The shift to consumption taxes by the federal government is more difficult to explain. Referring to federal tax policy during the thirties, Hansen and Perloff conclude that the federal government "followed an indefensible tax policy to the extent that it joined the state and local tax bodies in raising the level of consumption taxes."¹⁹

B. Federal, State, and Local Tax Revenues, 1933-1937.

During the recovery period, 1933-1937, total federal, state, and local tax revenues increased \$5 billion, an increase of approximately 62 percent (Table D). When measured in constant 1929 dollars, the increase in total tax revenues of all governments is \$3 billion, an increase in this case of 27 percent. However, when tax revenues are expressed as a percentage

¹⁷James A. Maxwell, Federal Grants and the Business Cycle (New York: National Bureau of Economic Research, Inc., 1952), p. 23.

¹⁸Hansen, State and Local Finance, p. 64.

¹⁹Ibid., p. 49.

of national income, the impact of federal, state, and local taxes is found to have declined during this period. Total tax revenues were 19 percent of national income in 1933, 18 percent in 1934 and 17, 16 and 17 percent in 1935, 1936, and 1937, respectively. Even though taxes withdrew a larger absolute amount from the income stream during the 1933-1937 recovery, the relative impact of these taxes on the flow of spending was decreasing, since the ability to pay taxes as measured by national income was increasing more than taxes.

Local tax revenues show only a slight increase, \$.2 billion, during the recovery when measured in current dollars, and a decrease, \$1.2 billion, when measured in 1929 dollars; hence, the increase in total tax revenues is completely accounted for by federal and state taxes when measured in constant dollars, and largely accounted for by federal and state taxes when measured in current dollars (Table D). Combined federal and state taxes increased \$4.9 billion and \$4.1 billion when measured in current dollars and in 1929 dollars, respectively.

It is interesting to note that when total tax revenues are expressed as a percentage of national income, the impact of total tax revenues on the income stream is found to have decreased during the 1933-1937 recovery; however, when federal tax revenues are expressed as a percentage of national income,

the impact of federal tax revenues is shown to have increased from 4.7 percent of national income in 1933 to 6.9 percent in 1937 (Table D). State taxes, as a percentage of national income, did not change significantly during this same period. Therefore, total tax revenues were a smaller percentage of national income because of the reduced burden of local taxes. This was probably due to reductions in local property tax rates. Market values and assessed values of property increased, but lower property tax rates produced about the same level of revenues from this main local tax source.²⁰ In contrast, tax rates were increased both at the federal and state levels. The Federal Revenue Acts of 1932 and 1934 increased tax rates on personal and corporate income, estates, liquor and tobacco, and extended federal taxes to gasoline and various manufactured products.²¹ The increase in federal tax revenues in the fiscal years 1936 and 1937 reflects improved economic conditions, further increases in tax rates on income, estates and gifts, and the adoption of a federal payroll tax in 1935.²² Similarly, state governments

²⁰Postwar Economic Studies, p. 105.

²¹Annual Report of the Secretary of Treasury on the State of Finances, 1940, pp. 7-12.

²²Ibid., pp. 12-16.

increased tax rates during this period on such items as tobacco, gasoline, liquor, etc., and in 1933, a mass movement began in the adoption of a state general sales tax.²³ Also, many states adopted a personal income and a corporate income tax during this period.

The adopting of new taxes and the increasing of tax rates at the federal-state levels during the recovery had a significant effect on consumer and investment spending. Throughout this period, federal and state taxes that fall mainly on consumption were between 45 and 50 percent of total federal and state taxes (Table XIII in the General Appendix). Federal taxes that tend to fall on consumption (gasoline tax, alcoholic tax, tobacco tax, manufacturers' excise tax, etc.) reached their highest relative significance in the federal tax structure in 1933, and started declining in relative significance thereafter. This decline in the relative importance of taxes that tend to fall on consumption was not due to an absolute decrease in these taxes, but rather to higher rates on estates and gifts, and the increased progressiveness of the

²³ W. J. Schultz and C. L. Harriss, American Public Finance (New York: Prentice-Hall, Inc., 1954), p. 364.

TABLE D

Total Federal, State and Local Tax Revenues, Adjusted Tax Revenues,¹ and Tax Burden²
1933-1937

	1933	1934	1935	1936	1937
<u>ALL UNITS</u>					
Tax Revenues (\$ billions)	7.7	8.9	9.8	10.6	12.7
Adjusted Tax Revenues (\$ billions)	11.0	11.2	11.7	12.6	14.0
Tax Burden (Percent)	19.5	18.2	17.3	16.4	17.3
<u>FEDERAL GOVERNMENT</u>					
Tax Revenues (\$ billions)	1.9	3.0	3.6	3.9	5.1
Adjusted Tax Revenues (\$ billions)	2.7	3.8	4.3	4.7	5.6
Tax Burden (Percent)	4.7	6.0	6.4	6.0	6.9
<u>STATE GOVERNMENT</u>					
Tax Revenues (\$ billions)	1.7	2.0	2.2	2.6	3.4
Adjusted Tax Revenues (\$ billions)	2.4	2.5	2.6	3.1	3.7
Tax Burden (Percent)	4.4	4.1	3.9	4.1	4.6
<u>LOCAL GOVERNMENT</u>					
Tax Revenues (\$ billions)	4.1	3.9	4.0	4.1	4.3
Adjusted Tax Revenues (\$ billions)	5.9	4.9	4.8	4.8	4.7
Tax Burden (Percent)	10.4	8.1	7.0	6.3	5.8

Sources: Tables IV and XI in the General Appendix, and United States Bureau of Census, Historical Statistics of the United States, 1789-1945.

¹Adjusted for price changes by using wholesale price index, (1929 = 100)

²Tax Revenues expressed as a percentage of national income.

personal and corporate income tax rates (Table XII in the General Appendix). States which had turned to consumption taxes in 1931, 1932, and 1933 continued this trend throughout the recovery. By 1934, consumption taxes had completely replaced the historically important property and license taxes in state tax structures. In 1937 over half of state taxes were derived from sources that fall heavily on consumer spending.

It is very difficult to justify these tax policies during this period of time. Income, production, and prices had not recovered their 1929 levels, and unemployment was still very high. New taxes or higher rates on old taxes have very discouraging effects on recovery forces. This is especially true of consumption taxes, but it is also true of taxes that reduce profit expectations, since this will tend to reduce investment incentives. The only difference is that taxes that tend to fall on savings are more likely to tap idle funds than taxes that tend to fall on consumption. Perhaps, most states felt that they had no other recourse except that of turning to consumption taxes; consumption taxes certainly had many advantages from the viewpoint of public administrators. However, from a counter-cyclical viewpoint, taxes that withdraw consumer spending from the income stream during a recovery

are inappropriate unless it appears that the recovery is proceeding too fast and inflationary trends are a problem. This appears not to have been the case during the 1933-1937 recovery.

C. Federal, State, and Local Tax Revenue, 1937-1940.

Total federal, state and local tax revenues increased \$1.7 billion from June, 1937, to June, 1938, in spite of the strong recessionary forces that characterized this period (Table E). Since prices declined 9 percent during this period, total tax revenues at all three levels of government show a significantly greater increase when measured in constant dollars (\$3.4 billion). Also, the impact of all taxes on national income was greater in the fiscal year ending in June, 1938, than in any year during the period of this analysis, 1929-1940. For, total federal, state, and local taxes were approximately 21 percent of national income in the fiscal year 1938.

The higher tax revenues at the federal level of government reflect higher rates established by the Federal Revenue Act of 1936 on estates, gifts, corporate and personal income.²⁴ Also, the increased revenues from these tax sources in the fiscal years 1937 and 1938 would, in part, reflect the relatively high income levels in 1937, since there is a lag in the reporting

²⁴Annual Report of the Secretary of the Treasury, 1940,
pp. 7-12.

TABLE E

Total Federal, State and Local Tax Revenues Adjusted Tax Revenues,¹ and Tax Burden²
1937-1940

	1937	1938	1939	1940
ALL UNITS				
Tax Revenues (\$ billions)	12.7	14.4	13.9	14.4
Adjusted Tax Revenues (\$ billions)	14.0	17.4	17.2	17.4
Tax Burden (Percent)	17.3	21.3	19.1	17.6
FEDERAL GOVERNMENT				
Tax Revenues (\$ billions)	5.1	6.0	5.5	5.7
Adjusted Tax Revenues (\$ billions)	5.6	6.0	6.8	6.9
Tax Burden (Percent)	6.9	8.9	7.6	6.9
STATE GOVERNMENT				
Tax Revenues (\$ billions)	3.4	3.9	3.9	4.2
Adjusted Tax Revenues (\$ billions)	3.7	4.7	4.8	5.1
Tax Burden (Percent)	4.6	5.7	5.4	5.2
LOCAL GOVERNMENT				
Tax Revenues (\$ billions)	4.3	4.5	4.5	4.5
Adjusted Tax Revenues (\$ billions)	4.7	5.4	5.6	5.4
Tax Burden (Percent)	5.8	6.6	6.2	5.5

Sources: Tables IV and XI in the General Appendix, and United States Bureau of Census, Historical Statistics of the United States, 1789-1945.

¹Adjusted for price changes by using wholesale price index. (1929 = 100)

²Tax revenues expressed as a percentage of national income.

of the data from these sources of tax revenues. Since tax revenues rose at the state and local levels (\$.7 billion) during the 1937-1938 business decline, some tax rates were evidently increased at these levels, too.

During the recession of 1937-1938, the federal tax structure became slightly more progressive as federal taxes that fall primarily on investment spending increased more than taxes that fall largely on consumption (Table XII in the General Appendix). Local tax structures showed no significant change; however, state general sales taxes, motor fuel taxes, and payroll taxes continued to yield higher revenues during the decline in economic activity. The increasing of federal tax rates on income was probably a contributing factor in bringing the expansion in 1937 to an end. The undistributed corporate profits tax which was passed in 1936,²⁵ and the increased progressiveness of tax rates on personal and corporate income would tend to decrease profit expectations from new investment. Perhaps this partially explains why most of the reduced spending between 1937 and 1938 is accounted for by a reduction in investment spending, which fell \$5.1 billion as compared to the drop

²⁵Harold M. Groves, Financing Government, p. 192.

in total spending of \$5.5 billion over this period. Spending for producer's durable goods, new construction, and inventories decreased rapidly in this recession;²⁶ especially strong was the businessman's reluctance to buy more inventories as taxes cut into profit margins, and falling prices gave an incentive to postpone purchases. Consumer spending held up very well during 1937-1938; only spending for consumer durable goods showed a significant percentage decrease.²⁷

Total federal, state, and local tax revenues decreased in 1939 (Table E). State and local tax revenues did not change; the reduction in total tax revenues in that year is accounted for by a decrease in federal tax collections. This reduction in federal tax revenues in 1939 reflects the decline in federal revenues from income tax sources as a result of recessionary forces operating in 1938 (Table XII in the General Appendix). Actually, collections from many federal consumption taxes, such as liquor, tobacco, and gasoline taxes, showed increases; as sales of these products increased in 1939, yield from these

²⁶U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, Supplement to the Survey of Current Business, National Income, 1951 Edition (Washington: U. S. Government Printing Office, 1951), p. 150.

²⁷Loc. cit.

sources increased. In 1940, tax revenues at each level of government increased, reflecting the improved economic conditions in 1939 and 1940.

State-Local Borrowing, 1929-1940

The depression affected state and local borrowing in three ways.²⁸ The amount of borrowing was not adequate to permit state and local units to finance needed expenditures; state and local governments changed from long term to short term borrowing, and the cost of borrowing was greatly increased. State and local governments had to meet the same criteria of soundness as private borrowers.²⁹ This meant that state and local units had to have adequate revenues. With a high volume of tax delinquencies and reduced tax yields, state and local units had difficulty securing funds from borrowing. Harvey Perloff notes that "in 1932, 697 issues totalling \$260 million could not find a market; in 1933, 528 issues with a dollar volume of \$212 million failed of sale, including sales by such governments as Buffalo, Philadelphia, Cleveland, Toledo, Mississippi, and Montana."³⁰ The inability of state and local

²⁸Maxwell, Federal Grants and the Business Cycle, p. 23.

²⁹Hansen, State and Local Finance, p. 56.

³⁰Harvey S. Perloff, "Fiscal Policy at the State and Local Levels," Postwar Economic Problems, ed. Seymour E. Harris, p. 225. (In the future, this reference will be referred to as: Perloff, Postwar Economic Problems.)

units to borrow, except at very high costs, if at all, led Arthur D. Gayer to conclude that this "demoralization of municipal credit" reduced the desirability and ability of state and local units to assume the burden of increased long-term indebtedness.³¹

The period 1930-1932 illustrates how the volume and distribution of state and local borrowing was affected by the distressed conditions at that time. During this period, total obligations dropped \$116 millions, and there was a marked shift from long term financing to short term financing (Table F). In 1932, 57 percent of state and local borrowing consisted of short term borrowing as compared to 40 percent in 1930. The increasing difficulties of securing long term loans resulted in a 34 percent (\$507 million) reduction in long term borrowing and a 29 percent (\$291 million) increase in temporary borrowing during the 1930-1932 period. The decrease in long term loans would have been greater if it had not been for \$96,000,000 of federal Reconstruction Finance Corporation loans to state and local governments for emergency relief and self liquidation projects.³²

³¹ Arthur D. Gayer, Public Works in Prosperity and Depression (New York: National Bureau of Economic Research, 1953), p. 303.

³² Hansen, State and Local Finance, p. 60.

The higher cost of borrowing reflects the perverse municipal credit conditions. In 1932, 37.9 percent of state and local bond issues were sold with interest costs higher than 5 percent, as compared with 6.5 percent in 1930. The world wide financial panic, the exodus of gold, and the worsening of

TABLE F

Gross State and Local Borrowing, Long Term
and Temporary, 1929-1939.

(in millions)

Year	Long Term ¹	Temporary	Total	Temporary % of Total
1929	1431	909	2339	39.0
1930	1487	996	2483	40.0
1931	1256	936	2192	43.0
1932	980	1287	2267	57.0
1933	1005	1374	2379	58.0
1934	1228	988	2216	45.0
1935	1299	1035	2329	44.0
1936	1173	884	2057	43.0
1937	1011	1064	2071	51.0
1938	1264	1210	2474	49.0
1939	1183	1181	2364	50.0

Source: Municipal Year Book, 1940, p. 189.

¹Includes purchases by federal agencies.

the depression were responsible for the very adverse terms on which state and local credit were available in 1932.³³ The spread between the average interest rates payable on federal

³³Ibid., p. 302.

TABLE G

Percentage of State and Local Bond Sales Bearing
Interest Rates Higher than 5 Percent

<u>Year</u>	<u>Percent</u>
1928	7.8
1929	19.6
1930	6.5
1931	6.1
1932	37.9
1933	14.9
1934	5.7
1935	.7

Source: State and Municipal Compendiums,
Part I, June 30, 1942, p. 8.

debt and the average rates payable on state and local debt indicates the greater difficulty of state and local borrowing during depressionary conditions.

The state and local bond market did not improve in 1933.³⁴ Increasing bond defaults, bank failures, and the high cost of credit were instrumental in deterring lending and borrowing. In 1933, long term borrowing increased (Table F) essentially because of loans to state and local governments from federal agencies. These agencies made available permanent loans to state and local units amounting to

³⁴Ibid., p. 303

TABLE H

Average Interest Rates Payable on Debt
At End of Calendar Year, 1929-1940

Year	Federal	State and Local	Spread
1929	3.99	4.55	.56
1930	3.84	4.53	.69
1931	3.70	4.52	.82
1932	3.50	4.55	1.05
1933	3.20	4.52	1.32
1934	2.86	4.48	1.62
1935	2.50	4.38	1.88
1936	2.47	4.25	1.78
1937	2.46	4.15	1.69
1938	2.57	4.00	1.43
1939	2.55	3.75	1.20
1940	2.52	3.50	.98

Source: Bureau of Foreign and Domestic Commerce,
Economic Series, No. 21, p. 68.

\$532,000,000 in this year.³⁵ However, difficulties were experienced with federal loans to local governments.³⁶ The Reconstruction Finance Corporation loan program was started in 1932, but the total amounts involved were small compared to the \$300 million that was available in that year. There were legal and institutional obstacles. State and local units could not circumvent their full faith and credit debt

³⁵Loc. cit.

³⁶Ibid., p. 59.

limitations, and were restrained, in many instances, from issuing revenue bonds. Also, the Reconstruction Finance Corporation's emphasis on self-liquidating projects and the $4\frac{1}{2}$ percent interest charge for these were deterrent factors to local borrowing.³⁷

The loans to local governments from the federal Public Works Administration program started in 1933, and were available at 4 percent.³⁸ However, these loans were subject to the same difficulties as Reconstruction Finance Corporation loans, namely, the emphasis on self-liquidating projects and the legal restrictions on debt limitations. Over 50 percent of municipal securities purchased by the Public Works Administration were revenue obligations payable from the revenues of self-sustaining municipal enterprises.³⁹ Actually, the emphasis on self-liquidating projects was an attempt to get around legal restrictions on debt limitations. The courts in most states had ruled that revenue bonds were not to be considered part of the state and local debts, which were limited by statutory or constitutional provisions.⁴⁰

³⁷Loc. cit.

³⁸Ibid., p. 60.

³⁹Ibid., p. 61.

⁴⁰Loc. cit.

As a result of improved economic conditions and federal loans to local units, the long term borrowing of state and local governments increased in 1934 and 1935 (Table F). Total state and local borrowing in 1935 was below the 1933 level, but this was due to a much lower level of short term borrowing in 1935. In 1936, both long term and short term borrowing by state and local governments decreased. Rising tax yields had decreased the need for borrowing. Credit was tightened as a result of the Federal Reserve policy of increasing the margin requirement on securities from 40 to 55 percent (February, 1936) and increasing member bank reserve requirements by 50 percent (August 15, 1936).⁴¹ In 1939, the further increasing of reserve requirements had significant effects on the securities market. Kenneth D. Roose, who made a detailed analysis of these effects of Federal Reserve action, concludes that increasing reserve requirements "touched off a series of events leading to a weakening of the securities markets which made the task of obtaining new capital funds more difficult."⁴²

⁴¹Roose, The Economics of Recession and Revival: An Interpretation of 1937-38, pp. 90-91.

⁴²Ibid., p. 109.

This higher cost and reduced availability of funds is reflected in the decline in the volume of long term borrowing (\$162 million) and the increase in temporary state and local borrowing (\$184 million in 1937). Again, it seems that when credit is scarce and the price high, state and local governments are forced to reduce the volume of their long term borrowing and increase their temporary borrowing.

The promising thing that happened during this period, from a counter-cyclical standpoint, is that federal action helped to stabilize the market for state and local credit. The pressure on state and local revenues was also relieved by direct aid to state and local units in the form of federal grants, discussion of which will follow the discussion of federal borrowing.

Federal Borrowing, 1929-1940

In contrast to state and local governments, the federal government was able to borrow adequate funds to finance deficits and to borrow funds on more favorable terms. When state and local issues were encountering difficulties in finding suitable markets, the market for federal issues was practically without limit.⁴³ The decline in private security issues and the lack of low risk private borrowers, encouraged the flow of loanable funds into the market for federal issues. In addition, the Federal Reserve policy of monetary ease during most of the period supported the market for federal credit. Federal borrowing increased approximately \$26 billion during the thirties (Table I). During the first two years of the depression, 1929 and 1930, the federal net debt decreased \$679 million and \$875 million, respectively (Table J). This was the result of a budget surplus in these two years. In the fiscal year 1931, federal spending exceeded federal revenues, necessitating an increase in the federal debt. Deficit spending continued throughout the rest of the period. The federal net debt increased 145 percent during 1929-1940.

⁴³National Industrial Conference Board, Essential Facts for Fiscal Policy (New York: National Industrial Conference Board, 1941), p. 115.

TABLE I

Federal Interest-Bearing Debt Outstanding, June 30, 1929-1940

	(in millions)											
Type of Issue	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
U. S. Bonds	12125	12111	13531	14250	14223	16510	14936	18628	21322	23599	27566	29917
Treasury Bills	1640	1420	2246	3341	3063	2921	2053	2354	2303	1154	1308	1302
Notes	2267	1626	452	1261	4548	6653	10023	11381	10617	9147	7243	6383
Special Issues ¹	607	764	291	309	323	396	633	626	1558	2676	3770	4775
Gross Debt	16639	15921	16520	19161	22157	26480	27645	32989	35800	36576	39887	42377
-Special Issues	607	764	291	309	323	396	633	626	1558	2676	3770	4775
Net Debt	16032	15157	16229	18852	21834	26084	27012	32363	34242	33900	36117	37602

Source: United States Department of Commerce, Bureau of Census, Historical Statistics of the United States, 1789-1945, p. 305

¹Comprises special issues to Government agencies and trust funds.

TABLE J

Federal Net Debt and Federal Surplus or Deficit

	(in millions)	
	Net Debt	Surplus (+), Deficit (-)
	increase (+)	
	decrease (-)	
1929	- 679	+ 734
1930	- 875	+ 738
1931	+1072	- 462
1932	+2623	-2529
1933	+2982	-1783
1934	+4250	-2895
1935	+ 928	-3209
1936	+5351	-4550
1937	+1879	-3149
1938	- 342	-1384
1939	+2217	-3542
1940	+1485	-3611

Source: United States Department of Commerce, Bureau of Census, Historical Statistics of the United States, 1789-1945, p. 296 and p. 305.

The cost of federal borrowing decreased during the period (Table K). In 1929, the average interest rate paid on the federal debt was 3.9 percent. By 1933, the average interest rate paid on federal securities was 3.3 percent. This trend continued during the recovery, with the average interest rate having fallen to 2.6 percent in 1936. During the remainder of the period, the average cost of federal credit stayed approximately 2.6 percent.

With the more favorable factors developing in the market for federal securities, the treasury converted a

TABLE K

Average Rate of Interest on the Federal Debt, 1929-1940

<u>Fiscal Year</u>	<u>Average Rate of Interest</u>
1929	3.946
1930	3.807
1931	3.566
1932	3.505
1933	3.350
1934	3.181
1935	2.716
1936	2.559
1937	2.582
1938	2.589
1939	2.600
1940	2.583

Source: United States Department of Commerce, Bureau of the Census, Historical Statistics of the United States, 1789-1945, p. 305.

significant amount of short term securities constantly falling due into issues paying a lower interest.⁴⁴ In 1930, 57 percent of federal issues were yielding between 4 and $4\frac{1}{2}$ percent. In 1940, only 4.8 percent of federal issues were paying this rate. In 1940, 66.9 percent of federal issues were returning a lower rate of interest - between $2\frac{1}{2}$ and $3\frac{1}{2}$ percent as compared to 15.7 percent in 1933.

⁴⁴Ibid., p. 117.

TABLE L

Percentage Distribution of Federal Net Debt by Interest Rates, 1930-1940

	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
Under 1%	—	0.5	2.9	7.2	5.4	7.6	7.3	6.7	3.4	4.8	6.5
1%—1½%	—	2.2	2.1	2.5	—	2.5	3.2	4.8	7.0	6.3	7.5
1½%—2%	—	5.2	2.0	—	3.4	9.8	15.5	14.3	15.1	11.6	5.5
2%—2½%	4.5	10.1	5.0	4.7	8.5	7.7	4.3	3.9	5.0	3.2	7.5
2½%—3%	4.0	0.1	0.2	8.6	10.9	19.5	27.8	34.6	37.5	44.2	45.2
3%—3½%	11.7	14.5	28.0	24.6	33.4	39.6	34.8	29.0	25.3	23.6	21.7
3½%—4%	23.1	14.4	14.2	8.6	7.2	1.8	1.5	1.4	1.4	1.3	1.3
4%—4½%	56.8	53.0	45.6	43.7	31.2	11.5	5.6	5.2	5.3	5.0	4.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: National Industrial Conference Board, Essential Facts for Fiscal Policy, p. 116.

Federal Grants, 1929-1940

A revenue source of state and local governments which evolved into importance during the distressed economic conditions of the thirties was federal grants to state and local governments. Before 1929, federal grants were not of sufficient magnitude to affect greatly state and local finance.⁴⁵ During 1919 and 1928, the average federal grant to state and local governments in a fiscal year was \$98.6 million. During the 1929-1940 period, the average federal grants rose to \$1453.3 million during a fiscal year.

Federal grants may be for the purpose of stimulating state and local services, or to relieve state and local budgets from the fiscal burden of providing services.⁴⁶ The grants in the thirties were primarily of the latter type, and had the purpose of aiding state and local governments in the financing of their expenditures. Congress set up the Federal Emergency Relief Administration (May, 1933), Civil Works Administration (November, 1933), Federal Emergency Administration of Public Works (June, 1933), and the Works Progress

⁴⁵Maxwell, Federal Grants and the Business Cycle, p. 10.

⁴⁶Ibid., pp. 8-10.

Administration (January 4, 1935)⁴⁷ to cope with the unemployment situation, and to aid state and local governments through grants and loans. Federal grants were made conditionally, and state-local contributions varied at different times and with different federal administrations.⁴⁸ For example, state-local contributions to projects financed by the Federal Emergency Relief Administration grants depended on the discretion of the administrator, until 1939 when state-local contributions were fixed at 25 percent of the total cost of the project. In the case of Public Works Administration grants, the grants were 20 to 25 percent and state and local contributions 75 to 80 percent until 1935, when federal grants became 45 percent of the total cost of the non-federal project.

Federal grants to governments were of insufficient magnitude to ease state and local tax and credit situations prior to 1934. During the 1929-1933 contraction period, federal grants were between 1.6 percent and 2.9 percent of state

⁴⁷Works Progress Administration payments were made completely through federal officers, but state and local governments supervised the projects and also put up some of the money. Therefore, Works Progress Administration payments are included as federal grants. See Maxwell, op. cit., p. 11.

⁴⁸Maxwell, op. cit., p. 97.

and local revenues. Starting in 1934 and continuing through 1940, federal grants became an important part of state and local revenues. In 1934, 21.9 percent of state and local revenues (exclusive of borrowing) consisted of federal grants. This ratio increased, reaching 26 percent in the fiscal year 1939. Federal grants decreased during the 1937-1938 recession,

TABLE M

Federal Grants to State and Local Governments,
1929-1940

Fiscal Year	(in millions)	
	Federal Grants	Percent of State-Local Revenues
1929	119	1.6
1930	114	1.5
1931	195	2.5
1932	228	2.9
1933	201	2.5
1934	1848	21.9
1935	2277	25.4
1936	2318	24.5
1937	2669	26.0
1938	2180	19.7
1939	2909	25.6
1940	2401	20.5

Source: James A. Maxwell, Federal Grants and the Business Cycle, p. 18. Table XI in the General Appendix.

playing a role in state-local revenue structures that was slightly less than in 1934. Federal grants increased absolutely and as a percentage of state-local revenues during the fiscal year 1939. In 1940, federal grants were reduced again,

but still amounted to a substantial sum (\$2.4 billion) and to a significant percentage of state-local revenues (20.5 percent).

Federal grants have vast counter-cyclical possibilities. By relieving state and local tax and credit structures from the full impact of recessionary forces, they enable state and local governments to keep up a level of spending that otherwise might be impossible.

Federal, State, and Local Spending, 1929-1940

As in the discussion of tax revenues, three criteria are used as a basis for indicating the relative importance of federal, state, and local spending during the period under review. Total government spending is discussed in terms of current prices, adjusted 1929 prices, and as a percentage of national income. Finally, government spending is discussed by type and character of expenditure.

A. Federal, State, and Local Spending, 1929-1933

Cumulative downward forces of the business cycle began to dominate in June, 1930, and total government spending decreased \$1180 million from that time to the end of the contraction in 1933 (Table N). In this situation, counter-cyclical fiscal policy would have called for a significant increase in government spending, especially at the federal-state levels. At the federal level, spending increased only \$627 million, and at the state level, spending increased only \$193 million.⁴⁹ Spending at the local level decreased \$2000 million, completely neutralizing the beneficial effects of increased federal-state

⁴⁹Includes only direct state spending. Total state spending (direct and state aid to governments) will be discussed later.

TABLE N
Federal, State, and Local Spending in Selected
Fiscal Years, 1930-1938

	(millions)		
	Current Prices	Adjusted 1929 Prices	% of National Income
1930			
Total	12329	12993	15.7
Federal	3237	3576	4.4
State ¹	1892	2091	2.5
Local	7200	7325	8.8
1933			
Total	11149	16065	28.2
Federal	3864	5424	10.0
State ¹	2085	3004	5.3
Local	5200	7637	12.9
1936			
Total	17167	20244	26.5
Federal	8666	10219	13.4
State ¹	2445	2883	3.8
Local	6056	7141	9.3
1937			
Total	17355	19102	23.6
Federal	8177	9005	11.1
State ¹	2697	2970	3.7
Local ²	6481	7138	10.2
1938			
Total	17227	20856	25.5
Federal	7239	8764	10.7
State ¹	3082	3731	4.6
Local	6906	8361	10.2

Sources: United States Department of Commerce, Bureau of the Census, Historical Statistics of the United States, 1789-1945; Table V in the General Appendix.

¹State aid spending to local governments deducted in order to avoid duplication.

²Estimated by taking the arithmetic mean of the closest even years, where data are unavailable.

spending.

When government spending is expressed in constant purchasing power and as a percentage of national income, it would appear that government spending had a greater impact on the economy than is usually realized. The same volume of government spending in 1933 as in 1929 would, of course, have made a greater relative contribution to the flow of spending since prices and incomes fell drastically during this period. The volume of government spending could have been less in 1933 than in 1929, and yet, the contribution of government spending could have been greater in 1933. This would depend on whether the change in the volume of government spending was more or less than the reduction in prices and income. If prices and income fall more than government spending, the impact of government spending, expressed in terms of constant purchasing power or as a percentage of income, will be greater. Since government spending is measured in terms of dollars, it is impossible to know the actual volume of government spending. The only way to indicate the relative change in the volume of government spending is to measure government spending in constant dollar values. At best, this is only a crude device for measuring changes in volume and should be recognized as such.

It does not make any difference whether government

spending is expressed as a percentage of income in constant prices or in current prices, since adjusting government spending and income for price changes would not change the ratio of government spending to income.

In constant 1929 prices, total government spending increased approximately \$3.1 billion between fiscal years 1930 and 1933, a very significant increase when measured on this basis (Table N). Federal spending increased 51 percent and state and local spending showed increases of 44 percent and 5 percent, respectively, when measured on this same basis. Thus, important increases in government spending occurred at all three levels of government. Prices decreased much more than even state and local spending. Hence, in constant dollar terms, state and local spending were greater in 1933 than in 1930. State and local dollar expenditures in 1933 bought more goods and services than they did in 1930.

When government spending is expressed as a percentage of national income, it is revealed that federal, state, and local spending accounted for an increasing share of national income throughout the contraction period (Table N). In 1930, total government spending was approximately 16 percent of national income. As a consequence of national income's falling 54 percent between 1929 and 1933, total government spending

was almost one-third of national income in 1933. Of course, it would have been much more desirable if this change had occurred as a result of higher levels of government spending rather than as a drastic drop in income levels. However, the fact remains that total government spending did increase relative to national income, and therefore, made a larger relative contribution to the income stream.

Federal spending expressed as a percentage of national income increased the most during the contraction of 1929-1933; however, state and local spending also became a greater percentage of national income (Table N). Federal spending was 4.4 percent of national income in 1930. In 1933, Federal spending had risen to 10 percent of national income. Direct state and local spending were 5.3 percent and 12.9 percent, respectively, in 1933 as compared to 2.5 percent and 8.8 percent, respectively, in 1930. Thus, state and local spending, as well as federal spending, became an increasing percentage of national income during the contraction. Also, total state and local spending was almost twice as great as federal spending in 1933, even though federal spending was increasing relative to state and local spending throughout this period.

Table O, below, shows total government spending, federal spending, and state and local spending on public works during

TABLE O

Federal, State and Local Expenditures on Public Works, 1927-1938

(in millions)

Calendar Year	Total Government Expenditures for Public Works	Federal Expenditures for Public Works		State and Local Expenditures for Public Works		
		Total	Direct	Total	State & Local Funds	Federal Aid
1927	3189	282	199	2990	2907	83
1928	3330	316	233	3097	3014	83
1929	3309	357	276	3033	2952	81
1930	3733	445	328	3405	3288	117
1931	3424	540	368	3056	2884	172
1932	2539	590	399	2140	1949	191
1933	1918	785	439	1481	1133	348
1934	2474	1266	509	1965	1208	757
1935	2548	1433	675	1873	1125	758
1936	3496	2180	916	2580	1316	1264
1937	3329	1938	773	2556	1391	1165
1938	3711	2099	655	3056	1612	1444

Source: Hearings Before the Temporary National Economic Committee,
Part 9, Savings & Investment, p. 4064.

the 1927-1938 period.

The salient characteristic indicated in the table is the inadequacy of federal expenditures on public works to prevent secondary cumulative forces from forcing total government spending on public works downward in 1931, 1932, and 1933. Total government spending on public works ran over \$3 billion in 1927, 1928 and 1929, reaching a peak of \$3.7 billion in 1930. From this peak, total government spending on public works rapidly declined \$1.8 billion over the next three years. Total state and local expenditures on public works were \$3.4 billion in 1930 and stayed slightly over \$3 billion in 1931; however, the onslaught of depressionary forces was too much for state and local governments, and federal aid to state and local governments was far below the level necessary to permit state and local governments to maintain their previous level of expenditures on public works. As a consequence, these expenditures of state and local governments on public works decreased to \$1.5 billion in 1933, a drop of approximately 56 percent between 1930-1933.

It was 1936 before the levels of direct federal expenditures (\$916 million) and federal aid expenditures on public works (\$1264 million) were sufficiently high to make total government spending on public works equal to the pre-depression

level of over \$3 billion. Can it be said then, that this is an indication of the level that federal spending on public works should have been? Would this level of federal spending have arrested the secondary cumulative forces? Probably not, for private investment spending and consumer spending drastically declined during this period, and even a level of \$3 billion of government spending on public works would not have made up for this deficiency in private spending. Private investment spending fell \$5.6 billion between 1929 and 1930, \$4.8 billion between 1930 and 1931, and \$4.5 billion between 1931 and 1932. In three years, private investment spending had fallen \$14.9 billion.

TABLE P

Private Consumer and Investment Spending-1929-1940

Year	Private Consumer Spending	Private Investment Spending	Total
1929	78761	15824	94585
1930	70761	10209	80970
1931	61153	5362	66515
1932	49208	886	50094
1933	46346	1306	47652
1934	51882	2807	54689
1935	56215	6146	62361
1936	62515	8318	70833
1937	67121	11440	78561
1938	64513	6311	70824
1939	67466	9917	77383
1940	72052	13949	86001

Source: United States Department of Commerce, A Supplement to the Survey of Current Business, National Income Edition, 1951, p. 150.

Consumer spending held up under the impact of falling income much better than did investment spending, but consumer spending decreased \$29.6 billion between 1929 and 1932, a drop of 37.6 percent as compared with the drop in investment spending of 94.3 percent. Nevertheless, a much higher level of direct federal spending and federal aid spending would certainly have mitigated the cumulative downward turn in the flow of spending, and if such a spending program had been started in 1930 when depressionary forces first started, the severity of the contraction could very likely have been lessened.

Most of the increased federal spending during this period was in the form of relief spending - relief to farmers, bankers, railroads, unemployed urban workers, and state and local governments.⁵⁰ This type of federal spending was urgently needed as the depression engulfed all phases of society. However, a counter-cyclical fiscal program necessitates a level of public investment adequate to fill the gap between income and consumption - a gap left by insufficient private investment. Direct federal public investment and federal aid to state and local governments were quite inadequate to do this job.

⁵⁰Gerhard Colm, "Fiscal Policy and the Federal Budget," p. 215; Hansen, Fiscal Policy and Business Cycles, pp. 84-95.

The 1929-1933 depressionary forces basically altered the type of state and local spending. The outstanding changes were the decrease in total state and local capital outlays and the increase in public welfare outlays. Local data are unavailable for every year, but the trend in state and local spending is indicated in Table Q. Total state and local capital outlays

TABLE Q

State and Local Direct Expenditures for Capital Outlays
and Public Welfare in Selected Fiscal Years,
1927-1934

(in millions)			
	Total	Capital Outlays	Public Welfare
1927			
Total	2507	2356	151
State	532	492	40
Local	1975	1864	111
1932			
Total	2320	1876	444
State	860	786	74
Local	1460	1090	370
1934			
Total	2296	1407	889
State	982	619	363
Local	1314	788	526

Sources: Tables XVI, XV, and XVII in the General Appendix.

fell \$949 million and public welfare outlays rose \$738 million between 1927 and 1934. Total state and local figures distort somewhat the individual changes at the two levels of government. State direct capital outlays were higher in 1932 and

and 1934 than they had been in 1927. State capital outlays increased \$255 million between 1929 and 1932, and \$88 million between 1932 and 1934.⁵¹ It appears that state capital outlays held up as well as they did partially because of federal grants. James A. Maxwell reveals that total state and local construction spending, exclusive of federal grants, decreased \$1405 million between the calendar years 1929-1933.⁵² According to Maxwell's data, state and local construction expenditures were 61 percent below their 1927 level, in 1934. The data in this study, which include federal grants, show that total state and local expenditures for construction fell 39 percent during the same period.⁵³

State and local construction expenditures were not the only type of expenditure to decrease during the 1929-1933 depression. In cities with a population of 100,000 or more,

⁵¹State Capital outlays were \$531 million in 1929. See United States Bureau of Census, Financial Statistics of States, 1929.

⁵²Maxwell, Federal Grants and The Business Cycle, p. 21.

⁵³United States Department of Commerce, Bureau of Census, Historical Statistics on State and Local Government Finances, 1902-1953, p. 17.

public welfare spending was the only type of spending that increased between 1931 and 1933.⁵⁴ Expenditures for local services, such as public safety, sanitation, health, hospitals, schools, recreation, etc., were reduced as a result of economic conditions. Similarly, state expenditures were reduced for many things, such as education and health; however, state spending held up much better than local spending because of the assumption by state governments of functions previously conducted at the local level, the increase in federal grants, and an increase in state aid to local governments.⁵⁵

Total state spending increased during 1929-1933. Essentially, there appear to be two reasons for this - state aid to local units and federal grants to state units. Unfortunately, data on state aid expenditures were not completely segregated during 1929-1931; however, data on state aid for education and highways, the two major purposes of state aid expenditures during this early period, are available. Data on federal grants are also incomplete. Figures on federal grants, prepared by the Bureau of the Census, are divided into state and local, but are available only for 1927, 1932, and

⁵⁴United States Department of Commerce, Bureau of the Census, Historical Review of State and Local Government Finances (Washington: United States Printing Office, 1954), p. 24.

⁵⁵Maxwell, Federal Grants and the Business Cycle, p. 21.

TABLE R

Total State Spending, State Aid to Local Governments, and Federal Grants to State Governments, 1927-1934

(in millions)			
Year	Total	State Aid	Federal Grants
1927	2047	596	107
1929	2061	367 ¹	119
1930	2290	398 ¹	113
1931	2509	419 ¹	195
1932	2829	801	222
1933	3145 ²	1055 ²	201
1934	3465	1318	968

Sources: United States Department of Commerce, Bureau of the Census, Financial Statistics of States; Historical Statistics on State and Local Government Finances, 1902-1953; Maxwell, Federal Grants and the Business Cycle.

¹Only state aid for highways and education segregated in these years.

²These figures estimated by taking the arithmetic mean of years 1932 and 1934, which probably over estimates state spending in 1933.

1934. Data for the other years were obtained from the Bureau of the Budget, which did not divide federal grants into state and local governments. However, federal grants before 1933 went to state governments;⁵⁶ therefore, the Bureau of the

⁵⁶Ibid., p. 16.

Budget figures on federal grants can be used here without distorting the data. On the basis of these figures, it appears that approximately 70 percent of the increase in state spending between 1929 and 1932 is accounted for by state aid spending and federal grants to state governments. Between 1932 and 1934, state aid spending and federal grants to state governments increased twice as much as the increase in state spending during this period.

B. Federal, State, and Local Spending, 1933-1937.

Total federal, state and local spending contributed to the recovery by increasing \$6.2 billion between fiscal years 1933 and 1937 (Table N). When total government spending is measured in constant 1929 prices, total government spending showed a substantial increase (\$3.0 billion) over this period. Federal spending may be presumed to have made a substantial contribution to the recovery. During this period, federal spending increased 112 percent when measured in current dollars, and 66 percent when measured in constant 1929 dollars. When the crisis came in 1929, federal spending was only about one-half that of local spending, and only slightly greater than state spending. The social and economic conditions of the thirties fostered a new role for federal spending; as a result, federal spending was greater than local spending by 1937, and

over two and one-half times greater than state spending in that year.

It is doubtful whether state and local spending contributed to the recovery. Direct state and local spending increased \$612 million and \$1281 million, respectively, between 1933 and 1937, a total contribution of slightly over \$1.9 billion. But in terms of 1929 prices, state direct spending decreased \$34 million, and local direct spending decreased \$499 million during the 1933-1937 recovery. Also, state and local spending fell as a percentage of national income during this period.

In fact, the ratio of total government spending to national income fell during 1933-1937. Government spending was probably not contributing as much to the recovery as the higher levels of private spending. How much the rising level of government spending stimulated the rising levels of private spending is very difficult to determine. It appears reasonable to say, however, that the higher level of government spending was a factor in explaining the rising level of private spending during the 1933-1937 recovery.

Total government spending on public works increased from \$1.9 billion in 1933 to \$3.3 billion in 1937 (Table O). This increased public works spending of \$1.4 billion was

largely accounted for by a higher level of federal aid expenditures and direct federal expenditures on public works.

Direct state and local public works spending increased 22.7 percent (\$258 million) during the recovery; whereas, federal aid to public works of state and local governments increased 234 percent (\$817 million), and direct federal spending on public works increased 76.1 percent (\$334 million) during the period. This higher level of federal spending on public works probably had an important influence on the recovery. Higher levels of public works expenditures would not only generate higher income levels per se, but they would also induce higher levels of private investment spending and consumer spending. Public works spending directly increases the demand for investment goods, and indirectly increases the demand for consumer goods via the employment of more workers. Private investment spending and consumer spending both demonstrated remarkable recoveries. Investment spending was at a level of \$11.4 billion in 1937, and consumer spending was at a level of \$67.1 billion in that year, compared to much lower levels of \$1.3 billion and \$46.3 billion, respectively, in 1933 (Table P). The most logical position seems to be that the higher level of federal spending along with other conducive factors, such as the expanding money supply, higher prices, the need for capital

and inventory replacements, higher profit expectations, etc., was a contributing factor in the recovery.⁵⁷

Total state and local spending for almost every purpose increased during the 1933-1937 recovery (Table XVII in the General Appendix). But, the important thing to note appears to be the relatively small increase in total state and local spending for most purposes, and the failure of many major types of spending, such as, construction, education, highways, etc., to recover their 1927 and 1932 levels. For example, total state and local spending for construction, equipment, land and existing structures in 1936 was \$352 million below the 1932 level, and \$832 million below the 1927 level. Total state and local spending on education was \$134 million and \$58 million below the 1932 and 1927 levels, respectively, in 1936. Similarly, highway spending was significantly below pre-depression and depression levels throughout the recovery. Total state and local spending for health, hospitals, public safety, natural resources, etc., increased during the recovery and were above pre-depression levels; but, the increase in these cases was not significant. Between 1932 and 1934, public welfare spending

⁵⁷For a discussion of some of these factors see Albert G. Hart, Money, Debt, and Economic Activity, (New York: Prentice-Hall, Inc., 1948), pp. 320-324.

doubled, increasing from \$444 million to \$889 million. During 1935 and 1936, public welfare spending remained at its 1934 level.

The interdependency of federal, state and local spending tends to be revealed when federal grants to state and local governments are excluded from state and local totals, and state aid to local governments is excluded from local spending.

TABLE S

Total State and Local Spending, Exclusive of Federal Grants,
and Local Spending Exclusive of State Aid to
Local Governments, 1933-1938

(in millions)				
Fiscal Year	Total State and Local Spending	Excluding Federal Grants	Total Local Spending	Excluding State Aid
1933	7285	7084	5200	4399 ¹
1934	7842	5994	5699 ²	4381 ²
1935	8172	5895		
1936	8501	6182	6056 ²	4639 ²
1937	9178	6509		
1938	9988	7808	6906	5390

Sources: Table N, p. 103; United States Department of Commerce, Bureau of the Census, Historical Statistics of State and Local Governments, 1902-1953; James A. Maxwell, Federal Grants and the Business Cycle, p. 18.

¹State aid in 1932 is used since this is all that is available.

²Data are not available.

Without federal grants, state and local spending would not have turned upward in 1934 and 1935, and would not have even reached the low 1933 level of spending until 1938. Local spending increased in 1934 as the result of state aid spending.

Total state spending (direct state spending and state aid spending) increased throughout the recovery, primarily because of federal aid to state governments (Table T). It appears that it would have been 1936 before total state spending would

TABLE T

Total State Spending Exclusive of Federal Revenue,
and State Aid to Local Governments, 1933-1938

(in millions)			
Fiscal Year	Total State Spending	Excluding Federal Revenue	Excluding Federal Grants & State Aid
1933	3145	2923 ¹	2122 ¹
1934	3461	2493	1175
1935	3662	²	²
1936	3862	3034 ²	1617 ²
1937	4066		
1938	4598	3965	2449

Source: Table V in the General Appendix; United States Department of Commerce, Bureau of the Census, Historical Statistics on State and Local Government, 1902-1953.

¹1932 data are used since that is all that is available.

²Data are not available

have increased without federal grants. Federal grants to state governments were for two purposes - public welfare and highways; state aid to local governments was for three purposes - public welfare, highways, and education.

C. Federal, State, and Local Spending, 1937-1940

During the 1937-1938 recession, total federal, state and local spending decreased \$128 million (Table N). However, in terms of 1929 prices, total government spending increased during the 1937-1938 recession; as a percentage of national income, total government spending also increased. At the state and local levels, spending increased whether measured in current prices, constant 1929 prices, or considered as a percentage of national income. In contrast, federal spending decreased during the 1937-1938 recession, whether measured in market prices, constant prices, or considered as a percentage of national income. Why was federal spending reduced before the economy had completely recovered its pre-depression levels? This is an important lesson in the annals of fiscal policy experience. Government spending should not be thought of as a temporary device that can be cut when it appears that economic conditions are improving. Government spending is a permanent means by which the attainment of the goals of counter-cyclical policy may be accomplished. Any sudden withdrawal of federal spending

similar to the 1937-1938 episode is most likely to produce drastic contractions in consumer and investment spending, especially the latter. Actually, federal spending was \$489 million lower in 1937 than in 1936, and this partially explains the turning point in production in 1936. Then, when federal spending was reduced almost a billion dollars the following year, private investment spending dropped 45 percent, and consumer spending dropped 3.8 percent (Table P).

During the 1936-1938 period, when recessionary forces were dominant, total government spending on public works increased from \$3.5 billion in 1936 to \$3.7 billion in 1938 (Table O). However, this increase in total government spending on public works was due to an increase of \$296 million in state and local spending. Both federal direct and federal aid spending on public works decreased during this period, \$261 million and \$81 million, respectively.

In 1939 and 1940, consumer and investment spending, along with production, income and prices, began to recover. Between 1938 and 1940, total government spending increased approximately \$3 billion, with federal spending accounting for approximately 60 percent of this increase. In 1939 and 1940, federal spending returned to its 1935 and 1936 levels. It would seem to follow that if federal spending had not been

cut in 1936 and 1937, the sharpness of the downward turn during 1937-1938 very likely could have been avoided.⁵⁸

⁵⁸For an excellent discussion of fiscal policy and other factors contributing to the 1937-1938 recession, see, Kenneth D. Roose, The Economics of Recession and Revival, pp. 3-19.

Federal, State, and Local Net Spending, 1929-1940

Two methods are used in this Study to indicate government net spending or the net effect of fiscal policy. The first method used to indicate the net effect of federal-state-local fiscal policy is borrowed from Henry H. Villard's Study, Deficit Spending and the National Income.⁵⁹ Villard defines government spending as income-increasing when "it is spent on current output," and government revenues as income-decreasing if the revenue "received would otherwise have been spent on current output."⁶⁰ The difference between income-increasing expenditures and income-decreasing revenues is the measure of the "net spending." At the federal level, Villard excludes expenditures for the purposes of debt retirement; Reconstruction Finance Corporation loans to railroads, financial institutions, and banks; and government purchases of stock in Home Loan Banks and Federal Saving and Loan Associations from the income-increasing category.⁶¹

⁵⁹See Table I in the General Appendix for data developed by Villard.

⁶⁰Villard, op. cit., p. 204.

⁶¹Ibid., pp. 278-280.

All federal revenues are classified as income-decreasing with the exception of proceeds from borrowing, estate taxes, profits resulting from reducing the gold content of the dollar, proceeds from foreign obligations, and part of the Panama Canal tolls.⁶² On the state and local levels, Villard assumes the net effect of state-local fiscal policy to be indicated best by the change in state and local debt.⁶³

Another way of indicating government net spending is to take the difference between state-local spending and state-local revenues.⁶⁴ In this case, the assumption is that all state and local spending is income-increasing and all revenues are income-decreasing. "Net spending" or the net effect on the income stream would be the difference between state-local spending and state-local revenues.⁶⁵ Along with the data developed by Villard to indicate government net spending, this method of deriving net spending at the state and local levels

⁶²Ibid., p. 278.

⁶³Ibid., p. 288.

⁶⁴This measure of the net effect of state and local fiscal policy is used in a study published by the Board of Governors of the Reserve System, Postwar Economic Studies, No. 3, December, 1945, "Public Finance and Full Employment."

⁶⁵State-local spending includes only direct spending exclusive of debt repayments, and state-local revenues includes revenues from state and local sources exclusive of revenues from borrowing and from the federal government.

is used with Villard's measure of federal net spending to give another indication of the net effect of government fiscal policy. Villard's data do have the advantage of being available on a monthly basis, and therefore, may be correlated with changes in economic variables on this basis. On the other hand, the other method has the advantage of being perhaps a more reliable indicator of net spending at the state and local levels. The latter data are based largely upon the recent and more reliable figures published in Historical Statistics on State and Local Finances, 1902-1953.⁶⁶

In order to ascertain the net effect of government fiscal policy, it is important to use government "net spending" rather than, say, total government spending. Government net spending is similar to private investment in that they both will more likely be financed out of savings or money created by the banking system.⁶⁷ Total government spending would be

⁶⁶Unfortunately, however, these data omit the interval between 1927 and 1932, and cover only even years after 1932. Data for state revenues and state spending from 1929-1931 are obtained from the Census Bureau's publication, Financial Statistics of States. The local data used for 1929-1931 are taken from the Study referred to in footnote 64.

⁶⁷Hansen, Fiscal Policy, p. 90.

misleading as a measure of the net contribution of fiscal policy. Even government net spending which is financed completely out of savings may not have an income stimulating influence if it decreases private investment spending.⁶⁸ However, since it is doubtful to what degree government net spending will influence private investment spending it will be assumed that government net spending indicates the net addition to the income stream.

During the first twelve months of the depression, June, 1929 to June, 1930, the net effect of government fiscal policy was to add \$502 million to the income stream according to Villard's method and \$633 million according to the other method used in this study. During the subsequent twelve months, the net effect of government fiscal policy was to make a net addition to the income stream of somewhere between \$2417 million (second method) and \$2052 (Villard's method). After this, the rate of growth of government net spending started decreasing and during the 1933 fiscal year, the absolute level of government net spending was lower than it had been previously. For

⁶⁸Government net spending may decrease private investment spending in two ways: by increasing the price paid for savings and by "frightening" away private investment spending.

the period as a whole, it may be estimated that the fiscal policy of all governmental units contributed somewhere between \$6963 and \$7884 million to the income flow.

TABLE U

Government Net Spending, 1930-1933

(in millions)		
Year ¹	Villard's Method	Second Method
1930	502	633
1931	2052	2417
1932	2313	2628
1933	2096	2206
1930-1933	6963	7884

Source: Table V in the General Appendix.

¹Fiscal year ending June of each year.

To assess properly the importance of the data above, attention must be given to the economic forces that were operating during this period. The downward economic forces that started in the summer of 1929 and evolved into secondary downward forces in 1932 and 1933 were forming during the prosperity phase of the late twenties.⁶⁹ First, it appears that the propensity to consume was falling during the 1928-1929 period.⁷⁰

⁶⁹This would be expected from Wesley C. Mitchell's study of economic fluctuations; Also, see A. F. Burns, The Frontiers of Economic Knowledge, pp. 112-113

⁷⁰Thomas Wilson, Fluctuations in Income and Employment, p. 155.

Both the rate of growth of consumer outlays and the ratio of consumer outlays to gross national income were decreasing slightly during 1928-1929.⁷¹ The under consumptionists may support their theory by showing that this fall in the rate of consumer spending and the proportion of production consumed was accompanied by a rise in the level of income.⁷² However, it is very doubtful that the fall in the propensity to consume was more than an accompanying factor leading to the 1929 downward turn.⁷³ It would be expected, of course, that a fall in the rate of growth of consumption would have depressing effects, via the acceleration principle, on investment spending; there is ample evidence to support this view. There is more evidence in support of the view that investment opportunities had been exhausted in the construction industry; this was especially

⁷¹Simon Kuznets, National Product Since 1869 (New York: National Bureau of Economic Research, 1946), p. 52.

⁷²Wilson, op. cit., p. 156.

⁷³Maurice W. Lee and Thomas Wilson appear to disagree as to the importance of consumer spending in the 1929 downward turn. Compare Lee, Economic Fluctuations (Homewood, Illinois: Richard D. Irwin, Inc., 1955), p. 209 and Wilson, Fluctuations in Income and Employment, p. 156.

true in residential construction. Residential construction, which reached a peak of \$5.2 billion in 1925, decreased to \$4.3 billion in 1928, and to \$3 billion in 1929.⁷⁴ From the various studies made, it appears that the demand for houses had caught up with the supply during the 1927-1929 expansion.⁷⁵

Besides the factors discussed, there were other possible factors that would help to explain the 1929 crisis and the ensuing contraction - such as, the collapse of the stock market, the decline in the merchandise balance of trade, the agricultural crisis, credit policies, the absence of wage deflation in 1929 and 1930, etc.⁷⁶ For all these reasons, the downward economic forces produced a 51 percent decline in industrial production, a 37 percent decline in wholesale prices, and a 41 percent decline in employment during the contraction of 1929-1933.⁷⁷ What role did government net spending play in maintaining economic activity during this period?

Table IV in the General Appendix compares monthly

⁷⁴Wilson, op. cit., p. 156.

⁷⁵Ibid., pp. 156-157.

⁷⁶Ibid., pp. 159-172; Lee, op. cit., pp. 219-229.

⁷⁷See Table IV in the General Appendix.

changes in government net spending with monthly changes in income, production, employment, and prices. These data reveal the cyclical importance of government net spending. For the first five months of 1929, government net spending averaged \$81.4 million; for the remainder of the year, monthly net spending averaged only \$22.8 million. Federal fiscal activities completely account for this much lower level of government net spending during the last half of 1929. For, federal net spending was negative, i.e., the net effect of federal fiscal policy was to reduce the income stream (\$335 million).⁷⁸ On the other hand, total state and local net spending was \$696 million greater over the last six months of the year than it had been during the first six months.⁷⁹ The reduction in the monthly rate of total government net spending corresponds with the 1929 reductions in income, production, employment and prices. Personal income dropped \$3.5 billion in the last six months of 1929; the industrial production index, employment index, and wholesale price index dropped four, six, and three points respectively during the last part of 1929.

⁷⁸See Table III in the General Appendix.

⁷⁹See Table II in the General Appendix.

Government net spending continued at a low monthly rate during the first two quarters of 1930. However, starting in July, 1930, the net effect of federal fiscal policy became income-increasing, adding about \$60 million to the income stream every month for the rest of 1930. As a consequence, government net spending increased to an average monthly rate of \$140 million.

This rising trend of federal net spending and total government net spending continued throughout 1931. State and local net spending stayed approximately the same until the last quarter of 1931. It appears from these data that government net spending may have played an important role in the improved economic conditions during the first part of 1931. All of the economic indexes observed showed higher levels in March and April of 1931 with the exception of the wholesale price index.

Also, it appears that monetary policies may have been a contributing factor to the slight upturn in 1931. As soon as depressionary forces became evident in 1929, the Federal Reserve policy became anti-depressionary. As Schumpeter so appropriately states, the monetary policy was one of easy money, "Thus giving business all the rein and all the

TABLE V

Reserve Bank Credit Outstanding, 1929-1932

	(in thousands)			
	1929	1930	1931	1932
Total Loans & Securities	1,547,517	1,351,852	1,825,088	2,128,015
Discounts & Advances	632,421	251,398	638,293	234,932
Bills bought	392,209	363,844	338,687	33,123
U. S. Govt. Securities				
Bought	510,587	729,467	816,960	1,855,142

Source: Historical Statistics of the United States,
1789-1945, p. 272.

encouragement it could possibly have wished for."⁸⁰ Federal Reserve bank credit outstanding increased \$473 million during 1930-1931, after decreasing from 1929 to 1930. The Federal Reserve rediscount rate was reduced, reaching $1\frac{1}{2}$ percent in 1931.⁸¹ Also, Federal Reserve open market purchases added to the availability of money during this period.

These counter-cyclical monetary policies were largely ineffective, however, for member banks decreased their loans outstanding by \$3.4 billion during 1930-1931.⁸² It appears that the supply of money was adequate, but the demand for money was not.⁸³ At the time of the slight recovery in 1931, monetary policy was playing a co-operative role even if most of its beneficial results were being neutralized by a contraction of commercial credit.

⁸⁰Joseph A. Schumpeter, Business Cycles, II (1st Edition; New York: McGraw-Hill Book Co., Inc., 1939), p. 916.

⁸¹Albert G. Hart, Money, Debt and Economic Activity (New York: Prentice-Hall, Inc., 1948), p. 314. The New York Federal Reserve Banks' rediscount rate fell from 6 percent to $1\frac{1}{2}$ percent during 1929-1931.

⁸²United States Department of Commerce, Bureau of the Census, Historical Statistics of the United States, 1789-1945, p. 266.

⁸³Wilson, Fluctuations in Income and Employment, p. 166.

Why weren't a favorable monetary climate and a high rate of government net spending sufficient to prevent the secondary downward forces from taking place during 1931-1933? There were numerous interacting factors that were probably responsible for this secondary contraction in 1931. When it seemed that the United States was showing strong signs of recovery, economic conditions in the rest of the world were getting worse.⁸⁴ These deteriorating world economic conditions resulted in a financial crisis that started when the chief bank of Vienna, Kredit-Anstalt, ran into difficulties, and when England abandoned the gold standard (September, 1931). This monetary crisis in Europe was immediately felt in the United States. Our gold reserves fell rapidly (approximately \$400 million) as foreign central banks demanded a transfer of their funds. At this time the Federal Reserve policy yielded to the dictates of the gold flow. Commercial paper rates in New York City increased from 1.9 percent in September to 3.4 percent in October to 4 percent in November.⁸⁵ Member bank

⁸⁴Hart, Money , Debt and Economic Activity, p. 316.

⁸⁵United States Department of Commerce, Bureau of the Census, Historical Statistics of the United States, 1789-1945, p. 346.

reserves decreased, and commercial credit was tightened.

In 1932, monetary policy was eased again. The Federal Reserve bought over a billion dollars worth of government securities (Table V), and the rediscount rate was lowered.⁸⁶ Also, the passage of the Glass-Steagall Act (27th February, 1932) helped matters by making it possible to issue notes against formerly ineligible United States Securities, and permitting member banks to borrow against formerly ineligible commercial paper. However, this action came too late. Maurice W. Lee summarizes the monetary situation by saying, "By 1932 the collapse of the security markets had already undermined general confidence; bank failures had grown appreciably in number, and the solvency of the whole economy was seriously in question as both business and individuals strove to maintain solvency."⁸⁷

An investigation of government fiscal policy from 1931 to 1933 reveals that government net spending was decreasing, and that types of taxes and types of spending involved tended to minimize the income-stimulating effects of government net

⁸⁶The Federal Reserve Bank of New York cut its rediscount rate from $3\frac{1}{2}$ percent to $2\frac{1}{2}$ percent between February and June. See Hart, op. cit., p. 319.

⁸⁷Lee, Economic Fluctuations, p. 221.

spending. Government net spending reached its highest level for the period in 1932. The rate of increased government spending, however, fell during 1931-1932. There was constant reference by the Secretary of the Treasury to the necessity of reducing deficit spending.⁸⁸ As a result, the Federal Revenue Act of 1932 was passed. This Act placed a federal excise tax on many products.⁸⁹ Similarly, state and local governments were taxing the consumption stream at an increasing rate.⁹⁰ The type of government expenditures that would probably have had the largest multiplying effect on income was decreasing. Total government spending on public works reached the highest level for this period in 1930 (\$3.7 billion), and after that peak, it decreased rapidly (\$1.9 billion in 1933). Federal expenditures on public works, which increased slightly, were inadequate to offset rapidly falling state and local expenditures on public works.

⁸⁸See Annual Reports of the Secretary of the Treasury on the State of Finance, 1930-1933.

⁸⁹See discussion on pp. 71-72 of this Study.

⁹⁰See discussion on pp. 69-72 of this Study.

TABLE W

Federal, State, and Local Net Spending As A Percent of Total Net Spending, 1930-1933

Year ¹	VILLARD'S METHOD		SECOND METHOD		
	State & Local	Federal	State & Local	Federal	State
1930	206.8	-106.8	184.6	-84.6	25.3
1931	36.5	63.5	46.1	53.1	12.6
1932	18.7	81.3	28.5	71.5	19.4
1933	6.2	93.8	10.8	89.2	33.5

Source: Calculated from Tables II, IV, and V in the General Appendix.

¹Fiscal Year.

Table W indicates the relative role played by net spending at the different levels of government. Federal fiscal policy had the effect of adding to the depressionary forces until 1931. Until the fiscal year which started in July, 1930, whatever beneficial results were derived from government fiscal policy were due to net spending at the state and local levels. However, starting in July, 1930, the trend was reversed. Government net spending at the federal level became over one-half total net spending, and a larger and larger percentage of total net spending as the contraction in economic forces continued. Villard's method of computing net spending at the state and local levels shows state-local net spending decreasing from 36.5 percent of total net spending in 1931, to 6.2 percent in 1933. State and local governments, especially local governments which had withstood the first two years of the depression very well, had increasing difficulties as the depression deepened.⁹¹ The second method used in this Study to measure state and local net spending shows that total state and local net spending decreased as a percentage of total net spending from 46 percent to 11 percent, but state net spending increased as a percentage of total net spending. The counter-

⁹¹See discussion on pp. 69-92 of this Study.

cyclical aspects of state fiscal policy seem to have been more important than usually realized. State spending was increasing relative to state revenues throughout this period.

Of the 1929-1933 period as a whole, Villard says, "At the very minimum it must be granted that the action of the government as a whole during the decline was income-maintaining, with a strong possibility that the decline in activity would have gone much further had it not been for the net expenditures of the government."⁹² However, there appears to have been no conscious pursuit of a counter-cyclical fiscal policy even at the federal level. Also, it appears that the falling rate of federal and state net spending and the falling level of local net spending during 1931-1933 was partly responsible for the severity of the 1929-1933 depression.

B. Net Effect of Federal-State-Local Fiscal Policy, 1933-1937.

During the 1933-1937 recovery, the net effect of government fiscal policy was to contribute between \$13.8 billion and \$14.7 billion to the income stream (Table X). The average monthly rate of government net spending rose from between \$175 million and \$184 million in 1933 to between \$287 million and \$294 million in 1936. The average monthly rate of

⁹²Villard, Deficit Spending and the National Income, p. 278.

TABLE X

The Average Monthly Changes and Yearly Percentage Changes
in Government Net Spending, 1933-1937

Year ¹	Villard's Method			Second Method		
	Total	Percentage Change	Monthly Average	Total	Percentage Change	Monthly Average
1933	2096.3	-----	174.7	2205.7	-----	183.8
1934	2187.4	/ 4	182.3	2833.2	/11	236.9
1935	3261.1	/49	291.8	3476.3	/23	289.7
1936	3533.1	/ 8	294.4	3444.7	- .9	287.1
1937	2743.8	-22.9	228.6	2444.7	-29.0	203.7

Source: Calculated from Tables I and V in the General Appendix.

¹Fiscal Year

government net spending decreased during the fiscal years 1936-1937; however, it still remained above \$200 million.

It seems, from the data, that government net spending probably played a role in the recovery of income, production, and prices in 1934, 1935, and 1936, and in the sudden drop in these economic variables between June, 1937, and June, 1938. Referring to the 1934-1936 expansion, Villard states, "We may surely conclude that during this period at least, whatever the exact proportion of the increase brought by net expenditure, such expenditure was of great importance in bringing about the expansion of activity which in fact took

place"⁹³ Table Y shows how much private investment spending was below the 1925-1929 level of \$14 billion, and hence, indicates the gap between income and consumption that government net spending had to fill if strong upward pressures were to be

TABLE Y

Deficiency in Private Investment Compared to
Government Net Spending, 1933-1937

(in billions)

Year	Private Investment Deficiency below the 1925-1929 level of \$14 billion	Villard's Government Spending	Second Method Government Net Spending
1933	11.1	2.1	2.2
1934	10.1	2.2	2.8
1935	8.7	3.3	3.5
1936	6.8	3.5	3.4
1937	4.5	2.7	2.4

Sources: Hansen, Fiscal Policy, p. 87; Tables I and V in the General Appendix.

exerted.⁹⁴ As shown in this table, government net spending was below the level necessary to replace the deficiency in private investment. However, the high level of government net spending in 1934-1936 was certainly an important factor in stimulating private investment spending via the multiplier

⁹³Ibid., p. 333.

⁹⁴Hansen, Fiscal Policy, p. 87.

and acceleration principles. The fact that there were other forces making for an expansion during this period should not invalidate this conclusion. The importance of government net spending during the recovery is given additional support when it is observed that the sudden decrease in government net spending in 1937 was accompanied by a downward turn in economic variables. It should be kept in mind that a change in government net spending not only has important effects per se on the income stream, but also, it alters expectations. Important investment decisions are made on the basis of expected or anticipated economic conditions. A change in government net spending, therefore, would not only affect private spending by inducing similar changes, but also effect a possibly greater impact in accordance with the degree in which it either undermines or supports confidence in the future.

The importance of government net spending during the recovery and the sudden drop in 1937-1938 is made even clearer when the other forces that were influencing economic activity are analyzed. Table Z shows the excess reserves of member banks and the Federal Reserve holdings of United States government securities during the period under discussion.

It is clear from the table that federal open-market operations played practically no role at all in influencing

TABLE Z

Changes In Certain Monetary Factors, 1933-1937

(in millions)					
Year	Excess Reserves, Member Banks.	Reserve Bank Holdings, U. S. Govt. Securities.	Reserve Bank Credit Outstanding	Member Banks Loans	Member Banks Investments
1933	859	2437	2670	12858	11928
1934	1,814	2430	2457	12523	14652
1935	2,844	2431	2472	11928	16857
1936	1,984	2430	2461	12542	19717
1937	1,212	2564	2562	14285	18454

Source: Board of Governors of the Federal Reserve System,
Banking and Monetary Statistics, 1943.

economic activity during the recovery.⁹⁵ Federal Reserve holdings of United States government securities remained between \$2.4 billion and \$2.6 billion throughout the period. The excess cash reserves of member banks increased \$1985 million from 1933 to 1935, but, from 1935 to 1937, excess cash reserves of member banks decreased \$1632 million. The decrease in excess reserves of member banks in 1936 and 1937 was the result of the decision of the Board of Governors to increase reserve requirements.⁹⁶ Previous to August 15, 1936, the required ratios of cash reserves to demand deposits were 13%, 10%, and 7% for central reserve, reserve city and country banks, respectively. New legislation in 1936 gave the Federal Reserve System the power to increase these reserve requirements up to twice their former level. Thus, the Board of Governors used this means of decreasing excess cash reserves by increasing the legal reserve requirement on August 15, 1936, and on March 1, 1936, and again on May 1, 1937, until the reserve requirements reached their maximum limits - 26%, 20% and 14% for central reserve, reserve city, and

⁹⁵Lee, Economic Fluctuations, pp. 232-233.

⁹⁶United States Department of Commerce, Bureau of the Census, Historical Statistics of the United States, 1789-1945, p. 273.

country banks, respectively.

The increase in the supply of money during the 1933-1937 recovery was essentially the result of an inflow of gold, an increase in government net spending, and the overall willingness of the banking system and the business public to take funds out of hoarding places. These encouraging signs became progressively dominant; to this extent, an increase in the supply of money was independent of Federal Reserve policy. The increase in gold stock from 1933 to 1937 was over \$14 billion, and the increase in government net spending was approximately the same. Even though an expansion of Federal Reserve credit was not the basis for the expansion in the money supply during the recovery, the fact that there was an overall policy of monetary ease, as evidenced by excess reserves and a low rediscount rate, certainly created an economic climate that was conducive to the recovery of economic variables until 1937. This climate changed in 1937.

Both monetary and fiscal policies contributed to this change. The sudden drop in government net spending in 1937, the doubling of reserve requirements between August 15, 1936, and May 1, 1937, and the increase in rediscount rates were important factors altering economic conditions that had been conducive to expansion. Different writers have attached

different relative significance to these causes. Hansen emphasizes the reduction in government net spending as the cause for the recession in 1937.⁹⁷ Also, Leonard P. Ayres stresses the importance of government net spending by referring to government net spending in his statement, "It seems wholly probable that we have here the chief explanation of the exceptionally abrupt decline in business activity which took place in the autumn of 1937."⁹⁸ Even Schumpeter who does not necessarily stress the causal significance of government net spending states, "Its (government net spending) high-water mark came exactly at the time when the economic process could most easily have done without it and its cessation exactly at the time when the economic process was in its most sensitive phase."⁹⁹

As far as monetary policy is concerned, many writers discount monetary actions as contributing to the recession. For example, Schumpeter states that monetary policy "had little

⁹⁷Alvin H. Hansen, Full Recovery and Stagnation (New York: W. W. Norton Co., 1938), Chapter 17.

⁹⁸Leonard P. Ayres, Turning Points in Business Cycles (New York: The MacMillan Co., 1939), p. 152.

⁹⁹Schumpeter, Business Cycles, p. 1032.

to do with the prosperity of 1935-1937, and nothing to do with the subsequent slump."¹⁰⁰ He supports his belief on the basis that interest rates were very low during this period. Actually, interest rates did stiffen somewhat in 1937; however, the fact does remain that the price for loanable funds was very low. As a matter of fact, the interest rates might have been too low in the sense that such lowness may have encouraged hoarding. Certainly there must have been a strong reason to anticipate that a higher return on loanable funds could be earned in the near future. K. D. Roose and others stress the depressed bond market in 1937 as a cause of the recession.¹⁰¹ The effect of doubling the reserve requirements was to make the larger New York and Chicago banks have to sell government securities; for, not only did these banks have most of their excess reserves wiped out by the new reserve requirements, but also, additional pressure was exerted on the reserves of New York and Chicago banks as other banks reduced their balances held at these banks in order to meet the new legal reserve requirement. This seemed more satisfactory than reducing their own excess reserves.

¹⁰⁰Ibid., p. 1029.

¹⁰¹Roose, The Economics of Recession and Revival, p. 105.

"The Government bond market had to absorb over \$2000 millions of bonds in six months with the large banks, the biggest buyers in the last four years, turned sellers."¹⁰²

Needless to say, many writers have stressed the causal significance of price-cost relationships, speculation in inventories, short-term nature of investment commitments, shortage of investment funds, the lag in the recovery of private construction expenditure (especially residential building), and secular stagnation as the causes of the slow recovery and the ensuing recession in 1937.¹⁰³ Without denying that there were many causes for the impeded recovery and the sudden backsliding in 1937, it does appear that the changes in government net spending correspond closely enough to similar changes in economic activity to be attributed an important causal role both in the recovery and in the recession. It is less certain what role was played by monetary policy. It may be concluded that monetary policy per se did not hamper the recovery, but was one factor explaining the 1937 recession.

¹⁰²Loc. cit.

¹⁰³Ibid., pp. 7-14.

The relative significance of federal net spending, state net spending, and local net spending is revealed in Table AA. Federal net spending increased significantly through the end of the fiscal year June, 1936. Federal net spending was 89% of total net spending in 1933, 85% in 1934, 93% in 1935, 98% in 1936 and 106% in 1937. Therefore, it is indicated that

TABLE AA

Net Government Spending at the Federal, State,
and Local Levels, 1933-1937

(in millions)

Year ¹	Federal Level	State Level	Local Level	Total ²	Fed. Net Spending as a % of Total Net Spending	State Net Spending as a % of Total Net Spending
1933	1966.7	740	-500	2205.7	89.2	33.5
1934	2405.2	973	-581	2833.2	85	34
1935	3217.3	766	-545	3476.3	93	22
1936	3366.3	588	-508	3444.7	98	17
1937	2602.7	83	-383	2444.7	106	3

Source: Calculated from Table V in the General Appendix.

¹Fiscal year - begins July of each year.

²Does not include inter-governmental spending at the state-local level.

the federal government was contributing an increasing share of total net spending throughout this period. On the other hand, state net spending was a significant factor in the early phases

of the recovery, reaching 34% of total net spending in 1934; after 1934, state net spending decreased absolutely, and also, as a percentage of total net spending. Local governments did not make a positive contribution to the income stream throughout the period. In every year except 1937, the positive contribution made by state governments more than compensated for the negative contribution made by local governments; total state and local fiscal activities made a positive contribution to the flow of income during most of the recovery period, small as it may have been.

This is contrary to the general conclusion that federal net spending was limited in its income-increasing effects by having to offset the income-decreasing effects of state and local fiscal policies. Since the contribution of local governments was negative throughout the period, the positive contribution of state fiscal policy has not been fully recognized. The failure to give full credit to the positive role of state fiscal policy is the result of the fact that the spending and revenues of state and local governments are typically grouped together. According to the latest available statistical information, state spending exceeded state revenues throughout the recovery, the difference being finances from revenues received

from borrowing and from federal aid.¹⁰⁴

C. Net Effect of Federal-State-Local Fiscal Policy, 1937-1940

During the 1937-1938 recession, net government spending decreased \$1673 million according to the data developed in this Study, and \$1637 million according to Villard's data. The causal significance of this decrease has already been discussed. Government net spending, which increased again in June, 1938, followed so closely the upward movement of economic variables that some writers have stated that this is a basis for believing that government net spending was not a cause explaining the revival in 1938.¹⁰⁵ However, it appears that there is no reason to believe that a sudden increase in government net spending in the last part of 1938 would not have appeared immediately in income and production data. This is especially true during this period since there were other factors encouraging private spending, factors such as: favorable Federal Reserve policies, (reduction in the legal reserve requirement, April 16, 1938, and lower interest rates), reduction in consumer debt, improved relations between businessmen

¹⁰⁴United States Department of Commerce, Bureau of Census, Historical Statistics on State and Local Government, 1902-1945, p. 19.

¹⁰⁵James W. Angell, Investment and Business Cycles (New York: McGraw-Hill, 1941), p. 232.

TABLE BB

Government Net Spending, 1937-1940

(in millions)		
Year ¹	Villard's Method	Second Method
1937	2743.8	2444.7
1938	1106.4	772.1
1939	3589.2	3815.0
1940	-----	3818.0

Source: Calculated from Tables I and V in the General Appendix.

¹Fiscal Year

and government, and reduced inventories. As a result of these favorable factors, an increase in average monthly net spending from \$92.2 million between July, 1937, and June, 1938, to \$283.7 during the last six months of 1938 would be expected to have immediate effects on income and production. The facts are that industrial production increased 17 percent, employment 9 percent, and income payments 11 percent during the last six months of 1938. Therefore, most writers agree that the revival in the latter part of 1938 was due to the resumption of a high rate of government net spending. According to Roose, the only objection Hansen has to government fiscal policy during 1937-1938 is that the new spending policy

should have started earlier.¹⁰⁶ A major criticism that can be levied against the program is the rather considerable delay in its inauguration. Also, Villard concludes that "There can be little or no doubt that the expansion of net spending in 1938 and 1939 played an important role in checking the recession and bringing about expansion."¹⁰⁷

Federal net spending decreased 60 percent during the 1937-1938 recession. This plus the negative net spending at the state and local levels of \$138 million and \$156 million, respectively, reduced the income flow during this same period. Therefore, changes at all three levels were responsible for the decrease in net spending during the 1937-1938 recession. However, the drastic upward turn in total net spending during the 1938 revival was primarily due to the 235 percent increase in federal net spending during this period. State net spending did contribute to the 1938 revival, as state net spending was \$208 million during the period between June, 1938, and June, 1939. Even though local spending and revenue policy was still withdrawing more from the income stream than it was

¹⁰⁶Roose, The Economics of Recession and Revival, p. 82.

¹⁰⁷Villard, Deficit Spending and the National Income, p. 337.

putting back into the income stream, this negative net spending decreased to \$8 million during the first twelve months of the revival; in the following twelve months, local net spending made a positive contribution of \$239 million.

TABLE CC

Total Net Spending, Federal Net Spending, State Net Spending, and Local Net Spending, 1937-1940

(in millions)				
Year ¹	Total Net Spending ²	Federal Net Spending	State Net Spending	Local Net Spending
1937	2444.7	2602.7	83	-383
1938	772.1	1042.1	-138	-156
1939	3815.0	3494.0	208	- 8
1940	3818.0	3383.0	139	239

Source: Calculated from Table V in the General Appendix.

¹Fiscal Year

²Does not include inter-governmental spending at state-local level.

The general conclusions that may be drawn from this 1937-1940 period are as follows: First, government net spending cannot be suddenly decreased without stimulating recessionary forces; this is especially true when the economy has not fully recovered from a previous depression. That the country had not fully recovered in 1937 was evidenced by the fact that 7.7 million people were unemployed, and the fact

that production, income and prices had failed to return to 1929 levels. Second, the increase in government net spending came too late to prevent the recessionary forces from having their adverse effects in the 1937-1938 period. There was an eight to ten month lag between the downward turn in economic activity and the resumption of a high level of government net spending in June, 1938. A well planned counter-cyclical program has to be flexible to be able to change quickly to meet changing economic conditions. The decision to reduce net spending in 1937 was not as fundamental a mistake as the failure to increase net spending once economic forces predominately turned downward. Finally, a successful counter-cyclical fiscal program will necessitate greater flexibility in the timing of net spending, and a more rationally planned and co-ordinated federal-state-local fiscal policy. A co-ordinated federal-state-local fiscal program implies a much greater role in stabilizing economic activity than was played by state-local fiscal policy in the period just reviewed.

Chapter IV

COUNTER-CYCLICAL ASPECTS OF LOUISIANA FISCAL POLICY, 1929-1940

The purpose of this chapter is to analyze the taxing, spending and borrowing policies of the State of Louisiana, and to evaluate these policies as to their counter-cyclical aspects. Complete fiscal data by individual states covering the depression of the thirties are available only for 1929-1931, and 1937-1940.¹ These data include fiscal activities at the state level only. Therefore, most of the analysis is restricted to the fiscal activities at the state level. Some fiscal data by individual states are available for both state and local levels in 1932 and 1942. Use will be made of these state and local data so that conclusions may be based on as complete a picture as possible of the fiscal activities within each state. When complete state fiscal data are not available, an attempt is made to fill this gap in the case of Louisiana by use of data that are available from records of bond financing and tax legislation.

¹United States Department of Commerce, Bureau of the Census, Historical Statistics of State and Local Finances, 1902-1953, pp. 1-3.

Louisiana State Revenues and Borrowing, 1929-1940

Important changes took place in the magnitude of total state revenues and borrowing in Louisiana during the relatively low levels of economic activity of the thirties. Of primary importance was the \$48.7 million increase in total revenues and borrowing during the fiscal years 1930-1931, and the relatively small change in total revenues and borrowing between 1931 and the 1937-1940 period. (Table XXI). State tax revenues stayed approximately the same during the early part of the depression (1929-1931). As a percentage of total revenues and borrowing, Louisiana state taxes were only 29 percent in 1931. This state turned to borrowing as the main revenue source in that year. From a counter-cyclical viewpoint, financing state spending from borrowed funds rather than from tax sources is appropriate fiscal policy, for, borrowing is less likely to reduce spending.

During the rest of the contraction (1931-1933) and during the 1933-1937 recovery, it appears that this policy of increasing borrowing rather than taxes was reversed. In 1937, the next year for which data are available, Louisiana State taxes were 56 percent and state borrowing was 22 percent of total revenues and borrowing as compared to almost the reverse of this in 1931 (Table XXI). Since data are not

available for the 1932-1936 interval, it is uncertain what happened during this period. However, the main reason for the higher level of total state revenues and borrowing was to finance highway spending; since highway spending by the State of Louisiana decreased after reaching a very high level in 1931, it is reasonable to believe that this state's total revenues and borrowing fell during the worst part of the depression (1931-1933) and rose during the 1933-1937 recovery. A reduction in borrowing probably caused a decrease in total revenues and borrowing during the period 1931-1933, and higher tax revenues probably produced a rise in total revenues and borrowing during the years 1933-1937.

Federal aid to the State of Louisiana increased during the 1929-1940 period. When the crash came in 1929, federal aid was 1.7 percent of Louisiana's total state revenues and borrowing (Table XXI). After 1929, federal aid to this state increased absolutely and as a percentage of total revenues and borrowing. During the fiscal years, 1930-1931, federal aid increased from \$1.7 million to \$4.6 million. By the fiscal year 1937, federal aid to the State of Louisiana had increased to \$8.2 million and was 8.3 percent of total revenues and borrowing. This trend in federal aid was reversed during the 1937-1938 recession, but was continued after 1938.

Louisiana's other state revenue sources are classified as aid from local governments, insurance trust revenues, and charges and miscellaneous. The State of Louisiana receives a negligible amount of revenues from its local governments. Insurance trust revenues became somewhat important in 1937 as the result of the inauguration of the state unemployment compensation program. The three revenue sources of Louisiana that have special importance for this Study are taxes, borrowing and federal aid.

A. Louisiana State Taxes, 1929-1931

State tax revenues increased \$4.4 million in 1929 as compared to 1928. In 1930, total tax revenues increased another \$1.1 million; however, in 1931, total tax revenues decreased \$585 thousand. Total tax revenues showed a slight increase of \$592 thousand between 1929 and 1931. This increase during the 1929-1931 downward turn in economic activity was the result of higher motor fuel tax collections; revenues from all other sources decreased. Revenues from licenses decreased \$411 thousand, from property taxes \$783 thousand, and from death and gift taxes \$170 thousand. On the other hand, revenues derived from the motor fuel source increased \$1.9 million over this same period. The motor fuel tax became one

TABLE ALouisiana State Tax Revenues by Type of
Tax, 1928-1931

	(in millions)			
	1928	1929	1930	1931
TOTAL TAX REVENUES	22.0	26.4	27.5	27.0
Motor Fuel Tax	3.3	6.4	7.3	8.4
Motor Vehicle License Tax	4.3	4.5	4.7	4.5
Business License	4.2	4.5	4.8	4.1
Property Tax	9.4	10.1	9.8	9.3
Other	.8	.9	.9	.7

Source: Table XXII in the General Appendix.

of Louisiana's important sources of revenue in 1929 as the result of legislation passed in 1928 increasing the gasoline tax to 4¢ per gallon.² In 1930, the gasoline tax was increased to 5¢ per gallon, thus explaining the higher revenues from this tax source in 1930 and 1931, even though economic activity had drastically decreased.³

Nevertheless, this increase in Louisiana tax revenues during this period was significantly smaller than the increase in tax revenues of the average state, both in absolute terms

²Tax Systems of the World, Sixth Edition, the Tax Research Foundation (Chicago: Commerce Clearing House, Inc., 1935), p. 39.

³Loc. cit.

and as a percentage of total state tax revenues. The average increase in state tax revenues during this period was \$1.9 million; whereas, Louisiana tax revenues increased only \$592 thousand. The average percentage increase in tax revenues at the state level was 4.7 percent as compared with an increase of 2.2 percent in Louisiana. The increases are found to be much larger when measured in 1929 prices. During 1929-1931, Louisiana tax revenues measured in 1929 prices increased \$8.3 million, an increase of 31 percent; whereas, average state tax revenues increased \$15 million, an increase of 37 percent. This suggests that Louisiana's tax policy during the early depression years of the thirties had a smaller restrictive effect on spending than the policies of most states.

When tax revenues are expressed as a percentage of income, the influence of Louisiana's taxes appears to be greater than that of most states, but less than that of most Southern States (Table XXIII). Louisiana tax revenues were 3.1 percent of the income earned in the state in 1929, increasing to 3.8 percent and 4.2 percent in 1930 and 1931, respectively; whereas, total state tax revenues were 1.9 percent of individual income earned in all states in 1929, increasing to 2.4 percent and 2.9 percent, respectively in 1930 and 1931. When Louisiana tax revenues are compared on this basis

to other Southern States, it is found that taxes in Louisiana withdrew less funds from the income stream in 1931 than did taxes in Arkansas (5.1 percent), Georgia (4.3 percent), Kentucky (4.3 percent), Mississippi (4.6 percent), North Carolina (4.3 percent), South Carolina (5.7 percent), Tennessee (4.3 percent), and Virginia (4.4 percent). Thus, even though the influence of Louisiana taxes on the flow of spending was greater than in most states, it was still smaller than many states with similar income and wealth.

When the crisis came in 1929, Louisiana's main tax sources were the property tax, license tax, motor fuel tax, and death and gift taxes. The only important change in the tax rate structure during the early depression years was an increase in the motor fuel tax. As stated previously, tax data are unavailable from 1932-1936; however, a study of Louisiana's tax laws during this period brings out notable changes that took place in state tax structures.

B. Louisiana Tax Policy, 1931-1937

The basis and rate of the state property tax were unchanged during the interval under examination; thus, the decreasing importance of this historically important tax source is explained. By law, this tax was levied on 100 percent of the value of real and personal property, and the

rate was 5.75 mills.⁴ The property tax contributed over one-third of Louisiana's tax revenues during the early thirties; in 1937, this tax source contributed only 18 percent (Table B). The property tax has continued to decrease in importance as a state revenue source until it has become one of relatively minor importance.

One important development concerning the property tax was the creation of the State Property Tax Relief Fund. This fund was established as the result of the passage of the Louisiana Homestead Exemption Law of 1934.⁵ Homesteaders were exempt \$2000 of the assessed value of their property, up to 160 acres of farm land. The State Property Tax Relief Fund was established to re-imburse the revenue loss resulting from homestead exemptions. The Property Tax Relief Fund received money from the State income tax, alcoholic beverage tax, and the public utilities tax. When funds are considered adequate, the State pays out of the Fund the property tax revenue that

⁴Tax Systems of the World, Seventh Edition, The Tax Research Foundation (Chicago: Commerce Clearing House, Inc., 1938), p. 35.

⁵Joseph M. Bonin, Homestead Tax Exemption in Louisiana, unpublished Master's Thesis, Louisiana State University, June, 1952, p. 22.

was lost to the parishes, the City of New Orleans, and the State. State property tax receipts appear larger than they actually are since the State re-imburses itself for the revenue lost from the homestead exemption; the portion of state property taxes paid by the State Property Tax Relief Fund is excluded from the data after 1937. Otherwise, Louisiana state revenues would appear larger than they actually are as a result of the State's transferring funds from one revenue source to another revenue source through the Property Tax Relief Fund. Homestead exemptions decreased the property tax base and encouraged minimum and maximum assessments to equal the value of the property tax exemption.⁶ The net result is an increased dependence of parishes on state funds, as well as a loss of revenue from this traditional tax source.

Louisiana adopted new tax sources and increased the base and rate of many tax sources during the thirties. The personal and corporate income taxes, estate tax, tobacco tax, liquor tax, severance tax, and general sales taxes were adopted, and rates were increased on most of these new tax sources

⁶W. D. Ross, "The Federal-State-Local Tax Structure in Louisiana," The National Tax Journal, VII (December, 1954), p. 376.

TABLE B

Louisiana State Tax Revenues By Type of Tax,
1931 and 1937

	(in millions)			
	1931		1937	
	Amount	% of Total	Amount	% of Total
TOTAL TAX REVENUES	27.0	100.0	55.4	100.0
General Sales	-----	-----	3.5	6.4
Motor Fuel	8.4	31.2	11.2	20.1
Alcoholic Beverages	-----	-----	2.3	4.1
Tobacco Products	-----	-----	3.9	7.1
Motor License	4.5	16.8	4.7	8.5
Business License	4.1	15.1	4.5	8.2
Income Tax	-----	-----	4.9	8.8
Property Tax	9.3	34.5	10.0	18.1
Severance Tax	-----	-----	7.6	13.7
Death and Gift Taxes	.5	1.9	.5	1.0

Source: Table XXII in the General Appendix

during this span of time. The income tax became a revenue source in Louisiana in 1934.⁷ The original income tax, Act, 21, was amended in 1934 by Act 2 of the First Extra Legislative Session, and by Act 7 of the Second Extra Session. Likewise, in 1935 and 1936, the original Act of 1934 was amended.⁸ However, there were no changes in the base and rate of this tax. The tax applied to the annual income of individuals,

⁷Loc. cit.

⁸Tax Systems of the World, Seventh Edition, p. 38.

corporations, and other businesses, and was levied against net taxable income. On individuals, the rate was slightly progressive, increasing from 2 percent to 4 percent and 6 percent, when net taxable income exceeded \$10 and \$50 thousand respectively. Corporate income was not taxed unless it exceeded \$3 thousand, and then only at 4 percent. The income tax is the best example of taxing in accordance to the ability to pay, and on this account, it is a most equitable tax. Furthermore, the tax cannot be shifted easily to another tax payer; it also tends to have the minimum influence on the flow of consumer spending. In 1937 Louisiana income tax revenues were \$4.9 million, which represented 8.8 percent of total tax revenues (Table B). In the recent post-war period, this tax source still represented about 8 percent of total tax revenues.

Tobacco and alcoholic products became tax revenue sources in Louisiana in 1932 and 1934, respectively.⁹ The basis and rate of the tobacco tax did not change during the period under review, but the tax rate on alcoholic products

⁹Tax Systems of the World, Sixth Edition, pp. 38-39.

was increased at the time of the Fourth Legislative Session of 1935. For example, the tax on wine was increased from 50¢ per gallon to 60¢ per gallon. The tax on cigarettes per package was set at one-fifth of a cent, and the tax on tobacco was one cent upon each five cents or fraction of retail selling price. The tobacco tax was already accounting for \$3.9 million in 1937, and the tax on alcoholic beverages was responsible for \$2.2 million in the same year (Table B). Along with the motor fuel tax, these taxes became Louisiana's most important tax revenue sources; the same change occurred in most other states.

Sales taxes on specific commodities should be distinguished from the general sales tax, which is a tax on a wide range of products.¹⁰ Taxes on specific commodities, such as those on gasoline, tobacco, and liquor are sometimes called excise taxes or selected sales taxes. On the other hand, the sales tax covering a wide range of goods and services is known as the general sales tax. The general sales tax was adopted by most states in the thirties, and has become a very vital tax revenue source. Louisiana adopted

¹⁰Due, Government Finance, p. 281.

this tax as a revenue source in 1936.¹¹ The basis of this tax was the sale of personal property at the retail level (personal services were excepted), and the rate was 2 percent of gross receipts. In 1937, the first year in which sales taxes were collected, this source accounted for \$3.5 million. Since 1937, this tax has become one of Louisiana's most important tax revenue sources. What are the economic effects of the general sales and selected sales taxes? What were their effects in the thirties?

There is a vast amount of literature on the shifting and incidence, and the economic effects of these taxes. Most of it is highly theoretical and controversial. Nevertheless, a brief comment concerning this issue seems to be appropriate. It is generally accepted that the incidence of these taxes will be on the consumer in the form of a higher consumer price. The extent to which this is true depends on a multitude of conditions, such as the type of market, elasticities of demand and supply of resources, economic conditions. Some backward shifting in the form of lower prices paid to factors

¹¹The Tax Systems of the World, Seventh Edition, p. 38.

of production could take place if the demand for resources decreased as a result of a decreased demand for the taxed commodity. In either case, consumers will have a reduction in their spendable income, and this is the important thing.

The arguments in their defense are most frequently presented as follows: they decrease the reliance upon progressive income taxes which impare incentives; they increase the "tax responsibility" of people who escape income taxes; they are easier to administer than income taxes; they are politically more desirable since voters may be unaware of them; they decrease the consumption of certain undesirable commodities such as tobacco and liquor. Most of these arguments seem questionable. The only valid question, from a counter-cyclical viewpoint, is whether it is economically desirable to discourage consumption. The answer to this question depends on certain economic conditions and the phase of the business cycle. Louisiana and other states adopted these tax sources when the flow of spending was beginning to recover from the very low levels of 1933. In 1936, the last year before the recession in 1937, states collected \$1.2 billion from these spending-reducing taxes (Table XIII). Would the recovery have come to an end in 1937 if this additional billion dollars had been available for spending? This is a moot question, of

course; it oversimplifies the problem of alternative tax sources and fails to consider the expenditures that were financed from these taxes. Nevertheless, a rational fiscal policy, coordinated at the federal, state, and local levels, would have called for less reliance on these taxes during this period of time.

During the thirties, Louisiana adopted other new tax sources, including an occupational license tax, an excise tax on the manufacture and sale of electric power, a franchise tax on corporations, a tax on dairy products, a public utilities tax, a license tax on the sale and delivery of cotton futures, an advertising tax, an estate tax, a natural gas pipe line franchise tax, and the severance tax, the severance tax being the most important of these revenue sources.¹² The severance tax is levied on the extraction of natural resources, such as mineral ores, coal, oil, timber, and such. It is similar to any tax on the costs of production, and thus it is very likely to be shifted to the consumer in the form of a higher price. To the extent that this is true, the economic effects of this tax are very similar to the effects

¹²Loc. cit.

of a sales tax. However, since these taxes are levied on resources used in the production of goods for regional or national markets, the burden of these taxes is spread far beyond the tax payers in the state that levies the tax. The impact of this tax on consumer spending will not be as severe in the state that levies the tax as a sales tax would.¹³ The severance tax was reenacted in Louisiana by Act 72 of 1932, and amended in 1935 and 1938. Since then, this tax has been given a broader base, and rates have been increased several times. In 1937, severance tax collections in Louisiana amounted to \$7.6 million; this was 13.7 percent of total state tax revenues for that year (Table B).

A comparison of Louisiana tax revenues with the tax revenues of other states on a per capita basis and as a ratio of state income indicates that the impact of Louisiana taxes increased significantly more than that of other states during the 1931-1937 period. Louisiana tax revenues on a per capita basis increased from \$12.69 in 1931 to \$24.54 in 1937; whereas, per capita state taxes as a whole increased from \$14.34 to

¹³W. D. Ross, Financing Highway Improvements in Louisiana (Baton Rouge, Louisiana: Division of Research, College of Commerce, Louisiana State University, 1955), p. 115. (Hereafter, this source will be referred to as Ross, Financing Highways).

TABLE C

Per Capita State Tax Revenues and Tax Burden¹ in the United States
and 13 Southern States in 1931 and 1937

	1931		1937	
	Per Capita	Tax Burden	Per Capita	Tax Burden
ALL STATES	14.34	2.9	21.41	3.8
Alabama	7.72	4.0	13.80	5.4
Arkansas	10.06	5.6	14.03	5.6
Florida	14.15	3.9	25.26	5.6
Georgia	9.74	4.3	11.28	3.7
Kentucky	10.99	4.3	15.77	4.9
Louisiana	12.69	4.2	24.54	7.0
Mississippi	6.72	4.6	10.75	5.1
North Carolina	9.22	4.3	20.28	6.5
Oklahoma	9.80	3.6	23.84	6.6
South Carolina	10.20	5.7	14.20	5.3
Tennessee	10.13	4.3	11.97	3.8
Texas	12.68	4.1	17.75	4.3
Virginia	13.78	4.4	15.80	4.1

Source: Table XXIII in the General Appendix.

¹Ratio of tax revenues to individual income payments in the state.

\$21.41. The increase in Louisiana taxes is even greater in comparison to other states when tax revenues are expressed as a percentage of income. In Louisiana, tax revenues as a percentage of income earned in the state, increased from 4.2 percent in 1931 to 7.0 percent in 1937. For all states, the increase was from 2.9 percent to 3.6 percent.

Florida was the only Southern State that had higher per capita state taxes than Louisiana in 1937, and no Southern State had a higher ratio of taxes to income. Conclusions should not be drawn too hastily because a recent study shows that Louisiana has a highly centralized tax structure, and when federal, state and local taxes collected in the state are taken into consideration, the burden of taxes in Louisiana is in line with that of most other states.¹⁴ An analysis of federal, state and local tax collections in the two years for which data are available (1932 and 1942) is presented below.

C. Louisiana State Tax Revenues, 1937-1940.

Total state tax revenues continued to increase throughout the 1937-1940 interval. At the time of the 1937-1938 recession,

¹⁴Ibid., p. 114.

Louisiana's total state tax revenues increased \$6.2 million (Table XXII). With the exception of the property tax, all of Louisiana tax revenue sources showed some increase between 1937 and 1938. However, the motor fuel tax and the general sales tax accounted for the higher tax revenues; collections from these taxes increased \$4.7 million and \$2.9 million, respectively. The gasoline tax had been increased from 5¢ to 7¢ a gallon in 1936¹⁵ and the 2 percent sales tax had been adopted in 1936; these new taxes had their first full impact on the Louisiana tax structure during the fiscal years 1937 and 1938. Demand for the products taxed by these levies is inclined to be very inelastic; thus, when recessionary pressures developed in June, 1937, the reduction in the consumption of these products did not reduce tax revenues as much as the higher tax rates increased revenues from these tax sources.

Because the fiscal year starts in July of each calendar year, the recessionary forces during the calendar year 1937 do not show up in tax data until the fiscal years 1938 and 1939. States as a whole showed decreasing tax revenues in the fiscal year 1939 as compared to 1938, when measured on a

¹⁵Tax Systems of the World, Seventh Edition, p. 37.

per capita basis. Nevertheless, many Southern States, Louisiana, Florida, Georgia, Mississippi, and Virginia, demonstrated per capita tax revenue increases during this period (Table XXIII). When measured in constant 1929 dollars, total tax revenues at the state level increased in every year during the 1937-1940 recession and recovery period. Louisiana tax revenues, when measured in constant 1929 dollars, also increased in every year; the total increase for the period was 39.5 percent in Louisiana.

Louisiana tax revenues, when considered as a percentage of income, increased in every year during the period of time under examination, thus indicating an increasing tax burden even at the time of strong recessionary forces (Table XXIII). All states as a whole show an increased tax burden for the entire period 1937-1940, but the ratio decreased from 4.4 percent of income to 4 percent of income between the fiscal years 1938-1939.

Louisiana Federal, State, and Local Tax
Revenues, 1932 and 1942

The full impact of government taxation on the citizens of a state can be seen only by examining tax revenues and their interrelationships at the three levels of government - federal, state and local. Federal tax collections and state and local

tax collections all play similar roles in withdrawing people's income into government channels. In the case of Louisiana, a recent study shows that incorrect conclusions may be drawn when taxes at only one level of government are analyzed.¹⁶ The study reports that Louisiana has a highly centralized state-local tax structure, with a larger ratio of taxes collected at the state level than in most other states.¹⁷ When state tax revenue comparisons are made, Louisiana state tax revenues appear unreasonably high; however, state tax comparisons do not reveal that Louisiana's high state tax collections are compensated for, to some extent, by the relatively low federal and local tax collections in the State.

The Ross study uses 1952 data but the same conclusions appear to be valid for 1932 and 1942. In 1932, per capita tax collections by all three levels of government in Louisiana were \$37.21 as compared to \$64.53 for the nation (Table D). Also, the ratio of taxes to income in Louisiana (14.7%) was less than the national ratio (16.8%). Of course, federal tax collections which depend primarily on income, would be expected

¹⁶Ross, "The Federal-State-Local Tax Structure in Louisiana," The National Tax Journal, p. 372.

¹⁷Loc. cit.

TABLE DFederal, State, and Local Tax Revenues in Louisiana
and All States in 1932 and 1942

	1932		1942	
	Per Capita	% of Income	Per Capita	% of Income
Louisiana				
Total Tax Revenues	37.21	14.7	88.69	15.9
Federal	2.87	1.3	41.37	7.4
State	12.69	4.2	31.61	5.7
Local	21.65	9.2	15.71	2.8
All States				
Total Tax Revenues	64.53	16.8	161.65	18.5
Federal	15.15	3.9	99.23	11.3
State	15.15	3.9	29.15	3.3
Local	34.23	9.0	33.27	3.9

Source: United States Department of Commerce; Bureau of the Census, Historical Review of State and Local Finance; Survey of Current Business, August, 1953; Statistical Abstract of the United States.

to be low in Louisiana, since Louisiana is a relatively poor state. However, when Louisiana state and local tax collections in 1932 are compared on a per capita basis, Louisiana state and local tax collections are found to have been \$34.34 as compared to \$49.38 for the nation as a whole (Table D). On a taxes to income basis, the Louisiana state-local tax load was slightly greater (13.4%) than the national state-local tax load (12.9%).

Louisiana's highly centralized state-local tax structure

was taking shape in the thirties. Between 1932 and 1942, state taxes per capita increased \$18.92; whereas, local taxes per capita decreased \$5.94 (Table D). For the nation, total taxes per capita increased \$14.00, and total local taxes per capita decreased less than one dollar between 1932 and 1942.

When Louisiana state tax collections are expressed as a percentage of total Louisiana state-local tax collections and Louisiana is compared with all states and selected Southern States on this basis, it is revealed that between 1932 and 1942 Louisiana was not the only state in which state tax collections became a much greater share of total state-local tax collections (Table E). For example, total state tax collections in the nation were 52 percent of total state-local tax collections in 1942 as compared to 30 percent in 1932. In 1942 state tax collections were more than 50 percent of total state-local tax collections in every Southern State except Arkansas.

Nevertheless, the change appears to have been greater in Louisiana. During 1932-1942, Louisiana state collections rose from 40 percent to 67 percent of total state-local tax collections. In 1932, seven out of the twelve Southern States had state tax collections which were a greater share of state-local tax collections than Louisiana. In 1942, only four

states (Alabama, Arkansas, North Carolina, and West Virginia) had a higher ratio of state tax collections than Louisiana.

TABLE E

State Tax Collections as a Percentage of Total
State-Local Tax Collections, 1932 and 1942

	1932	1942
All States	30	52
Alabama	45	68
Arkansas	53	77
Florida	36	55
Georgia	42	63
Kentucky	40	61
Louisiana	40	67
North Carolina	45	71
Oklahoma	36	66
South Carolina	41	65
Tennessee	38	56
Texas	41	55
Virginia	46	62
West Virginia	27	69

Source: United States Department of Commerce, Bureau of the Census, Historical Review of State and Local Finance.

Louisiana and other states adopted new tax sources and increased the base and rate of many tax sources between 1932 and 1942. The general sales tax and selected sales taxes (gasoline, tobacco, alcohol, severance, and such) began to emerge as Louisiana's most important tax sources, replacing property and license taxes as the most important tax sources. These taxes fell heavily upon consumption spending and were

repressive influences during this period.

The higher ratio of state tax collections to total state-local tax collections developed during this period. The impact of depressionary forces was especially severe on local tax structures, which depend primarily on the property tax for their revenues. State governments, willingly or unwillingly, assumed more local functions and looked for and found new tax sources to finance these new functions.

Governmental Spending in Louisiana,
1929-1940

State and local government spending in Louisiana during the period 1929-1940 is reviewed below.

A. State Spending, 1929-1931

Spending by the State of Louisiana showed increases of \$6.6 million, \$11.4 million, and \$36.8 million in 1929, 1930, and 1931, respectively (Table XIX). In 1931, spending by this State was \$83.7 million, an absolute increase of \$54.8 million, and a percentage increase of 189 percent between 1928 and 1931.

The outstanding characteristic of the increase in spending during this period was the vast increase in state spending for highways; there were relatively small increases in state spending for other purposes (Table XIX). In 1931, this State spent \$55.7 million in support of its highway program; this was 66.5 percent of Louisiana's total state spending in that year. The State's spending for other purposes, such as education, public safety, public welfare, health and hospitals, interest on the debt, etc. did not show an appreciable increase during the early part of the contraction, with the exception of interest payments on the state debt. Interest payments were less than one million dollars in 1928,

but rose to \$2.6 million in 1931. This increase in interest payments was a by-product of highway spending which was financed in large part by borrowing.

Highway spending has much to recommend it as an anti-depressionary policy, for this is the type of expenditure that would be expected to have maximum income stimulating effects via the multiplier and acceleration principles. This type of capital outlay creates jobs and increases the demand for construction products. When other states were contracting their capital outlays, this State was expanding capital outlays, mainly for the purpose of highways. Whether by accident or design, this State's spending policy was an appropriate counter-cyclical policy.

No other Southern State had a percentage increase in state spending that was close to Louisiana's. Georgia was second with a percentage increase in state spending of 47.7 percent. All states as a whole showed a percentage increase in state spending of 21.7 percent. Only three Southern States, Alabama, Mississippi, and North Carolina, decreased their spending during this early period of the depression. Thus, most states did not reduce their level of spending when the depressionary forces became very strong in 1930 and 1931, but the State of Louisiana, in this respect, stands out. It alone more than doubled its level of spending.

TABLE F

Total State Spending in the United States and
13 Southern States in 1929 and 1931

State	1929	1931	Percent Change	1929 Spending as a % of 1929 Income Payments	1931 Spending as a % of 1931 Income Payments
All States	2,061,017	2,508,743	✓ 21.7	2.5	4.0
Alabama	43,675	35,519	- 18.7	5.4	6.9
Arkansas	43,590	54,688	✓ 25.4	7.8	16.5
Florida	25,833	27,849	✓ 7.8	3.7	5.1
Georgia	27,732	40,953	✓ 47.7	2.9	6.1
Kentucky	37,739	41,920	✓ 10.9	3.9	6.2
Louisiana	35,478	83,687	✓ 135.8	4.1	10.6
Mississippi	23,745	22,680	- 4.5	4.4	7.8
North Carolina	47,723	44,469	- 6.8	4.9	6.4
Oklahoma	33,211	43,261	✓ 30.3	3.1	6.6
South Carolina	27,176	38,297	✓ 40.9	6.2	12.2
Tennessee	46,510	55,294	✓ 18.9	5.1	8.5
Texas	106,623	92,875	✓ 14.9	3.5	4.2
Virginia	37,986	43,660	✓ 28.1	3.8	4.9

Source: United States Department of Commerce, Bureau of the Census,
Financial Statistics of States, 1929, 1931; Survey of
Current Business, August, 1952

In all states as a whole and in each of the Southern States total spending was a greater percentage of state income payments in 1931 than in 1929 (Table F). Only in Arkansas and South Carolina did state spending contribute a greater share to the flow of income payments than in Louisiana. Total state spending in all states increased from 2.5 percent of state income payments in 1929 to 4.0 percent in 1931; the increase in Louisiana was from 4.1 percent to 10.1 percent.

State aid to local governments includes direct grants to local government and state tax receipts earmarked for local governments. For the 1929-1931 period, data available show only direct state grants to local governments; for some states these data are not complete. Table G shows the trend in state aid to local governments indicated by these data.

During the 1929-1931 period, Louisiana state aid to local governments increased, as did that of most other states. State aid spending in all states as a whole increased 14.3 percent, from \$367 million in 1929 to \$419 million in 1931. State aid spending in Louisiana increased 12.4 percent during this period. Two Southern States, North Carolina and Florida, showed significant percentage increases in state aid spending, 81.5 percent and 63.4 percent, respectively. Only three Southern States, Arkansas, Kentucky, and South Carolina,

TABLE G

Total State Aid to Local Governments in the United States
and 13 Southern States, 1929-1940

(in thousands)							
State	1929	1930	1931	1937	1938	1939	1940
All States	366,973	398,262	419,315	1,368,509	1,516,000	1,586,986	1,654,000
Alabama	6,943	7,130	7,131	19,341	21,095	22,129	24,812
Arkansas	3,515	4,363	3,413	5,816	6,775	7,019	7,767
Florida	2,745	5,272	4,485	20,744	21,898	22,167	24,376
Georgia	5,467	6,918	7,461	11,280	16,777	14,136	18,336
Kentucky	7,629	6,190	7,366	10,014	10,593	10,810	10,827
Louisiana	5,233	5,452	5,880	12,099	27,770	22,057	24,587
Mississippi	5,458	5,678	5,711	9,601	9,347	13,131	15,978
North Carolina	3,582	9,739	6,503	22,847	29,140	31,139	33,369
Oklahoma	3,771	3,557	4,295	22,777	26,066	25,122	—
South Carolina	4,120	3,857	3,808	12,773	14,542	15,798	15,502
Tennessee	4,532	5,099	5,294	18,121	20,140	17,449	10,836
Texas	25,166	29,778	30,541	43,589	52,297	47,231	64,193
Virginia	6,614	6,449	7,339	8,030	11,894	13,936	15,326

Source: United States Department of Commerce, Bureau of the Census,
Financial Statistics of States, 1929, 1930, 1931, 1937,
1939; Statistics on State and Local Government Finance,
1902-1953.

showed decreases in state aid spending during 1929-1931. The increase in state aid to local governments during the early depression was a contributing factor in enabling local governments to maintain the level of spending which they did maintain.

B. Louisiana State Spending in 1931 and 1937, and Louisiana State and Local Highway Spending, 1931-1937

Total state spending in Louisiana in 1937 was \$6.5 million below total spending in 1931 (Table XIX). Spending for every purpose, except highways, increased very significantly during this period. Spending for education was \$13.5 million greater in 1937 than in 1931. Spending for public welfare was \$4.9 million in 1937 as compared to \$701 thousand in 1931. Also, spending for public safety, health and hospitals, natural resources, etc., showed increases over the period. However, highway spending in the State was \$12.5 million in 1937, a decrease of \$43.2 million between 1931 and 1937; this accounts for the lower level of total state spending in 1937.

Louisiana Department of Highways data are available which show state and local highway spending during the entire period, 1929-1940. These data do not always agree with the highway data published by the United States Bureau of Census

for Louisiana for selected years during this period. However, both data show the same trend in highway spending, and the discrepancy in data is not significant. Table H shows the data made available by the Louisiana Department of Highways.

TABLE H

Louisiana State and Local Highway Expenditures, 1928-1940

(in millions)

Year	Total	State	Local
1928	23.1	10.7	12.4
1929	29.1	17.1	12.0
1930	38.5	28.9	9.6
1931	69.5	58.4	11.1
1932	42.8	35.6	7.2
1933	24.7	18.6	6.1
1934	23.7	16.7	7.0
1935	31.0	19.7	11.3
1936	39.3	30.3	9.0
1937	29.0	19.9	9.1
1938	33.1	25.5	7.6
1939	33.6	25.7	7.9
1940	31.3	24.0	8.3

Source: W. D. Ross, Financing Highway Improvements in Louisiana, p. 208.

State-local highway spending in Louisiana reached a high of \$69.5 million in 1931; from this date to 1934 total highway spending decreased. The 1933 and 1934 levels of total state-local spending on highways were below the 1929 level. From 1935 to 1940 total state and local highway spending stayed above the 1929 level. However, this occurred because spending at the state level stayed significantly above the pre-depression

level; whereas, spending at the local level stayed below the 1928 level during this period.

Most states increased their level of state spending between 1931 and 1937. Table I shows that five Southern States decreased their total state spending during this period, and eight Southern States increased their spending. Louisiana, along with Arkansas, Georgia, South Carolina, and Tennessee, had a lower level of state spending in 1937 than in 1931. Alabama, Florida, Kentucky, Mississippi, North Carolina, Oklahoma, Texas, and Virginia showed a significantly higher level of spending in 1937 than in 1931. Total state spending in seven Southern States represented a larger percentage of income payments in these states in 1937 than in 1931. On the other hand, the ratio of expenditures to income payments was lower in Louisiana and five other Southern States in 1937 than in 1931.

State aid to local governments in all states as a whole and in all Southern States increased between 1931 and 1937 (Table G). Since data for the years 1929-1931 include only direct state grants as state aid spending, and data for the years 1937-1940 include grants and locally shared receipts as state aid spending, figures for 1931 and 1937 are not entirely comparable. Nevertheless, the trend in state aid to

TABLE I

Total State Spending in the United States and 13 Southern States in
1931 and 1937¹

(in thousands)

State	1931	1937	Percent Change	1931 Spending as a % of 1931 Income Payments	1937 Spending as a % of 1937 Income Payments
All States	2,508,743	4,235,000	68.8	4.0	5.9
Alabama	35,519	49,958	40.6	6.9	7.0
Arkansas	54,688	26,633	-51.3	16.5	5.6
Florida	27,849	49,513	77.8	5.1	6.4
Georgia	40,953	40,396	- 1.4	6.1	4.4
Kentucky	41,920	47,643	13.7	6.2	5.3
Louisiana	83,687	67,248	-18.5	10.6	8.5
Mississippi	22,680	44,261	95.2	7.8	10.0
North Carolina	44,469	74,741	68.1	6.4	6.9
Oklahoma	43,261	74,180	71.5	6.6	6.9
South Carolina	38,297	25,497	- 7.3	12.2	7.3
Tennessee	55,294	46,779	-15.4	8.5	5.3
Texas	92,575	153,784	44.2	4.2	6.0
Virginia	48,660	56,543	19.4	4.9	5.7

Source: United States Department of Commerce, Bureau of the Census,
Financial Statistics of States, 1931, 1937; Survey of
Current Business, August, 1953.

¹Debt redemptions are excluded in 1937; in 1931 debt redemptions
were not segregated.

local governments is indicated; it appears that state aid spending was a factor in keeping up local spending during the recovery of 1933-1937.

C. Louisiana State Spending, 1937-1940

During the 1937-1938 recession, state spending in Louisiana increased \$27.6 million (Table XIX). State spending for the purposes of public welfare, highways, debt redemption, and unemployment compensation accounted for 75 percent of this increase in spending during the 1937-1938 recession. Spending on public welfare and highways increased \$4.5 million and \$4.1 million, respectively. The State spent \$17.9 million in 1938 to fulfill debt obligations, which was an increase of \$8 million over the previous year. For the first time, the State distributed \$4 million to the unemployed in the State in the form of unemployment compensation.

Total state spending increased \$18.3 million in Louisiana in 1939, but decreased \$19.7 million in 1940. Over the entire 1938-1940 recovery period, total spending did not change appreciably (Table XIX). The increase in 1939 was the result of slightly higher spending for all purposes; however, a significant portion of the increase was due to the increased spending by the State for the purpose of health and hospitals. The State spent 199 percent more on health and hospitals in

1939 than in 1938. The reduction in state spending in 1940 as compared to 1939 was the result of the fact that spending on health and hospitals dropped nearer to its original level, and of the fact that there was very little spending for debt redemption.

The percentage change in total state spending and state aid spending in Louisiana when compared with all states as a whole and selected Southern States during the 1937-1938 recession reveals some interesting facts.¹⁸ All states as a whole and all Southern States increased their total spending and state aid spending, with the exception of Mississippi, during the recession of 1937-1938. Total state spending increased 8.6 percent and total state aid spending increased 10.8 percent during this period. Since federal spending decreased during this period, this increase in public spending at the state level partially neutralized the income reducing effects of decreased spending at the federal level. Total state spending in Louisiana increased 19.1 percent, and

¹⁸Debt redemption figures are excluded from these data except in 1929-1931. The reason for this exclusion is that total state spending excluding debt redemption seems to be a better measure of the relative significance of state spending.

TABLE J

Total State Spending and State Aid Spending In the United States
and 13 Southern States, 1937-1938¹

State	(in thousands)					
	Total Spending		Percent Change	State Aid Spending		Percent Change
	1937	1938		1937	1938	
All States	4,235,000	4,598,000	8.6	1,368,509	1,516,000	10.8
Alabama	49,958	58,968	18.0	19,341	21,095	9.1
Arkansas	26,633	34,122	28.1	5,816	6,775	16.5
Florida	49,513	52,727	6.5	20,744	21,898	48.7
Kentucky	47,643	51,130	7.3	10,014	10,593	4.8
Louisiana	67,248	86,884	21.3	12,099	27,770	129.5
Mississippi	44,261	48,918	10.5	9,601	9,347	-2.6
North Carolina	74,741	86,119	15.2	22,847	29,140	27.5
Oklahoma	74,180	85,560	15.3	22,777	26,066	14.4
South Carolina	35,497	46,525	31.1	12,773	14,542	13.8
Tennessee	46,779	56,458	20.7	18,121	20,140	11.1
Texas	153,784	164,363	6.9	43,589	52,297	20.0
Virginia	56,543	62,046	9.7	8,030	11,894	47.0

Source: United States Department of Commerce, Bureau of the Census,
Financial Statistics of States, 1937, 1938.

¹Excludes Debt Redemptions.

Louisiana state aid spending more than doubled, increasing 129.5 percent. Four Southern States, Arkansas, Georgia, South Carolina, and Tennessee, increased their total spending more than Louisiana on a relative basis, but no Southern State showed an absolute increase in total state spending that exceeded Louisiana's \$14.2 million. Also, during the 1937-1938 recession, the increase in state aid to local governments in Louisiana greatly exceeded the increases in all other Southern States on a percentage and absolute basis.

Table K shows the total spending of Louisiana and other Southern States as a percentage of income payments within each during 1937-1940. Mississippi was the only Southern State in which total state spending was a slightly greater share of income payments than in Louisiana in 1937, 1938 and 1940. In 1939, total spending was 13.6 percent of income payments in Louisiana; this was a greater percentage than that in any other Southern State.

TABLE K

Total State Spending Expressed as a Percentage of Income Payments
in the United States and in 13 Southern States, 1937-1940

State	1937	1938	1939	1940
All States	5.9	7.0	6.9	6.9
Alabama	7.0	9.0	9.4	8.4
Arkansas	5.6	7.5	7.7	7.9
Florida	6.4	7.0	7.5	7.4
Georgia	4.4	7.1	6.5	7.3
Kentucky	5.3	6.4	7.1	6.8
Louisiana	8.5	11.3	13.6	12.0
Mississippi	10.0	12.3	12.2	13.2
North Carolina	6.9	8.5	8.5	8.5
Oklahoma	8.8	11.2	11.0	9.9
South Carolina	7.3	10.3	10.1	8.7
Tennessee	5.3	7.0	7.1	6.8
Texas	6.0	6.7	6.8	6.5
Virginia	5.7	6.6	7.2	6.7

Source: United States Department of Commerce, Bureau of the Census, Financial Statistics of States, 1937, 1938, 1939, 1940; and Survey of Current Business, August, 1953.

State and Local Spending In Louisiana, 1932 and 1942

The magnitude of government spending in a state is better revealed when both state and local spending are considered. For many states, the amount of spending at the state level became larger than spending at the local level, and for most states, state spending increased significantly relative to local spending between 1932 and 1942 (Table XXV). Of the thirteen Southern States only three States, Louisiana, Arkansas, and South Carolina, showed a higher level of spending at the state level than at the local level in 1932. In 1942, ten Southern States (including Louisiana) had a higher level of spending at the state level than at the local level. For the nation, government spending at the state level was still below government spending at the local level in 1942, but spending at the state level more than doubled between 1932 and 1942; whereas, total spending at the local level decreased slightly between 1932 and 1942.

The impact of the depression served to increase the ratio of state services to total state-local services. States took over functions that had previously been local, and increased state aid to local governments. States were in a better position than local units to finance government services.

Table L shows how Louisiana and other states expended their services at the state level as compared to the local level.

TABLE L

Total State Spending as a Percentage of Total State-Local Spending in the United States and in 13 Southern States, 1932, 1942

State	1932	1942
All States	27	46
Alabama	41	52
Arkansas	57	61
Florida	26	44
Georgia	41	51
Kentucky	40	57
Louisiana	51	59
Mississippi	31	52
North Carolina	36	64
Oklahoma	33	54
South Carolina	56	56
Tennessee	35	49
Texas	34	42
Virginia	39	54

Source: Table XXV in the General Appendix.

Louisiana was providing 59 percent of its state-local service at the state level in 1942 as compared to 51 percent in 1932.

A comparison of Louisiana's state-local expenditure structure with that of other states in 1932 and 1942 also reveals how both state and local governments greatly reduced their spending on capital projects and expanded their outlays on operational services (Table XXV). For example, total

TABLE M

Total Expenditures, Capital Expenditures, and Operational
Expenditures for All States and Louisiana, 1932, 1942

(in millions)						
	Total		Capital		Operational	
	<u>Expenditures</u>		<u>Expenditures</u>		<u>Expenditures</u>	
	1932	1942	1932	1942	1932	1942
ALL STATES						
Total	9563	12959	2362	1017	5533	7216
State	2506	5863	886	615	1058	1916
Local	7057	7096	1476	402	4475	5300
LOUISIANA						
Total	163	302	73	21	59	103
State	84	120	54	14	21	48
Local	79	83	19	7	38	55

Source: Table XXV in the General Appendix.

state-local spending in Louisiana increased approximately 24 percent between 1932 and 1942; whereas, total state-local expenditures on capital projects decreased approximately 250 percent during the same period. As was indicated in the previous chapter, state and local units were forced by depressed economic conditions to forego important construction projects in order to take care of the more pressing need for welfare services. A counter-cyclical program coordinated at the federal, state, and local levels would necessitate a high level of capital outlay at the state and local levels under such conditions.

The most important changes that took place in state

expenditure structures during the thirties were: an increase in state spending relative to local spending; an increase in state aid to local governments; and the reduction in the level of capital outlays. The following section attempts to evaluate these changes in the expenditure structure of Louisiana and the 1929-1940 changes in Louisiana's tax structure in terms of their influence upon economic activity in the State of Louisiana.

Net Effect of Louisiana State Fiscal Policy, 1929-1940

What was the degree of causality between the fiscal policy of the State of Louisiana and the economic activity in the State between 1929 and 1940? Several economic variables are used to indicate changes in economic activity in the State, such as the gross income from farm production, value added from manufacturing production, changes in time and demand deposits, the income payments received by individuals. The problem is to reveal, to the extent that is possible, how these economic variables were influenced by the spending, taxing, and borrowing policies of the State during the period under review. It would be desirable to know the flow of economic activity within the State of Louisiana, and the link between this economic flow and the economic flow outside of the State. This information would help to isolate the impact of external forces on economic activity within the State, and also, isolate economic activity in the State that has final impact outside the State. Studies of inter-regional and inter-state commodity flows have recently been made;¹⁹

¹⁹Frederick T. Moore and James W. Peterson, "Regional Analysis: An Inter-industry Model of Utah," The Review of Economics and Statistics, XXXVIII, (1955), 368-383; Walter Isard, "Regional Commodity Balances and Interregional Commodity Flows," American Economic Review, XLIII, (1953), 167-180.

however, data are not available to make such a study of Louisiana's economy during the period selected for study. Instead, this Study relies upon relative changes in the economic variables that give some indication of the economic influence of state fiscal policy.

It is assumed again that the difference between state spending and state revenues gives an indication of the net effect of state fiscal policy. In instances where there are evidences that the impact of fiscal policy is greater or less because of the type of expenditure or the type of revenue involved, discussions of tax revenues and expenditures per se will be relevant. It should be remembered that the impact of government net spending will depend on the quality of government spending and revenues as well as the quantity of each.

A. Net Effect of Louisiana State Fiscal Policy, 1929-1931

In the early phases of the depression, there seems to be some evidence to support the position that the fiscal policy of most states was income-maintaining in the sense that state spending increased relative to state revenues; the net spending of the State of Louisiana stands out because of its remarkable magnitude as compared to other states (Table VI). The increase in net spending by this State was \$48 million or a 912 percent increase between 1929 and 1931. The increase in net spending

by Louisiana was 26 percent of the increase in total net spending by all states. The income generating effects of this astonishing rise in net spending could be expected to have the maximum impact on the flow of income for two reasons: First, most of this increase in net spending is accounted for by highway spending, and second, Louisiana financed this highway spending from borrowed funds rather than from tax funds. Government net spending for highways is likely to have a

TABLE N

Louisiana State Net Spending, Highway Spending and
Net Debt, 1929 and 1931

Year	(in thousands)		
	Net Spending	Highway Spending	Net Debt
1929	5305	15264	27194
1931	53666	55664	73383
Increase '29-'31	48361	40400	46119

Source: Tables VI, X, and XIX in the General Appendix

greater income stimulating effect than say, government net spending for welfare payments because: (a) The demand for construction goods and services will be increased, and such demand during a depression is usually more depressed than the demand for many other types of goods and services; (b) Highway expenditures are more likely to start a chain of re-spending which will permeate the economy than expenditures for public welfare,

public safety, and debt repayment.²⁰ Also, highway expenditures financed from borrowed funds will be much more income-stimulating than highway spending financed out of tax revenues, because borrowed funds are more likely to come from idle balances.

Income payments in Louisiana were \$222 million less in 1931 than they had been in 1929 (Table O). The income received by individuals in this State was 26 percent below what it had been before the State started its extensive program of public spending. Therefore, the increase in net spending of \$48 million did not prevent income payments from falling; however, income payments in Louisiana probably would have decreased significantly more if the net spending of this State had been of smaller magnitude. When the fall in income payments in Louisiana is compared to the fall in income payments in other selected Southern States that have somewhat similar economies, it is revealed that income payments in Louisiana fell absolutely and percentage wise less than most of these states. Only income payments in the States of Virginia and Florida fell slightly less than Louisiana's decrease

²⁰Hansen, Fiscal Policy, pp. 91-93.

of 26 percent, and only these same two States along with South Carolina showed an absolute decrease in income payments less than Louisiana's. It is questionable whether these facts prove that the relatively high level of income payments in Louisiana was due to Louisiana's high level of net spending; however, it would be illogical to ignore or to minimize the possible causal relation between income payments to people living in the State of Louisiana and the program of public spending pursued by the State. In the cases of the two States, Virginia and Florida, both of which had smaller absolute and percentage changes in income payments, each had significantly increased its net spending - 761 percent in the case of Florida, and 113 percent in the case of Virginia. However, the increase in the level of net spending by these States was significantly lower than the increase in Louisiana's net spending. This indicates that there were other forces operating to explain the relative differences in the fall in the level of income. In the case of Florida, a possible explanation of the relatively small decline in income may lie in the fact that a relatively large percentage of the income received by the people of Florida comes from various out-of-state income sources; incomes in this State may be less sensitive

TABLE O

Absolute and Percent Changes in State Net Spending Compared to Absolute and Percent Changes in Selected Economic Variables Between 1929 and 1931

State	Government Net		Gross Income		Manufacturing		Income Payments		Bank Deposits	
	Spending		From		(Value Added)					
	Thousands	Percent	Thousands	Percent	Thousands	Percent	Thousands	Percent	Thousands	Percent
Ala.	- 4683	- 33	-126463	-50	-120406	-44	-290000	-36	-134520	-53
Ark.	+ 8932	+ 45	-127414	-51	- 49415	-53	-230000	-41	- 62135	-32
Fla.	+ 3660	+ 761	- 5701	- 6	- 47047	-35	-149000	-21	-112202	-40
Ga.	+ 8292	+2229	-236079	-63	-105595	-37	-289000	-30	- 33025	-11
Ken.	+ 1103	+ 32	- 99901	-42	-181871	-36	-285000	-30	- 72926	-17
La.	+48361	+ 912	- 71872	-42	-183665	-46	-222000	-26	- 22801	-36
Miss.	+ 425	+ 7	-185565	-59	- 61030	-57	-252000	-46	- 63944	-30
N. C.	- 1394	- 17	-134074	-43	-303141	-44	-276000	-29	+ 64723	+20
Okla.	+ 8884	+ 808	-163989	-52	- 76798	-53	-420000	-39	- 90153	-21
S. C.	+ 6565	+ 98	- 74763	-46	- 48887	-31	-124000	-28	- 33274	-20
Tenn.	+ 4018	+ 28	-123059	-48	-105973	-33	-283000	-31	- 68496	-17
Texas	-21075	- 130	-314757	-41	-178935	-40	-825000	-31	-163120	-16
Va.	+10349	+ 113	- 94133	-42	- 16174	- 4	-217000	-22	- 20653	- 5

Source: Calculated from Tables VI and VII in the General Appendix.

to worsening economic conditions within that State. Similarly, the impact of downward economic forces was less severe in Virginia. Virginia's relatively small decline in income was accompanied by relatively small declines in manufacturing production (4%) and in bank deposits (5%).

Most of the increase in state net spending came as a result of state spending increasing at a faster rate than state revenues, or as a result of state spending increasing while state revenues decreased, rather than as a result of state spending decreasing, but decreasing less than state revenues (Table VI). Most states showed a willingness to increase spending during this period rather than to decrease spending as a result of the loss of revenues produced by falling incomes and prices. Arkansas, Georgia, Kentucky, Oklahoma, South Carolina, Tennessee, Florida, Louisiana, and Virginia are examples of Southern States that increased spending relative to revenues. Income payments in these States decreased from 21 percent in the case of Florida to 41 percent in the case of Arkansas. There is no conclusive evidence to prove that states that had a relatively large increase in net spending also had a relatively small decrease in income payments. For example, Arkansas which had, with the exception

of Virginia and Louisiana, the largest increase in net spending also had the greatest decline in income payments. On the other hand, income payments in Texas and North Carolina, both of which increased revenues relative to spending, fell comparatively less than they did in many Southern States. This indicates either that the magnitude of net spending was too low to have a significant effect on income payments, or that other more important causal forces were present to explain the differences in the relative decline of income payments; a combination of the above two factors would be possible. However, the three States (Florida, Virginia, and Louisiana) that had the smallest relative declines in income payments are the only States that actually increased their spending and decreased their revenues. Two of these three States (Louisiana and Virginia) had the largest absolute increases in net spending during this period, 1929-1931.

Another favorable factor coinciding with Louisiana's relatively small decline in income payments was this State's small decline in bank deposits (6%) (Table O). Only the State of Virginia had a smaller absolute and percentage decrease in bank deposits than did Louisiana between 1929 and 1931. The relatively small decline in bank deposits in Louisiana in the early phases of the depression may have been the result of the very high level of net spending. It would appear that a

state government that puts more money into its banking system by spending more than it takes out by taxing would leave the banking system in that state with more bank deposits, assuming that these transactions all take place within the state. This appears to have been true in the case of Louisiana. If the net spending and deposits of other states failed to follow this pattern, then either the magnitude of net spending was insufficient, or there were other factors affecting bank deposits, such as the willingness of bankers to lend and the public to borrow. Of the five Southern States, Louisiana, Virginia, Arkansas, Oklahoma, and Georgia, that had an increase in state net spending of over \$8 million, only Arkansas had a relatively large decline in bank deposits (Table O).

It appears uncertain to what extent state net spending influenced income from farm and manufacturing production. The relative importance of agriculture and manufacturing in the various states and the fact that agriculture and manufacturing production are closely linked to forces outside the state make it exceedingly difficult, if not impossible, to determine the influence of state net spending on these economic variables. Also, it is to be expected that the effects of state fiscal policy will appear more clearly in the data showing income payments, and to a lesser extent demand deposits, than they will

in data showing farm and manufacturing production. First, total state spending has a greater effect on income payments than it has on other economic variables because only the difference between state spending and state taxes is available for spending on goods and services. Second, disposable income created from state net spending may be hoarded or used to purchase goods and services produced outside the state. Third, spending in the state is distributed over various products and services, and as a result, the impact in any one market is diminished. Fourth, state spending may not have a direct effect on the production of many products; this depends upon the purpose of state spending. For example, an increase in state highway spending influences, say, retail sales only indirectly by increasing incomes to individuals.

The three States (Louisiana, Virginia, and Florida) which had high levels of state net spending which corresponded with a relatively small decline in income between 1929 and 1931 showed diverse changes in income from agriculture and manufacturing production. The gross income earned from farm production in Louisiana was 42 percent less in 1931 than it was in 1929, and the value added from manufacturing in the State was 46 percent less when the same years are compared (Table O). This large decrease in farm income was not exceptional; however,

the decrease in manufacturing production in Louisiana was greater than in most Southern States under review. Virginia, which had the smallest decrease (4%) in income from manufacturing production, had a decrease (41%) in farm income as great as the decrease in many Southern States. On the other hand, Florida, which had the smallest decline (6%) in farm income, had a decrease in income from manufacturing production (35%) that was significantly smaller than most states. In some instances, states that had a very insignificant increase in net spending had a relatively large drop in both income from farm and manufacturing production. For example, Mississippi, which had an increase in net spending of only 7 percent between 1929 and 1931, had a percentage decrease of 51 percent and 57 percent in income from farm and manufacturing production, respectively.

B. Net Effect of Louisiana State Fiscal Policy, 1931-1937

The outstanding characteristic of state fiscal policy in Louisiana during this period was the complete reversal of the policy of the previous period, 1929-1931. Revenues, which had decreased during the previous period, increased 144 percent during this period (Table VI). The increase in revenues was the result of this State's adopting new tax sources and

increasing the base and rate of these new tax sources as well as of old tax sources. The personal and corporate income taxes, estate tax, tobacco tax, liquor tax, severance tax, and general sales taxes were adopted, and the rates were increased on most of these tax sources during this period. On the other hand, expenditures decreased 11 percent between 1931 and 1937 (Table VI). This decrease in expenditures was the result of a lower level of highway expenditures. The result of this higher level of revenues and lower level of state spending was that in 1937 this State's net spending was 91 percent below what it had been in 1931. Since revenue and expenditure data are unavailable for Louisiana during the period 1932-1936, it is impossible to say with certainty, but it appears that net state spending in the State declined significantly in 1932 and 1933, not because of an increase in revenues but because of a reduction in highway expenditures. Highway spending in Louisiana declined \$23 million and \$17 million in the years 1932 and 1933, while new tax sources did not start providing increased revenues until after 1933.

What were the economic effects of this policy of decreasing expenditures relative to revenues in 1932 and 1933? Income payments in Louisiana, which were only 26 percent below 1929 levels in 1931, were 45 percent below 1929 levels in 1933

(Table P). Similarly, bank deposits, which were only 6 percent below the 1929 level in 1931, were 50 percent below the 1929 level in 1933. Also, gross income from farm production, value added by manufacturing, and retail sales followed the patterns of income payments and bank deposits. As might be expected, retail sales, employment and wages in retail outlets held up somewhat better than manufacturing production and wages and employment in manufacturing concerns. For example, Louisiana manufacturing production and wages in manufacturing fell 51 and 59 percent, respectively, during the 1929-1933 depression; whereas, retail sales and retail payrolls fell 45 and 34 percent over the same period.²¹ There were too many important economic forces influencing the further contractions in the income stream in the State of Louisiana and in the entire economy to justify emphasizing the causal significance of state net spending during the period 1931-1933. Nevertheless, the fact that Louisiana state fiscal policy was having the net effect of putting less purchasing power into the income stream in 1933 than it had in 1931 was probably a contributing factor to the downward forces operating during this worst phase of the

²¹See Tables VII and IX in the General Appendix for wage, payroll, and employment data.

depression.

TABLE P

Percent Change in Selected Economic Variables in the
United States and 13 Southern States, 1929-1933

State	Income Payments	Retail Sales	Manufacturing ¹	Farm Production ²
All States	-44	-49	-54	-46
Alabama	-48	-53	-58	-46
Arkansas	-49	-56	-61	-49
Florida	-39	-43	-52	-20
Georgia	-38	-45	-41	-57
Kentucky	-45	-48	-46	-48
Louisiana	-45	-45	-51	-44
Mississippi	-53	-66	-67	-56
North Carolina	-29	-44	-54	-25
Oklahoma	-50	-53	-54	-43
South Carolina	-32	-38	-26	-35
Tennessee	-43	-53	-46	-48
Texas	-42	-52	-48	-33
Virginia	-25	-40	-41	-47

Source: Calculated from Tables VII and IX in the
General Appendix.

¹Value added from manufacturing products.

²Gross income from farm products.

Louisiana income payments, which show a relatively small decline when the 1931 level is compared to the 1929 level, show a relatively large decline when income payments in 1933 are compared to the 1929 level. Arkansas, Alabama, Mississippi, and Oklahoma were the only four Southern States

which had larger declines in the 1929-1931 period. When a similar comparison is made of Louisiana retail sales, manufacturing, and farm production, it is found that the Louisiana decreases in retail sales of 45 percent, in manufacturing of 51 percent, and in farm production of 44 percent do not vary significantly from those in most Southern States. The fact that Louisiana income payments fall in a manner similar to other Southern States when 1933 is compared to 1929, but not when 1931 is compared to 1929, suggests the possibility that the very large net spending in Louisiana in 1931 was supporting this State's relatively high level of income payments.

The economic forces promoting the 1933-1937 recovery in the economy as a whole certainly had their beneficial effects on the economy of Louisiana. As indicated by various economic variables, economic activity in the State was approximately 60 to 70 percent higher in 1937 than it had been in 1933. Income payments to individuals in the State rose to \$792 million, 63 percent higher than in 1933. Manufacturing and wages in manufacturing both were 69 percent higher in 1937. The 1937 levels of farm income and bank deposits were 56 percent and 70 percent, respectively, above the 1933 levels. However, as in other states and the United States, economic

TABLE Q

Louisiana Economic Variables, 1933 and 1937

Economic Variables	1933-1937			
	1929	1933	1937	% Change
Income Payments	862000	487000	792000	63
Manufacturing (value added)	242906	118125	199856	69
Wages	87511	35643	60203	69
Farm Production (gross income)	172000	96180	161165	56
Bank Deposits (demand & time)	382014	187720	339807	79

Source: Calculated from Table VII in the General Appendix.

activity in Louisiana did not reach 1929 levels during this period of recovery.

It appears that Louisiana, along with most states, made a positive contribution to the recovery in the sense that state spending was greater than state revenues. However, there are several factors that minimize the income-stimulating effects of Louisiana's state fiscal policy and the fiscal policy of other states. For one thing, Louisiana net state spending decreased greatly during the recovery. This was also true in other states. Louisiana and other states increased their revenues much faster than they did their expenditures during the recovery. For example, Louisiana revenues were 133 percent higher in 1937 than they had been in 1931 (Table VI). Other Southern States covered in this study and total

state revenues showed similar significant increases over this period. On the other hand, state spending in Louisiana in 1937 was 11 percent below the level of 1931. Only four other Southern States followed the pattern of Louisiana, i. e., decreased spending. Most Southern States increased their spending, but increased it at a decreasing rate.

Also, the types of state revenues and the types of state expenditures decreased the possible income-stimulating effects that Louisiana's and other states' net spending might ordinarily be expected to have. Louisiana, along with other states, found higher tax revenues mainly in the form of regressive taxes, i. e., taxes that tend to fall relatively on income available for the flow of consumption goods. These taxes, by reducing the flow of consumption, not only reduced the level of consumer expenditures, but also, reduced, probably, the flow of consumer-induced investment. From a counter-cyclical viewpoint, it is difficult to justify these types of taxes at this time. On a counter-cyclical basis, the only possibility of justifying the adoption of a sales tax, and the increasing of its rates during a recovery period would have to be based on the belief that these taxes might promote an orderly expansion which would decrease the possibility

of over-expansion and inflation via consumer inspired investments and investment inspired consumer spending.²² This counter-cyclical basis for sales taxes would not be applicable to the 1933-1937 recovery, for this recovery was characterized by slowness in the recovery forces, rather than by any tendency for the recovery forces to be proceeding too rapidly. As for the type of expenditures, state expenditures that would have had the most income stimulating effects, such as expenditures on construction, decreased, and expenditures, such as those on current operation, subsidies, interest, and the like, that would tend to have a smaller stimulating effect on income, accounted for the higher level of state spending during the recovery.²³ In the case of Louisiana, it was similar. State spending by Louisiana increased for every purpose except for the purpose of highways, and this decrease in spending for highways completely accounted for Louisiana's lower level of state spending in the latter part of the recovery. Thus it seems that Louisiana, along with other states, even though adding more to the income stream than taking out, still made

²²See discussion in Chapter II.

²³Maxwell, Federal Grants and the Business Cycle, p. 21.

only a small contribution to the forces making for the 1933-1937 recovery.

C. Net Effect of Louisiana State Fiscal Policy, 1937-1940.

From the data that are available showing Louisiana's economic activity, it appears that the economy of this State was not greatly affected by the recessionary forces of 1937-1938. Income payments in the State decreased less than one-half of one percent during the recession, and since prices were lower in 1938, the 1938 level of income probably bought more goods and services for Louisiana's citizens than did the slightly higher 1937 level of income. Louisiana's bank deposits were actually 5.5 percent higher in 1938 than they were in 1937. Data are not available to show Louisiana's manufacturing level in 1938, but it would seem that the net value created by manufacturing was not significantly affected by the recession. Only income from farming in Louisiana decreased, and this drop in Louisiana's farm income continued through 1939.

Louisiana state net spending, which was decreasing during the latter years of the 1933-1937 recovery, was at a higher level in 1938 than it had been in 1937. Exactly what significance may be attributed to this State's higher level of net spending during the recession cannot be completely known. It would appear that the net effect of Louisiana

TABLE R

Louisiana State Net Spending Compared to Selected
Economic Variables, 1937-1940

(in thousands)					
Economic Variables	1937	1938	1939	1940	1937-38
Net Spending	4642	8406	-----	11805	781
Income Payments	792000	789000	824000	847000	- .4
Bank Deposits	339807	352680	504805	541440	+ 5.5
Gross Farm Income	161165	157074	134604	143109	- 2.5
Manufacturing (value added)	199856	----- ¹	200086	----- ¹	----- ¹
Wages	60203	----- ¹	55084	----- ¹	----- ¹

Source: Table VII in the General Appendix.

¹Data not available for these years

fiscal policy of contributing \$3.8 million more to the income stream in 1938 than it had in 1937 was a factor in maintaining economic activity in the State. Louisiana state revenues did increase during the recession, and this increase was mainly accounted for by higher revenues from the gasoline tax and the general sales tax. However, Louisiana state spending increased significantly more than did revenues during 1937-1938. Besides increasing spending for public welfare, highways, and the like, Louisiana distributed \$4 million to the unemployed in the State; this was approximately the same amount as was added to the income stream by net spending.

All states did not follow the counter-cyclical policy

of Louisiana during 1937-1938; for, most states increased their revenues relative to their spending during this period. The result was that state revenues exceeded state spending in 1938, and the drop in state net spending during the recession was \$221 million, a percentage drop of 226 percent.

Five out of the thirteen Southern States studied had a lower level of net spending in 1938 than in 1937. There appears to be no conclusive evidence that these states with a lower level of net spending in 1938 than in 1937 correspond with the same states that had a relatively greater decline in income payments; however, in some instances, there does appear to be some correspondence. Kentucky, which had the greatest percentage decline in income payments (12%), did have a lower level of state net spending in 1937 than in 1938. Louisiana, which had the smallest decline in income payments did have a higher level of net spending in 1938 than in 1937. However, besides such general statements, it does not appear that the data indicate a great deal more. Similarly, states that had the greatest increase in net spending during the recession did not necessarily have the smallest decrease in bank deposits. For example, South Carolina, which had the largest absolute and percentage increase in state net spending, had the largest decline in bank deposits during the period. However, it does

TABLE S

Absolute and Percent Changes in State Net Spending, Income Payments, and Bank Deposits
in the United States and 13 Southern States Between 1937 and 1938

State	Net State Spending		Income Payments		Bank Deposits	
	Thousands	Percent	Thousands	Percent	Thousands	Percent
All States	-221000	-266	-6166000	- 9	-858955	- 2
Alabama	- 1464	550	- 59000	- 8	- 5707	- 2
Arkansas	4704	151	- 23000	- 5	- 1995	- 1
Florida	- 3482	-121	- 22000	- 3	- 17202	- 6
Georgia	3480	108	- 57000	- 6	- 11640	- 4
Kentucky	- 2006	- 34	- 109000	-12	- 14109	- 4
Louisiana	3764	81	- 3000	- .04	12873	6
Mississippi	8	.04	- 43000	-10	7547	4
North Carolina	9834	128	- 66000	- 6	- 5345	- 2
Oklahoma	5372	58	- 75000	- 9	- 773	- .2
South Carolina	19615	349	- 34000	- 7	- 13226	-10
Tennessee	- 315	- 7	- 79000	- 9	- 2389	- .5
Texas	- 4199	- 40	- 116000	- 5	20365	2
Virginia	1614	204	- 58000	- 6	- 1615	- .3

Source: Tables VI and VII in the General Appendix.

appear that the states that had the highest level of net spending in 1938, but not necessarily higher when compared to 1937, are also the states that had bank deposits to increase or to decrease less than most states during the recession, with the exception of South Carolina.

TABLE T

Southern States Which Had 1938 Level of Net Spending
in Excess of Six Million Dollars

States	State Net Spending	% Change in Bank Deposits 1937-1938
Georgia	6.7	- 4
Louisiana	8.4	6
Mississippi	18.6	4
Oklahoma	14.6	- .2
South Carolina	13.9	-10
Texas	6.2	2

Source: Tables VI and VII in the General Appendix.

During the remainder of the 1938-1940 period, Louisiana state net spending continued to rise, reaching \$11.8 million in 1940 (Table VI). Similarly, economic activity in the State improved as indicated by higher levels of income payments, manufacturing production, and bank deposits in the State. The net effect of the fiscal activities of Louisiana and other states was probably income-stimulating during 1938-1940. Total state net spending, which was negative in 1938, and to

that extent income-decreasing, was income-increasing in 1940. This excess of state spending over state revenues in 1940 was financed essentially from borrowing, for, the gross debt outstanding was \$49.7 million higher in 1940 than it had been in 1938 (Table X). Also, Federal aid to states was higher in 1940, and this increase helps to explain how state net spending was financed.

In summary, this analysis of the net effect of Louisiana fiscal policy reveals that this State, consciously or unconsciously, pursued fiscal policies that were counter-cyclical in their effects in many instances. Before the secondary forces of 1931-1933 set in, Louisiana's unusually high level of net spending was tending to keep up economic activity in this State, and in the economic system as a whole. After 1931, and probably to 1937, Louisiana net spending was decreasing and was probably of an insufficient magnitude to have more than a very limited impact on the economic conditions in the State during the recovery. During the 1937-1938 recession, Louisiana state net spending was increasing, and hence, counter-cyclical in its economic effects. The counter-cyclical aspects of Louisiana fiscal policy were more observable than were those of most states. The very fact that on the state level state spending was greater than state revenues during the depression

and recovery of 1929-1937 indicates that state fiscal policy did not accentuate the downward turn of the cycle, and probably was an encouraging factor in the upward turn of the cycle.

The adoption and increasing of the rates of state sales taxes during the recovery was probably discouraging to recovery forces; also, these inflexible tax sources partially explain why the net effect of state fiscal policy during the 1937-1938 recession was income-decreasing.

The implications of the counter-cyclical aspects of Louisiana fiscal policy, and the fiscal policy at the federal, state, and local levels will be discussed in the next chapter.

Chapter V

CONCLUSIONS AND IMPLICATIONS

The purpose of this Study is to investigate the counter-cyclical aspects of federal, state, and local fiscal policy during 1929-1940, and to examine more closely the feasibility of a coordinated fiscal program for economic stabilization. The method used in this work is the aggregate or income approach - the study of fiscal policy in terms of income and employment. The problem which arises is that of determining the causal significance of fiscal activity when economic activity is a function of a multitude of interacting forces. This interrelatedness of economic phenomena is especially relevant to the study of Louisiana's state fiscal policy. Each state is a unique economic system, and in some way is affected by forces originating outside of the state as well as within the state. Within this limitation and other limitations which have been pointed out in this Work, the findings of this Study are presented below.

Conclusions based on the findings of this Study are both discouraging and encouraging. The discouraging factors decrease the possibility of a coordinated federal, state, and local counter-cyclical fiscal policy, and the encouraging factors increase the possibility of a concerted government fiscal program. Certain conditions may have to be overcome, and certain other conditions

may have to be fulfilled before a coordinated government fiscal program is possible. The necessary conditions for a counter-cyclical fiscal program of the sort visualized in this Study will be discussed below under the heading "implications."

Conclusions

A. Factors Which Limit the Possibility of A Coordinated Federal, State, and Local Fiscal Program

This study of the counter-cyclical aspects of total government fiscal policy during 1929-1940 reveals that there are serious limitations to a coordinated federal, state and local fiscal program for economic stabilization. These limitations are: (1) the bias of state and local tax structures in favor of taxing consumption, and the low income elasticity of state and local consumption taxes;¹ (2) the legal, institutional, and market difficulties experienced by state and local governments in obtaining credit; (3) the inability of state and local governments to stabilize capital expenditures; (4) the overall failure of total government net spending to be properly timed, coordinated, and of a sufficient magnitude to replace the deficiency in private spending.

¹It has been estimated that the income elasticity of total state and local tax systems is between .43-.56. See H. M. Groves and C. H. Kohn, "The Stability of State and Local Tax Yields," American Economic Review, XVII (1952), 94.

Under the strain and tension of depressed economic conditions, tax policies which conflicted with a coordinated fiscal policy for economic stabilization were pursued at all three levels of government. Of special relevance was the basic change in the tax structure of states. This change produced the basic tax structure of states today, which presents a problem. Any tax may reduce the flow of spending, but taxes that rest on the consumer in the form of higher consumer prices seriously limit counter-cyclical fiscal policy. Consumption taxes do not have the built-in flexibility which is desirable; they fall heavily on consumer spending and indirectly reduce the volume of investment spending via the acceleration principle. New and increased consumption taxes have particularly adverse effects on the flow of spending during periods of falling or abnormally low economic activity.

The State of Louisiana, like the other states, adopted the tobacco tax (1932), liquor tax (1934), general sales tax (1935), and other similar taxes, and increased the base and rate of these consumption taxes and other consumption taxes, such as the motor fuel tax. During the entire period of study, 1929-1940, consumption taxes rose from 22 percent to 57 percent of total state tax revenues. There was no time during this period of study when consumption taxes could be justified from a counter-cyclical viewpoint. The recovery of economic forces during the

thirties was slow and incomplete, and there was no evidence that consumption was rising too fast for an orderly expansion.

There were reasons why states resorted to consumption taxes. The difficulties states experienced in borrowing, arising out of legal limitations and weakened credit conditions, fostered the shift to consumption taxes. States were encouraged to shift to consumption taxes in order to obtain revenues that would enable them to qualify for federal grants. Increased state spending could be financed only by relying on such tax sources to some extent. Consumption taxes have two important non-economic advantages which appeal to state officials. They are easy to administer and they are politically expedient because voters may not be fully aware of them. On whatever basis these taxes may be justified, the fact remains that consumption taxes are well entrenched in the institutional framework of state tax systems.

The federal government joined the states in making use of consumption taxes during the Great Depression. The Federal Revenue Act of 1932 imposed a federal excise tax on gasoline, alcohol, and many manufactured products, and later federal revenue acts increased the rate on these taxes. The adopting of consumption taxes and the increasing of their rates by the federal government was an indefensible policy. This was an

inappropriate anti-depression policy, and it conflicted with the federal spending program which was pursued to relieve the unemployment problem. The federal tax structure did become more progressive during the 1933-1937 recovery as a result of increasing the rates on income, gift, and death taxes. The important thing here is that it was probably undesirable to increase the rate on any tax at this time, since unemployment was still high and economic forces had not fully regained their pre-depression levels. During the 1929-1933 depression, the 1933-1937 recovery, and the 1937-1938 recession, federal tax collections increased whether measured in current prices, constant 1929 prices, or as a percentage of income.

Most local tax problems center around the administration of the property tax. Attempts were made to maintain property tax revenues by increasing property tax rates. The result was an increase in foreclosures and tax delinquencies. Changes in assessed valuations of property lag behind changes in market values of property, and thus, the burden of the property tax increases in depression and decreases in prosperity. The property tax affects one very important consumption item - residential housing, and is objectionable on a counter-cyclical basis along with other consumption taxes. Many states passed homestead exemption laws which decreased the local property tax

base, giving home owners some relief. In some states, such as Louisiana, however, local units of government were reimbursed for the loss of revenue resulting from homestead exemptions from funds secured through new state taxes, some of which were consumption taxes. Homestead exemptions also helped to undermine local property tax administration. The local tax situation could be improved with important administrative changes;² however, the difficulty of bringing about such changes is a serious obstacle to the flexible tax system which an economic stabilization policy would require.

The 1929-1940 period reveals that important changes have to be made in the market for state and local credit if these governments are to be able to pursue a coordinated stabilization policy. The scarcity and high cost of state and local credit reduced the volume of state and local borrowing during the period under review. State and local borrowing was below the 1930 level throughout the period. State and local units were forced to change from long term borrowing to short term borrowing. In 1932, 57 percent of state and local borrowing was short term

²Mabel Newcomer suggests improving local assessments and restoring the old practice of a variable annual tax rate. See Mabel Newcomer, "State and Local Financing in Relation to Economic Fluctuations," National Tax Journal, VII (1954), 108-109.

borrowing as compared to 40 percent in 1930. State and local units could not circumvent their debt limitations and were restrained, in many instances, from issuing revenue bonds. The emphasis on self-liquidating projects and the $4-4\frac{1}{2}$ percent interest on federal loans to state and local governments were deterrent factors to state and local borrowing.

Public investments were insufficient to replace the deficiency in private investments during 1929-1940. It was 1936 before total government spending on public works reached pre-depression levels. State and local spending on public works held up during the first few years of the 1929-1933 depression; in 1931, state and local spending on public works turned downward and stayed below the 1929 level of \$3 billion until 1938. Federal spending on public works did not compensate for the fall in state and local spending until 1936.

The salient characteristic of state and local expenditures during this period of study was the decrease in state and local capital expenditures and the increase in welfare expenditures. State and local capital expenditures decreased \$949 million and welfare expenditures increased \$738 million between 1927 and 1934. During the 1933-1937 recovery and the 1937-1938 recession, state and local capital expenditures remained at low levels and welfare expenditures were increased. The stabilizing of state

and local capital expenditures is a major problem to overcome.

Net spending of federal, state, and local governments, which is an indication of the net effect of government fiscal policy, was improperly timed and not coordinated at the three levels of government. Even fiscal policy pursued at the federal level was not a thoroughly planned program of economic stabilization. State and local fiscal policy was unplanned and determined with little regard for economic stabilization. Whatever beneficial results society received from total government net spending were more by accident than design. Federal fiscal policy had the net effect of reducing the flow of income until July, 1930, and it was 1931 before federal net spending was of a scale that influenced economic activity. By this time, total state and local net spending, which had held up very well, began to fall rapidly. A coordinated federal, state, and local fiscal policy in 1931 would have ameliorated the secondary depressionary forces in 1931-1933. During 1931-1933, total federal, state, and local net spending was decreasing and the tax structure and the spending program being conducted tended to minimize the income stimulating effect of government net spending. Federal, state, and local governments were taxing the consumption stream at an increasing rate and federal expenditures on public works were inadequate to compensate for the reduction of state and local expenditures on

public works.

During the 1933-1937 recovery, total government net spending was adding to the flow of spending as a result of the rising level of net spending at the federal level. After 1934, state net spending decreased absolutely and as a percentage of total net spending. Local governments did not make a positive contribution to the income stream throughout this recovery. During this time, positive net spending at the state level was partially offset by negative net spending at the local level.

The reduction of government net spending and the ensuing twelve-month recession during 1937 and 1938 would seem to reveal that government net spending was reduced before economic forces had fully recovered, and that a basic mistake was made in failing to resume a higher level of government net spending once the economic forces turned predominantly downward. A successful counter-cyclical fiscal program would appear to necessitate greater flexibility in the timing of government net spending, and a more rationally planned coordinated federal, state and local fiscal program. A coordinated plan implies a greater role for state and local governments in economic stabilizing activity.

B. Factors Which Facilitate the Possibility of a Coordinated Federal, State, and Local Fiscal Program.

This study of total government fiscal policy reveals

encouraging factors which indicate the feasibility of a coordinated fiscal program of economic stabilization. These encouraging factors are: (1) social and economic conditions fostered a new role for federal and state spending; (2) state-local tax and spending structures have become more centralized, with state taxes a larger ratio of total state-local taxes and state spending a larger ratio of total state-local spending; (3) federal grants and federal loans to state and local governments offer a means by which federal, state, and local fiscal policy can be coordinated; (4) state aid to local governments offers a way by which state-local fiscal policy may be coordinated; (5) states play a greater role in economic stabilization than is usually realized; (6) government net spending was counter-cyclical in its effect in many instances.

The economic conditions of the depressed thirties stimulated a higher ratio of federal-state services to national income, and a higher ratio of federal-state services to total government services. During 1930-1940, the ratio of total federal-state spending to national income increased from 6.9 percent to 15.5 percent. During the 1929-1933 depression, total federal-state services increased while national income decreased, and during the rest of the period, with the exception of 1937 and 1938, total federal-state services were increasing as fast as national income.

The higher level of federal-state spending was a reflection of a growing new responsibility - a responsibility for economic stabilization. This responsibility was not accepted fully, and in many instances, it was accepted out of necessity only; nevertheless, the problem of unemployment was becoming a government responsibility. At the federal level, government spending provided relief and jobs for the unemployed and aid to banks, railroads, and state and local governments. Federal deficit spending, which took place during the Hoover Administration in spite of strong protests, became an accepted policy after 1933, and since has become almost an expected policy when recession threatens. State spending increased during the period because economic conditions gave rise to increased state aid to local governments and states assumed functions that had previously been local.

Examination of the Louisiana state and local fiscal structure has revealed the increased centralization of state-local fiscal structures. States, and especially Louisiana, increased the ratio of their services to total state-local services and increased the ratio of state taxes to total state-local taxes. Total state spending was 27 percent in 1932 as compared to 46 percent of total state-local spending in 1942. Louisiana had a highly centralized spending structure even in 1932; 51 percent of government expenditures provided in this State were provided at the state level

and, in 1942, Louisiana's state expenditures increased to 59 percent. In 1932, total state tax collections were less than one-third of total state-local tax collections; in 1942, total state tax collections were over one-half of total state-local tax collections. During this same time, Louisiana state tax collections increased from 40 percent to 67 percent of total taxes collected in this state. This increased centralization of state-local fiscal activities which took place during the period of the Study has continued to the present day, and improves the feasibility of a coordinated state-local fiscal program of economic stabilization. States are in a better position to pursue a counter-cyclical fiscal policy than local governments. States have more and better administered tax sources, better borrowing facilities, and a more flexible, dispersed spending program than local governments. This growth in the importance of state fiscal activity relative to local fiscal activity is one of the changes associated with a rapidly growing industrial society. The increasing demand for highways, education, and welfare programs in modern society necessitates increased centralization at the federal-state-local levels. Whatever may be said for or against centralization of government fiscal activity, the fact remains that this trend increases the likelihood of a coordinated fiscal program of economic stabilization.

State aid to local governments offers a way in which

state-local fiscal policy may be coordinated. State aid to local governments increased throughout the period of study, and was important in keeping local spending from falling in the early years of the 1929-1933 depression, and important in maintaining local spending during the 1933-1937 recovery. State aid to local governments was mainly for education, highways, and welfare. State aid, which approximately tripled during the decade of the thirties, has more than tripled since 1940. State aid could be used to stabilize spending at the local level. When local units decrease spending as a result of loss of revenues during a depression, state aid to local units could be increased; during inflationary periods, state aid could be decreased. State aid to local governments could be in the form of buying or guaranteeing the sale of local security issues as well as direct grants and shared receipts. This would further relieve local budgets, and enable them to stabilize spending.

Federal grants to state and local governments have vast counter-cyclical possibilities. By relieving state and local tax and credit structures from the full impact of depressionary forces, federal grants enable state and local units to maintain a level of spending that otherwise would be impossible. During depressionary times, federal grants may be increased and be in addition to federal grants that make possible the satisfying of minimum social needs.

During inflationary periods, federal grants may be decreased to a level that would maintain minimum service standards. The matching of federal funds with state and local funds could vary with the cycle. During a downward turn, federal funds could become an increasing share of the total cost of the project; whereas, during an upward turn, federal funds could become a decreasing share. Federal grants became important during the thirties. Federal grants were 22 percent of state-local revenues in 1934 and by 1937 were 26 percent. Capital expenditures of state and local units fell 61 percent, excluding federal grants, as compared to 39 percent, including federal grants. Without federal grants, state and local spending would not have turned upward in 1934 and 1935 and would not have regained the 1933 level of spending until 1938.

Federal loans to state and local governments were important in maintaining state and local borrowing, and offer another way in which federal, state, and local fiscal policy may be coordinated. Federal loans to state and local governments, when private loans are not available at reasonable rates, could go a long way in overcoming most of the borrowing difficulties experienced by state and local governments in the thirties. Federal agencies could buy state and local issues when private credit is unavailable, or when available only at abnormally high prices, and sell state and local issues when the market for them has improved.

The counter-cyclical aspects of state fiscal policy would appear to be more important than usually realized. In the period 1929-1940, the net effect of state fiscal policy was to add to the income flow in every fiscal year except 1937. State spending increased throughout the period, and increased at faster rates than state taxes until 1935. During the early years of the depression, the State of Louisiana was an example of a state that was pursuing an anti-depressionary policy. This State's spending increased 136 percent while its tax revenues remained practically unchanged between 1929 and 1931. The increase in Louisiana state spending may be presumed to have had the maximum stimulating effect on income because it was primarily in the form of highway spending, and this spending was financed from borrowing. In 1931, the State of Louisiana spent \$58 million, and local governments in the State spent another \$11 million on highway improvements. There is some evidence that this program was instrumental in maintaining income payments in Louisiana. Income payments in Louisiana fell absolutely and percentage wise less than in most states studied. During the recovery, Louisiana's net spending was decreasing and during the 1937-1938 recession Louisiana's net spending increased, with some apparent counter-cyclical effects.

Government fiscal policy during the thirties was not a consciously coordinated fiscal program for economic stabilization.

There were, however, times when the net effect of government fiscal policy was counter-cyclical. Government net spending was income maintaining during the 1929-1933 contraction and net spending probably played an important role in the recovery of economic forces in 1934, 1935, and 1936, and again in 1938. If government net spending fell short of the mark of preventing undue fluctuations in the economy, the stage was being set for a more concerted effort.

Implications

The findings of this Study imply that there are serious political and institutional reasons why an ideal fiscal program coordinated at all levels of government may not be pursued; however, there is evidence in support of the belief that some form of a rational fiscal program may be achieved within the limitations of the present political and economic institutions. The logic of an ideal counter-cyclical fiscal policy may imply that economic security is desirable at all costs - even to the giving up of present economic institutions. This need not be the case. Instead, realistically viewed, a coordinated fiscal policy of economic stabilization may be an alternative to a socialized economic system. Too often, perhaps, a fiscal program of economic stabilization implies what should be rather than what is possible. An important result of this Study would seem to be the implication that some form of coordinated fiscal program may be pursued without basically

altering state and local tax systems, spending patterns, and credit structures. A long-run vision will envisage progress in overcoming many of the difficulties of state and local governments, but the immediate emphasis of this Study is on the findings of this Study that would seem to verify the feasibility of a coordinated fiscal program that would work in conjunction with other stabilization policies aimed to keep economic fluctuations within limits compatible with the maintenance of a democratic political system and a private enterprise economic system.

Since the thirties there have been several studies which have shown the desirability of a coordinated fiscal policy, and certain changes have been suggested that would make possible a coordinated fiscal program.³ If some of the proposals of these studies are over idealistic in some instances, they have contributed to the interest in the subject and suggested ways in which a concerted fiscal program may be made possible. Hansen and Perloff suggest a complete rationalization of federal, state,

³Hansen, State and Local Finance, pp. 200-222; Mabel Newcomer, "State and Local Financing in Relation to Economic Fluctuations," The National Tax Journal, pp. 97-109; M. White and A. White, "The Impact of Economic Fluctuations," The National Tax Journal, VII (1954), pp. 17-29; G. Mitchell, O. Letterer, and E. Domar, "State and Local Finance," Public Finance and Full Employment, Postwar Economic Studies No. 3 (Washington: U. S. Government Printing Office, 1945), pp. 122-130.

and local tax structures, state support of local credit, federal support of state and local credit, rationalization of state and local debt limitations, changes in budgetary practices, establishment of reserve funds, and long range public works planning and programming.⁴ As desirable and interesting as these ideas may be, some of them are not immediately possible. Mabel Newcomer suggests that states can assist local governments by broadening the tax power of local governments, restoring the local tax base of real estate, which is now exempt under various homestead and industrial exemptions, removing restrictive tax limits, assisting in improving local assessments, substituting flexible state administrative controls for the more rigid debt limits, allowing state aid for public assistance and education, and making use of federal loans and equalization grants.⁵ A study made by George A. Mitchell, Oscar F. Litterer, and Evsey D. Dornar concludes that a coordinated fiscal policy necessitates a thorough rationalization of federal, state and local fiscal relations,⁶ and L. Shere

⁴State and Local Finance, pp. 200-222; pp. 243-283.

⁵Newcomer, op. cit., p. 109.

⁶Mitchell, Litterer, and Dornar, op. cit., p. 126.

suggests that a tax reserve plan could provide the means that would enable state and local governments to pursue a consciously planned policy of stabilization.⁷ Such a tax reserve plan would call for tax revenues exceeding spending during periods of prosperity, and the use of these reserves to retire the debt or to finance spending during periods of depression. Another excellent study emphasizes the desirability of an elastic local revenue system and substantial reserves as a way to pursue a rational local fiscal policy.⁸ In 1946, the State of New York inaugurated a fiscal program known as the Moore Plan which had the purpose of alleviating cyclical fluctuations.⁹ This Plan essentially called for the replacement of the present system of shared tax revenues with a per capita grant program, the increasing of state aid for the purpose of welfare, and the establishment of a tax stabilization reserve fund.¹⁰

⁷L. Shere, "Tax Reserve for State and Local Governments," National Tax Association Proceedings, XXXVIII, 1945 (Washington: National Tax Association, 1946), pp. 187-199.

⁸M. White and A. White, "The Impact of Economic Fluctuations," The National Tax Journal, pp. 17-39.

⁹David M. Blank, "Reform of State-Local Fiscal Relations in New York," The National Tax Journal, III (1950), pp. 326-347; and IV (1951), pp. 77-91.

¹⁰Ibid., p. 326.

All of these studies and the proposals arising out of them have much to recommend them. If there is a criticism it is concerned with the impracticality of some of the proposals. The possibility that state and local tax structures can be basically altered is unlikely.¹¹ Tax improvements, such as the separation of tax sources, the uniformity of the tax base, the sharing of tax sources, and better administration of the property tax might be expected. At the present, it may be advisable to adjust to state and local tax systems rather than anticipating immediate reform. The economic drag that state and local tax systems represent from a counter-cyclical viewpoint during depressionary times does not remove the social and political fact that state and local services need to be financed. The alternative may be the assumption of financial support of state and local services by the federal government - a trend that probably needs no encouraging. State and local tax structures may even offer something to economic stability by alleviating inflationary pressures when they are dominant; although, this was not a justification for the adoption of consumption taxes and increasing the rates of consumption taxes during the thirties, and is not an argument for

¹¹Newcomer, "State and Local Financing in Relation to Economic Fluctuations," The National Tax Journal, p. 102.

these taxes. The case that is being made is that these taxes are imbedded in the tax systems of state and local governments and it may be difficult, if not impossible, to change present thinking concerning them; furthermore, it is not necessary to remove these taxes for a coordinated fiscal program to be pursued.

Another difficulty in state and local fiscal structures that may offer resistance to change is the legal limitations on state and local debt. Local debt is usually limited to a fixed percentage of assessed value of taxable property, and state debt is usually subject to a referendum or to a 2/3 vote of the legislature. Excellent proposals have been made to put state and local debt limitations on a more rational and flexible economic basis. Hansen and Perloff suggest local debt be limited to a certain percentage of total revenues over a five year moving average.¹² Newcomer recommends the replacement of the fixed limitations on state and local debt by establishing state and local commissions which would govern debt limits.¹³ Both of these proposals would give state and local governments more flexibility in their capacity to incur debt. Legal limitations

¹²State and Local Finance, pp. 206-207.

¹³Newcomer, op. cit., pp. 105-106.

on state and local debt have evolved out of conditions of the past and are based on traditional attitudes concerning borrowing. As state and local officials become better informed, and there are reasons to believe this may be the case,¹⁴ improvements in debt limitations may be made. Legal limitations probably are not the primary reason why state and local governments fail to pursue deficit spending during a depression; the main reason is a lack of a desirable market for state and local securities.

The market difficulties experienced by state and local governments during the thirties reveal that federal support of state and local credit is probably necessary if state and local governments are to make a positive contribution to economic stability. A federal agency might be established for this purpose.¹⁵ The corporation would be empowered to purchase or guarantee state and local securities when there is a weak market and sell or fail to guarantee state and local issues when the market is strong. This should be a permanent institution, and its permanence would aid in eliminating a great deal of the uncertainty that prevails in the market for state and local securities.

¹⁴Ross, Financing Highway Improvements in Louisiana, p. 17; Newcomer, op. cit., p. 109.

¹⁵Hansen, State and Local Finance, p. 203.

Loans by the federal agency should not be restricted to self-liquidating projects as they were in the thirties. The essential criterion for a loan should be the long-run capacity of the state or community to pay off the loan at reasonable rates.

Another way in which the market for state and local securities could be improved would be that of permitting state and local issues to be used as collateral for commercial bank loans from Federal Reserve Banks.¹⁶ Federal Reserve Banks could determine whether a specific state or local bond issue would be eligible for Federal Reserve loans. The securities held or guaranteed by the federal credit institutions could be made eligible for further discounting.

One way in which state and local units might stabilize their expenditures over the cycle would be to accumulate cash reserves during prosperous times and use these reserves to finance deficit spending during depressionary periods. Such reserves or stabilization funds have much to commend them, and some states have attempted to establish programs for reserve funds.¹⁷ The experience has been, however, that cash reserves

¹⁶Ibid., p. 205.

¹⁷Ibid., p. 214-215.

are difficult to accumulate and when accumulated are difficult to carry over from year to year, and are usually dissipated for other purposes before they are needed for stabilization purposes.

The resistance that may be encountered in changing state and local tax and credit structures, and the unlikelihood of establishing a reserve or stabilization fund does not make impossible a coordinated federal, state, and local fiscal program. Such a program is feasible if a rational attempt is made to maintain or to increase state and local capital expenditures during depressionary times. Federal support of state and local credit on an adequate scale would be a rational approach to the problem. One of the most encouraging signs that state and local capital expenditures may be maintained or increased in a future recession or depression is that of the development of a National System of Interstate Highways. Recent legislation provides federal expenditures of \$27.839 billion for highway purposes for the next 13 years.¹⁸ The major portion of these funds must be matched on a 10 percent basis by state funds, but in the case of regular federal aid, which is continued and expanded under this program, the matching requirement will continue

¹⁸Federal Aid Highway Act of 1956, Public Law 627.

to be 50 percent of the cost of each project. A study committee reported to the Commission on Intergovernment Relations that the federal government "should confine its regular highway aid to construction of the National System of Interstate Highways on a basis in which the States will bear not less than half the construction costs."¹⁹ The Committee notes the important role this System may play in economic stabilization:

We believe that Federal expenditures on highways when necessary for economic stabilization purposes should be made through regular channels and, initially at least, confined to the National System of Interstate Highways...The National Government should encourage and facilitate the advance planning of highway programs and the building up of a shelf of deferrable projects on all highway systems which can be implemented as necessary for stabilization purposes.²⁰

It has been estimated that total federal, state and local expenditures of fifty billion dollars are necessary to eliminate the present deficiencies in highway construction,²¹ and one hundred and one billion dollars is needed to bring highway construction up to current needs and to provide for the future growth of the

¹⁹Commission on Intergovernmental Relations, A Study Committee Report on Federal Aid to Highways, p. 5.

²⁰Ibid., p. 29.

²¹Ibid., p. 17.

economy for the next ten years.²² This program may provide the necessary machinery, technical assistance, and long-run planning that is needed for a coordinated federal-state program of government construction expenditures, which can be used for counter-cyclical purposes. Such a program may serve as an important outlet for private savings and also provide for the highway needs of this country.

As has been mentioned before, this Study reveals that federal loans and grants to state and local governments, and state loans and grants to local governments for the purposes of education, highways, and public welfare are the means by which a coordinated fiscal program may be possible. Federal loans and grants and state grants performed stabilization roles in the thirties and have continued to grow in importance. One important reason why state and local governments should be placed in a position to make a positive contribution towards economic stability is that at the state and local levels traditional public services - highways, education, and public welfare - are badly needed. A fiscal program coordinating state and local government action with federal government action will provide for social needs as well as keep cyclical fluctuations within social

²²Ibid., p. 18.

limits. W. D. Ross has concluded:

If it should ever again become necessary for the federal government to make large expenditures for public works as a means of combating a major recession or threat of depression, it may be that such action should be planned as a thoroughly integrated program to be conducted simultaneously at the federal, state and local levels of government. The major share of the operations of such a program might well be administered at the state and local levels. Such a procedure could be efficient from an administered standpoint and almost certainly would assure a more accurate job of matching expenditures with legitimate priority local needs. Counter-cyclical fiscal policies and efficient administration need not be incompatible.²³

The major responsibility for economic stabilization lies at the federal level. However, the federal government by operating through grants and loans can ease the burden at the federal level and provide stability without basically altering state and local administrative responsibilities.

Finally, a coordinated fiscal program at the federal, state, and local levels is desirable and feasible without basically altering fiscal structures and fiscal responsibilities. Federal support of state and local credit, the establishment of the National System of Interstate Highways, and the already vast and increasing program of federal and state grants for the purposes of highways,

²³Ross, Financing Highway Improvements in Louisiana, p. 17.

education, and public welfare offer the means by which concerted action may be taken against the forces of unemployment and inflation.

THE GENERAL APPENDIX

TABLE I

Total Net Income-Increasing Expenditure of All Government
Units by Months, 1929-1939^a

	(in millions)				
	1929	1930	1931	1932	1933
January	40.4 ^b	13.9	175.4	139.4	176.1
February	73.4 ^b	61.5	195.7	189.0	171.7
March	94.3 ^b	110.0	262.6	274.2	272.9
April	94.4 ^b	97.0	367.1	227.2	108.6
May	104.5 ^b	-15.9	213.4	145.2	233.5
June	7.5 ^b	-13.0	-2.3	203.3	136.3
July	25.3	244.4	214.6	143.7	81.6
August	24.6	116.4	234.6	234.7	48.9
September	47.7	119.2	294.7	138.6	68.6
October	61.8	178.5	131.1	137.1	113.3
November	-19.5	64.8	154.5	76.9	-87.0
December	8.3	116.7	105.4	266.2	162.8
Calendar year	562.7 ^b	1093.5	2346.8	2175.5	1487.3
Fiscal year	—	401.7	2051.9	2313.2	2096.3

	1934	1935	1936	1937	1938	1939
January	433.9	338.3	424.7	264.0	267.5	271.0
February	325.6	271.2	126.1	196.0	30.6	339.1
March	377.9	302.2	213.8	36.7	297.7	378.1
April	179.1	323.6	404.2	28.1	32.3	224.0
May	196.2	170.3	289.7	59.0	57.6	354.0
June	286.5	353.4	547.7	107.8	329.3	320.6
July	332.8	256.8	445.5	6.3	274.3	316.2
August	264.7	184.4	304.1	-66.8	302.0	394.1
September	206.1	271.5	326.0	96.6	309.7	236.3
October	219.7	321.2	344.6	61.0	307.1	103.1
November	318.1	158.0	266.3	-46.2	211.8	397.9
December	341.7	335.0	365.7	58.5	297.5	318.1
Calendar year	3482.3	3194.9	4058.4	801.0	2699.4	3652.5
Fiscal year	2187.4	3351.1	3533.1	2743.8	1106.4	3589.2

Source: Villard, Deficit Spending and the National Income,
p. 323.

^aIncludes Net Income-Increasing Expenditure of the federal government, changes in federal government trust funds, and the change in both the long-and-short-term issues of state and local governments.

^bIncomplete

TABLE II

Net Income-Increasing Expenditure of State and Local Governments

	(in millions)										
	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
January	40.4	62.8	73.9	41.2	8.8	35.7	67.8	109.6	21.8	154.9	-10.0
February	73.4	101.1	82.3	42.2	18.5	62.0	8.0	-30.2	92.8	58.4	90.1
March	94.3	125.8	134.6	103.7	76.5	111.4	90.8	41.1	8.1	160.4	44.1
<u>First Quarter</u>	208.1	289.7	290.8	187.1	103.8	209.1	166.6	120.5	122.7	373.7	124.2
April	94.4	118.4	197.5	41.6	-106.1	-98.1	-10.0	81.4	-73.3	-144.5	-82.0
May	104.5	34.5	44.0	-44.1	45.8	-27.9	-94.0	-129.2	13.7	-67.9	-17.0
June	7.5	11.2	-173.1	10.7	-71.8	9.0	-16.1	-11.7	23.1	21.7	-12.4
<u>Second Quarter</u>	206.4	164.1	68.4	8.2	-132.1	-117.0	-120.1	-59.5	-36.5	-190.7	-111.4
July	92.7	169.5	60.8	9.3	-8.6	54.8	54.1	43.5	-34.8	56.3	-13.8
August	85.6	47.5	66.2	76.8	-19.8	39.1	22.5	-35.5	-48.9	13.0	86.1
September	118.1	50.4	109.6	37.1	19.1	21.3	9.6	34.8	64.9	60.7	-4.7
<u>Third Quarter</u>	296.4	267.4	236.6	123.2	-9.3	115.2	86.2	42.8	-18.8	130.0	67.6
October	121.8	117.4	-4.1	18.7	11.6	-63.5	31.2	-0.3	-0.5	13.1	-175.9
November	29.3	-23.2	22.3	-73.2	-238.9	14.4	-78.3	-49.3	-65.0	-41.2	118.9
December	36.1	29.1	-17.1	89.2	-73.3	21.2	66.7	61.7	-34.4	-19.5	-21.9
<u>Fourth Quarter</u>	187.2	123.3	1.1	34.7	-300.6	-27.9	19.6	12.1	-99.9	-47.6	-78.9
<u>Annual Total</u>	898.1	844.5	596.9	353.2	-338.2	179.4	152.3	115.9	-32.5	265.4	1.5
Fiscal year (ending in June)	—	1037.4	749.9	433.0	129.6	-217.8	43.8	166.8	141.1	64.3	95.2

Source: Villard, Deficit Spending and the National Income, p. 293.

TABLE III

Net Income-Increasing Expenditure of the Federal Government

(in millions)												
Month	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
January	-----	-48.9	101.5	98.2	167.3	398.2	270.5	315.1	242.2	112.6	281.0	349.0
February	-----	-39.6	113.4	146.8	153.2	263.6	263.6	156.3	103.2	-27.8	249.0	234.0
March	-----	-15.8	128.0	170.5	196.4	266.5	211.4	172.7	28.6	119.3	334.0	257.0
April	-----	-21.4	169.6	185.6	214.7	277.2	242.6	322.8	101.4	176.8	306.0	254.0
May	-----	-50.4	169.4	189.3	187.7	224.1	264.3	418.9	45.3	125.5	371.0	292.0
June	-----	-24.2	170.8	192.6	208.1	277.5	369.5	559.4	84.7	307.6	333.0	219.0
July	-67.4	74.9	153.8	134.4	90.2	278.0	202.7	402.0	41.1	218.0	330.0	283.0
August	-61.0	68.9	168.4	157.9	68.7	225.6	161.9	339.6	-17.9	289.0	308.0	326.0
September	-70.4	68.8	185.1	101.5	49.5	184.8	261.9	291.2	31.7	249.0	241.0	326.0
October	-60.0	61.1	135.2	118.4	101.7	283.2	290.0	344.9	61.5	294.0	279.0	415.0
November	-48.8	88.0	132.2	150.1	151.9	303.7	236.3	315.6	18.8	253.0	279.0	441.0
December	-27.8	87.6	122.5	177.0	236.1	320.5	268.3	304.0	92.9	317.0	340.0	580.0
Total	-335.4	-249.0	1749.9	1822.3	1825.5	3302.9	3042.6	3942.5	833.5	2434.0	3651.0	3976.0
Fiscal year	-----	-535.7	1302.0	1880.2	1966.7	2405.2	3217.3	3366.3	2602.7	1042.1	3494.0	3382.0

Source: H. H. Villard, Deficit Spending and the National Income, p. 287.

TABLE IV

Total Government Net Spending Compared With Selected
Economic Variables, 1929-1940

	Govt. Net Spending ¹ (Millions)	Personal Income (Billions)	Income Payments 1929=100	Industrial Production ² 1935-1939 =100	Employment Index 1923-'25 =100	Wholesale Price Index 1926=100
<u>1929</u>						
January	40.4	85.1	100.0	108	99.8	95.9
February	73.4	84.6	100.0	108	100.3	95.4
March	94.3	85.2	100.0	108	100.9	96.1
April	94.4	85.2	100.0	110	101.7	95.5
May	104.5	84.5	100.0	112	102.4	94.7
June	7.5	85.1	100.0	113	102.7	95.2
July	25.3	86.3	100.0	114	102.8	96.5
August	24.6	86.9	100.0	114	102.7	96.3
September	47.7	86.4	100.0	112	102.4	96.1
October	61.8	86.3	100.0	110	101.3	95.1
November	-19.5	83.6	100.0	105	99.3	93.5
December	8.3	82.8	100.0	100	96.9	93.3
TOTAL	562.7	1022.0	100.0	110	101.1	95.3
<u>1930</u>						
January	13.9	81.7	98.5	100	95.6	92.5
February	61.5	80.9	97.3	100	93.9	91.4
March	110.0	79.6	95.6	98	92.9	90.2
April	97.0	80.0	95.0	98	92.4	90.0
May	-15.9	78.9	94.0	96	91.4	88.8
June	-13.0	77.5	92.3	93	89.7	86.8
July	244.4	75.3	90.4	89	86.6	84.4
August	116.4	74.3	89.4	86	84.4	84.3
September	119.2	73.7	88.6	85	83.4	84.4
October	178.5	72.4	87.2	83	82.2	83.0
November	64.8	70.6	85.6	81	81.1	81.3
December	116.7	69.5	84.3	79	80.1	79.6
TOTAL	1093.5	844.9	91.5	91	87.8	86.4
<u>1931</u>						
January	175.4	68.5	83.1	78	78.3	78.2
February	195.7	68.1	82.3	79	77.8	76.8
March	262.6	72.0	85.9	80	77.9	76.0
April	367.1	72.4	85.5	80	78.0	74.8
May	213.4	67.7	80.4	80	77.8	73.2
June	-2.3	65.4	77.9	77	76.0	72.1

TABLE IV (continued)

	Govt. Net Spending (Millions)	Personal Income (Billions)	Income Payments 1929=100	Industrial Production 1935-1939 =100	Employment Index 1932-'25 =100	Wholesale Price Index 1926=100
<u>1931 (cont.)</u>						
July	214.6	64.4	76.6	76	75.1	72.0
August	234.6	62.2	74.9	73	74.1	72.1
September	294.7	61.0	73.1	70	72.8	71.2
October	131.1	59.9	72.0	68	70.3	70.3
November	154.5	59.2	71.3	67	69.3	70.2
December	105.4	57.8	70.2	66	69.4	68.6
TOTAL	2346.8	778.6	77.8	75	74.4	73.0
<u>1932</u>						
January	139.4	56.6	49.0	64	69.1	67.3
February	189.0	55.5	43.0	63	70.3	66.3
March	274.2	53.7	43.0	62	69.3	66.0
April	227.2	52.4	43.0	58	67.1	65.5
May	145.2	50.7	41.0	56	64.6	64.4
June	203.3	48.3	42.0	54	62.5	63.9
July	143.7	46.9	41.0	53	60.4	64.9
August	234.7	46.4	39.0	54	61.8	65.2
September	138.6	46.2	38.0	58	65.1	65.3
October	137.1	45.5	41.0	60	66.3	64.4
November	76.9	45.3	38.0	59	65.5	63.9
December	266.2	44.6	38.0	58	64.3	62.6
TOTAL	2175.5	592.1	41.0	58	65.5	64.8
<u>1933</u>						
January	176.1	44.9	41.0	58	62.6	61.0
February	171.7	43.8	35.0	57	63.7	59.8
March	272.9	42.6	35.0	54	61.5	60.2
April	108.6	43.6	36.0	58	62.9	60.4
May	233.5	54.7	37.0	68	65.8	62.7
June	136.3	47.6	39.0	78	70.2	65.0
July	81.6	48.5	40.0	85	74.9	68.9
August	48.9	48.2	37.0	82	79.6	69.5
September	68.6	48.2	40.0	77	83.2	70.8
October	113.3	48.1	44.0	73	82.8	71.2
November	87.0	48.4	41.0	69	79.5	91.1
December	162.8	50.0	43.0	70	77.6	70.8
TOTAL	1487.3	559.6	39.0	69	72.0	67.6

TABLE IV (continued)

	Govt. Net Spending (Millions)	Personal Income (Billions)	Income Payments 1929=100	Industrial Production 1935-1939 =100	Employment Index 1923-'25 =100	Wholesale Price Index 1926=100
<u>1934</u>						
January	433.9	51.5	47.0	72	78.3	72.2
February	325.6	52.2	42.0	75	81.4	73.6
March	377.9	52.9	43.0	79	84.0	73.7
April	179.9	52.6	44.0	79	85.4	73.3
May	196.2	53.5	43.0	80	85.9	73.7
June	286.5	53.4	45.0	79	85.2	74.6
July	332.8	54.0	46.0	73	83.4	74.8
August	264.7	53.7	44.0	72	83.0	76.4
September	206.1	52.9	46.0	70	78.1	77.6
October	219.7	53.2	50.0	71	80.8	76.5
November	318.1	53.4	45.0	72	80.8	76.5
December	341.7	54.0	48.0	77	82.3	76.9
TOTAL	3482.3	637.3	45.0	75	82.4	74.9
<u>1935</u>						
January	338.3	55.5	69.0	83	84.1	78.8
February	271.2	57.3	70.0	85	85.3	79.5
March	302.2	58.0	70.0	84	85.7	79.4
April	232.6	59.5	70.8	82	85.6	80.1
May	170.3	59.7	70.3	83	84.6	80.2
June	353.4	56.7	70.2	84	83.7	79.8
July	256.8	59.9	70.0	84	85.0	79.4
August	184.4	60.9	72.1	87	86.1	80.5
September	271.5	61.3	72.9	89	86.3	80.7
October	321.2	61.5	74.2	92	87.3	80.5
November	158.0	61.9	75.0	94	88.1	80.6
December	335.0	62.6	75.9	95	88.7	80.9
TOTAL	3194.9	714.8	71.7	87	85.9	80.0
<u>1936</u>						
January	424.7	62.9	75.8	94	94.6	80.6
February	126.1	63.3	76.5	92	93.3	80.6
March	213.8	63.7	77.7	93	93.6	79.6
April	404.2	64.4	78.5	98	95.1	79.7
May	289.7	65.4	79.8	100	96.7	78.6
June	547.7	76.1	93.1	103	97.9	79.2
July	445.5	72.5	88.3	104	99.8	80.5
August	304.1	69.1	83.5	106	100.6	81.6

TABLE IV (continued)

	Govt. Net Spending (Millions)	Personal Income (Billions)	Income Payments 1929=100	Industrial Production 1935-1939 =100	Employment Index 1923-'25 =100	Wholesale Price Index 1926=100
<u>1936 (cont.)</u>						
September	326.0	68.9	83.6	108	101.6	81.6
October	344.6	69.6	84.8	110	102.4	81.5
November	266.3	71.2	85.8	113	104.4	82.4
December	365.7	72.5	87.2	116	106.9	84.2
TOTAL	4058.4	819.6	82.9	103	98.9	80.8
<u>1937</u>						
January	264.0	71.7	86.5	116	107.3	85.9
February	196.0	73.1	87.6	118	108.4	86.3
March	36.7	74.5	89.9	120	109.8	87.8
April	28.1	75.3	89.6	120	111.0	88.0
May	59.0	75.8	89.3	121	111.8	87.4
June	107.8	76.6	90.1	119	111.2	87.2
July	6.3	75.9	90.5	120	112.3	87.9
August	-66.8	76.3	91.0	119	111.7	87.5
September	96.6	74.7	89.6	115	110.3	87.4
October	61.0	73.4	88.8	107	107.8	85.4
November	-46.2	71.7	86.7	96	103.7	83.3
December	58.5	66.5	84.9	87	97.9	81.7
TOTAL	801.0	885.5	88.7	113	108.6	86.3
<u>1938</u>						
January	267.5	68.5	57.0	85	93.0	80.9
February	30.6	68.4	51.0	84	91.9	79.8
March	297.7	68.2	54.0	84	90.4	79.7
April	32.3	67.3	55.0	82	88.2	78.7
May	57.6	67.4	52.0	81	86.4	78.1
June	329.3	67.2	56.0	81	85.2	78.3
July	274.3	67.4	55.0	86	86.0	78.8
August	302.0	68.5	52.0	90	87.9	78.1
September	309.7	68.8	57.0	93	89.4	78.3
October	307.1	68.8	59.0	96	90.2	77.6
November	211.8	69.5	55.0	100	92.8	77.5
December	297.5	69.9	61.0	101	94.4	77.0
TOTAL	2699.4	819.9	55.0	89	90.5	78.6
<u>1939</u>						
January	271.0	70.6	57.0	101	94.6	76.9
February	339.1	70.6	52.0	101	94.3	76.9
March	378.1	71.5	57.0	101	94.0	76.7

TABLE IV (continued)

	Govt. Net Spending (Millions)	Personal Income (Billions)	Income Payments 1929=100	Industrial Production 1935-1939 =100	Employment Index 1923-'25 =100	Wholesale Price Index 1926=100
1939 (cont.)						
April	324.0	70.6	57.0	98	93.8	76.2
May	354.0	71.5	54.0	98	93.3	76.2
June	320.6	71.8	59.0	103	94.3	75.6
July	316.2	71.4	57.0	105	95.3	75.4
August	394.1	72.6	54.0	105	96.0	75.0
September	236.3	73.8	60.0	114	97.5	79.1
October	103.1	74.6	62.0	121	101.2	79.4
November	397.9	75.5	58.0	124	103.4	79.2
December	318.1	76.0	69.0	125	104.4	79.2
TOTAL	3652.5	870.5	58.0	108	96.8	77.1
1940						
January	— ³	76.0	62.0	122	107.6	79.4
February		76.5	57.0	116	105.8	78.7
March		75.9	61.0	113	104.0	78.4
April		75.9	61.0	112	102.8	78.6
May		76.6	59.0	116	102.8	78.4
June		77.0	64.0	122	103.9	77.5
July		77.6	63.0	122	105.1	77.7
August		78.8	60.0	124	107.4	77.4
September		79.5	66.0	127	108.9	78.0
October		81.1	69.0	130	111.4	78.7
November		81.8	65.0	134	114.2	79.6
December		84.0	77.0	139	116.6	80.0
TOTAL		940.7	64.0	123	107.5	79.4

Source: Board of Governors of the Federal Reserve System, Federal Reserve Bulletin, September, 1941, p. 934; Data for Industrial Production; United States Department of Commerce, Supplement, Survey of Current Business, 1930, 1936, 1938, 1940, 1942, Data for Income Employment, and Price Index; Villard, Deficit Spending and The National Income, p. 323, data for Government Net Spending.

TABLE IV (continued)

¹Government net spending is the difference between income-increasing expenditures and income-decreasing revenues at the federal, state, and local levels. At the federal level, income-increasing expenditures exclude debt retirement, Reconstruction Finance institutions, and banks, and government purchases of stocks in Home Loan Banks and Federal Savings and Loan Associations; income-decreasing revenues exclude proceeds from borrowing, estate taxes, profits resulting from reducing the gold content of the dollar, and part of the Panama Canal tolls. At the state and local levels, government net spending is measured by the changes in state and local debt.

²Includes durables and non-durables. Seasonally adjusted.

³Data unavailable.

TABLE V

Total Net Government Spending, Federal Net Spending,
State Net Spending, and Local Net Spending, 1929-1940

	(in millions)					
	1929	1930	1931	1932	1933	1934
<u>ALL LEVELS</u>						
Net Spending ¹	-----	633.3	2417.0	2628.2	2205.7	2833.2
<u>FEDERAL LEVEL</u>						
Net Spending	-----	-535.7	1302.0	1880.2	1966.7	2405.2
<u>STATE-LOCAL LEVEL</u>						
Total Spending ³	8714.0 ¹⁰	8843.0 ¹⁰	8763.0 ¹¹	8403.0	7243.0	7842.0
Total Revenue ⁴	7093.0 ¹⁰	7674.0 ¹⁰	7648.0 ¹¹	7655.0	7004.0	7414.0
Net Spending ⁵	1621.0	1169.0	1115.0	748.0	239.0	428.0
<u>STATE LEVEL</u>						
Total Spending ⁶	2061.0	2290.0	2509.0	2829.0	3145.0	3461.0
Total Revenue ⁷	1940.0	2130.0	2204.0	2319.0	2405.0	2488.0
Net Spending ⁵	121.0	160.0	305.0	510.0	740.0	873.0
<u>LOCAL LEVEL⁸</u>						
Total Spending ⁹	7300.0	7200.0	7100.0	6375.0	5200.0	5699.0
Total Revenue ⁷	5800.0 ¹²	6191.0 ¹²	6290.0 ¹³	6181.0	5700.0	6280.0
Net Spending ⁵	1500.0	1009.0	800.0	194.0	-500.0	-581.0
	1935	1936	1937	1938	1939	1940
<u>ALL LEVELS</u>						
Net Spending	3476.3	3444.7	2444.7	772.1	3815.0	3818.0
<u>FEDERAL LEVEL</u>						
Net Spending	3217.3	3366.3	2602.7	1042.1	3494.0	3382.0
<u>STATE-LOCAL LEVEL</u>						
Total Spending	8172.0	8501.0	9178.0	9988.0	10852.0	11240.0
Total Revenue	7913.0	8412.0	9336.0	10258.0	10531.0	10804.0
Net Spending	259.0	89.0	-158.0	-270.0	321.0	436.0
<u>STATE LEVEL</u>						
Total Spending	3662.0	3862.0	4066.0	4598.0	5073.0	5209.0
Total Revenue	2896.0	3304.0	3983.0	4660.0	4865.0	5070.0
Net Spending	766.0	558.0	83.0	-138.0	208.0	139.0
<u>LOCAL LEVEL</u>						
Total Spending	5878.0	6056.0	6481.0	6906.0	7296.0	7685.0
Total Revenue	6425.0	6564.0	6864.0	7162.0	7304.0	7446.0
Net Spending	-545.0	-508.0	-383.0	-151.0	-8.0	239.0

TABLE V (continued)

Sources: U. S. Department of Commerce, Bureau of Census, Financial Statistics of States, Historical Statistics on State and Local Government Finance, 1902-1953; Postwar Studies No. 3, p. 115, Dec. 3 1945, Board of Governors of Federal Reserve System; Villard, Deficit Spending and the National Income, p. 289.

¹Total net spending will include federal net spending and total State-Local net spending. See footnotes 3 and 4.

²Villard's data are used for federal net spending. See Table III.

³Includes only direct spending at both levels in order to avoid double counting. Therefore, state aid spending to local governments and local spending to state governments are excluded.

⁴Includes only revenues from state and local sources. State aid to local revenues and local revenues to state revenues have been deducted in order to avoid duplication. In 1929-1931, only state aid to local revenues could be estimated.

⁵Represents the excess of total spending over total revenues.

⁶Includes state aid expenditures, but excludes expenditures for debt retirement.

⁷Excludes revenues from borrowing and federal aid.

⁸Local data for years 1929-1931 were taken from Postwar Economic Studies, No. 3, Board of Governors of the Federal Reserve System, p. 115.

⁹Includes only direct spending for 1932-1940; 1929-1931 spending may include total spending.

¹⁰Derived by deducting 1927 state and local inter-government transfer from total state and local data, since data for state and local inter-government transfers are not available in this year.

TABLE V (continued)

¹¹Derived by deducting 1932 state and local inter-government transfer from total state and local data, since data for state and local inter-government transfer are not available in this year.

¹²Federal aid in 1927 is deducted since data are not available in this year.

¹³Federal aid in 1932 is deducted since data are not available in this year.

TABLE VI

Changes in State Revenues and State Expenditures of 13
Southern States During Cyclical Fluctuations of 1929-1938

	(in thousands)				% Change	% Change	% Change
	1929	1931	1937	1938	'29-'31	'31-'37	'37-'38
<u>ALABAMA</u>							
Revenues ¹	29527	26054 ⁴	49692	60166	-11.8	90.7	23.1
Expenditures ²	43675	35519	49958	58968	-18.7	40.6	18.0
Difference ³	14148	9465	266	-1198	-33.1	-97.2	-550.0
<u>ARKANSAS</u>							
Revenues	21247	23413 ⁴	29335	32750	10.2	25.3	11.9
Expenditures	43590	45688	26633	34122	25.4	-51.3	28.1
Difference	22343	31275	-2702	1372	44.5	-110.2	150.7
<u>FLORIDA</u>							
Revenues	25351	23708 ⁴	46636	53332	-6.5	96.7	14.4
Expenditures	25833	27849	49513	52727	7.8	77.8	6.5
Difference	481	4141	2877	-605	760.9	-30.5	-121.0
<u>GEORGIA</u>							
Revenues	27360	32290 ⁴	37167	54443	18.4	151.0	46.4
Expenditures	27732	40953	40396	61145	47.7	-1.4	51.3
Difference	372	8663	3222	6702	2228.8	-62.8	108.0
<u>KENTUCKY</u>							
Revenues	34279	37357 ⁵	53462	58955	11.9	43.1	10.3
Expenditures	37739	41920	47643	51130	10.9	13.7	7.3
Difference	3460	4563	-5819	-7825	31.9	-2275.3	-34.4
<u>LOUISIANA</u>							
Revenues	30173	30021 ⁴	69962	78434	-1.0	133.0	12.1
Expenditures	35478	83687	74604	86840	135.8	-10.9	16.1
Difference	5305	53666	4642	8406	911.6	-91.4	81.0
<u>MISSISSIPPI</u>							
Revenues	17595	16105 ⁴	26004	30353	-8.5	61.5	1.7
Expenditures	23745	22680	44261	48918	-4.5	95.2	10.5
Difference	6150	6575	18257	18565	6.9	177.7	.04
<u>NORTH CAROLINA</u>							
Revenues	39684	37824 ⁴	82451	83995	-4.7	118.0	1.8
Expenditures	47723	44469	74741	86119	-6.8	68.1	15.2
Difference	8039	6645	-7710	2124	-17.3	216.0	128.0
<u>OKLAHOMA</u>							
Revenues	32112	33278 ⁴	64840	70948	3.6	94.8	9.4
Expenditures	33211	43261	74180	85560	30.3	71.5	15.3
Difference	1099	9983	9240	14612	808.4	-7.4	58.2

TABLE VI (continued)

	1929	1931	1937	1938	% Change '29-'31	% Change '31-'37	% Change '37-'38
SOUTH CAROLINA							
Revenues	20533	25089 ⁵	30117	32530	22.2	20.0	7.9
Expenditures	27176	38297	25497	46525	40.9	-7.3	31.1
Difference	6643	13208	-5620	13955	98.2	-104.2	349.0
TENNESSEE							
Revenues	32158	36924 ⁵	42394	52388	14.9	14.8	23.5
Expenditures	46510	55294	46779	56458	18.9	-15.4	20.7
Difference	14352	18370	4395	4070	28.0	-76.1	-7.2
TEXAS							
Revenues	90431	97758 ⁴	143363	158141	8.1	46.7	10.3
Expenditures	106623	92875	153784	164363	-14.9	44.2	6.9
Difference	16192	-4883	10421	6222	-698.4	3134.1	-40.3
VIRGINIA							
Revenues	47112	42437 ⁴	57334	61223	-9.9	35.1	6.8
Expenditures	37986	43660	56543	62046	28.1	19.4	9.7
Difference	-9126	1223	-791	823	86.6	164.7	204.0

Source: United States Department of Commerce, Bureau of the Census, Financial Statistics of States, 1929, 1931, 1937, and 1938.

¹Excludes revenues from federal government and revenues from borrowing.

²Includes direct state expenditures and state aid to local governments.

³The excess of expenditures over revenues.

⁴In 1931 government grants to states were not segregated into federal and local grants; therefore, data for 1931 excludes state revenue from local sources.

⁵Includes federal aid to state governments.

TABLE VII

Changes in Selected Economic Variables in All States and 13
Southern States in Selected Years, 1929-1940

	(in thousands)			
	1929	1931	1933	1937
<u>ALL STATES</u>				
Gross Income From Farm Production ¹	11772882 ⁷	6958967	6393251 ⁷	10424624
Manufacturing - Value Added ²	31843926	19866787	14538018	25173539
- Wages ³	8807553	7185971	5261576	10112883
Bank Deposits ⁴	53137781	43485571	36676576	52798182
Income Payments ⁵	82617000	61971000	46273000	72211000
<u>ALABAMA</u>				
Gross Income From Farm Production	251997	125534	137095	204243
Manufacturing - Value Added	271456	151050	113470	237436
- Wages	120064	61568	48417	96058
Bank Deposits	252670	118150	131018	238101
Income Payments	802000	512000	419000	711000
<u>ARKANSAS</u>				
Gross Income from Farm Production	253605	124586	130196	201841
Manufacturing - Value Added	93867	4452	36842	65587
- Wages	44073	19023	14039	24734
Bank Deposits	197428	135293	79962	145373
Income Payments	562000	332000	288000	479000
<u>FLORIDA</u>				
Gross Income From Farm Production	110755	105054	88454	130056
Manufacturing - Value Added	135810	88763	65337	103907
- Wages	64936	34439	24450	36501
Bank Deposits	305769	193567	158620	296614
Income Payments	695000	546000	425000	773000
<u>GEORGIA</u>				
Gross Income from Farm Production	374510	138431	159703	233027
Manufacturing - Value Added	288576	182981	169334	269507
- Wages	158280	74918	67415	110501
Bank Deposits	305146	272121	211848	320215
Income Payments	956000	667000	596000	920000
<u>KENTUCKY</u>				
Gross Income from Farm Production	239847	139966	123996	239272
Manufacturing - Value Added	227934	145964	123240	181896
Wages	76201	54432	44292	66249
Bank Deposits	433726	360800	251918	392057
Income Payments	964000	679000	534000	902000

TABLE VII (continued)

	1929	1931	1933	1937
<u>LOUISIANA</u>				
Gross Income from Farm Production	172886	101014	96180	161165
Manufacturing - Value Added	242906	131113	118125	199856
- Wages	87511	47949	35643	60203
Bank Deposits	382014	359213	189720	339807
Income Payments	862000	640000	487000	792000
<u>MISSISSIPPI</u>				
Gross Income from Farm Production	314366	128801	138495	231023
Manufacturing - Value Added	107116	46086	35386	76225
- Wages	52039	18919	13636	26344
Bank Deposits	211244	147300	101689	171854
Income Payments	544000	292000	256000	442000
<u>NORTH CAROLINA</u>				
Gross Income from Farm Production	312071	177997	233946	306404
Manufacturing - Value Added	687179	384038	319140	475834
- Wages	208068	118684	113523	189265
Bank Deposits	331700	396432	149139	313922
Income Payments	966000	690000	677000	1077000
<u>OKLAHOMA</u>				
Gross Income from Farm Production	317985	153996	181750	235764
Manufacturing - Value Added	145171	68373	65988	110618
- Wages	31279	26271	20747	34390
Bank Deposits	422230	332077	235071	373283
Income Payments	1079000	659000	537000	841000
<u>SOUTH CAROLINA</u>				
Gross Income from Farm Production	164290	89554	106245	152882
Manufacturing - Value Added	158236	109349	116522	175478
- Wages	108600	50926	54761	91792
Bank Deposits	166018	132744	47816	134558
Income Payments	438000	314000	299000	485000
<u>TENNESSEE</u>				
Gross Income from Farm Production	255228	132169	131585	211287
Manufacturing - Value Added	318433	212460	172939	295627
- Wages	126921	74506	60871	109248
Bank Deposits	408943	340447	216490	396410
Income Payments	905000	622000	516000	880000
<u>TEXAS</u>				
Gross Income from Farm Production	764419	449662	511341	717221
Manufacturing - Value Added	451870	272935	347307	439854
- Wages	131503	99061	73427	132505
Bank Deposits	1016978	853858	629282	1088767
Income Payments	2668000	1843000	1552000	2554000

TABLE VII (continued)

	1929	1931	1933	1937
<u>VIRGINIA</u>				
Gross Income from Farm Production	224611	130478	119181	188263
Manufacturing - Value Added	368857	352683	206556	335848
- Wages	118399	90559	70444	112774
Bank Deposits	450764	430116	333334	499641
Income Payments	987000	770000	639000	996000
<hr/>				
	1938	1939	1940	
<u>ALL STATES</u>				
Gross Income from Farm Production ¹	9290058	8539602	10378246	
Manufacturing - Value Added ²	----- ⁶	24682918	----- ⁶	
- Wages ³	----- ⁶	9089941	----- ⁶	
Bank Deposits ⁴	51939227	64576694	70240327	
Income Payments ⁵	66045000	70601000	75852000	
<u>ALABAMA</u>				
Gross Income from Farm Production	181733	114863	167121	
Manufacturing - Value Added	----- ⁶	247383	----- ⁶	
- Wages	----- ⁶	92018	----- ⁶	
Bank Deposits	232394	298371	325938	
Income Payments	652000	681000	763000	
<u>ARKANSAS</u>				
Gross Income from Farm Production	193613	131676	205397	
Manufacturing - Value Added	----- ⁶	67390	----- ⁶	
- Wages	----- ⁶	24577	----- ⁶	
Bank Deposits	143378	----- ⁶	189165	
Income Payments	456000	478000	493000	
<u>FLORIDA</u>				
Gross Income from Farm Production	105364	122371	129617	
Manufacturing - Value Added	----- ⁶	118016	----- ⁶	
- Wages	----- ⁶	37883	----- ⁶	
Bank Deposits	279412	393332	450860	
Income Payments	751000	819000	900000	
<u>GEORGIA</u>				
Gross Income from Farm Production	217422	158492	277935	
Manufacturing - Value Added	----- ⁶	283316	----- ⁶	
- Wages	----- ⁶	108083	----- ⁶	
Bank Deposits	308575	451340	498699	
Income Payments	793000	901000	968000	

TABLE VII (continued)

	1938	1939	1940
<u>KENTUCKY</u>			
Gross Income from Farm Production	219141	146766	217422
Manufacturing - Value Added	----- ⁶	187400	----- ⁶
- Wages	----- ⁶	61902	----- ⁶
Bank Deposits	377948	463806	472519
Income Payments	793000	839000	880000
<u>LOUISIANA</u>			
Gross Income from Farm Production	157074	134604	143109
Manufacturing - Value Added	----- ⁶	200086	----- ⁶
- Wages	----- ⁶	55084	----- ⁶
Bank Deposits	352680	504805	541550
Income Payments	789000	824000	847000
<u>MISSISSIPPI</u>			
Gross Income from Farm Production	221761	168823	183515
Manufacturing - Value Added	----- ⁶	73462	----- ⁶
- Wages	----- ⁶	27437	----- ⁶
Bank Deposits	179401	195825	198259
Income Payments	399000	436000	444000
<u>NORTH CAROLINA</u>			
Gross Income from Farm Production	316385	240543	288090
Manufacturing - Value Added	----- ⁶	545952	----- ⁶
- Wages	----- ⁶	199289	----- ⁶
Bank Deposits	308607	931626	479569
Income Payments	1011000	1090000	1131000
<u>OKLAHOMA</u>			
Gross Income from Farm Production	217119	113301	246477
Manufacturing - Value Added	----- ⁶	103118	----- ⁶
- Wages	----- ⁶	30465	----- ⁶
Bank Deposits	372510	458921	460159
Income Payments	767000	796000	829000
<u>SOUTH CAROLINA</u>			
Gross Income from Farm Production	136591	115121	150669
Manufacturing - Value Added	----- ⁶	169847	----- ⁶
- Wages	----- ⁶	86616	----- ⁶
Bank Deposits	121332	139666	153172
Income Payments	451000	493000	545000

TABLE VII (continued)

	1938	1939	1940
<u>TENNESSEE</u>			
Gross Income from Farm Production	191171	132378	196337
Manufacturing - Value Added	----- ⁶	320342	----- ⁶
- Wages	----- ⁶	109662	----- ⁶
Bank Deposits	394421	520288	568421
Income Payments	801000	853000	927000
<u>TEXAS</u>			
Gross Income from Farm Production	596585	567596	675259
Manufacturing - Value Added	----- ⁶	453105	----- ⁶
- Wages	----- ⁶	129138	----- ⁶
Bank Deposits	1109132	1471897	1582342
Income Payments	2438000	2554000	2652000
<u>VIRGINIA</u>			
Gross Income from Farm Production	171142	121419	182425
Manufacturing - Value Added	----- ⁶	379488	----- ⁶
- Wages	----- ⁶	155539	----- ⁶
Bank Deposits	497990	596115	634446
Income Payments	938000	996000	1127000

Source: United States Department of Agriculture, Bureau of the Census, Agriculture Statistics, 1936 (data for 1933), 1939 (data for 1937, 1938), 1942 (data for 1939, 1940); Fifteenth Census of the United States Agriculture, 1930 (data for 1929); Yearbook of Agriculture, 1935 (data for 1931); Biennial Census of Manufacturing, 1929, 1933, 1935, 1937; Census of Manufacturing, 1939; United States Department of Treasury, Annual Report of the Comptroller of the Currency, 1929, 1933, 1937, 1939, 1941 (data for bank deposits); United States Department of Commerce, Survey of Current Business, August, 1953 (data for income payments).

¹Gross farm income from farm production equals cash farm income from sales, plus the value of commodities consumed on the farms where grown, valued at the average price received by farmers for the commodities sold.

²Calculated by subtracting sum of cost of materials, containers, fuel, electric energy, and cost of contract work from value of products of both years.

TABLE VII (continued)

³Average wages per year.

⁴Demand and time deposits.

⁵Comprises income received by individuals in the form of wages and salaries, net income of proprietors, dividends, interest, rent, social insurance, contributions, transfer payments, etc.

⁶Data unavailable.

⁷In this year the data are for value of farm products instead of gross income from farm production which did not become available until 1936 and thereafter.

TABLE VIII

Percentage Changes in Selected Economic Variables in All States and
13 Southern States in Selected Years, 1929-1938

	% Decrease 1929-1931 ⁷	% Decrease 1929-1933 ⁷	% Increase 1933-1937 ⁷	% Decrease 1937-1938 ⁷
<u>ALL STATES</u>				
Gross Income from Farm Production ¹	40.9	45.7	63.1	10.9
Manufacturing - Value Added ²	37.6	54.3	73.2	— ⁶
- Wages ³	18.4	40.2	92.2	— ⁶
Bank Deposits ⁴	18.2	31.0	44.0	1.6
Income Payments ⁵	25.0	44.3	56.1	8.5
<u>ALABAMA</u>				
Gross Income from Farm Production	50.2	45.6	49.0	11.0
Manufacturing - Value Added	44.4	58.2	109.0	— ⁶
- Wages	48.7	59.7	98.3	— ⁶
Bank Deposits	53.2	48.1	81.7	2.4
Income Payments	36.2	47.6	71.0	8.3
<u>ARKANSAS</u>				
Gross Income from Farm Production	50.9	48.7	55.0	4.1
Manufacturing - Value Added	52.6	60.8	78.0	— ⁶
- Wages	56.8	68.2	76.2	— ⁶
Bank Deposits	31.5	59.5	81.8	1.4
Income Payments	40.9	48.8	35.1	4.8
<u>FLORIDA</u>				
Gross Income from Farm Production	5.8	20.1	47.0	16.1
Manufacturing - Value Added	34.6	51.9	5.9	— ⁶
- Wages	47.0	62.4	49.3	— ⁶
Bank Deposits	40.0	48.1	87.0	5.8
Income Payments	21.4	38.9	81.9	2.8

TABLE VIII (continued)

	% Decrease 1929-1931	% Decrease 1929-1933	% Increase 1933-1937	% Decrease 1937-1938
<u>GEORGIA</u>				
Gross Income from Farm Production	63.0	57.4	45.9	6.7
Manufacturing - Value Added	36.6	41.3	59.2	—6
- Wages	52.7	57.4	6.4	—6
Bank Deposits	10.8	30.6	51.2	3.6
Income Payments	30.2	37.6	54.4	6.2
<u>KENTUCKY</u>				
Gross Income from Farm Production	41.7	48.3	93.0	8.4
Manufacturing - Value Added	36.0	45.9	47.6	—6
- Wages	28.6	41.9	49.6	—6
Bank Deposits	16.8	41.9	55.6	3.6
Income Payments	29.6	44.6	68.9	12.1
<u>LOUISIANA</u>				
Gross Income from Farm Production	41.6	44.4	55.6	2.5
Manufacturing - Value Added	46.0	51.4	69.2	—6
- Wages	45.2	59.3	68.9	—6
Bank Deposits	6.0	50.3	79.1	45.5
Income Payments	25.7	44.6	62.6	3.8
<u>MISSISSIPPI</u>				
Gross Income from Farm Production	59.0	55.9	66.8	4.0
Manufacturing - Value Added	57.0	67.0	115.4	—6
- Wages	63.6	73.8	93.2	—6
Bank Deposits	30.3	51.9	69.0	44.4
Income Payments	46.3	52.9	72.7	9.7

TABLE VIII (continued)

	% Decrease 1929-1931	% Decrease 1929-1933	% Increase 1933-1937	% Decrease 1937-1938
<u>NORTH CAROLINA</u>				
Gross Income from Farm Production	43.0	25.0	31.0	43.3
Manufacturing - Value Added	44.1	53.6	49.1	— ⁶
- Wages	43.0	45.4	66.7	— ⁶
Bank Deposits	419.5	55.0	110.5	1.7
Income Payments	28.6	29.9	59.1	6.1
<u>OKLAHOMA</u>				
Gross Income from Farm Production	51.6	42.8	29.7	7.9
Manufacturing - Value Added	52.9	54.5	67.6	— ⁶
- Wages	16.0	33.7	65.8	— ⁶
Bank Deposits	21.4	44.3	58.8	0.2
Income Payments	38.9	50.2	56.6	8.8
<u>SOUTH CAROLINA</u>				
Gross Income from Farm Production	45.5	35.3	43.9	10.7
Manufacturing - Value Added	30.9	26.4	50.6	— ⁶
- Wages	53.1	49.6	67.6	— ⁶
Bank Deposits	20.1	71.2	181.4	9.8
Income Payments	28.3	31.7	62.2	7.0
<u>TENNESSEE</u>				
Gross Income from Farm Production	48.2	48.4	60.6	30.8
Manufacturing - Value Added	33.3	45.7	70.9	— ⁶
- Wages	41.7	52.0	79.0	— ⁶
Bank Deposits	16.7	97.1	83.1	0.5
Income Payments	31.3	43.0	70.5	9.0

TABLE VIII (continued)

	% Decrease 1929-1931	% Decrease 1929-1933	% Increase 1933-1937	% Decrease 1937-1938
<u>TEXAS</u>				
Gross Income from Farm Production	41.2	33.1	40.3	16.8 ₆
Manufacturing - Value Added	39.6	47.5	85.4	— ₆
- Wages	44.2	44.2	80.5	— ₆
Bank Deposits	16.0	38.1	7.3	71.9
Income Payments	30.9	41.8	64.6	4.5
<u>VIRGINIA</u>				
Gross Income from Farm Production	41.9	46.9	58.0	9.1 ₆
Manufacturing - Value Added	4.4	44.0	62.6	— ₆
- Wages	23.5	40.5	6.0	— ₆
Bank Deposits	4.6	26.1	49.9	0.3
Income Payments	22.0	35.2	55.8	5.8

Source: United States Department of Agriculture, Bureau of the Census, Agriculture Statistics, 1936 (data for 1933), 1939 (data for 1937, 1938), 1942 (data for 1939, 1940); Fifteenth Census of the United States Agriculture, 1930 (data for 1929); Yearbook of Agriculture, 1935 (data for 1931); Biennial Census of Manufacturing, 1929, 1933, 1935, 1937; Census of Manufacturing, 1939; United States Department of Treasury, Annual Report of the Comptroller of the Currency, 1929, 1933, 1937, 1939, 1941 (data for bank deposits; United States Department of Commerce, Survey of Current Business, August, 1953 (data for income payments).

TABLE VIII(continued)

¹Gross farm income from farm production equals cash farm income from sales, plus the value of commodities consumed on the farms where grown, valued at the average price received by farmers for the commodities sold.

²Calculated by subtracting sum of cost of materials, containers, fuel, electric energy, and cost of contract work from value of products of both years.

³Average wages per year.

⁴Demand and time deposits.

⁵Comprises income received by individuals in the form of wages and salaries, net income of proprietors, dividends, interest, rent, social insurance, contributions, transfer payments, etc.

⁶Data unavailable.

⁷% decrease unless noted by / sign.

TABLE IX

Changes in Sales, Number of Employees, and Pay Roll at the Retail Level,
in All States and 13 Southern States, 1929, 1933, 1935, and 1939

	1929	1933	1935	1939	% Change '29-'33	% Change '33-'39
<u>ALL STATES</u>						
Retail Sales ¹ (in thousands)	49114653	25037225	3279121	42041790	-49	68
Average Number of Employees ²	3833581	2703325	3898258	4600217	-29	70
Pay Roll ² (in thousands)	5189670	2910445	3568167	4529499	-44	56
<u>ALABAMA</u>						
Retail Sales (in thousands)	527101	250384	334223	435973	-53	74
Average Number of Employees	43632	29962	41818	51830	-31	73
Pay Roll (in thousands)	48128	23788	29896	37826	-51	59
<u>ARKANSAS</u>						
Retail Sales (in thousands)	412680	180095	238809	298301	-56	66
Average Number of Employees	29710	18323	27590	32581	-38	78
Pay Roll (in thousands)	33034	15299	19135	23775	-54	55
<u>FLORIDA</u>						
Retail Sales (in thousands)	504523	288804	421934	614464	-43	113
Average Number of Employees	45618	33484	56391	73190	-27	119
Pay Roll (in thousands)	52749	30819	45415	64244	-42	108
<u>GEORGIA</u>						
Retail Sales (in thousands)	635440	352916	481197	624765	-45	77
Average Number of Employees	57554	42114	65782	78947	-27	87
Pay Roll (in thousands)	60599	35763	46195	58874	-41	65
<u>KENTUCKY</u>						
Retail Sales (in thousands)	587340	304603	382761	520135	-48	71
Average Number of Employees	46749	32503	47293	55062	-30	69
Pay Roll (in thousands)	53266	30220	36101	46090	-44	53

TABLE IX (continued)

	1929	1933	1935	1939	% Change '29-'33	% Change '33-'39
<u>LOUISIANA</u>						
Retail Sales (in thousands)	476643	264123	341911	486250	-45	84
Average Number of Employees	47058	36970	49608	63638	-21	72
Pay Roll (in thousands)	48962	32156	36369	49000	-34	52
<u>MISSISSIPPI</u>						
Retail Sales (in thousands)	413737	140855	176915	282440	-66	101
Average Number of Employees	19244	16906	23008	32514	-12	92
Pay Roll (in thousands)	30747	13271	15443	22735	-57	71
<u>NORTH CAROLINA</u>						
Retail Sales (in thousands)	653419	363111	460083	633240	-44	74
Average Number of Employees	49900	39181	59328	79404	-21	103
Pay Roll (in thousands)	58066	35165	43602	60052	-39	71
<u>OKLAHOMA</u>						
Retail Sales (in thousands)	2043020	965561	430084	513091	-53	-47
Average Number of Employees	160308	111080	52709	59988	-31	-46
Pay Roll (in thousands)	191961	101721	40440	48953	-47	-52
<u>SOUTH CAROLINA</u>						
Retail Sales (in thousands)	300220	186215	246214	332224	-38	78
Average Number of Employees	24580	20218	32659	41119	-18	103
Pay Roll (in thousands)	26128	16961	22229	29093	-35	72
<u>TENNESSEE</u>						
Retail Sales (in thousands)	643817	330079	477720	606489	-53	84
Average Number of Employees	55147	37568	60310	71869	-32	91
Pay Roll (in thousands)	61176	33564	45948	55924	-45	67

TABLE IX (continued)

	1929	1933	1935	1939	% Change '29-'33	% Change '33-'39
<u>TEXAS</u>						
Retail Sales (in thousands)	1548650	739614	1273775	1803716	-52	14
Average Number of Employees	116018	73150	156045	209841	-37	19
Pay Roll (in thousands)	155952	80163	124414	171690	-49	114
<u>VIRGINIA</u>						
Retail Sales (in thousands)	600929	358102	466768	628172	-40	75
Average Number of Employees	52287	41118	57104	74864	-21	82
Pay Roll (in thousands)	61376	40065	47776	63867	-35	59

Source: United States Department of Commerce, Bureau of the Census, Census of American Business, Retail Distribution, 1933 (data for 1929, 1933); Census of Business, Retail Trade, 1939 (data for 1935, 1939).

¹Figures for 1939 and 1935 are revised to exclude data for service garages and other automobile service businesses formerly classified as retail businesses.

²Employees and pay roll include paid executives of corporations, but do not include the number and compensation of proprietors of unincorporated businesses.

TABLE X

Gross Debt and Net Debt Outstanding In All States and
13 Southern States, 1929-1940

	(in thousands)						
	1929	1930	1931	1937	1938	1939	1940
<u>ALL STATES</u>							
Gross Debt	2300057	2444122	2666070	3275677	3300648	3449020	3514189
Net Debt ¹	1661686	1833428	1976844	2424648	2509869	2502237	2460116
<u>ALABAMA</u>							
Gross Debt	69713	74992	82343	73473	69908	70127	68478
Net Debt	66026	67684	66534	72591	68622	67862	66146
<u>ARKANSAS</u>							
Gross Debt	100637	122638	160095	164402	160459	158977	155214
Net Debt	93292	120443	156849	163859	159883	158691	150982
<u>FLORIDA</u>							
Gross Debt	12516 ₂	12872	13042	----- ²	----- ²	----- ²	----- ²
Net Debt	----- ²	180	580	----- ²	----- ²	----- ²	----- ²
<u>GEORGIA</u>							
Gross Debt	10444	10583	12592	23694	22118	22204	26503
Net Debt	7932	7284	9448	23492	21984	22047	26310
<u>KENTUCKY</u>							
Gross Debt	12744	11132	13909	30843	22171	20910	18842
Net Debt	2180	2006	2295	14929	14876	20598	18391
<u>LOUISIANA</u>							
Gross Debt	29822	40399	83884	129716	142250	152452	155202
Net Debt	27194	37356	73313	126325	137652	145972	147223
<u>MISSISSIPPI</u>							
Gross Debt	29094	32150	36504	53117	70984	71982	81158
Net Debt	23586	31479	32722	51460	70836	69030	78117
<u>NORTH CAROLINA</u>							
Gross Debt	182933	185107	186364	164280	156884	155623	150613
Net Debt	161177	164932	169400	136420	129507	128190	122716
<u>OKLAHOMA</u>							
Gross Debt	4664	6727	11532	12899	10998	28908	35259
Net Debt	2278	1935	1578	11936	10755	28541	26999
<u>SOUTH CAROLINA</u>							
Gross Debt	47916	63943	78527	41596	46193	49906	56903
Net Debt	40854	56479	69430	40771	44218	48277	55058
<u>TENNESSEE</u>							
Gross Debt	57581	85847	88323	104042	109825	99999	95120
Net Debt	31609	84404	86450	91007	92366	90166	91133

TABLE X (continued)

	1929	1930	1931	1937	1938	1939	1940
<u>TEXAS</u>							
Gross Debt	7632	7162	10346	29737	26641	28015	23282
Net Debt	4367	4372	4446	26649	23503	23006	19985
<u>VIRGINIA</u>							
Gross Debt	29992	29886	29331	29987	30267	29115	28503
Net Debt	26703	26440	25335	23892	23315	22633	21744

Source: United States Department of Commerce, Bureau of the
 Census, Financial Statistics of States, 1929, 1930
 1931, 1937, 1938, 1939, 1940.

¹Excludes assets of sinking funds and other reserve funds.

²Data unavailable.

TABLE XI

Federal, State, and Local Total Revenues, Tax Revenues, Inter-government Revenues,
and Non-Tax Revenues, 1929-1940

	(in millions)											
	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
FEDERAL, STATE, AND LOCAL¹												
Total Revenues ²	11254	11974	10968	9893	10256	11581	12767	13585	15558	17300	17072	17674
Total Tax Revenues ³	10274	10752	9655	8053	7683	8866	9816	10624	12725	14370	13855	14352
Total Non-Tax Revenues	980	1222	1313	1840	2573	2715	2951	2961	2833	2930	3217	3322
STATE AND LOCAL												
Total Revenues ²	7221	7796	7778	7887	8176	8465	8967	9469	10264	11058	11404	11749
Revenue from Federal Govt.	128	122	205	232	642	1051	1054	1057	928	800	873	945
Revenue from Own Sources	7093	7674	7573	7655	7534	7414	7913	8412	8685	10258	10531	10804
Tax Revenues ³	6770	7126	6847	6164	5828	5912	6195	6724	7641	8336	8375	8695
FEDERAL												
Total Revenues ⁴	4033	4178	3190	2006	2080	3116	3800	4116	5294	6242	5668	5925
Total Tax Revenues ⁵	3504	3626	2808	1889	1855	2954	3621	3900	5084	6034	5480	5657
Non-Tax Revenues	429	552	382	117	225	162	179	216	210	208	188	268
STATE												
Total Revenues ¹	2059	2243	2324	2541	2999	3456	3794	4132	4713	5293	5515	5737
Revenues from Federal Govt. ⁶	119 ⁹	113 ⁹	195 ⁹	222	201 ⁹	968	898	828	730	633	650	667
Revenues from Local Sources ⁶	517	517	458	45	41	36	38	39	44	48	53	58
Revenues from Own Sources ⁶	1889	2079	2084	2274	2364	2452	2858	3265	3939	4612	4812	5012
Tax Revenues	1951	2108	2042	1890	1724	1979	2217	2641	3360	3858	3884	4191

TABLE XI (continued)

	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
<u>LOCAL</u>												
Total Revenues ¹	5809	6200	6300	6192	6278	6363	6578	6793	7061	7329	7527	7724
Revenues from Federal Govt. ⁶	97	97	108	10	47	83	156	229	198	167	223	278
Revenues from State Sources ⁶	5967	5967	801 ⁸	801	1060	1318	1368	1417	1467	1516	1585	1654
Revenues from Own Sources ⁶	5204	5595	5489	5481	5172	4962	5055	5147	5397	5646	5719	5792
Tax Revenues ⁶	4819 ⁹	5018 ⁹	4805 ⁹	4274	4104	3933	3978	4083	4281	4478	4491	4504

Source: United States Department of Commerce, Bureau of the Census, Historical Statistics on State and Local Government Finances, 1902-1953; Financial Statistics of States, 1929-1931; Historical Review of State and Local Government Finances; United States Bureau of the Census, Department of Treasury, Annual Report of the Secretary of the Treasury, 1940, 1953; National Bureau of Economic Research, Federal Grants and the Business Cycle, James A. Maxwell; Board of Governors of the Federal Reserve System, Public Finance and Full Employment, Postwar Economic Studies, No. 3, December, 1945, p. 115.

¹State and Local Total Revenues are estimated in the odd years starting in 1933 by taking the arithmetic mean of the data available in the two closest even years starting in 1933. This was necessary because the latest revised data are available only in even years starting in 1932. Other annual data are taken from what seems to be the most reliable source.

²Total State and Local Revenues are less than sum of total State Revenues and Total Local Revenues because of the exclusion of duplicating interlevel transfers from the state-local aggregate figures.

TABLE XI (continued)

³Local tax revenues are estimated in odd years starting in 1933. See footnote (1).

⁴Includes net transfers to Federal Old Age and Survivors Insurance Trust Fund.

⁵Includes internal revenue receipts and custom receipts as reported in the Treasury Daily Statement.

⁶Estimated in odd years starting in 1933. See footnote (1).

⁷1927 data are used since data in this year are unavailable.

⁸1932 data are used since data in this year are unavailable.

⁹Data in this year taken from James A. Maxwell's Federal Grants and the Business Cycle, p. 115. See sources.

TABLE XII

Federal and State Tax Sources, 1929-1940

(in thousands)

	1929	1930	1931	1932	1933	1934
FEDERAL LEVEL (total)	3540283	3626296	2808135	1888761	1855200	2954100
TAXES ON CONSUMPTION	1055297	1051711	833213	735134	1065163	1585405
Gasoline Tax					124900	202600
Alcoholic Tax	12777	11695	10432	8704	43174	258911
Tobacco Tax	434545	450339	444277	398579	402379	425169
Manuf. Excise Tax	5712	2676	150	96	243600	385291
Payroll Tax						
Custom Tax	602263	587001	378354	327755	250750	313434
TAXES ON SAVING	2393171	2514029	1888119	1105179	781102	932794
Individual Income Tax	1095541	1146845	833648	427191	352574	419509
Corporate Income Tax	1235733	1263414	1026393	629566	394218	400146
Estate Tax	61897	64770	48078	47422	29693	103986
Gift Tax					4617	9153
OTHER TAXES⁵	91815	99556	66804	49448	133800	638500
STATE LEVEL (total)	1951000	2108000	2042000	1890000	1724000	1979000
TAXES ON CONSUMPTION	431000	508000	560000	553000	564000	825000
General Sales Tax		1000	8000	7000	18000	173000
Motor Fuel Tax	431000	495000	536000	527000	518000	565000
Alcoholic Tax			1000 ²	1000	10000 ²	62000
Tobacco Tax		12000	15000	19000	20000	25000
Payroll Tax						
TAXES ON SAVING	353000	416000	388000	301000	248000	222000
Individual Income Tax	204000 ¹	233000 ¹	86000	74000	64000	80000
Corporate Income Tax			115000	79000	57000	49000
Death and Gift Taxes	149000	183000	187000	148000	127000	93000
OTHER TAXES	1167000	1184000	1094000	1036000	912000	932000
Property Tax	350000	345000	371000	328000	285000	273000
License Tax	348000 ⁴	356000 ⁴	344000 ⁴	490000	303000 ⁴	460000
Severance Tax			27000	19000	14000	21000
Other	469000	483000	352000	199000	310000	178000

TABLE XII (continued)

	1935	1936	1937	1938	1939	1940
FEDERAL LEVEL (total)	3621100	3899700	5083500	6033500	5480000	5656600
TAXES ON CONSUMPTION	1716700	2001135	2504110	2857647	2830096	3087544
Gasoline Tax	161500	177300	196500	203600	207000	226200
Alcoholic Tax	410926	505243	593831	567669	587605	624064
Tobacco Tax	458776	500785	551923	567777	579784	608073
Manuf. Excise Tax	342145	382716	449854	416754	396891	447088
Payroll Tax	-----	48279	265745	742660	740429	833521
Custom Tax	343353	386812	486357	359187	318387	348591
TAXES ON SAVING	1317900	1806287	2485376	3043894	2545831	2489680
Individual Income Tax	527113	674416	1091741	1286312	1028834	982017
Corporate Income Tax	578675	753031	1088087	1342718	1156281	1147592
Estate Tax	140441	218781	281636	382165	332280	330886
Gift Tax	71671	160059	23912	34699	28436	29185
OTHER TAXES⁵	748000	269600	250400	333600	311100	305600
STATE LEVEL (total)	2217000	2641000 ³	3364000 ³	3858000 ³	3884000 ³	4191000 ³
TAXES ON CONSUMPTION	1073000	1244000	1778000	2181000	2328000	2506000
General Sales Tax	284000	364000	434000	447000	440000	499000
Motor Fuel Tax	617000	687000	722000	777000	440000	499000
Alcoholic Tax	143000 ²	126000	221000 ²	176000	228000 ²	193000
Tobacco Tax	29000	44000	54000	55000	60000	97000
Payroll Tax	-----	23000	347000	726000	799000	878000
TAXES ON SAVING	259000	383000	472000	525000	464000	474000
Individual Income Tax	105000	153000	199000	218000	197000	206000
Corporate Income Tax	54000	113000	157000	165000	134000	155000
Death and Gift Taxes	100000	117000	116000	145000	133000	113000
OTHER TAXES	885000	1014000	1114000	1152000	1092000	1211000
Property Tax	248000	228000	292000	244000	259000	260000
License Tax	323000 ⁴	554000	349000 ⁴	604000	364000 ⁴	647000
Severance	26000	34000	49000	58000	47000	53000
Other	288000	198000	424000	246000	422000	251000

TABLE XII (continued)

Source: United States Treasury Department, Annual Report of the Secretary of the Treasury on the State of Finances, 1940, 1953; United States Department of Commerce, Bureau of the Census, Historical Review of State and Local Finance.

¹Not segregated between individual income tax and corporate net income tax.

²Includes license tax on the sale of alcoholic beverages.

³Includes Payroll taxes.

⁴Does not include license tax on the sale of alcoholic beverages. See footnote (2).
The license tax was not completely segregated in this year.

⁵Includes all other federal taxes not shown such as the admission tax, sugar tax, capital stock tax, stamp tax, and so forth.

TABLE XIII

Federal and State Taxes That Tend to Fall on Consumption
and Saving, 1929-1940

	1929		1930		1931	
	Add 000,000	% of Total	Add 000,000	% of Total	Add 000,000	% of Total
<u>FEDERAL-STATE</u>						
Total Tax Revenues	5491	100.0	5734	100.0	4850	100.0
Taxes on Consumption	1486	27.0	1560	27.0	1393	28.7
Taxes on Saving	2746	50.0	2930	51.0	2276	46.9
Taxes on Both	1269	23.0	1244	22.0	1181	27.4
<u>FEDERAL</u>						
Total Tax Revenues	3540	100.0	3626	100.0	2808	100.0
Taxes on Consumption ¹	1055	29.8	1052	29.0	833	29.6
Taxes on Saving ²	2393	67.5	2514	69.3	1888	67.2
Taxes on Both ³	102	2.7	60	1.7	87	3.2
<u>STATE</u>						
Total Tax Revenues	1951	100.0	2108	100.0	2042	100.0
Taxes on Consumption ⁴	431	22.0	508	24.0	560	27.4
Taxes on Saving ⁵	353	18.0	416	19.7	388	19.0
Taxes on Both ⁶	1167	59.8	1184	56.1	1094	52.2

	1932		1933		1934	
	Add 000,000	% of Total	Add 000,000	% of Total	Add 000,000	% of Total
<u>FEDERAL-STATE</u>						
Total Tax Revenues	3779	100.0	3579	100.0	4933	100.0
Taxes on Consumption	1288	34.8	1629	45.5	2410	49.0
Taxes on Saving	1406	37.5	1029	28.2	1155	23.4
Taxes on Both	1085	27.7	921	26.0	1368	28.0
<u>FEDERAL</u>						
Total Tax Revenues	1889	100.0	1855	100.0	2954	100.0
Taxes on Consumption	735	38.9	1065	57.4	1585	53.6
Taxes on Saving	1105	58.5	781	42.1	933	31.5
Taxes on Both	49	2.6	9	.5	436	14.9
<u>STATE</u>						
Total Tax Revenues	1890	100.0	1724	100.0	1979	100.0
Taxes on Consumption	553	29.2	564	32.7	825	41.6
Taxes on Saving	301	15.9	248	14.3	222	11.2
Taxes on Both	1036	54.9	912	53.0	932	47.2

TABLE XIII (continued)

	1935		1936		1937	
	Add 000,000	% of Total	Add 000,000	% of Total	Add 000,000	% of Total
FEDERAL-STATE						
Total Tax Revenues	5838	100.0	6540	100.0	8448	100.0
Taxes on Consumption	2790	47.8	3245	49.0	4282	50.6
Taxes on Saving	1577	27.0	2189	33.5	2957	35.0
Taxes on Both	1471	25.2	1106	17.0	1209	14.4
FEDERAL						
Total Tax Revenues	3621	100.0	3899	100.0	5084	100.0
Taxes on Consumption	1717	47.4	2001	51.2	2504	49.2
Taxes on Saving	1318	36.3	1806	46.3	2485	48.8
Taxes on Both	586	16.3	92	2.4	95	2.0
STATE						
Total Tax Revenues	2217	100.0	2641	100.0	3364	100.0
Taxes on Consumption	1073	48.3	1244	47.1	1778	52.8
Taxes on Saving	259	11.6	383	14.5	472	14.0
Taxes on Both	885	40.1	1014	38.4	1114	33.2
	1938		1939		1940	
	Add 000,000	% of Total	Add 000,000	% of Total	Add 000,000	% of Total
FEDERAL-STATE						
Total Tax Revenues	9892	100.0	9364	100.0	9848	100.0
Taxes on Consumption	5039	51.0	5158	55.0	5594	57.0
Taxes on Saving	3569	36.0	3010	32.0	2964	30.0
Taxes on Both	1184	12.0	1196	12.8	1290	13.0
FEDERAL						
Total Tax Revenues	6034	100.0	5480	100.0	5657	100.0
Taxes on Consumption	2858	47.3	2830	51.6	3088	54.5
Taxes on Saving	3044	50.4	2546	46.4	2490	44.0
Taxes on Both	32	2.3	104	2.0	79	1.5
STATE						
Total Tax Revenues	3858	100.0	3884	100.0	4191	100.0
Taxes on Consumption	2181	56.5	2328	59.9	2506	59.7
Taxes on Saving	525	13.6	464	11.9	474	11.3
Taxes on Both	1152	29.9	1092	28.2	1211	29.0

Source: United States Department of Treasury, Annual Report of the Treasury on the State of Finances, 1940, 1953; United States Department of Commerce, Bureau of the Census, Historical Review of State and Local Finance.

TABLE XIII (continued)

¹Includes the gasoline tax, alcoholic tax, tobacco tax, manufacturer's excise tax, payroll tax, and custom tax.

²Includes individual income tax, corporate income tax, estate tax, and gift tax.

³Includes all other taxes not included in footnotes (1) and (2).

⁴Includes general sales tax, motor fuel tax, alcoholic beverages tax, tobacco tax, payroll tax.

⁵Includes individual income tax, corporate income tax, and death and gift taxes.

⁶Includes property tax, license tax, severance tax, and other taxes.

TABLE XIV

Local Revenues, 1927-1940¹

	(in millions)					
	1927	1932	1934	1936	1938	1940
Total Revenues	6,333	6,192	6,363	6,793	7,329	7,724
Revenue from States	596	801	1,318	1,417	1,516	1,654
Revenue from Federal Govt.	9	10	83	229	167	278
Revenue from Local Sources	5,728	5,381	4,962	5,147	5,646	5,792
Taxes	4,479	4,274	3,933	4,083	4,473	4,397
Property	4,360	4,159	3,803	3,865	4,196	4,170
Sales & Gross Receipts	25	26	30	90	120	130
Individual Income	-----	-----	-----	-----	-----	-----
Corporation Net Income	-----	-----	-----	-----	-----	-----
License and Other	94	89	100	128	157	178
Non-tax Revenues	1,249	1,107	1,029	1,064	1,173	1,295

Source: United States Department of Commerce, Bureau of the Census, Historical Statistics on State and Local Government Finances, 1902-1953.

¹Data for other years of this period are unavailable.

TABLE XV

State Expenditures in Selected Years, 1927-1940

	(in millions)					
	1927	1932	1934	1936	1938	1940
Total expenditure	2,047	2,829	3,461	3,862	4,598	5,209
Payments to local governments	596	801	1,318	1,417	1,516	1,654
Education	292	398	434	573	656	700
Highways	197	229	247	285	317	332
Public Welfare	6	28	211	245	346	420
Other specified purposes	3	6	281	151	17	21
Unspecified purposes	98	140	145	163	180	181
Direct Expenditure (by function)	1,451	2,028	2,143	2,445	3,082	3,555
Direct general expenditure	1,380	1,965	2,009	2,223	2,576	2,730
Education	218	278	228	297	347	375
Highways	514	843	738	754	815	793
Public welfare	40	74	363	422	453	527
Health	24	34	36	41	59	64
Hospitals	146	181	167	180	209	236
Police	7	15	15	19	30	34
Natural resources	94	119	85	93	128	144
General control	96	114	108	130	146	151
Interest on general debt	83	114	119	124	128	130
Veterans' services, n.e.c.	-----	-----	-----	-----	-----	-----
Employment security adminis.	-----	-----	1	3	48	64
Correction	64	87	70	73	85	86
Other and unallocable	94	106	79	87	128	126
Liquor stores expenditures	-----	-----	70	143	204	224
Insurance trust expenditures	71	63	64	79	302	601
Employee retirement	12	18	27	36	48	56
Unemployment compensation	-----	-----	-----	-----	202	492
Other	59	45	37	43	52	53
Total direct expenditure (by character and object)	1,451	2,028	2,143	2,445	3,082	3,555
Current operation	762	982	985	1,192	1,503	1,570
Capital outlay	492	786	619	634	701	737
Assistance and subsidies	43	83	356	416	448	517
Interest on debt	83	114	119	124	128	130
Insurance trust benefits and withdrawals	71	63	64	79	302	601

Source: United States Department of Commerce, Bureau of the Census, Historical Statistics on State and Local Government Finances, 1902-1953.

TABLE XVI

Local Spending in Selected Years, 1927-1940

	(in millions)					
	1927	1932	1934	1936	1938	1940
Direct expenditure (by function)	6,359	6,375	5,699	6,056	6,906	7,685
Direct general expenditure	5,830	5,800	5,172	5,421	6,181	6,499
Education	2,017	2,033	1,603	1,880	2,144	2,263
Highways	1,295	898	771	671	835	780
Public welfare	111	370	526	405	616	629
Health	52	73	73	75	92	95
Hospitals	133	168	142	171	191	214
Police	263	303	276	295	329	331
Fire protection	203	210	189	205	231	235
Natural resources	----- ¹	46	74	100	94	74
Sanitation	312	223	177	204	226	207
Housing & comm. redevelopment	-----	-----	-----	-----	3	230
Recreation	153	147	126	104	130	162
General control	316	356	324	370	396	410
Interest on general debt ²	501	627	620	614	545	523
Other and unallocable	474	346	271	327	349	346
Utility & liquor store expenditure	491	518	458	558	644	1,100
Liquor stores	-----	-----	1	5	8	10
Water supply system	349	320	292	344	385	404
Electric power system	94	92	102	117	156	257
Transit system	38	99	57	81	82	411
Gas supply system	10	7	6	11	13	18
Insurance trust expenditure	38	57	69	77	81	86
Employee retirement	38	57	69	77	81	84
Unemployment compensation	-----	-----	-----	-----	-----	2
Total direct expenditure (by character and object)	6,359	6,375	5,699	6,056	6,906	7,685
Current operation	3,828	4,197	3,665	4,036	4,466	4,606
Capital outlay	1,864	1,090	788	890	1,157	1,778
Construction	1,491	872	630	712	926	1,185
Land & existing structures	-----	-----	-----	-----	-----	-----
Equipment	373	218	158	178	231	593
Assistance & subsidies	50	305	459	336	546	558
Interest on debt	579	726	718	717	656	657
Insurance trust benefits & withdrawals	38	57	69	77	81	86

Source: United States Department of Commerce, Bureau of the Census, Historical Statistics on State and Local Government Finances, 1902-1953.

TABLE XVI (continued)

¹"Natural resources" expenditure not segregable; included in "other and unallocable" general expenditure.

²Interest on utility debt is included in "utility expenditure."

TABLE XVII

State and Local Expenditures in Selected Years, 1927-1940

	(in millions)					
	1927	1932	1934	1936	1938	1940
Direct expenditure (by function)	7,810	8,403	7,842	8,501	9,988	11,240
Direct general expenditure	7,210	7,765	7,181	7,644	8,757	9,229
Education	2,235	2,311	1,831	2,177	2,491	2,638
Highways	1,809	1,741	1,509	1,425	1,650	1,573
Public welfare	151	444	889	827	1,069	1,156
Health	76	107	109	116	151	159
Hospitals	279	349	309	351	400	450
Police	270	318	291	314	359	365
Local fire protection	203	210	189	205	231	235
Natural resources	94 ¹	165	159	193	222	218
Sanitation	312	223	177	204	226	207
Housing and Comm. redevelopment	-----	-----	-----	-----	3	230
Local recreation	153	147	126	104	130	162
General control	412	470	432	500	542	561
Interest on general debt ²	584	741	739	738	673	653
Other and unallocable	632	539	421	490	610	622
Utility & liquor store expenditure	491	518	528	701	848	1,324
Liquor stores	-----	-----	71	148	212	234
Water supply system	349	320	292	344	385	404
Electric power system	94	92	102	117	156	257
Transit system	38	99	57	81	82	421
Gas supply system	10	7	6	11	13	18
Insurance trust expenditure	109	120	133	156	383	687
Employee retirement	50	75	96	113	129	140
Unemployment compensation	-----	-----	-----	-----	202	494
Other	59	45	37	43	52	53
Total direct expenditure (by character and object)	7,810	8,403	7,842	8,501	9,988	11,240
Current operation	4,590	5,179	4,650	5,228	5,969	6,176
Capital outlay	2,356	1,876	1,407	1,524	1,858	2,515
Assistance and subsidies	93	388	815	752	994	1,075
Interest on debt (gen. & utility)	662	840	837	841	784	787
Insurance trust benefits & withdrawals	109	120	133	156	383	687

Source: United States Department of Commerce, Bureau of the Census, Historical Statistics on State and Local Government Finances, 1902-1953.

TABLE XVII (continued)

¹State expenditure only: local expenditure for "natural resources" is included under "other and unallocable direct general expenditure."

²Interest on utility debt is included in "utility expenditure." For total expenditure for interest on debt, see "direct expenditure (by character and object)."

TABLE XVIII

Federal Expenditures, 1929-1940
(in millions)

	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
TOTAL EXPENDITURES ¹	3298	3237	3640	3934	3864	6011	7010	8666	8177	7239	8707	8998
Direct and Work Relief	—	—	—	—	350	1845	2267	2292	2376	1869	2602	1906
Public Works	201	—	396	450	442	698	883	730	1024	783	992	948
Aid to Agriculture	6	—	311	443	209	780	1076	938	976	861	1235	1567
National Defense	660	—	700	702	651	540	710	912	935	1028	1163	1559
Interest on Debt	678	659	612	599	689	764	824	758	866	926	970	1041
Veterans' Benefits	738	—	953	985	863	557	607	2351	1137	582	557	557
Grants to States ²	—	—	—	—	—	—	—	28	157	272	320	357
Other ³	1015	—	668	755	610	827	643	657	1706	1218	868	1063
Debt Retirement ⁴	550	553	440	413	462	360	574	403	104	65	58	129

Source: United States Treasury Department, Annual Report of the Secretary of the Treasury on the State of the Finances, 1929, 1930, 1931, 1940.

¹Excludes expenditures for debt retirement.

²Grants to states as a result of the Social Security Act, 1935.

³Includes departmental expenses, transfers to trust accounts, refunds of taxes, etc.

⁴Not included in total above.

TABLE XIX

Louisiana State Expenditures and Debt Redemption, 1928-1940¹

	1928		1929		1930		1931	
	Add 000	% of Total	Add 000	% of Total	Add 000	% of Total	Add 000	% of Total
TOTAL SPENDING	28,914	100.0	35,478	100.0	46,862	100.0	83,687	100.0
Public Safety	1,998	6.9	2,507	7.1	2,704	5.8	2,662	3.2
Public welfare	172	.6	198	5	424	.9	701	.8
Education	8,185	28.3	8,410	23.7	8,542	18.2	9,149	11.0
Highways	10,772	37.5	15,264	43.5	25,595	54.6	55,664	66.5
Health and Hospitals	3,069	10.6	3,412	9.6	3,395	7.3	3,435	4.2
Natural Resources	870	3.0	1,046	3.0	1,020	2.2	1,195	1.4
Employment Security	—	—	—	—	—	—	—	—
Administration	—	—	—	—	—	—	—	—
General Control	1,696	5.9	1,815	5.1	2,191	4.8	6,109	7.3
Debt Interest	791	2.7	1,019	3.0	1,701	3.6	2,692	3.2
Misc. & Unallocable ²	1,295	4.5	1,755	5.0	1,227	2.6	2,025	2.4
Unemployment Compensation	— ³	—	— ³	—	— ³	—	— ³	—
Other ⁴	— ³	—	— ³	—	— ³	—	— ³	—
Employee Retirement	— ³	—	— ³	—	— ³	—	— ³	—
Contributions to	—	—	—	—	—	—	—	—
Enterprises	66	5	52	5	63	5	55	5
Debt Redemption	— ³	—	— ³	—	— ³	—	— ³	—

TABLE XIX (continued)

	1937		1938		1939		1940	
	Add	% of	Add	% of	Add	% of	Add	% of
	000	Total	000	Total	000	Total	000	Total
TOTAL SPENDING	77,192	100.0	104,837	100.0	123,123	100.0	103,423	100.0
Public Safety	3,011	3.9	3,890	2.8	2,977	2.4	3,070	3.0
Public Welfare	4,922	6.4	9,424	9.0	11,477	9.3	14,341	13.9
Education	22,661	29.8	23,059	22.0	27,796	22.8	26,434	25.6
Highways	12,461	16.2	16,610	15.9	17,878	14.5	15,811	15.3
Health and Hospitals	6,569	8.5	6,398	6.2	19,129	15.5	9,216	8.9
Natural Resources	2,065	2.7	3,203	3.2	3,579	2.9	2,431	2.4
Employment Security	221	— ⁵	1,127	1.1	759	.6	781	.8
General Control	4,270	5.5	5,696	5.4	5,969	4.9	5,480	5.3
Debt Interest	6,032	7.8	5,946	5.7	6,477	5.3	6,616	6.4
Misc. and Unallocable	3,861	5.0	7,146	6.8	9,752	7.9	10,080	9.8
Employee Retirement	70	— ⁵	137	— ⁵	125	— ⁵	181	— ⁵
Unemployment Compensation	—	—	4,007	3.8	5,934	4.8	6,730	6.5
Other ⁴	101	— ⁵	203	— ⁵	82	— ⁵	85	— ⁵
Contributions to Enterprises	1,004	1.3	1,038	1.0	1,090	.9	1,167	1.1
Debt Redemption	9,944	12.9	17,953	17.1	10,099	8.2	1,000	1.0

Source: United States Department of Commerce, Financial Statistics of the States, 1929-1939; Compendium of State Government Finances, 1940.

TABLE XIX (continued)

¹Data unavailable for years 1932-1936

²Includes veterans' services, inspection and regulation n.e.c., commercial facilities n.e.c., public buildings n.e.c., current operation and capital outlay n.e.c., aid to local governments n.e.c., and assistance and subsidies n.e.c.

³Data unavailable.

⁴Administration of public trust funds and investments n.e.c.

⁵Less than five-tenths of one percent.

TABLE XX

Federal Interest-Bearing Debt Outstanding, June 30, 1929-1940

(in millions)												
Type of Issue	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
U. S. Bonds	12125	12111	13531	14250	14223	16510	14936	18628	21322	23599	27566	29917
Treasury Bills	1640	1420	2246	3341	3063	2921	2053	2354	2303	1154	1308	1302
Notes	2267	1626	452	1261	4548	6653	10023	11381	10617	9147	7243	6383
Special Issues ¹	607	764	291	309	323	396	633	626	1558	2676	3770	4775
Gross Debt	16639	15921	16520	19161	22157	26480	27645	32989	35800	36576	39887	42377
-Special Issues	607	764	291	309	323	396	633	626	1558	2676	3770	4775
Net Debt	16032	15157	16229	18852	21834	26084	27012	32363	34242	33900	36117	37602

Source: United States Department of Commerce, Bureau of the Census, Historical Statistics of the United States, 1789-1945, p. 305.

¹Comprises special issues to Government agencies and trust funds.

TABLE XXI

Louisiana State Revenue and Borrowing in Selected Years, 1929-1940¹

	1929		1930		1931		1937	
	Add 000	% of Total	Add 000	% of Total	Add 000	% of Total	Add 000	% of Total
Total Revenue and Borrowing	67,992	100.0	60,077	100.0	108,800	100.0	99,078	100.0
Taxes	26,370	38.8	27,546	45.9	26,960	24.8	55,379	55.9
Federal Aid	1,173	1.7	1,687	2.8	4,569	4.2	8,237	8.3
Local govt. Aid	-----	-----	-----	-----	----- ²	-----	153	.2
Charges & Misc. Insurance Trust	3,333	4.9	3,976	6.6	3,061	2.8	6,440	6.5
Revenues	-----	-----	-----	-----	----- ³	-----	7,560	7.6
Borrowing	-----	-----	-----	-----	----- ⁴	-----	21,309	21.5
Other ⁵	37,116	54.6	26,868	44.7	74,210	68.2	-----	-----

	1938		1939		1940	
	Add 000	% of Total	Add 000	% of Total	Add 000	% of Total
Total Revenue And Borrowing	115,443	100.0	118,407	100.0	109,869	100.0
Taxes	61,557	53.3	65,045	54.9	74,071	67.4
Federal Aid	7,110	6.2	12,642	10.7	12,397	11.3
Local Govt. Aid	372	.3	743	.6	604	.5
Charges & Misc. Insurance Trust	7,197	6.2	8,157	6.9	7,000	6.4
Revenues	8,917	7.7	9,810	8.3	8,019	7.3
Borrowing	30,290	26.3	22,010	18.6	7,778	7.1
Other	-----	-----	-----	-----	-----	-----

Source: United States Department of Commerce, Bureau of the Census, Financial Statistics of the States, 1929, 1930, 1931, 1937, 1938, 1939, 1940.

¹Data for years 1932, 1933, 1934, 1935, and 1936 unavailable.

²Included in figure for federal aid, 1929-1931.

³Included in figure for other receipts, 1929-1931.

TABLE XXI (continued)

⁴Included in figure for other receipts, 1929-1931.

⁵Borrowing and other unsegregated receipts, 1929-1931.

TABLE XXII

Louisiana Tax Revenue by Type of Tax, 1928-1940¹

	1928		1929		1930		1931	
	Add 000	% of Total	Add 000	% of Total	Add 000	% of Total	Add 000	% of Total
TOTAL TAXES	22,026	100.0	26,369	100.0	27,546	100.0	26,961	100.0
General Sales Taxes								
Selected Sales Taxes	3,278	14.9	6,450	24.5	7,335	26.6	8,406	31.2
Motor Fuels	3,278	14.9	6,450	24.5	7,335	26.6	8,406	31.2
Alcoholic Beverages								
Tobacco Products								
Licenses	9,124	34.6	9,688	35.2	8,713	32.4		
Motor Vehicles	4,457	16.9	4,701	17.1	4,521	16.8		
Other	4,667	8.4	4,987	18.1	4,192	15.6		
Individual & Corp. Net Income ²								
Property ³	9,363	42.5	10,097	38.3	9,834	35.7	9,314	34.5
Death and Gift	690	3.1	698	2.5	689	2.5	528	1.9
Severance								

TABLE XXII (continued)

	1937		1938		1939		1940	
	Add 000	% of Total	Add 000	% of Total	Add 000	% of Total	Add 000	% of Total
TOTAL TAXES	855,379	100.0	61,557	100.0	65,045	100.0	74,071	100.0
General Sales Taxes	3,539	6.4	6,414	10.4	8,248	12.7	8,131	11.0
Selected Sales Taxes	19,441	35.1	22,441	36.5	22,380	34.5	33,020	44.6
Motor Fuels	11,154	20.1	15,870	25.8	15,067	23.2	18,953	25.6
Alcoholic Beverages	2,273	4.1	2,390	3.9	2,791	4.3	3,562	4.8
Tobacco Products	3,942	7.1	4,181	6.8	4,522	7.0	5,037	6.8
Licenses	9,383	16.9	10,179	16.5	10,753	16.5	5,708	7.7
Motor Vehicles	4,704	8.5	5,057	8.2	5,232	8.0	5,102	6.9
Other	4,679	8.4	5,122	8.3	5,521	8.5	606	.8
Individual & Corp.								
Net Income	4,855	8.8	5,369	8.7	5,235	8.0	5,682	7.7
Property	10,034	18.1	8,411	13.7	9,878	15.2	9,647	13.0
Death and Gift	532	1.0	655	1.1	677	1.0	887	1.2
Severance	7,595	13.7	8,078	13.1	7,874	12.1	10,996	14.8

Source: United States Department of Commerce, Bureau of the Census, Financial Statistics of the States, 1928-1939; Compendium of State Government Finances, 1940.

¹Data unavailable for years 1932 through 1936.

²Individual and corporation net income taxes are not segregated.

³Data adjusted to include collection fees retained by local tax collector and to exclude the portion of state property taxes paid by the state property tax relief fund, 1937-1940.

TABLE XXIII

Per Capita Tax Revenue and Tax Burden¹ in All States and
13 Southern States, 1929-1940²

	1929	1930	1931	1937	1938	1939	1940
<u>ALL STATES</u>							
Per Capita Tax Revenue (\$)	13.26	14.46	14.43	21.41	22.29	21.50	25.10
Tax Burden (Percent)	1.9	2.4	2.9	3.8	4.4	4.0	4.4
<u>ALABAMA</u>							
Per Capita Tax Revenue (\$)	8.07	8.29	7.72	13.80	14.14	14.28	16.11
Tax Burden (Percent)	2.6	3.6	4.0	5.4	6.0	5.9	6.0
<u>ARKANSAS</u>							
Per Capita Tax Revenue (\$)	10.01	11.16	10.06	14.03	14.08	14.10	15.78
Tax Burden (Percent)	3.3	5.3	5.6	5.6	6.0	5.7	6.3
<u>FLORIDA</u>							
Per Capita Tax Revenue (\$)	14.42	14.97	14.15	25.26	25.35	27.73	27.12
Tax Burden (Percent)	3.0	3.5	3.9	5.6	6.0	6.2	5.8
<u>GEORGIA</u>							
Per Capita Tax Revenue (\$)	8.02	9.74	9.74	11.28	13.53	13.50	14.72
Tax Burden (Percent)	2.4	3.6	4.3	3.7	4.8	4.7	4.7
<u>KENTUCKY</u>							
Per Capita Tax Revenue (\$)	10.48	11.16	10.99	15.77	15.77	14.44	15.20
Tax Burden (Percent)	2.8	3.7	4.3	4.9	5.6	4.9	4.9
<u>LOUISIANA</u>							
Per Capita Tax Revenue (\$)	12.68	13.09	12.69	24.54	26.94	27.87	31.25
Tax Burden (Percent)	3.1	3.8	4.2	7.0	7.8	7.9	8.7
<u>MISSISSIPPI</u>							
Per Capita Tax Revenue (\$)	6.74	6.80	6.72	10.75	11.84	11.91	14.11
Tax Burden (Percent)	2.5	3.5	4.6	5.1	6.3	5.9	6.9
<u>NORTH CAROLINA</u>							
Per Capita Tax Revenue (\$)	10.19	11.29	9.22	20.28	20.14	19.53	21.34
Tax Burden (Percent)	3.3	4.4	4.3	6.4	6.9	6.3	6.7
<u>OKLAHOMA</u>							
Per Capita Tax Revenue (\$)	9.15	10.72	9.80	23.84	25.60	22.99	24.02
Tax Burden (Percent)	2.0	3.1	3.6	6.6	7.8	6.7	6.7
<u>SOUTH CAROLINA</u>							
Per Capita Tax Revenue (\$)	10.56	10.56	10.20	14.20	14.52	13.67	16.51
Tax Burden (Percent)	4.2	5.0	5.7	5.3	5.9	5.2	5.8
<u>TENNESSEE</u>							
Per Capita Tax Revenue (\$)	8.15	10.25	10.13	11.97	14.38	13.90	14.77
Tax Burden (Percent)	2.3	3.6	4.3	3.8	5.1	4.7	4.7

TABLE XXIII (continued)

	1929	1930	1931	1937	1938	1939	1940
<u>TEXAS</u>							
Per Capita Tax Revenue (\$)	12.53	13.53	12.68	17.75	18.57	17.83	19.74
Tax Burden (Percent)	2.7	3.5	4.1	4.3	4.8	4.4	4.8
<u>VIRGINIA</u>							
Per Capita Tax Revenue (\$)	14.09	13.82	13.78	15.80	16.25	16.80	17.25
Tax Burden (Percent)	3.4	3.9	4.4	4.1	4.6	4.5	4.2

Source: United States Department of Commerce, Bureau of the Census, Financial Statistics of States, 1929-1939; Compendium of State Government Finances, 1940; Survey of Current Business, August, 1953; Statistical Abstract of the United States, 1929-1940.

¹Ratio of tax revenues to national income.

²Data for the years 1932, 1933, 1934, 1935, and 1936 are not available.

TABLE XXIV

State and Local Total Tax Revenues, Property Tax Revenues, and
Aid Received from Other Governments in All States and
13 Southern States, 1932 and 1942

	(in millions)					
	Total Taxes		Property Taxes Only		Aid Received from Other Governments ¹	
	1942	1932	1942	1932	1942	1932
<u>TOTAL</u>	9612	6358	4544	4682	854	238
<u>State</u>	5015	1890	271	328	809	228
<u>Local</u>	4597	4468	4273	4353	1830	915
<u>ALABAMA</u>	91	53	26	32	12	5
<u>State</u>	62	24	5	8	11	5
<u>Local</u>	29	29	21	24	32	14
<u>ARKANSAS</u>	60	34	17	20	8	7
<u>State</u>	46	18	4	4	8	7
<u>Local</u>	15	17	13	16	10	8
<u>FLORIDA</u>	123	75	52	48	11	3
<u>State</u>	68	27	2	3	11	3
<u>Local</u>	55	48	50	45	23	14
<u>GEORGIA</u>	112	66	41	41	11	4
<u>State</u>	71	28	5	6	13	4
<u>Local</u>	41	38	36	35	22	9
<u>KENTUCKY</u>	109	67	45	48	13	4
<u>State</u>	67	27	6	11	13	4
<u>Local</u>	42	40	39	37	11	7
<u>LOUISIANA</u>	120	73	41	51	15	5
<u>State</u>	80	27	8 ²	9	15	5
<u>Local</u>	40	46	33	41	30 ²	7
<u>NORTH CAROLINA</u>	159	98	46	56	14	3
<u>State</u>	113	42	3	3	14	3
<u>Local</u>	46	56	43	52	9	13
<u>OKLAHOMA</u>	122	77	41	53	22	5
<u>State</u>	80	28	— ³	5	20	5
<u>Local</u>	42	49	41	48	26	13
<u>SOUTH CAROLINA</u>	78	41	27	25	9	2
<u>State</u>	51	17	2	3	9	2—
<u>Local</u>	27	24	25	22	19	8
<u>TENNESSEE</u>	118	69	47	40	19	3
<u>State</u>	66	26	1	1	16	3
<u>Local</u>	52	43	45	39	29	12

TABLE XXIV (continued)

	Total Taxes		Property Taxes Only		Aid Received from Other Governments	
	1942	1932	1942	1932	1942	1932
<u>TEXAS</u>	306	207	154	148	37	10
State	170	84	23	26	34	10
Local	136	122	130	122	78	39
<u>VIRGINIA</u>	121	75	44	40	13	3
State	75	35	5	3	12	3
Local	45	40	39	37	21	11

Source: United States Department of Commerce, Bureau of the Census, Historical Review of State and Local Finance.

¹National and state totals for aid received from other governments are shown excluding duplicating fiscal aid from state and local governments; whereas the separate "state" and "local" lines include all aid from other governments - state, local, and federal.

²Homestead exemption credits are classified as aid received from other governments rather than as property tax revenue.

³Less than \$.5 million.

TABLE XXV

State and Local Total Expenditures, Operation Expenditures,
Capital Expenditures, and Interest Expenditures in
All States and 13 Southern States in 1932 and 1942

(in millions)

	Total 1932	Expenditures 1942	Operation		Capital 1932	Outlay 1942	Interest	
			1932	1942			1932	1942
<u>ALL STATES</u>	9563	12959	5533	7216	2362	1017	844	515
State	2506	5863	1058	1916	886	615	112	110
Local	7057	7096	4476	5301	1476	402	732	405
<u>ALABAMA</u>	90	141	53	72	17	13	11	8
State	37	73	15	21	9	10	4	3
Local	54	68	38	51	8	4	6	5
<u>ARKANSAS</u>	68	78	32	42	22	5	11	11
State	39	47	8	20	18	3	8	7
Local	29	31	23	22	2	2	3	3
<u>FLORIDA</u>	98	178	56	97	10	18	21	15
State	26	77	13	35	6	11	1	2
Local	73	100	42	62	3	7	21	15
<u>GEORGIA</u>	98	154	57	89	23	19	6	3
State	41	79	12	28	19	14	1	1
Local	57	75	44	62	4	5	4	3
<u>KENTUCKY</u>	95	135	58	77	22	21	5	5
State	38	77	18	32	13	16	1	1
Local	57	58	41	45	9	4	5	4
<u>LOUISIANA</u>	163	203	59	103	73	21	16	14
State	84	120	21	48	54	14	3	7
Local	79	83	38	55	19	7	14	8
<u>MISSISSIPPI</u>	72	110	2	2	10	9	10	8
State	23	58	2	2	5	6	1	3
Local	49	52	2	2	5	2	8	5
<u>NORTH CAROLINA</u>	130	179	67	104	13	18	28	16
State	47	114	15	62	7	15	8	6
Local	82	65	52	42	6	3	20	9
<u>OKLAHOMA</u>	132	166	76	105	32	12	12	7
State	43	91	18	48	17	9	1	1
Local	88	75	57	58	15	3	12	6
<u>SOUTH CAROLINA</u>	69	114	30	56	23	14	11	7
State	38	64	9	21	21	11	5	2
Local	31	51	21	36	2	2	7	5

TABLE XXV (continued)

	Total Expenditures		Operation Expenditures		Capital Outlay		Interest	
	1932	1942	1932	1942	1932	1942	1932	1942
<u>TENNESSEE</u>	107	167	64	86	18	8	16	12
State	37	81	17	26	8	4	6	4
Local	70	86	46	60	11	4	10	8
<u>TEXAS</u>	311	446	157	233	77	46	37	26
State	107	199	39	75	35	28	— ¹	1
Local	20	247	118	158	41	18	37	26
<u>VIRGINIA</u>	107	165	67	87	19	31	10	7
State	42	89	24	32	10	25	1	1
Local	53	76	43	46	9	3	4	2

Source: United States Department of Commerce, Bureau of the Census, Revised Summary of State and Local Financial Statistics of State and Local Government, 1932.

¹Less than \$.5 million.

²Data unavailable.

TABLE XXVI

State and Local Gross Debt, Per Capita Gross Debt and the
Debt Burden in All States and 13 Southern States,
1932 and 1942

	Amount in Millions		Per Capita		% of Income Payments	
	1932	1942	1932	1942	1932	1942
<u>TOTAL</u>	17577	17320	140.80	129.47	37.1	14.9
State	2361	2732	18.91	20.42	5.0	2.3
Local	15216	14603	121.88	109.16	32.1	12.5
<u>ALABAMA</u>	211	222	78.40	78.98	50.4	15.5
State	82	74	30.47	26.33	19.6	5.2
Local	129	148	47.93	52.65	30.8	10.5
<u>ARKANSAS</u>	256	219	113.91	138.74	89.2	24.4
State	164	149	77.50	88.88	57.1	16.6
Local	92	70	36.41	49.86	32.1	7.8
<u>FLORIDA</u>	513	421	337.17	195.97	95.2	29.0
State	-----	1	-----	.47	-----	.1
Local	513	420	337.17	195.51	95.2	28.9
<u>GEORGIA</u>	107	132	36.09	41.42	19.1	8.0
State	12	26	4.05	8.16	2.1	1.6
Local	95	115	32.05	36.09	17.0	7.0
<u>KENTUCKY</u>	113	128	42.71	46.09	21.3	9.6
State	16	9	6.05	3.24	3.0	.7
Local	97	119	36.66	42.85	18.3	8.9
<u>LOUISIANA</u>	360	376	165.15	150.17	72.1	26.6
State	84	182	38.54	72.69	16.8	12.9
Local	276	194	126.62	77.48	55.3	13.7
<u>MISSISSIPPI</u>	179	176	88.42	76.66	69.9	19.9
State	36	81	17.78	35.28	14.1	9.2
Local	143	95	70.63	41.38	55.9	10.8
<u>NORTH CAROLINA</u>	533	393	163.25	107.22	92.5	21.1
State	165	108	50.54	49.46	28.6	5.8
Local	368	284	112.71	77.48	63.9	15.2
<u>OKLAHOMA</u>	194	122	80.95	58.72	38.3	9.2
State	11	39	4.59	18.77	2.2	3.0
Local	183	82	76.36	39.47	36.1	6.2
<u>SOUTH CAROLINA</u>	172	193	95.95	96.43	65.9	20.1
State	78	86	43.51	42.97	29.9	9.0
Local	94	107	52.44	53.46	36.0	11.2

TABLE XXVI (continued)

	Amount in Millions		Per Capita		% of Income Payments	
	1932	1942	1932	1942	1932	1942
<u>TENNESSEE</u>	323	363	119.39	124.09	64.9	23.8
State	94	86	34.75	29.40	18.9	5.6
Local	229	277	84.65	94.69	46.0	18.1
<u>TEXAS</u>	748	683	126.00	102.10	50.4	15.3
State	10	18	1.68	2.69	.7	.4
Local	738	665	124.31	99.41	49.7	14.9
<u>VIRGINIA</u>	181	162	72.39	54.02	27.7	7.7
State	26	21	10.40	7.00	4.0	1.0
Local	155	141	61.99	47.01	23.7	6.7

Source: United States Department of Commerce, Bureau of the Census, Historical Review of State and Local Finance.

BIBLIOGRAPHY

BOOKS

- Anderson, Lynn F. and T. E. McMillan, Jr. Financing State Government in Texas. Austin, Texas: Institute of Public Affairs, The University of Texas, 1953. Pp. x / 196.
- Angell, James W. Investment and Business Cycles. New York: McGraw-Hill Book Co., 1941. Pp. xviii / 363.
- Ayers, Leonard P. Turning Points in Business Cycles. New York: Macmillan Co., 1939. Pp. xi / 341.
- Bach, George L. Economics: An Introduction to Analysis and Policy. New York: Prentice-Hall, Inc., 1954. Pp. xvi / 720.
- Bird, F. C. "Municipal Fiscal Policy and the Business Cycle," National Tax Association Proceedings, XXXVIII, 1945. Washington: National Tax Association, 1946. Pp. xix / 344.
- Bird, F. L. Trend of Tax Delinquency, 1930-1946 in Cities of Over 50,000 Population. New York: Dun and Bradstreet, 1947. Pp. viii / 313.
- Bowman, Mary Jean, and George Leland Bach. Economic Analysis and Public Policy. New York: Prentice-Hall, Inc., 1949. Pp. xviii / 931.
- Burkhead, Jesse. "The Balanced Budget," in Readings in Fiscal Policy. Edited by Arthur Smithies and J. Keith Butters. Homewood, Illinois: Richard D. Irwin, Inc., 1955. Pp. x / 596.
- Burns, Arthur F. The Frontiers of Economic Knowledge. Princeton: Princeton University Press, 1954. Pp. vii / 367.
- Clark, J. Maurice. Studies in the Economics of Overhead Costs. Chicago: The University of Chicago Press, 1923. Pp. xiii / 502.
- Colm, Gerhard. Essays in Public Finance and Fiscal Policy. Cambridge: Oxford University Press, 1955. Pp. xvii / 375.
- _____. "Fiscal Policy and the Federal Budget," in Income Stabilization for a Developing Democracy. Edited by Max F. Millikan. New Haven: Yale University Press, 1953. Pp. xxi / 730.

Committee for Economic Development. Problems in Anti-Recession Policy. New York: Committee for Economic Development, 1954. Pp. ii / 161.

Committee of the American Economic Association, Gottfried Haberler, Chairman. Readings in Business Cycle Theory. Philadelphia: The Blakiston Co., 1944. Pp. xvi / 494.

Committee on Taxation of the Twentieth Century Fund, Inc., Carl Shoup, Director. Facing the Tax Problem. New York: Twentieth Century Fund, Inc., 1937. Pp. xxiii / 606.

Despres, Emile, Milton Friedman, Albert G. Hart, Paul A. Samuelson, and Donald H. Wallace. "The Problem of Economic Instability," in Readings in Fiscal Policy. Edited by Arthur Smithies and J. Keith Butters. Homewood, Illinois: Richard D. Irwin, Inc., 1955. Pp. x / 596.

Dillard, Dudley. The Economics of John Maynard Keynes. New York: Prentice-Hall, Inc., 1948. Pp. xv / 364.

Due, John F. Government Finance. Homewood, Illinois: Richard D. Irwin, Inc., 1954. Pp. xviii / 562.

Ellis, Howard S. A Survey of Contemporary Economics. Philadelphia: The Blakiston Co., 1949. Pp. x / 490.

Estey, James A. Business Cycles. New York: Prentice-Hall, Inc., 1941. Pp. xvii / 544.

Gayer, Arthur D. Public Works in Prosperity and Depression. New York: National Bureau of Economic Research, 1953. Pp. xx / 460.

Grampp, William D. and Emanuel T. Weiler. Economic Policy: Readings in Political Economy. Homewood, Illinois: Richard D. Irwin, Inc., 1953. Pp. xiii / 393.

Groves, Harold M. Financing Government. Third Edition. New York: Henry Holt and Co., 1950. Pp. xvi / 645.

Haberler, Gottfried. Prosperity and Depression. Third Edition, Enlarged by Part III. Lake Success, New York: United Nations, 1946. Pp. xxiv / 532.

- Hansen, Alvin H. A Guide to Keynes. New York: McGraw-Hill Book Co., 1953. Pp. xiv / 237.
- _____. Business Cycles and National Income. New York: W. W. Norton and Co., Inc., 1951. Pp. xv / 639.
- _____. Fiscal Policy and Business Cycles. New York: W. W. Norton and Co., Inc., 1941. Pp. ix / 462.
- _____. Fiscal Policy for Full Employment. New York: Institute on Postwar Reconstruction, New York University, 1946. Pp. 23.
- _____. Full Recovery and Stagnation. New York: W. W. Norton and Co., Inc., 1938. Pp. 350.
- _____. Monetary Theory and Fiscal Policy. New York: McGraw-Hill Book Co., 1949. Pp. ix / 236.
- Hansen, Alvin H. and Harvey S. Perloff. State and Local Finance in the National Economy. New York: W. W. Norton and Co., Inc., 1944. Pp. viii / 310.
- Harris, Seymour E. The New Economics. New York: Alfred A. Knopf, 1950. Pp. xvi / 686 / ix.
- Harrod, R. F. The Trade Cycle. Oxford: The Clarendon Press, 1936. Pp. ix / 234.
- Hart, Albert Gailord. Money, Debt and Economic Activity. New York: Prentice-Hall, Inc., 1948. Pp. xviii / 558.
- Johnson, Robert H. and Lewis E. Wagner. A Comparative Study of the Tax Systems of Iowa and the Surrounding States. Iowa City, Iowa: Bureau of Business and Economic Research, State University of Iowa, 1952. Pp. xii / 372.
- Keynes, J. M. "An Open Letter," in Readings in Fiscal Policy. Edited by Arthur Smithies and J. Keith Butters. Homewood, Illinois: Richard D. Irwin, Inc., 1955. Pp. x / 596.
- _____. The General Theory of Employment, Interest and Money. New York: Harcourt, Brace and Co., 1935. Pp. xii / 403.

- Kuznets, Simon. Commodity Flow and Capital Formation. New York: National Bureau of Economic Research, 1938. Pp. ix / 505.
- _____. National Product Since 1869. New York: National Bureau of Economic Research, 1946. Pp. xvi / 239.
- _____. "Relation Between Capital Goods and Finished Products in the Business Cycle," in Economic Essays in Honor of Wesley C. Mitchell. New York: Columbia University Press, 1935. Pp. ix / 518.
- Lee, Maurice W. Economic Fluctuations. Homewood, Illinois: Richard D. Irwin, Inc., 1955. Pp. xv / 619.
- Lerner, Abba P. The Economics of Control. New York: Macmillan Co., 1949. Pp. xxi / 428.
- _____. The Economics of Employment. First Edition. New York: McGraw-Hill Book Co., 1951. Pp. xv / 397.
- Lindholm, Richard W. Introduction to Fiscal Policy. New York: Pitman Publishing Corp., 1948. Pp. xiii / 235.
- McCracken, Harlan L. Value Theory and Business Cycles. Binghamton, New York: Vail-Ballou Press, Inc., 1933. Pp. xiii / 269.
- Maxwell, James A. Federal Grants and the Business Cycle. New York: National Bureau of Economic Research, Inc., 1952. Pp. 122.
- Metzler, Lloyd A., and Others. Income, Employment, and Public Policy. New York: W. W. Norton and Co., Inc., 1948. Pp. viii / 379.
- Millikan, Max F. Income Stabilization for a Developing Democracy. New Haven: Yale University Press, 1953. Pp. xxi / 730.
- Mitchell, Wesley C. What Happens During Business Cycles. New York: National Bureau of Economic Research, Inc., 1951. Pp. xxi / 386.

- Myrdal, Gunnar. "Fiscal Policy in the Business," in Readings In Fiscal Policy. Edited by Arthur Smithies and J. Keith Butters. Homewood, Illinois: Richard D. Irwin, Inc. Pp. x / 596.
- National Industrial Conference Board, Inc. Essential Facts for Fiscal Policy. New York: National Industrial Conference Board, Inc., 1941. Pp. 135.
- New York State Tax Commission. Federal and State Tax Systems, 1930. Chicago: Commerce Clearing House, Inc., 1930. Pp. xii / 258.
- Nordin, J. A. and Virgil Salera. Elementary Economics. New York: Prentice-Hall, Inc., 1953. Pp. xvi / 844.
- Peach, W. Nelson and Walter Krouse. Basic Data of the American Economy. Homewood, Illinois: Richard D. Irwin, Inc., 1955. Pp. xii / 135.
- Perloff, Harvey S. "Fiscal Policy at the State and Local Levels," in Postwar Economic Problems. Edited by Seymour E. Harris. New York: McGraw-Hill Book Co., 1943. Pp. xii / 417.
- Pigou, A. C. Industrial Fluctuations. London: Macmillan Co., 1929. Pp. xxii / 425.
- Poole, Kenyon. Fiscal Policies and the American Economy. New York: Prentice-Hall, Inc., 1951. Pp. x / 468.
- Ratchford, B. U. American State Debts. Durham, North Carolina: Duke University Press, 1941. Pp. xviii / 629.
- Reed, Edward W. Comparative Analysis of the Arkansas Tax System. Fayetteville, Arkansas: Bureau of Business and Economic Research, University of Arkansas, 1950. Pp. 223.
- Robertson, D. H. "What Has Happened to the Rate of Interest," in Utility and All That. New York: Mcmillan Co., 1952. Pp. 206.
- Roose, Kenneth D. The Economics of Recession and Revival: An Interpretation of 1937-38. New Haven: Yale University Press, 1954. Pp. xi / 280.

- Ruggles, Richard. An Introduction to National Income and Income Analysis. First Edition. New York: McGraw-Hill Book Co., 1949. Pp. viii / 349.
- Samuelson, Paul A. Economics: An Introductory Analysis. New York: McGraw-Hill Book Co., 1951. Pp. xxii / 762.
- Schumpeter, Joseph A. Business Cycles, II. First Edition. New York: McGraw-Hill Book Co., 1939. Pp. ix / 1095.
- Shere, L. "Tax Reserve for State and Local Governments," in National Tax Association Proceedings, XXXVIII, 1945. Washington: National Tax Association, 1946. Pp. xix / 344.
- Shultz, William J. and C. Lowell Harriss. American Public Finance. New York: Prentice-Hall, Inc., 1954. Pp. xx / 689.
- Smithies, Arthur and J. Keith Butters. Readings In Fiscal Policy. Homewood, Illinois: Richard D. Irwin, Inc., 1955. Pp. x / 596.
- Slichter, Sumner H. "The Economics of Public Works," in Readings In Fiscal Policy. Edited by Arthur Smithies and J. Keith Butters. Homewood, Illinois: Richard D. Irwin, Inc., 1955. Pp. x / 596.
- Somers, Harold M. Public Finance and National Income. Philadelphia: The Blakiston Co., 1949. Pp. xii / 540.
- The Tax Research Foundation, Tax Systems of the World. Sixth Edition. Chicago: Commerce Clearing House, Inc., 1935. Pp. 365.
- _____. Tax Systems of the World. Seventh Edition. Chicago: Commerce Clearing House, Inc., 1938. Pp. 415.
- _____. Tax Systems of the World. Ninth Edition. Chicago: Commerce Clearing House, Inc., 1942. Pp. ix / 382.
- Villard, Henry H. Deficit Spending and the National Income. New York: Farrar and Rinehart, Inc., 1941. Pp. xviii / 429.
- Williams, John H. "Deficit Spending," in Readings in Business Cycle Theory. Edited by The American Economic Association. Philadelphia: The Blakiston Co., 1944. Pp. xvi / 494.

- _____. "The Implications of Fiscal Policy for Monetary Policy and the Banking System," in Readings in Fiscal Policy. Edited by Arthur Smithies and J. Keith Butters. Homewood, Illinois: Richard D. Irwin, Inc., 1955. Pp. x / 596.
- Wilson, Thomas. Fluctuations in Income and Employment. London and New York: Pitman Publishing Co., 1948. Pp. x / 217.
- Wright, David McCord. A Key to Modern Economics. New York: Macmillan Co., 1954. Pp. x / 520.
- _____. Capitalism. New York: McGraw-Hill Cook Co., 1951. pp. xvii / 246.

ARTICLES

- Blank, David M. "Reform of State-Local Fiscal Relations in New York," The National Tax Journal, III (December, 1950), 326-347.
- _____. "Reform of State-Local Fiscal Relations in New York," The National Tax Journal, IV (March, 1951), 77-91.
- Groves, H. M. and C. H. Kohn. "The Stability of State and Local Tax Yields," The American Economic Review, XLIII (1952), 87-102.
- Isard, Walter. "Regional Commodity Balances and Interregional Commodity Flows," The American Economic Review, XLIII (May, 1953), 167-180.
- McCracken, H. L. "Economic Contradictions," The Southern Economic Journal, XIII (April, 1947), 343-359.
- Moore, Frederick T. and James W. Peterson. "Regional Analysis: An Interindustry Model of Utah," The Review of Economics and Statistics, XXXVII (August, 1955), 368-383.
- Newcomer, Mabel. "State and Local Financing in Relation to Economic Fluctuations," The National Tax Journal, VII (1954), 97-109.
- White, M. and A. White. "The Impact of Economic Fluctuations," The National Tax Journal, VII (1954), 17-39.

GOVERNMENT PUBLICATIONS

Annual Report of the Secretary of the Treasury on the State of Finances for the Fiscal Year, 1931. Washington: United States Government Printing Office, 1932. Pp. xxxiv / 1016.

Annual Report of the Secretary of the Treasury on the State of Finances for the Fiscal Year, 1932. Washington: United States Government Printing Office, 1932. Pp. xxiv / 420.

Annual Report of the Secretary of the Treasury on the State of Finances for the Fiscal Year, 1933. Washington: United States Government Printing Office, 1933. Pp. xvi / 420.

Annual Report of the Secretary of the Treasury on the State of Finances for the Fiscal Year, 1939. Washington: United States Government Printing Office, 1940. Pp. xv / 560.

Annual Report of the Secretary of the Treasury on the State of Finances for the Fiscal Year, 1940. Washington: United States Government Printing Office, 1941. Pp. xx / 873.

Board of Governors of the Federal Reserve System. Public Finance and Full Employment, Postwar Economic Studies, No. 3. Washington: United States Government Printing Office, 1945. Pp. v / 157.

Hearings Before the Temporary National Economic Committee, Congress of the United States, 76th Congress, May 16, 17, 18, 22, 23, 24, 25, and 26, 1939. Investigation of Concentration of Economic Power. Washington: United States Government Printing Office, 1940. Pp. xii / 4151 / vii.

_____. Savings and Investment. Washington: United States Government Printing Office, 1940. Pp. xii / 4151 / vii.

United States Department of Commerce, Bureau of the Census. State and Local Government Special Studies No. 20: Financing Federal, State, and Local Governments, 1941. Washington: United States Government Printing Office, 1942. Pp. viii / 149.

_____. State and Local Government Special Studies No. 25: Historical Review of State and Local Government Finances. Washington: United States Government Printing Office, 1948. Pp. 41.

- _____. State and Local Government Special Studies No. 38:
Historical Statistics on State and Local Government Finances,
1902-1953. Washington: United States Government Printing
Office, 1955. Pp. iii / 125.
- _____. State and Local Government Special Studies No. 34:
Local Government Structure in the United States. Washing-
United States Government Printing Office, 1954. Pp. iii / 91.
- _____. State and Local Government Special Studies No. 32:
Revised Summary of State Government Finances, 1942-1950.
Washington: United States Government Printing Office, 1953.
Pp. 69.
- _____. State and Local Government Special Studies No. 26:
Revised Summary of State and Local Finances in 1942. Wash-
ington: United States Government Printing Office, 1948. Pp. 31.
- _____. State and Local Government Special Studies No. 28:
State Aid to Local Governments. Washington: United States
Government Printing Office, 1948. Pp. 52.
- _____. State and Local Government Special Studies No. 35:
State Payments to Local Governments in 1952. Washington:
United States Government Printing Office, 1954. Pp. iii / 76.
- _____. Financial Statistics of States, 1929. Washington:
United States Government Printing Office, 1931. Pp. v / 123.
- _____. Financial Statistics of States, 1930. Washington:
United States Government Printing Office, 1932. Pp. v / 123.
- _____. Financial Statistics of States, 1931. Washington:
United States Government Printing Office, 1933. Pp. v / 117.
- _____. Financial Statistics of States, 1937. Washington:
United States Government Printing Office, 1940. Pp. vii / 171.
- _____. Financial Statistics of States, 1938. Washington:
United States Government Printing Office, 1941. Pp. v / 169.
- _____. Financial Statistics of States, 1939. Washington:
United States Government Printing Office, 1942. Pp. vii / 182.

- _____. Financial Statistics of States, 1940. Washington: United States Government Printing Office, 1942. Pp. 27.
- _____. Historical Statistics of the United States, 1789-1945. Washington: United States Government Printing Office, 1949. Pp. 363.
- _____. Statistical Abstract of the United States, 1953. Washington: United States Government Printing Office, 1953. Pp. 1041.
- United States Department of Commerce, Bureau of Foreign and Domestic Commerce. Survey of Current Business, 1939. Washington: United States Government Printing Office, 1939. Pp. 56.
- United States Department of Commerce, National Income Division. National Income and Product of the United States, 1929-1950. Washington: United States Government Printing Office, 1951. Pp. 216.

UNPUBLISHED WORKS

- Bonin, Joseph M. Homestead Tax Exemptions in Louisiana. Unpublished Master's Thesis, Louisiana State University. June, 1952. Pp. vii / 147.
- Williams, Harry, Jr., "Twenty Years of General Theory," Paper presented before the Southwestern Social Science Association. Dallas, Texas. April, 1955. Pp. 26.

VITA

Ansel Miree Sharp was born June 25, 1924, in Rome, Georgia. After graduating from Rome High School in June, 1942, he enlisted in the United States Army Signal Corps. In March, 1946, he received an honorable discharge from the Army and in June of the same year entered Howard College, Birmingham, Alabama, graduating in June, 1949. He completed his work for the M. A. degree at the University of Virginia in June, 1950, and was awarded the degree in June, 1951. From September, 1951 to June 1952, he was an Instructor of Economics at Alabama Polytechnic Institute, Auburn, Alabama. In September, 1952, he accepted a graduate assistantship in Economics at Louisiana State University. From September, 1953 to June, 1954, he was an Instructor of Economics at Louisiana State University. He was Professor of Economics and Head of the Department of Economics at William-Jewell College, Liberty, Missouri, from September, 1955 to June, 1956. He has accepted an Assistant Professorship at the University of Cincinnati beginning September, 1956. He will receive his Ph.D. degree at Louisiana State University in August, 1956.

EXAMINATION AND THESIS REPORT

Candidate: Ansel M. Sharp

Major Field: Economics

Title of Thesis: "A Study of the Counter-Cyclical Aspects of Total
Government Fiscal Policy 1929-1940"

Approved:

Major Professor and Chairman

Dean of the Graduate School

EXAMINING COMMITTEE:

Date of Examination:

7/26/56