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A CRITICAL ANALYSIS OF THE DEBT STRUCTURE AND
DEBT MANAGEMENT IN LOUISIANA

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

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ABSTRACT

This dissertation examines and evaluates Louisiana's debt structure and debt management. The experiences of the American states in debt management contribute to the development of "principles of debt management" which are the basis for this study. Other debt management principles are derived from the various factors considered by investment bankers and investor services in their analyses of bond issues. Since these groups prevail in the market, and since debt management must often be passive and adaptive, the various financial criteria must be recognized and exploited if state debt management is to be successful. Distinctions between proper and improper purposes of borrowing and safe and unsafe borrowing are examined. Other principles deal with bond provisions and the management of existing debt.

With the various principles established as standards, Louisiana's modern debt experiences are examined in detail. Individual issues are analyzed in terms of their purposes, their provisions and features, and their effects upon the debt structure. General tendencies observable only when issues are considered in the aggregate involve the timing of
issues, the use of the call feature, the ratings received, and the administrative machinery. A major effort is made to emphasize both the desirable and the undesirable practices.

The findings in this study fall into two major categories: those applying generally to all states, and those findings particularly pertinent to Louisiana. Among the findings that may be appropriate generally on the state level are the following: (1) The techniques utilized by investment bankers and rating services in rating municipal bonds are not entirely pertinent to state bond issues, but they cannot be ignored and must be observed in debt management. (2) The traditional market concepts of safety and propriety in borrowing do not take into account the fact that considerations of what is proper and safe borrowing will depend greatly upon expectations of secular and cyclical economic conditions and upon what role the state government has been assigned under various conditions. (3) The planning and execution of debt policy should be keyed to the objectives of simplicity and stability. (4) The timing of bond sales and the reporting of debt are more important than is generally recognized. The value of debt reporting has been dramatically demonstrated in Louisiana. The use of a seasonal index to aid in timing bond sales is not a tested technique, but it would appear to warrant further study.
Louisiana has frequently violated the principles of good debt management; debt management has been characteristically uncertain and unstable. The State presently has no administrative machinery for coordinating, planning, authorizing, issuing, reporting, and retiring debts which directly or indirectly involve the State. A recent improvement in the management of highway finance has yet to spread to other areas of the debt structure.

Proposals for the improvement of Louisiana's debt structure and management are necessarily general because of the underlying philosophy that management requires flexibility. Nonetheless, it is clear that Louisiana's constitutional debt provisions need rationalization. Extensive planning would be necessary in the formulation of a desirable legal framework; even if a large-scale constitutional revision is impossible, planning would help to minimize the present legal impediments. The responsibility for debt management in Louisiana should be centralized in one or two debt units.
CHAPTER I

INTRODUCTION

It is earnestly desired that this study make some useful contribution to a better debt structure and to more efficient debt management in Louisiana. The body of this study, therefore, consists of a critical analysis of Louisiana's debt structure and management. This critical analysis must not be construed to reflect adversely upon any State officials or groups of officials who have been responsible for debt management in the past. There is no question but that in recent years officials with this responsibility have acted in good faith and with some measure of success.

However, Louisiana debt management, like debt management in most states, has not always been as efficient as was possible. One reason there has been inefficiency in debt management in the American states is that the problems of debt management are largely nonrecurrent except over long periods of time. Furthermore, there has been little formal study of the peculiar problems that confront states in the management of their debts. Principles that might promote better debt management on the state level have not been fully developed. It is little wonder then that the actual
operation of state borrowing has been subject to "false
starts." It is hoped that this thesis will help bridge this
gap. The appraisal of debt management experience in
Louisiana presented in this study should permit future state
officials to profit from the successes and the mistakes of
past officials.

I. APPROACH AND METHOD

The analysis of Louisiana's debt structure and debt
management practices contained in this study is based
largely on what might be considered a "traditional" view of
public finance. This approach implies that the financing of
government expenditures normally should be by means of taxa-
tion and that only special circumstances justify the
financing of government spending by means of borrowing.

The method of this study is to develop certain
principles of good debt management from historical data and
from the dictates of logic. The basic criterion for the
formulation of these principles is whether the given prin-
ciple will contribute to the welfare of the state and its
people. One of the most important and tangible tests of
this benefit is the money that can be saved by using certain
techniques in debt management. After the principles are
formulated, they become the basis for the appraisal of debt
management which follows in later chapters.
II. ORGANIZATION OF MATERIAL

This Chapter reviews some of the major developments in the debts of the American states. Proposed principles of debt management are presented in Chapter II. Only the more important general developments are analyzed in the period of Louisiana's debt history before 1921, in Chapter III. Chapters IV and V cover the period 1921-1959 and deal with the debt structure and the management of individual issues in some detail. In the final Chapter, the problems of Louisiana's current debt structure are examined, and general proposals to aid in their solution are offered.

III. BACKGROUND OF AMERICAN STATE DEBTS

A résumé of the development of American state debts is useful to this study for two reasons: (1) the experiences of the states contribute to the development of principles of debt management, and (2) the debt experience in Louisiana must be viewed in the context of common experiences.

Basic Forces Behind State Borrowing

State borrowing in the United States apparently has followed at least two main tendencies: there seems to have been a direct relationship between the level of business activity and the amount of state borrowing; and, there apparently has also been a direct relationship between
transportation improvement (water, railroad, highway) and debt growth. These forces probably were interrelated. States borrowed in prosperous times, and one of the main reasons why they did so was to finance transportation improvements. The spending and the borrowing may well have had an influence on the degree of prosperity. The two elements, transportation improvements and the business cycle, were involved in the development of American state debts in the following stages: (1) 1820-1860, transportation and bank borrowing; (2) 1860-1900, Civil War and Reconstruction borrowing; (3) 1900-1959, highway, bonus, relief, welfare, and education borrowing.

Transportation and Bank Borrowing, 1820-1860

The first cycle in American state debts lasted from 1820 to 1845. Debt expansion continued from 1820 until the Panic of 1837, and the contraction which began at that time lasted until 1845. During this period, the Northern states borrowed primarily in order to finance internal improvements


such as canals, turnpikes, and railroads. The only major purposes of borrowing, other than for financing transportation facilities, were to provide banking capital and to finance state enterprises. In some states, it was actually hoped that these investments would provide enough profit to eliminate the need for taxation. Most of the bank borrowing took place in the Southern states while the enterprise debt was largely in the Western states. The purposes of the borrowing during this period differ somewhat from the underlying causes of the borrowing. For example, the transportation needs were too great to be satisfied from private sources, but the Federal government did not finance these needs. The result was the first large-scale state\(^3\) borrowing which Henry C. Adams viewed as a part of the weakening of centralized power. Another underlying cause of the heavy debt expansion during the period before 1837 was simply the speculative spirit of the times. As a result of this mood, some of the state borrowing from 1820 to 1845 probably was unnecessary and wasteful.\(^4\)

\(^3\)There was also local borrowing for these same purposes.

In 1837, the great business boom came to an end, but it did not immediately curtail borrowing in all of the states. Some states attempting to complete developmental projects continued to borrow along with those states that were not convinced that the economic situation was serious. According to Ratchford, still other states continued their borrowing and public works in order to relieve unemployment. The burden of the debts proved to be too much, however, after another round of banking failures in 1839. Some of the states could no longer borrow, and their revenues fell with the general decline in business activity. The problem was intensified where the banks that failed had been established with funds raised by state borrowing. When banks could not repay the states, the states missed this source of funds in

paying interest on bonds that had been issued to support these same banks.\(^5\)

States in financial difficulty around 1839 and 1840 were unable to get much relief by means of increased taxation. By 1842, nine states had defaulted and several others were nearly as hard pressed.\(^6\) Mississippi and Florida had repudiated part of their debts on technical points of the law. Some states averted default by managing to increase their tax revenues, while others adjusted their debts by selling bank stocks and publicly owned railroads and canals.\(^7\) One of the more lasting reactions to this collapse of state credit was the establishment of constitutional debt limitations in nineteen states within fifteen years after 1840.\(^8\)


\(^6\)McGrane gives a detailed description of the difficulties encountered by each of the defaulting and repudiating states in this period. McGrane, \textit{op. cit.}, pp. 62-264.

\(^7\)There was also an attempt in 1842 on the part of some states to have state debts assumed by the Federal government. Albert S. Bolles, \textit{The Financial History of the United States from 1789 to 1860} (New York: D. Appleton and Company, 1883), pp. 560-62.

\(^8\)This movement was interpreted as a public reaction against state participation in business. It has been suggested that the collapse of the states' ventures in providing internal improvements led to the rise of corporation power in the United States. Adams, \textit{op. cit.}, pp. 341-42.
The states thus were occupied with debt adjustment until about 1845 when business activity revived. Business revival marked the beginning of another debt cycle which lasted from 1845 to 1860. Borrowing again moved with business activity, but it was somewhat more restrained than in the first debt cycle. The states that had defaulted earlier generally did not borrow— their credit standings were so impaired that their obligations were unpopular in the European money markets. Also, the previous experiences of these states made them more conservative in their policies, and they abandoned the notion that state operation of enterprises was a sound way to finance government. Western and Southern states did much of the borrowing in this period in order to finance railroad construction.

Debt contraction ending the pre-Civil War period was temporary and mild. It came primarily in cases where the railroads were unable, because of the crisis of 1857, to pay interest on bonds they had sold to the states. The states,


in turn, found it difficult to pay the interest on their own bonds. The slight reduction in debts that occurred in 1857 was soon completely overshadowed by the war.

**Civil War and Reconstruction Borrowing, 1860-1900**

Civil War debt experiences were somewhat different in the two groups of states. States on both sides borrowed during the war and then reduced their debts as soon as possible afterward, but the methods of accomplishing the borrowing and the debt reduction differed considerably. The Northern states borrowed between $100,000,000 and $110,000,000 to support the war effort, but they were fortunate in receiving prompt reimbursement from the Federal government and as early as 1880 had reduced their debts to about $32,000,000. In the South, the lack of experience and taxing power on the part of the Confederacy made the problem somewhat similar to that which had confronted the Continental Congress. The Southern states made up this deficiency by borrowing. This borrowing, which was sometimes supplemented by issues of paper money that occasionally bore interest, consisted of both voluntary and involuntary bank (short-term) loans and bond issues (long-term). The total debts of the Southern states were estimated to have increased by between

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$81,000,000 and $96,000,000. Default on obligations of the Confederate states became common before the war ended.

A financial question that presented itself even before the conclusion of hostilities was what to do with the war debts of the Southern states. Loyal constitutional conventions protected by Union forces in four states, in 1864 and 1865, invalidated all laws that had contributed to the war effort of the Confederacy. This action was construed by some as a repudiation of war debts. The majority of the Southern Reconstruction conventions later specifically repudiated their war debts upon the advice of President Johnson. This action, incidentally, is sometimes considered to have set a precedent for and contributed to later repudiations by Southern states. The Civil War debt cycle had run its course of expansion and contraction.

Civil War debts had not been completely settled when a new cycle of debt expansion was launched in the South. The Presidential Reconstruction (1865-1868) brought inevitable

\[ \text{Tenth Census, VII, p. 554; Ratmond, op. cit., pp. 60-61; Ratchford, American State Debts, pp. 135-61; and Shultz and Caine, op. cit., pp. 282, 310.} \]

\[ \text{Arkansas, Louisiana, Texas, and Virginia.} \]

increases in state borrowing. In addition to the need for revenues to help finance the replacement and completion of internal improvements, there was also a pressing need for funds to settle unpaid interest and matured principal on debts. Moreover, the assets of the South had been greatly reduced during the war, and there was a sharp decline in tax revenues when the need for such revenues was quite great. The result was a wave of funding and refunding as well as the sale of some new issues for the financing of needed improvements. The debts of the Southern states increased by between $33,000,000 and $35,000,000 during the Presidential Reconstruction period. 15

Records of state debts during Congressional Reconstruction, which were kept by the usually untrained and often dishonest persons who held office at that time, are sketchy and confused. In Alabama, no records were kept of the amount of bonds actually issued, and an estimate of its debt could be made only after asking all bondholders to state their claims. The total of all state debts in the South had been about $110,000,000 in 1865 after the repudiation of Civil War debts. At the end of the Presidential Reconstruction, 1868, it was approximately $145,000,000.

The Congressional Reconstruction, which continued until 1877, increased the Southern debts by approximately $100,000,000 to over $245,000,000. Borrowing during both phases of the Reconstruction thus totaled approximately $135,000,000.16

The relationship between transportation and state debt was not entirely missing even during the Congressional Reconstruction. The stated purpose of many bond issues in the South was for the development of railroads. In practically every Southern state, however, statements as to the reasons for borrowing were more nominal than real. The underlying purpose of state borrowing in the South during the period of Congressional Reconstruction was to enrich the "rings" of state officials, the members of which succeeded in getting most of the borrowed funds.17

The Reconstruction debt cycle had its contraction phase as soon as the native whites regained control. Most of the Southern states repudiated the Reconstruction debts and prohibited the issue of previously authorized bonds at the first opportunity. The method and extent of debt adjustment differed from state to state—some issues were completely

16Ratchford, American State Debts, pp. 170, 181-83. Shultz and Caine, op. cit., pp. 343-44, estimated the total as $150,000,000.

17McGrane, op. cit., pp. 282-83; Ratchford, American State Debts, p. 172; and Shultz and Caine, op. cit., pp. 343-44.
repudiated while others were "scaled" down to some fraction of their face value. Estimates are very crude, but the amount of debt reduction appears to have been greater than the amount that had been added during the Congressional Reconstruction. Pre-Reconstruction debt was scaled down along with questionable debts in several states. In some instances, therefore, repudiations may have been opportunistic; in most states, there were good reasons for the repudiation of individual bond issues. Another predictable occurrence resulting from the Reconstruction was the revival of the debt limitation movement. Several of the Southern states revised their limitations.

Outside the South in the period from 1860 to 1900, tax revenues were generally used to reduce debts. State debt was again moving in the same direction as the general level of business activity. The national economy was in a somewhat depressed condition during the last quarter of the century. The total debt of all the states declined from over $297,000,000 in 1880 to about $229,000,000 in 1890. Reduction of this total was accomplished by the application

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of surplus current revenues to debt retirement and by the scaling of debts.  

Highway, Bonus, Relief, Welfare, and Education Borrowing, 1900-1959

After 1900, economic conditions began improving while state borrowing increased apace. Total state debt outstanding rose to $234,908,873 in 1902, $422,796,525 in 1913, and $580,408,081 in 1915. The automobile, which was the next important transportation development after the invention of the locomotive, represented another attempt to meet the challenge of space in the United States. The automobile brought problems of its own—highways were now needed. There was still an inability on the part of the private sector of the economy to provide all of the capital necessary for financing a highway network, and the Federal government was not yet inclined to assume the responsibility. States (and local governments) again undertook the financing of the new transportation medium.

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The expansion in state borrowing in the twentieth century came to an end with World War I. Capital outlays declined and brought borrowing down with them. However, the first World War slowed debt growth only temporarily. There was soon a revival of borrowing for highway construction and for financing bonuses for war veterans. Borrowing continued at a relatively high rate for the whole of the twenties. Veterans' bonuses were an important reason for bond authorizations until the mid-twenties when these payments declined substantially. Highway construction continued to add to state debts for the whole period of the 1920's. Transportation needs thus were still shaping the pattern of state debts after over 125 years of development.


During the 1930's, relief borrowing on the state level became quite significant although total borrowing began to decline. The market for municipals was a failing one from 1929 to 1933. In 1932, relief issues constituted about 20 per cent of the total while highways continued to account for over 40 per cent. By 1933, relief borrowing almost doubled to make up about 37 per cent of the total while highway issues fell to only 23 per cent. The trend among the states toward more relief and less highway borrowing was accentuated in 1934 and 1935. Although the composition of the debt was changing, total state debt outstanding showed only a small absolute decline by 1937. Thereafter, the total state debt remained relatively stable until 1942. During World War II, the total debt of the American states declined in much the same manner as it had during World War I.

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22 For an impression of the situation facing state and local governments in 1933, see Evans Clark (ed.), The Internal Debts of the United States, Published for Twentieth Century Fund, Inc. (New York: The Macmillan Company, 1933), pp. 254-90.

State borrowing entered another cycle with the boom in state spending and debt creation that began at the end of World War II. The total gross debt of the American states before the war was about $3,600,000,000, and it declined to about $2,400,000,000 in 1946. Subsequent state borrowing pushed gross debt to over $5,000,000,000 in 1950 and to about $13,000,000,000 in 1956. Part of the increase in spending which led to this borrowing was the result of inflation, but there was also a major increase in spending. The purposes of post-World War II borrowing and spending are similar to those that operated in the debt cycles of the past. The immediate post-war years brought veterans' bonuses back as a major purpose for borrowing. There was a great need for the replacement and addition of highways. By 1955, the fading veterans' bonus borrowing was replaced by borrowing for the expansion of educational facilities. One important characteristic of borrowing during this period was the widespread adoption of the agency or authority device

with a corresponding decline in the use of full faith and
credit (general) obligations.

The end of the growth phase of the present debt cycle
is not yet in sight. Transportation problems are far from
solved. Although the Federal government is assuming a
greater share of the responsibility for providing certain
types of highways, this does not mean that state borrowing
can be expected to decline either relatively or absolutely.
There is some evidence that the shifting of functions (other
than highway services) to the Federal level has halted, but
even if the present division of functions between the Federal
and state governments continues, states will still need to
finance many expenditures by means of borrowing.

\[24\] Compendium of State Government Finances. State
Finances: 1947, No. 2, p. 6; United States Bureau of the
Census, Department of Commerce, Compendium of State Govern­
ment Finances in 1957. State Finances: 1957 (Washington:
Government Printing Office, 1958), pp. 7-8; Tax Foundation,
Inc., Project Note No. 27, op. cit., p. 2; Tax Foundation,
Inc., Project Note No. 22, op. cit., pp. 2-5; Allen D.
Manvel, "Postwar Trends in State and Local Finance," 
Proceedings of the Fifty-First Annual Conference on Taxation
(Harrisburg, Pennsylvania: National Tax Association, 1959),
pp. 259-64; Tax Foundation, Inc., Facts and Figures on
Government Finance, 1952-1953 (New York: Tax Foundation,
Inc., 1952), p. 200; and Studenski and Krooss, op. cit.,
pp. 483-85.

\[25\] Tax Foundation, Inc., Project Note No. 27, op. cit.,
p. 1; and Dick Netzer, "The Outlook for Fiscal Needs and
Resources of State and Local Governments," American Economic
Review, XLVIII, No. 2 (May, 1958), 323.
General Characteristics of American State Debts

Detailed principles drawn from the debt experiences of the American states appear in the next Chapter; however, there are certain general factors that stand out in this background. First, the roles of borrowing and taxation in state financial structures are indicated. Some states tried to finance their pre-Civil War operations by engaging in enterprises—sometimes highly speculative—as substitutes for taxation. The failure of these experiments indicates that taxation generally must be the keystone of a state's financial structure.

A second conclusion that may be drawn from the experiences of the states is that borrowing to aid railroads and banks was very expensive and damaging to the credit of the states involved; states take chances when they pledge or involve their credit in supporting private enterprises. It would appear to be improper for states to borrow for this purpose especially in this age when capital is not as scarce as it was in the period before the Civil War.

The importance of having well trained and able state officials is very evident in some of the state experiences in the Reconstruction period. The activities of state officials were not always subject to public scrutiny. Records frequently were not carefully compiled and were not
always made public. Candid, forceful, and courageous leadership often made the difference between success or failure in meeting crises.

The experiences of the states with debt limitations indicate that these restrictions have not been highly successful in preventing borrowing or in avoiding debt difficulties. (Of course, whether borrowing should be prevented is still an open question.) The debt limitations did not prevent the ill-fated Reconstruction borrowing in the South. Inflexible debt limitations are no cure-all for debt difficulties.

Finally, the record of American state borrowing, especially in the nineteenth century, gives some insight into the market for state bonds today. There were far too many instances of lack of good faith on the part of states in the payment of their debts. For many bondholders and investment bankers, their dealings with the American states turned out to be traumatic experiences. The actions of the states in the past, therefore, go a long way toward explaining the conservative attitudes that prevail in the market for municipal bonds. These prevailing attitudes should be studied very carefully by states in formulating their debt policies.

26 McGrane, op. cit., p. 383.
CHAPTER II

PRINCIPLES OF DEBT MANAGEMENT

The consequences of debt management are most significant. The method of handling debt will have import not only for credit standings, costs, and the ability of a state to meet crises, but it may also affect the general welfare of people within a state. If those charged with managing the state's credit are careful in their selection of courses of action from the many alternatives, they will be in position to keep debt in manageable and orderly form, to maintain a good credit standing, and to reduce the costs of borrowing. On the other hand, the consequences of improper debt handling will be unwieldy debt structures, poor credit ratings, high interest charges, and perhaps even default.

There is no real excuse today for debt management to deteriorate to the condition described above. The factors which go to make up the difference between "good" and "bad" debt management are not unknown. These factors can even be formulated into certain principles, the observance of which will contribute to the improvement of debt management.

Principles of good debt management can be drawn from three sources. The most reliable source probably is empirical evidence. What has proved to be good practice in the past, and what has been conducive to default and failure? The experiences of the American states have provided sufficient data for many sound principles to be established about questions of state debt. Principles that are evident from historical analysis seem to be unusually reliable. The problems involved in debt management have not changed greatly over the years. Why then have the errors in debt management been repeated so often? The answer lies in the fact that bonded debt is a long-term matter. Financial officials have little opportunity, unless they possess a good measure of political longevity, of seeing the full effects of their mistakes. In the area of debt, one has little opportunity to learn from his own mistakes. If progress is to be made in debt management, those dealing with the problem must be prepared to learn from the experiences of others. This learning can be advanced if these experiences are formulated into principles.  

A second approach to the formulation of principles of good debt management is based on the deductive method. What is the logical conclusion if certain propositions are

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accepted? What are the consequences if it is assumed that most government spending should be financed by taxation? These propositions or assumptions from which particular courses of action may be decided can sometimes be formulated from empirical observation. Conclusions then can be deduced from certain general assumptions about the nature of debt. Authorities in the field of public finance have reached agreement upon many points about debt management by this means.

The final major factor that must be considered in dealing with principles of good debt management turns away from formal methods of reasoning to a pragmatic attitude. Certain principles of good debt management must be based upon observations of what is logical in view of extant institutions. It does not matter that the institutions themselves may be irrational. For example, investors usually like to see that state property tax receipts are dedicated to the payment of debt, but property tax revenues are steadily declining in relative importance at the state level. Nevertheless, it is a sound principle for the state to provide the investor what he wants, to know the current styles in the market, and to provide necessary guarantees in bond contracts. Awareness of such institutional factors can be gained by investigation of the determinants of good bond ratings.
The approach in this Chapter is, first, to analyze the institutional framework of state borrowing and the influence of this framework on the effective use of borrowing power on the state level. The next step is to move closer to the more detailed problems involved in the planning of a debt structure and the advantages to be gained by careful planning. Finally, this Chapter identifies some of the desirable practices which can be observed in the issuance of new bonds and in the management of existing debt.

I. THE INSTITUTIONAL FRAMEWORK

The institutional framework upon which debt management rests seems to have several different bases. The various institutions involved will be the broad economic and political ones, the legal ones, and finally, the more specific financial practices that so importantly affect debt structures and debt management.

Economic and Political Factors

State borrowing cannot be viewed as an isolated phenomenon or even as only a problem of state finance. In the most obvious instance, borrowing will be somewhat dependent upon the economic characteristics of the state. Some use of the state's borrowing powers will be justified, but this use will be limited if the state is underdeveloped.
An underdeveloped state will need internal improvements to improve its economic position, but the income in such an area will effectively limit the ability to service debt.

The political characteristics of a state will also have a great deal of influence in shaping the debt structure that evolves. One state may have long before restricted its borrowing activities, refined its debt management, and established an enviable credit standing. Another state may have had a series of experiences ranging from administrations that have used the state's credit unwisely to administrations that have reacted radically against obviously wasteful borrowing and spending practices. It is unfortunate that reform administrations have sometimes reacted unwisely by introducing legislation that has proved to be highly inflexible and just as undesirable as the practices that it was intended to replace.

Another political factor which will influence the state debt structure and the management of that structure is the over-all handling of state finance. The attitudes of people and politicians toward the taxing and spending functions will certainly influence a state's debt structure. Many of the debt problems that plague state finance start at this point. Some of the debt difficulties in the states simply cannot be avoided if unfavorable fiscal relationships have already been established at this level.
The more general political and economic factors which may have an indirect influence on debt matters most likely cannot be reformed merely to improve debt structures. Little more will be said of such factors; however, it should never be forgotten that these elements are working to shape the debt structures and management. These distantly related institutional factors bear watching so that improvements can be made whenever possible and so that any favorable changes may be recognized and used to improve debt structures and management.

Legal Institutions

Policy concerning the use of a state's credit should be clearly and carefully established in the constitution. But, if this policy is perverted in some fashion in the basic document, another institutional problem has been created. The development of a sound debt structure and good debt management should start logically with the modification of the legal framework wherever this framework seems to be faulty. Policies that will make the debt structure more efficient should be brought together, or codified, into one constitutional article. At present, Louisiana has debt provisions strewn throughout its Constitution under sections

\[^{3}\text{Ibid., p. 442}.\]
such as those concerning the limitations on legislative powers and those chartering particular agencies of the State. Bringing these debt provisions together would be a very effective first step in the removal of complexity. Complexity is severely penalized when ratings are assigned to bond issues.

Topics that may be included in state constitutional sections dealing with debt are as follows: the delegation of the borrowing power; the prohibition of borrowing for certain purposes as proper subjects for borrowing (provided that the amending procedure permits change if economic and social factors necessitate revision); and, the designation of certain flexible debt limitations where they seem necessary. Certain definitions should, of course, be included in the above provisions. A clear and careful definition of state debt, for example, could be used to put an end to the special fund doctrine which interprets debts of agencies or departments, or debt supported by special revenues (such as dormitory and bridge revenues), as something other than state debt. The main provisions above would also be expected to cover methods of debt authorization, funding

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\(^4\)Louisiana, Constitution (1921), Art. 4, Secs. 2, 12; Art. 6, Secs. 16, 21; Art. 12, Secs. 19-21; Art. 18, Secs. 1-5; Art. 20, Sec. 1; and Projet of a Constitution for the State of Louisiana (hereinafter referred to as Projet), Vol. I, Part 2, prepared by the Louisiana State Law Institute, 1954, pp. 1145-61.
and refunding procedures, certain safeguards in both policies and administration, and also perhaps some reference to the policy for determining maturity schedules.\(^5\)

It would probably not be desirable for much else to be included in a constitutional debt code. It seems unwise, for example, to place provisions in constitutions requiring that only serial bonds or only callable bonds be used. These two provisions are often desirable, but there may be circumstances in which other types of bonds might be more appropriate. It should not be forgotten that a debt code is no guarantee of a good debt structure. A debt structure cannot be truly effective without good management or administration because financial conditions often change quickly and radically. A good debt code will be one that recognizes the importance of management and leaves enough flexibility for administrators to take advantage of changing conditions. On the other hand, a faulty legal framework can so impede debt administration that no satisfactory debt structure could be designed or managed by anyone.

\(^5\)Hillhouse, op. cit., pp. 442-43. Hillhouse suggests these provisions for municipalities, but they appear to be generally applicable for state constitutional debt codes.

\(^6\)Ibid., p. 443.
One of the most obvious and important ways in which state debts have been influenced greatly by legal institutions has been by the establishment of constitutional debt limitations. These limitations were established in many states as a result of excessive borrowing many years ago. The major purposes of the limitations seem to have been to protect taxpayers against excessive tax rates and to protect the credit standings of the governments. 7 Legislatures were often deprived, by constitutional or sometimes by statutory law, of the free and unrestricted use of borrowing power. These constitutional debt limitations have not proved to be very successful in operation. They are a good example of practices that were well intended but that have not proved to be very beneficial in their application. 8

Constitutional debt limitations fall into several broad groups. First are the rigid constitutional provisions that prohibit legislatures from borrowing except under


certain specified extreme situations such as war or insur-
rection. Other constitutional limitations are those which 
require that all laws concerning borrowing must be submitted 
to a popular referendum. This provision is similar to the 
first group insofar as the legislature is again deprived of 
the use of the state's credit without approval of the people. 
The main difference between the two groups is that there is 
somewhat more flexibility and less formality in the rendering 
of the final decision by the people. A third major group 
into which the states would fall is that group in which 
there are limitations only of a procedural nature. Finally, 
several state constitutions do not restrict legislative 
power to create debt. 9

In the first two cases above, the decision regarding 
debt creation is reserved by the electorate. It is not 
uncommon for constitutional provisions of states in this 
category to impose certain restrictions on the electorate 
itself. Constitutional provision may require that all

9B. U. Ratchford, American State Debts (Durham, 
Ratchford, "State and Local Debt Limitations," pp. 216-19; 
Projet, Vol. I, Part 2, pp. 1130-31; William L. Raymond, 
State and Municipal Bonds (second edition; Boston: Financial 
Constitutional Debt Control in the States (New York: Tax 
Foundation, Inc., 1954), p. 13; and Jerry Peyton Simpson, 
"Oklahoma's State Debt," (unpublished Ph.D. dissertation, 
issues authorized by constitutional amendment include provisions for raising taxes to pay for the interest. Another similar constitutional debt provision is that any debt authorized by the electorate by constitutional amendment must also make adequate provision for repayment. Prohibitions against the pledge of the state's credit to private enterprises are also not uncommon. Where borrowing can be authorized by legislative action, legislatures often are governed by procedural provisions concerning maximum interest rates, maximum bond maturities, and whether bonds shall be serial or otherwise. 10

Ratchford's conclusions about debt limitations are qualified ones. Analyzing the existing limitations, he found several constitutions that needed redrafting of debt provisions. In other states, he found that legislatures were not restrained, but their records were such that they did not really require any constitutional restraint. In some of the remaining states, he thought that certain provisions were altogether too rigid. His recommendations, consequently, take into consideration the various types of constitutional debt limitations and legislative performances

that are found in the states. Some states do not need them at all, but in other states Ratchford suggests that clear and effective constitutional limitations would be beneficial.

The position taken by Harold M. Groves is somewhat similar to Ratchford's. He finds the self-imposed discipline of debt limitation especially undesirable in view of the fact that there is such a clear movement in state finance away from the stable property tax to the more cyclically sensitive income and sales and excise taxes. These taxes make the likelihood of deficits very strong if there is a downturn in business activity, and if this should be the case, the states will need more freedom to use their credit. With this attitude toward limitation in general, Groves then notes the lack of self-control on the part of some governments that might require some type of limitation perhaps less extreme than the common restrictions now in existence.

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11 Ratchford, American State Debts, pp. 444-45. One of the earliest evaluations of state constitutional debt limitation was by William A. Scott. In 1893, he noted the ability of debt limitations to restrict debt creation and thus prevent debt repudiation. He did not recommend their unqualified use, however, because he felt that the states would need to use their credit. The needs that he predicted were for irrigation, reforestation, education, and to finance natural monopolies. It is understandable that he did not foresee the highway problem. Scott, op. cit., pp. 242-43.

12 Groves, op. cit., p. 569.
The conclusion that debt limitations are sometimes necessary is accepted in this paper.

For the states needing debt limitations, Ratchford outlined the scope which limitations should cover. They should be written so that the special fund doctrine does not apply, i.e., the limitation cannot be circumvented by the process of agency borrowing. Some of the more important general characteristics that the debt limit should contain are as follows: the limit should be related to the wealth or ability of the people and the state; the provisions should be designed to become more restrictive as the ultimate limit is approached; the actual limit should not be radically reduced when business is depressed; it should be written with the intention of reducing court interpretation to a minimum, but it should also be expressed concisely in the constitution; and it should be rigorous enough to control borrowing where it has been consistently abused.  

These characteristics were the guides which Ratchford used in designing a limitation based upon average revenue receipts. Revenue receipts, of course, must be carefully and realistically defined to include such revenues as net collections from fees and taxes, donations from the Federal

\footnote{13Ratchford, \textit{American State Debts}, pp. 592-94. See also Hillhouse, \textit{op. cit.}, pp. 442-43.}
government, and net returns on enterprises run by the state. The basic limit would be as follows: the legislature could authorize borrowing so long as the net debt incurred under such authorization did not exceed 100 per cent of average revenue receipts for the five preceding years. The electorate could, by a referendum vote, authorize borrowing to a similar amount. The normal or basic limit for the debt would thus be an amount equal to twice the average revenue receipts, as above defined, for the preceding five years; it would be a moving limit to be recomputed each year. It would be desirable to keep the two parts of the debt separate to show: (1) the part of the debt authorized by the legislature and by the people and (2) the amount of additional indebtedness which each might authorize.

The proposal above would seem to avoid the basic flaw that was present in most of the early debt limitation provisions—inflexibility. Ratchford's proposed limitation offers the advantage of gradual increases in the pressure applied against debt expansion. Perhaps the greatest advantage in the above proposal, however, is that this type of debt limitation is really more of a debt plan than it is a debt limitation. It has some of the elements of determining

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14 Ratchford, American State Debts, pp. 594-95.
15 Ibid., p. 595. These proposals were endorsed in a special study of constitutional debt limitations which is included in the Louisiana Projet. Projet, Vol. I, Part 2, pp. 1135-36.
ability to pay or ability to bear debt. It is a method of embedding into the basic document, a place so prominent that legislators and citizens alike will be more aware of its existence, a constant reminder to the effect that there are certain criteria which must be observed to promote good credit standing.

In his above-mentioned proposal, Ratchford made it clear that if any limitations were necessary, they should not be easily circumvented; they have been widely circumvented by the use of the special fund doctrine and the authority device. The special fund doctrine is the judicial principle that some debts are not state debts because they are secured by special funds. The use of the doctrine

17 Ratchford, "State and Local Debt Limitations," pp. 219, 221-22; and Project, Vol. I, Part 2, pp. 1132-34. There are methods of circumventing local debt restrictions other than by use of the authority. The creation of special districts and the use of lease-purchase arrangements are common on the local level, and they have been used widely in Kentucky. Legislative Research Commission, "Debt Administration," Staff Report to Committee on Functions and Resources of State Government, Research Publication No. 30 (1952), p. 12.

In Oklahoma, circumvention of debt control was possible before 1941 by incurring short-term deficits which were then funded into long-term debt. See Simpson, op. cit., p. 76. This method of circumvention has also been used in other states. See Ratchford, American State Debts, pp. 376-82.

depends upon the existence of some sort of revenues to establish the special funds. These revenues are often available from the operation of capital improvements, and this characteristic gives rise to the term "revenue bond." The widespread use of authorities is at least partly a result of the aforementioned debt limitations. This development is a case in point that legal institutions greatly influence debt administration.\textsuperscript{19}

The use of agencies has been, and is, an expensive way of doing things. Authorities rely almost exclusively upon borrowing to start their operations. This borrowing makes them expensive to start with, but they are also more expensive because they depend to such a great extent on

\textsuperscript{19}Seven reasons for the creation of public authorities in New York State were analyzed by Charles W. Ingler in a paper before the National Tax Association in 1957. He found that most of the reasons involved the "... avowed intent to circumvent continuing restraint by the electorate, the Constitution, or the elected officeholder." Charles W. Ingler, "Are Public Controls Over Authorities Adequate?" Proceedings of the Fiftieth Annual Conference on Taxation (Harrisburg, Pennsylvania: National Tax Association, 1958), p. 259.

revenue bond financing with its attendant higher costs. The authority device also represents a fragmentation of sovereignty that is not desirable. "It would seem to be the wiser course for the legislative body to exhaust every possible governmental remedy, and to assume real leadership and educational responsibility . . ."\(^\text{21}\) This suggestion, of course, turns attention back to the constitutional framework.

Debt limitations and the authority device are political-legal problems that are both partly effects but also causes of debt difficulties. They cannot be neglected if a sound debt structure is the goal. Constitutional provisions should be carefully reviewed and revised wherever necessary so that they constitute a proper institutional framework for the debt—including detailed yet flexible provisions pertinent to planning the debt structure, managing the issuance of new debt, and managing existing debt.

**Financial Factors**

After the economic, political, and legal factors, a fourth major influence on state debt is the whole set of financial customs that are so critical where debt management

\(^{20}\)For an analysis of the advantages and disadvantages of revenue bonds, *infra*, pp. 112-14.

\(^{21}\)Ingler, *op. cit.*, p. 262.
is concerned. Debt cannot be effectively managed until the bond market itself is thoroughly understood. There are the market mores that will determine whether or not an issue is well rated and well received. Certain demands by bond investors and the dealers affect the interest costs borne by the states. Complete cognizance must be taken of all these factors, even those that may appear to be illogical or minor in importance from the standpoint of economic analysis. At the present time, there is little alternative but to adjust to the market.

State and local governments can exercise little control—other than to establish and maintain themselves as good credit risks—over the yields that must be offered on their new debt issues and the market quotations on their outstanding obligations. Their debt management problem is largely one of passive accommodation to the circumstances and demands of the investment market.22

Principles of good debt management, therefore, must be based on thorough understanding and frequent review of financial factors. Principles of good debt management based upon these factors can, to some extent, be formulated by analyzing the actions of bond dealers and investors and their reactions to certain practices that states have used in issuing debt. The problem thus is basically one of determining what factors affect the marketability of state bond issues.

22 Shultz and Harriss, op. cit., p. 609.
Leading investment surveys give an indication of the standing of state bonds from the viewpoint of the investment analyst. Although some analysts are more cautious than others, the over-all view appears to be that state bonds as a class have a very high standing and that they are held in high esteem by the investment community.\(^2^3\) This good standing seems to depend upon two main characteristics of state bonds: (1) they are generally secure, and (2) they are tax exempt. Since they are exempt from Federal income taxes, very wealthy people and even commercial banks and corporations with large net taxable incomes often find them a distinct advantage.\(^2^4\) As a result, prices of the obligations are usually bid up to the point where the resulting


yields make the bonds unattractive to investors in lower income brackets. As a result, investors with moderate means are flatly advised to seek other investments.

Other investors who buy state bonds in significant amounts are those that are restricted in their options by law. These investors are the institutional buyers such as pension fund trustees, life insurance companies, trustees, and mutual savings banks that are not permitted to invest in obligations not on the "legal" list. State and municipal bonds usually are on these approved lists. "Tax exempts," as they are called, are also in demand in some states where they are accepted as security or reserve against deposits of public funds.

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25 This tax exempt characteristic is the reason for the relatively small difference between the yields on state and Federal obligations even though the United States bonds have a higher credit standing. Tax exempt bonds, in fact, may sell at a lower yield than Federal obligations that have the same maturity. Dowrie and Fuller, op. cit., p. 477.

26 David F. Jordan and Herbert E. Dougall, Investments (sixth edition; New York: Prentice-Hall, Inc., 1952), pp. 334-35. This situation points up a problem that will have to be solved if the volume of state borrowing in the future becomes so great that it cannot be absorbed by the extremely wealthy and by institutional investors. Dick Netzer, "The Outlook for Fiscal Needs and Resources of State and Local Governments," American Economic Review, XLVIII, No. 2 (May, 1958), 323.

The overall high regard for state and municipal bonds and the popularity of these bonds with certain groups of investors do not mean, of course, that investment bankers who deal in these bonds do not evaluate each individual issue with a great deal of care. Prospective buyers concern themselves with such factors as the past records of units in meeting obligations, economic reserves, political structures and the quality of political administration, legal provisions concerning the debt, and with certain specific measures that show the strength of financial structures. Other general criteria observed in evaluating the investment qualities of state bonds are the ability and willingness to pay the debts, and the legal provisions concerning tax rates and debt limitations. The character of the community or the state (in respect to its general economic status and its degree of moral responsibility), as

28 Whether state and municipal bonds should be evaluated by different criteria from that presently used is a question that is raised at another point. Infra, pp. 51-56. It is also suggested elsewhere that states may benefit from disassociating themselves from local governments. Infra, Chap. VI, pp. 401-2.

29 Dowrie and Fuller, op. cit., pp. 479, 487; and Raymond, op. cit., p. 197.

30 Jordan and Dougall, op. cit., pp. 324-35; and Raymond, op. cit., p. 197.
indicated by historical fact, is also of vital interest to the investment banker.\textsuperscript{31}

Some of the more specific questions which are raised by investment analysts and investment bankers concern the following: the amounts of existing debt and the plans for debt retirement; the extent of delinquency in tax collections; the status of the annual budget; the various comparisons of taxable wealth and revenues with debt.\textsuperscript{32} Investment bankers are also interested in details about outstanding debt: its relationship to population and property values; the trend of borrowing; the schedule of service requirements; the ratio of service requirements to annual revenues; the rate of debt retirement in relation to the life of improvements that these debts financed; the existence of short-term or floating debt; the provisions made to retire term bonds; and the extent and type of protection provided to existing issues. Current operations of the governmental unit proposing any bond issues and data showing revenue collections and existing tax rates will be carefully scrutinized. Budgetary procedures to be followed in case of impending deficits, the

\textsuperscript{31}\textit{Fundamentals of Investment Banking}, pp. 374-404; and Raymond, \textit{op. cit.}, p. 197.

\textsuperscript{32}\textit{Dowrie and Fuller, op. cit.}, p. 487; and Raymond, \textit{op. cit.}, p. 197.
degree of centralized control or supervision, and the inclination to avoid a pay-as-you-go approach are all usually observed. Finally, legal opinion about any particular issue is generally sought. 33

If the foregoing review of questions that are frequently raised by investment bankers concerning state credit is insufficient to serve as a starting point to derive debt principles, there is available still another source of pertinent information. Useful principles of debt management can be formulated from a study of the rating systems employed by investors services. The Moody's rating system, described here, is not only well known and respected, but it is also representative of the rating devices used by these institutions. 34 Moody's uses nine rating symbols that range from the highest rating of "Aaa" through "C." The symbols are intended to represent investment risk or investment quality. This determination of investment risk involves economic judgment that is based not only on the past record of the borrower but also on the present and future potentialities

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33Fundamentals of Investment Banking, pp. 374-404; and Raymond, op. cit., p. 197.

34For this reason, and in order to limit the scope of this study, Moody's has been used throughout the study as representative of all of the rating services.
of each issue. Moody's ratings thus are only estimates of long-term risks, and they are intended solely for the grading of bonds in terms of their investment quality.  

Bond ratings are of great importance to the states regardless of their intended purpose. There is a clear correlation between high ratings and low bond yields. Since this relationship exists, some very valuable debt management  


36. The average yields for state and local government bonds for several recent years were computed by the Federal Reserve System from samples of Moody's rated bonds as follows:  

| STATE AND LOCAL GOVERNMENT GENERAL OBLIGATION BONDS |
|---------------------------------|--------|--------|--------|
| **Yearly Average**             | **Rating** | **Aaa** | **Baa** |
| 1955                           | 2.18    | 3.14    |
| 1956                           | 2.51    | 3.50    |
| 1957                           | 3.10    | 4.20    |
| 1958                           | 2.92    | 3.95    |


When the four years above are averaged, the mean difference between the two ratings is more than one per cent. If this difference prevails for a sizeable issue or for a whole debt structure, the amounts involved obviously are extremely significant.
principles can be derived by observing and analyzing the types of structures and the particular management practices that are associated with high ratings.

There appear to be two main considerations that determine the ratings given by Moody's. The first and probably the most important consideration is that which concerns the protection afforded bondholders. The second factor, which may not be fully appreciated by some fiscal administrators and policy makers, is the characteristic of "certainty" or "uncertainty." This feature is carefully studied for each particular issue, but the rating process does not rule out the uncertainty that revolves around the complexity and instability of the whole of the state's financial structure when a particular issue is rated. 37

The protection afforded to bondholders seems to be measured primarily by the ratio of pledged revenues to debt service requirements. There are frequent references in Moody's explanation of its ratings to the "margin of protection." This tendency is also reflected in the weekly bond survey by the same institution which sometimes reports the ratio of revenue to debt—the greater the ratio the more protection afforded or the greater the margin of protection. 38

37Moody's, 1958, pp. v-vi.

38For example, see Moody's Bond Survey, XLVIII, No. 23, (June 4, 1956), 522.
The ratio of revenue to debt is something that is often superficial and something which can be changed. One practice that usually results in small margins is the dedication of certain revenues or certain taxes to the repayment of specific bond issues. When this type of dedication is used, there may be some issues that have large surpluses over and above their service requirements. These particular issues will have extremely high ratios of revenue to debt requirements, higher ratios than are really necessary, and the result will be that the revenues or resources are not being used effectively. This type of dedication thus can result in overprotecting some issues and underprotecting others. Besides the strictly mathematical ratio of revenues to debt, there is also the disadvantage of having one tax alone as support for each issue. Dedication presumably makes risk greater than if several bond issues of a state were being paid from a pool of four or five major taxes. In the latter case, the failure of one tax probably would not cause default on any issue. Logic would seem to call for freeing taxes and other revenues from specific to general debt service. Debt service requirements could then be the first charge upon the entire receipts in the state. The ratio of revenue to debt service—the margin of protection—would be much greater. Ratings, in the absence of other
undesirable factors, should improve, and bids for the state's new obligations should be more favorable.

The second characteristic that distinguishes the nine different Moody's ratings is the degree of certainty surrounding the bond issue. Here the key seems to be stability. For example, the difference between Aaa bonds and Aa bonds can be either a smaller margin of protection or else greater "fluctuations" in the protective elements. Again, the A rating may result from a "susceptibility" to impairment in the protective elements--more uncertainty. The Baa bond rating might result from "unreliability" in the protective provisions. "Uncertainty" is the cause for some bonds being rated Ba. Bonds rated B are those that lack the characteristic of "assurance" of principal and interest payments.39

The certainty or uncertainty factor which is so important in the rating of bonds can concern anything connected with the issue. The characteristic of stability must be interpreted very broadly. It is not just a question of whether or not the provisions in the bond indenture are clear. The degree of assurance provided to the investor and bond dealer will depend upon such things as the institutional factors that were mentioned earlier in this Chapter as well.

39Moody's, 1958, pp. v-vi.
as the specific provisions of the issue. It may take some time for the state to build up a reputation for certainty, stability, and assurance, but there is little doubt that success in the endeavor will be reflected in better ratings and lower interest charges.

The general criteria used for bond ratings are significant in themselves, but they provide still more information when they are analyzed from another point of view. This approach is to compare the ratings associated with certain states and certain issues and to determine from this certain principles for successful debt management on the state level. The characteristics of state debt structures with excellent bond ratings are indicative of what the market considers to be good debt management. What are these characteristics? An excellent study of this type was prepared by the staff of the Louisiana Legislative Council.

The Legislative Council study dealt only with general obligations but included all of the states and grouped them according to the ratings carried by their bonds. Thirteen states at the time of the study had no outstanding general obligations.

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obligations, and another twelve had Aaa ratings on at least part of their general obligations outstanding. Seventeen other states had ratings no higher than Aa on any of their bonds, and six others had no bonds rated higher than A. The State of Louisiana general obligation bonds held ratings that varied from Aa to Baa.41

Only five of the twelve states with Aaa ratings had more than $50,000,000 of general obligations outstanding. These five states were Connecticut, Maryland, Ohio, Massachusetts, and New York. Connecticut had $111,831,000 of bonds which were all ultimately payable "automatically" from one main fund. A main characteristic of that state's general debt, therefore, was simplicity. Maryland, with $150,160,000 of general obligations outstanding, provided for their payment from a single fund and had "no limit" on taxing power. The simplicity again is striking. Ohio had $165,704,000 of full faith and credit debt which was serviced from a single sinking fund from which payments were "required." Again there was no limitation on the ad valorem tax rate in the simple structure. Massachusetts had used its full faith and credit freely when the survey was conducted and had $459,855,676 of general debt outstanding. The Massachusetts debt was serviced from dual funds which were sustained by

41 Ibid., p. 3.
"unlimited" general revenues. The fifth of the large issuers of Aaa full faith and credit bonds was New York, the largest borrower among the American states. New York did not have the simplest system of the group, but it did have a successful debt structure. A large sinking fund in that state, which had assets of $177,759,691, contributed to this success. Besides having these assets, the debt structure in New York benefited as a result of the provision which made payment of revenues "mandatory" and "judicially enforceable."

The Louisiana Legislative Council concluded its analysis of state debt structures with bonds of the highest rating as follows:

Aaa bonds are supported by the pledge of the full taxing power of the state with no constitutional limitations thereon and the bonds operate as a charge, which the Legislature may not touch, upon either the general revenue or general fund of the state or upon a sinking fund supported by dedicated revenues far in excess of debt requirements.

42 Massachusetts lost its position within this exclusive group since the survey was conducted. All of its outstanding full faith and credit debt was given a revised rating of Aa in 1955. The reason for the change apparently is that the volume of the debt was great enough to damage the state's credit position. William A. Forbes, "The Billion Dollar Debt of Massachusetts," Boston University Business Review, IV, No. 2 (Fall, 1957), 10-11.

43 It is noteworthy that self-supporting debt in New York, such as that connected with housing, was given the benefit of mandatory payment machinery to make it even more attractive. Louisiana Legislative Research Study No. 9, pp. 16-32.
or both. Alternative means are usually provided for payment of the bonds in the event of a deficit in the primary source of revenue allocated to the payment thereof, such alternate means of producing revenue being either automatic and/or enforceable by legal process available to bond holders.44

The characteristics of state debt structures that have highly-rated issues reveal that there is some legal basis for the difference in ratings, but also that there is a significant tribute to convention involved. The legal status of state debts differs from municipal debts in one

44Ibid., p. 3. The state debt structures that had lower ratings had the following characteristics:

Aa bonds either are payable from a sinking fund with adequate minimum reserves and an excess of revenue over debt retirement requirements or are supported by dedicated revenue far in excess of debt retirement requirements with alternative provisions for added revenue in the event of deficit in the dedicated source. The length of time required to retire outstanding bonds, total state debt, and available assets or revenue for bond retirement are additional factors which may be considered in according this type of rating.

A bonds are payable from dedicated revenue sources with or without a sinking fund. Alternative means of payment usually are not provided and these bonds generally do not operate as a charge upon the general revenue or taxing power of the state with any means of enforcement thereof available to a bond holder.

Baa bonds ordinarily are not payable on a parity basis from dedicated revenues. Various issues often have different priority of lien upon or payment from a single dedicated revenue source. There are no sinking funds and no alternative means of payment of the bonds provided. Ibid., p. 3.
very important respect—the state is a sovereign government and cannot be sued without its consent. The state therefore can repudiate its debt or default on interest with very little chance that the bondholders will gain any satisfaction. As Ratchford points out, the bondholders, therefore, generally must depend upon the state's good faith. The whole gamut of "required," "mandatory," and "automatic" payments to bondholders may make it easier for bondholders to build a case if there is a breach of faith on the part of the state; however, there can be no assurance that payment will actually be made. Thus, one of the prime characteristics that is used to separate state obligations into grades is certainly of questionable value.

The same thing might be said of the pledge of unlimited ad valorem tax revenues. Ad valorem taxes have long been losing their importance on the state level.

45 Ratchford, American State Debts, pp. 482-96.

The full faith and credit pledge, incidentally, has been widely honored by the states. There were only three states in default in the 1930's. Alvin H. Hansen and Harvey S. Perloff, State and Local Finance in the National Economy (New York: W. W. Norton & Company, 1944), p. 52.

According to Business Week, full faith and credit municipals have an even more impressive record of no final defaults. "Manning a Market in Municipals," Business Week, No. 1549 (May 9, 1959), 55.

46 Shultz and Harriss, op. cit., p. 258.
The states that do not have this unlimited property tax pledge may also have certain ad valorem tax limitations in their constitutions, but how much weight should be given to these factors? How real is any tax or debt limit? Neither of these is more than temporary if it really needs to be eliminated or revised. It is difficult to imagine that any state would let a tax limitation interfere with the payment of a just debt. The pledge of unlimited ad valorem taxes, therefore, is very unconvincing—but it is still the proper thing for a state to use.

Even if the mandatory and judicially enforceable characteristics of Aaa bonds are granted, these provisions are questionable as criteria for ratings. Legal clauses requiring payment are not pertinent except in case of a default or repudiation on the part of the state, and this financial condition is quite rare in modern American states. When states are beset with such difficulties, it is apparently largely a result of poor debt management—something that need not happen. At the present time, there appear to be no real reasons why states should ever have to default or repudiate debt.

If this optimistic opinion about state credit and about the techniques available for state debt management is

correct, the characteristics summarized above, which affect ratings and interest rates to such a large extent, would appear to have been given far too much weight. Serious doubt may be raised as to the justification of the average difference of more than one per cent that existed between Aaa and Baa rated state and local bonds in the United States from 1955 through 1958. 48

Several of the legal and administrative practices that have proved to be so successful in the five states referred to above are of questionable real value. States are to be imitated and complimented on their use of these devices, of course, but have they done much more than conform to the conventions of the bond market? It appears that the liberal use of such words as "mandatory," "required," judicially enforceable," "unlimited taxes," and "first charge" has worked wonders in the market. Large measures of psychology and semantics apparently are necessary in order to have successful debt structures. The successful states have bowed in the direction of conservative market desires, and the gestures have paid off handsomely.

If the market ratings of bonds are based so much on remote possibilities and questionable clauses, what should

48 Supra, p. 44.
be done to supplement or revise the criteria on which ratings are based? It would certainly appear that the basic strength of state obligations should be given more weight. One way that states could help to accomplish this would be by offering only their full faith and credit as valid and sufficient security for bond issues. This full faith and credit pledge could probably be made more effective for the state and more attractive to investors (and not much more misleading) if the phrase were changed to read: "full faith, credit, resources, and wealth of the state of 'X' are pledged . . ." This change would serve to emphasize the economic strength of the state while also making more effective use of the state's name even though it would not necessarily give the bondholders any more real legal protection.

Surely, when it is apparent that a state's economy is strong and that there is every intention on the part of the state to honor its obligations, a penalty of one per cent because of a cluttered debt structure is heavy indeed.

Market standards as characterized by the bond ratings are

49The point here is that the economic condition is not given the weight it deserves. There is no question, of course, that the rating services do consider it in assigning their ratings. It is the first factor named, for example, by a representative of Standard and Poor's. Tyler, op. cit., p. 52.
not ultimate criteria. It would appear that some reexamination is in order in the bond market as well as on the state level.

The questions raised about the validity of bond ratings do not, of course, absolve the states from making certain that they are not victims of the ratings. Bond ratings are important because they give a good indication of credit standing and because they have a clear relationship to interest charges that must be paid for borrowed funds. It was indicated previously that the higher the rating, the lower the interest costs. Thus, if the factors affecting the ratings are known, the method of lowering interest costs should be very clear. Careful consideration of conventional market rules that influence ratings and interest costs is still of great importance and is a major concern here. Financial customs represented by these ratings must be given important weight in the formulation of principles of debt management.

Principles of debt management must be directed at meeting the two basic criteria upon which ratings are based—

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50 Personal interview with Dr. William D. Ross, Dean, College of Business Administration, Louisiana State University, Baton Rouge, Louisiana, June 30, 1959.

The subject of bond ratings is studied later from a different approach. Infra, Chap. VI, pp. 396-99.
protection and stability—as well as at some of the more specific characteristics discovered in the Legislative Council report and the recommendations of investment bankers and investment analysts noted above. The key elements of protection and stability clearly must be introduced into the debt structure by careful planning. Planning should be concerned with specific protective provisions, but good planning will also help to dissipate uncertainty in a debt structure. The next problem, therefore, is to develop a debt plan based upon given institutions.

II. PLANNING THE DEBT STRUCTURE

A major part of the constitutional section bearing on the question of debt should deal with planning the debt structure. Main provisions, which are suggested by Hillhouse for inclusion in a bond code, are merely debt plans that are given the weight of constitutional law. However, since these long-term plans are not always provided constitutionally, and since they can certainly be useful guides to the debt administrator whether they are codified or not, it is perhaps better to emphasize the plan rather than the constitution which may embody it. This shifting of emphasis does not mean that the constitution would not be a

51 Hillhouse, op. cit., pp. 442-444.
logical place to start in planning. But if the constitution cannot be changed, this should not mean that planning cannot be used at all to improve the debt structure.

The plan of a debt structure must take cognizance of two distinct problems related to the efficacy of borrowing. The two problems concern the propriety and the safety of borrowing. Whether the borrowing is "proper" or not is mainly a question of whether the particular purpose of the borrowing is suitable. The "safety" problem concerns the whole fiscal structure. Is the state in a position where it can safely add any debt to its existing structure no matter how proper any particular purpose might be?\footnote{Ratchford, American State Debts, pp. 564-65.} This section will deal with both of these questions in the order given.

When to Borrow

In order to determine when it is proper to borrow, some of the basic relationships in the area of public finance must be reviewed. These relationships are those between spending, taxing, and borrowing.

To determine when it is proper to borrow, it must first be established when it is proper to spend.\footnote{It is generally agreed that spending should be carried only up to the point where the additional social benefit gained in the spending would balance that which would be sacrificed by the taxpayers. This conclusion is} After the
decision has been made to spend, the next consideration is to determine the method of financing—taxation or borrowing. The basic advantage of the first method of financing is that there are no interest costs involved, and the savings of interest costs would be available for other spending if needed. Taxes, however, are not always preferred over borrowing. There are certain characteristics of taxation that make it inappropriate in some situations. An obvious limitation is that taxation is not flexible enough to take care of sudden changes in needs. Then, of course, there is the case where large sums are needed all at once so as not to lose the advantages of large-scale operations. Tax systems may not succeed in raising the amounts that are needed at one time. Finally, borrowing may be a more equitable method of distributing the financial burdens connected with certain physical improvements over time among all of the users of these improvements.

Borrowing, therefore, will be appropriate for certain purposes and under some circumstances which are widely

recognized in the field of public finance. These general purposes are:

. . . (1) to finance large emergency or irregular expenditures--including wars, (2) to finance capital construction projects, (3) to harmonize the divergent rhythms of current expenditures and current revenues, and (4) to refinance existing debt. A fifth reason . . . government borrowing should be an element of fiscal policy.\(^{54}\)

The first of these circumstances is inappropriate for the states insofar as it applies to wars, but the balance are applicable to at least some extent on the state level. The states have their emergencies in acts of God such as floods and other destruction by the elements. Another type of "emergency" which is usually somewhat reluctantly recognized and condoned is that which is due to past neglect of, say, institutional facilities. It is all too common for states to find themselves in the position of having obviously inadequate hospitals or prisons that require the replacement of entire systems. The cost of such replacements or additions is frequently so large that only borrowing will provide the needed sums.\(^{55}\)


\(^{55}\)Shultz and Harriss, *op. cit.*, p. 571; and Ratchford, *American State Debts*, p. 564.
Borrowing to finance capital construction projects can involve several different circumstances. Borrowing for capital expenditures may generally be justified if one or more of the following factors appear: (1) the outlays are large and nonrecurrent; (2) the borrowing finances certain state "enterprises;" (3) the expenditures finance improvements that indirectly generate revenues.

Borrowing to finance large nonrecurrent capital outlays such as state office buildings, bridges, and highways is very common on the state level. The occasional large capital construction need which is nonrecurrent in nature can be properly financed by borrowing. Another type of capital expenditure borrowing that is rarely used in the American states but which is sometimes accepted as proper is "enterprise" debt. Examples of these enterprises are more easily found on the local and Federal levels; power plants and dam projects would be representative. Somewhat related to enterprise debt would be borrowing which generates income; this type of debt is called "self-supporting debt."

The question of what is proper is profoundly influenced if the borrowing occurs in order to finance capital improvements that directly generate revenues in amounts sufficient to pay the principal and interest costs.  

56 Shultz and Harriss, op. cit., pp. 572-76; and Ratchford, American State Debts, pp. 563-64.
not be limited only to operations which support themselves directly. For example, port development can be expected to contribute to economic growth and thus indirectly generate revenues that will ease the burden of borrowing. (Of course, port improvement would also normally be expected to result in certain operating revenues.) Highways may also fit into this category of borrowing if they indirectly generate debt-paying ability. Some highways may increase state revenues indirectly by contributing to economic growth and this in turn may lead to greater revenues if more traffic results and thus increases gasoline tax collections. 57

Borrowing for the improvements described above may be very sound economically. Borrowing is a way of getting improvements that are needed when they are needed and of providing for their payment as they are being used. There may, in fact, be a responsibility to carry on such borrowing if it is a significant factor in contributing to necessary and desirable expansion in the economy. 58 There is no need,

57 The references to the revenue-producing nature of improvements here should not be interpreted to mean that the borrowing should take the form of revenue bonds.

if the timing and the method of retiring such borrowing are properly planned, of passing any burden on to a generation of taxpayers who will not have the use of the improvements. There would appear to be little justification for hesitation in borrowing under these circumstances if available funds are insufficient. Furthermore, even if funds could be raised by taxation, this might not always be the most appropriate way of financing the improvements if the increased taxes would pose a serious threat to economic expansion.

When borrowing for large nonrecurrent construction is involved, whether the improvements are self-supporting or not, the most desirable method of planning the debt structure is to engage in "capital budgeting." Capital budgeting is simply a "... long-term capital improvement program, plus a coordinated program of the methods by which such capital expenditures will be financed." It is also sometimes referred to as "capital planning" which is defined as a continuous program in which the planning agency compiles and analyzes the requests for capital improvements for several years, assigns priorities to these requests, and

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puts these requests in financial terms which are then related to the revenues or receipts available.

Viewpoints on the objectives of capital planning or capital budgeting differ somewhat, and the differences appear to be somewhat contradictory. One view would emphasize three objectives: (1) to schedule public needs in the order of their urgency; (2) to "... direct attention to ascertaining the extent to which operating and maintenance costs will be increased by a proposed capital project;" and, (3) to "... require state officials and the legislature to review all methods of financing, ... and ... relate the amounts available from these sources to the needs of the state and its ability to finance various projects." Other authorities recognize the objective of preplanning capital spending as a method of making installments more or less equal, but they also note the alternative objective of


61 Ibid., p. 3.

62 Ibid. A similar interpretation of capital budgeting has been expressed by David M. Ellinwood, a Vice-President of Moody's Investor Service, who has recommended it for municipalities. David M. Ellinwood, The Commercial and Financial Chronicle, CLXXXI, No. 5434 (Thursday, June 2, 1955), 27.

63 Public Affairs Research Study No. 69, p. 3.
having unequal installments timed to counter the business cycle.

In view of the generally accepted limitations of effective counter-cyclical fiscal policy on the state level, the more restricted objective of capital budgeting appears to be the more desirable one. Capital budgeting thus is planning directed specifically at capital improvements. These capital improvements may or may not require borrowing for their financing, and one main function of capital budgeting is to decide this very question. Of course, the concept of the capital budget is much easier to grasp than it is to apply. One major difficulty in the process of capital budgeting as well as in financial planning in general is the problem of estimation. The estimation of revenues in preparing the capital budget is a problem that has been seriously neglected in the past. It has become a more important problem since state spending has increased so greatly in the last twenty or twenty-five years. There are also signs that fiscal problems on the state level will be

64 Shultz and Harriss, op. cit., p. 574.
65 Infra, pp. 74-75.
even greater in the future. Finally, if capital planning or capital budgeting is adopted as is recommended by most fiscal experts, the states must of necessity make long-range projections and plans. The collection and analysis of adequate information is a responsibility of government which is necessary if the common good is to be furthered because collecting information is basically a method of helping to determine what is the common good. Decisions about taxation, services offered, and borrowing all depend upon projections of revenue yields.

Much of the progress that has been made in the use of estimation techniques and machinery in capital budgeting has come from legislative committees acting somewhat upon their own initiative when they have been dissatisfied with available information. Taxpayers' research groups are also important in this area of research. These groups can help to force the government to accept its responsibilities in

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providing adequate information. Where governmental research units are operating, the taxpayer groups are also useful in checking the official figures and perhaps in supplementing them in certain instances. Research units, as they exist today, have at least succeeded, in most cases, in moving away from the "rule of thumb" method of estimating revenue which was still used by a majority of states as late as 1952.

Obviously the whole process of revenue estimation in capital budgeting will be very complex if it is based on realistic assumptions—it must be complex since it deals with such a complicated problem. The technical nature of the problems together with this complexity indicate that a certain amount of specialization must be involved if the estimation of state revenues is to be done thoroughly. The following recommendations would seem to conform to the idea of capital budgeting and the method of establishing it. First, it is recommended that the Division of the Budget be given responsibility for making final decisions. However, it

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70 For an example of a typical project conducted by the Public Affairs Research Council of Louisiana, supra, p. 64.

71 See Lawrence A. Leonard, "State and Local Governmental Revenue Structures—A National and Regional Analysis," National Tax Journal, XI, No. 1 (March, 1958), 67-77; and Myers, op. cit., pp. 350-51, for examples of statistical techniques which have been applied to revenue estimation.
is also recommended that this agency employ a systematic method for making the estimates and that this systematic method should be formulated by a research unit within the Budget Division. Individual estimates probably should originate from the various agencies responsible for collecting taxes and other revenues. A research unit could be utilized to check and evaluate these tax and revenue projections and to assemble the various estimates. Estimates could then be checked by independent tax and fiscal experts. From these sources, the Division of the Budget could then make its final report which should include an explanation of the bases of the projections. The various units involved, but especially the research unit, would be expected to constantly analyze and review the latest pertinent data. 72

After revenue estimates are made, the next step in setting up the capital budget is one of determining physical needs; 73 available facilities must be inventoried and future needs must be estimated. This determination would probably best be initiated on the departmental or agency level with objective review by some central administration agency that

72 Myers, op. cit., p. 353.
73 Chatters and Hillhouse, op. cit., p. 364.
is responsible to the executive branch. Capital improvement needs then can be listed chronologically in order of their relative importance in the 5-, 6-, or 10-year capital budget.

After physical needs have been considered and weighed by a central agency, the next step is to try to reconcile these needs and the ability to pay. If ability to pay is sufficient to care for the needs, the state probably should shift to a pay-as-you-go basis and restrict borrowing to approved purposes other than for capital improvement. On the other hand, if the physical needs outstrip the ability to pay, the traditional approach is one of adopting a partial pay-as-you-go program to whatever extent it is possible.

The pay-as-you-go or partial pay-as-you-go system has been widely accepted for many years as the soundest approach to the financing of public improvements. It has much to recommend it--it is a cautious approach that is appropriate to a problem which has such long-term implications. If needed revenues can be obtained by means of existing taxes,

\[74\] The Public Affairs Research Council of Louisiana has made a similar proposal that would create a planning agency to review construction requests and a management section to check on office space utilization. See Public Affairs Research Study No. 69, pp. 4-5.

\[75\] Chatters and Hillhouse, op. cit., pp. 362-68.
or if needs are not pressing, it may be possible to raise taxes soon enough to finance the planned improvement. The character of the spending will also have a bearing upon the efficacy of pay-as-you-go relative to borrowing. The more regular the amount spent on improvements, then the more feasible it is to shift to a pay-as-you-go basis because there is more opportunity to plan taxes to take care of the needs. The main advantage claimed for pay-as-you-go is that it saves on interest costs; capital improvements reputedly can be supplied more cheaply if the timing of the improvement is not affected. 76 Of course, lower interest costs will enable more capital improvements to be made. 77 A second advantage which is sometimes claimed for the pay-as-you-go system is that costs are felt immediately, forcing more economical planning and eliminating extravagance. 78

76 Other advantages that have been noted are that pay-as-you-go saves on bond issue expenses and on referenda or the costs of amending constitutions. Frank Amandus Neff, Municipal Finance With Emphasis on Trends Since 1900 (McGuin Publishing Company, 1939), p. 140.

77 This theory does not take into consideration the different effect that a secular trend of rising prices would have on a pay-as-you-go program as opposed to a long-term debt program. The long-term debt may prove to be cheaper in the long run if the timing of the improvement is advanced by borrowing and thus entails lower construction costs.

78 Chatters and Hillhouse, op. cit., pp. 375-80; Shultz and Harriss, op. cit., pp. 574-75; and Hillhouse, op. cit., pp. 11, 441, 446.
There is, however, one basic difficulty with the pay-as-you-go system for state financing—it simply does not provide a guide for the state that cannot pay but still needs improvements. There is also a semantics problem involved. It should be recognized that so-called "pay-as-you-go" really means "pay-before-you-go." Present taxpayers are asked to pay now for highways or other improvements that will be enjoyed only by those around to use them after they have been constructed. A public improvement financed by bonds retired over the life of the improvement may involve greater equity. Besides promoting equity in some cases, borrowing permits benefits to be derived from the use of improvements years before they could be provided on a pay-as-you-go or "pay-before-you-go" basis and permits savings to be realized if there is inflation of costs. Finally, the pay-as-you-go plan ignores the fact that certain improvements have the ability in themselves to increase state income. Borrowing, therefore, is sometimes more appropriate than pay-as-you-go financing of capital improvements, and it definitely has a place in capital budgeting.

79 Ross, Financing Highway Improvements in Louisiana, p. 18; and Neff, op. cit., p. 140.
Whether a borrowing plan or a pay-as-you-go plan is adopted, many real benefits can be realized from capital budgeting.

It gives perspective and method to capital spending and enables state officials and legislators to see the whole picture and thus to keep the various parts in correct proportion. . . . its own reasonableness and logic and the publicity which goes with the plan give it considerable weight.80

Perhaps the most important benefit of capital budgeting is the step that it makes toward planning commitments in relation to the ability to finance these improvements. Another striking advantage, however, is that needs of one state agency are reviewed relative to the needs of other agencies. Not only do priorities become clearer, but this comparison of needs should also serve to eliminate some overlapping projects. Finally, of course, there results an orderly arrangement of public needs in the order of their urgency. The result of this scheduling is an increase in social benefits.

Leaving the area of capital construction, a third major justification for the use of credit on the state level is to smooth budgetary irregularities. Government spending

80Ratchford, American State Debts, p. 590.
81Public Affairs Research Study No. 69, p. 3.
cannot easily be stabilized and tax revenues are often received on annual or quarterly terms. The discrepancy between the timing of expenditures and receipts makes some borrowing necessary, but this would justify only short-term borrowing.  

Borrowing for refinancing is another purpose for which credit has been used, but it is of relatively limited importance on the state level. Refinancing can refer to renewing a maturing bond issue by more borrowing. This type of refinancing or refunding is widely disapproved because it is an indication that the state has not made adequate provisions for debt retirement. The term "refinancing," however, has other more pleasant connotations. Another type of refinancing has to do with the calling of debt prior to maturity. Circumstances sometimes permit the refinancing of debt on terms more favorable to state governments. This benefit is dependent on the states having had the foresight and the opportunity to reserve the call option.  

Other refinancing which is somewhat less common would be the calling and converting of certain issues so that annual maturities can be rescheduled in more manageable form.

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82 Shultz and Harriss, op. cit., pp. 576-77.

83 Ibid., p. 590. For a discussion of the call option, infra, p. 114.
Finally, a less desirable type of refinancing would be the funding of short-term issues into long-term debt.  

The final reason for borrowing is to influence income and unemployment. But, this type of borrowing is not universally approved for states, and many would severely restrict its use on that level. The orthodox view on the role of state borrowing in fiscal policy apparently is that states should cooperate with the Federal government, while remembering that they are not in a position to borrow to the same extent as the Federal government. The argument is that reluctance on the part of prudent state governments should result from the assumption that their debts are not internally held debts as is the Federal debt. States are considered to be in a midposition between individuals and the Federal government but more comparable to individuals. Repayments of externally held debts are thought to place a real burden on the state and on its citizens. Furthermore, the state's resources for servicing and repaying debts are

84 Shultz and Harriss, op. cit., p. 577.
85 Ratchford, American State Debts, pp. 562-63; and Hansen and Perloff, op. cit., pp. 53-54.
86 Groves, op. cit., p. 577.
87 The orthodox view about debt has recently been severely attacked. See James M. Buchanan, Public Principles of Debt (Homewood, Illinois: Richard D. Irwin, Inc., 1958), p. 223.
more limited than those of the Federal government. States also differ in that they do not have the monetary powers of the Federal government. 88

Many fiscal authorities appear to be inclined to accept as satisfactory any state fiscal policy that does not seriously impede the counter-cyclical policy followed by the Federal government. This opinion is based upon the premise that state fiscal policy has tended to aggravate business cycles. But recent studies seem to indicate that this was not really the case during the thirties. If this new thesis is correct, there should be little or no difficulty in satisfying a minimum requirement that the states not intensify fluctuations and make more work for the Federal government. These new findings would also seem to suggest that perhaps the above requirement should be reviewed with the thought in mind that the states might be able to make a larger contribution and cooperate more in the area of fiscal policy if it should ever be necessary. 89

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When It Is Not Proper to Borrow

Since the careful planning of debt policy is the first step toward establishing a sound credit structure on the state level, this planning has recognized the conditions in which the use of credit is proper. It may be pertinent also, however, to examine purposes for which borrowing normally is not considered appropriate. Perhaps the greatest danger of listing "improper" purposes is that these will tend to become inflexible. Obviously, there can be no standard of what is proper that will endure the various financial, economic, and political changes that come in time. For this reason, a list of improper purposes may be inappropriate for a constitution and especially undesirable if the constitution is extremely difficult to amend. With these reservations about establishing a lasting standard, however, it is worthwhile to review the conventional views as to when borrowing is proper. These conventional views in municipal finance naturally focus on financial factors and do not consider political and social forces which some people may consider even more important. This conventional financial approach was taken by Chatters and Hillhouse when they concluded that bonds should not be issued for the following:

(a) Subsidies to private enterprise, . . .
(b) Unneeded capital improvements. . . .
(c) Minor capital expenditures. . . .
(d) The purchase of movable equipment. . . .
(e) Deficits in the operating budget.
(f) Emergency relief purposes. . . .
(g) Regularly recurrent capital expenditures. . .

These rules were formulated with municipal or other local forms of government specifically in mind, but they are applicable to some extent to state governments as well. Some of these rules have been arrived at by historical analysis. The violation of some of these rules accounted for many of the defaults and repudiations of state debt which took place in the nineteenth century. The various principles are worth reviewing separately.

The granting of subsidies to private enterprise is undesirable on several counts. First, it opens the state's credit to political abuse. Certain influential or "favorite" groups have been the ones to get this state backing in the past, and there is a good chance that collusion with the legislatures will take place. Another difficulty which is involved in the providing of subsidies to private industry is that public officials, perhaps not well trained in business matters, would have to pass judgment about the chances of success of private businesses. These state subsidies would also have one danger that is present

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90 Chatters and Hillhouse, op. cit., p. 353.
91 Ratchford, American State Debts, pp. 172-75.
in tariffs; private industries subsidized by the states might tend to become dependent and continue to demand help from the state. Still another possibility is that private industry would put the states in the position of having to compete with each other. Industries could begin "whipsaw" tactics that could eventually lead to widespread state subsidies to industry. Another objection to subsidies is that capital no longer is so scarce in the United States that worthy ventures essentially suited to private ownership are unable to get sufficient capital without the help of the state. 92

The use of state credit for "unneeded" capital improvements--extravagences--is traditionally considered undesirable. Normally, there should be a clear need before any expenditure is made and a still greater need before the expenditure is financed by borrowing. The obviousness of this general rule has not precluded its violation in the past, and for this reason it cannot be omitted. The same thing can be said about borrowing to finance minor capital improvements, to finance regularly recurrent capital

92 Ibid., pp. 587-88.
expenditures, to cover deficits in operating budgets, to purchase movable equipment, and to finance minor emergency spending. In the aggregate, these expenditures are recurrent, and they should be provided for by means other than borrowing. The frequent sale of small bond issues to finance such expenditures is also undesirable because this type of borrowing is generally expensive and complicated.

One of the recent types of borrowing that is not considered proper by financial standards is borrowing for veterans' bonuses. Bonus borrowing is somewhat different from the Confederate pension borrowing that took place in some of the Southern states. The issuance of bonds in order to finance cash bonuses became a major reason for borrowing only after World War II, although some borrowing for this purpose did occur in the 1920's. Two objections are commonly directed against veterans' bonus borrowing. First, it is felt that the obligation to veterans is primarily an

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93 Regularly recurrent capital expenditures are not as patently unsuitable purposes for debt financing as are some of the other items listed above. The principal reason for their inclusion at this point is that there is an alternative which sometimes is more desirable—a pay-as-you-go system. The pay-as-you-go system was discussed in connection with conditions under which it was considered proper for the state to borrow. Supra, pp. 69-71.

94 Ratchford, American State Debts, pp. 264, 313-32.
obligation that must be settled on the national level. Secondly, and this is a value judgment, many feel that states should reserve the use of their credit for more urgent purposes than to pay bonuses. A third possible objection is that borrowing should be reserved largely for lasting and tangible benefits normally associated with capital improvements. Veterans' bonuses are highly ephemeral benefits.

Safe Amounts to Borrow

Once it has been determined that spending is desirable, that no other method of financing is appropriate, and that the particular purpose of the borrowing is a proper one, the next question is one of determining the amount that can safely be borrowed. There must be a determination of the maximum debt load which the economy can safely bear and then it must be ascertained whether or not the particular issue in question exceeds this limit. Thus, a particular project may be a distinctly proper subject for borrowing, but the state may already have reached the limit beyond which it cannot safely borrow. Obviously, if the state has reached this point, it cannot justify further borrowing.

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95 Shultz and Harriss, op. cit., p. 578.
96 Ratchford, American State Debts, p. 564.
When a question of safety is involved, therefore, there must be some method of determining what the maximum debt burden should be for the governmental unit involved. This problem is basically a matter of determining ability to pay, and it encounters some of the same perplexing difficulties that arise when taxpaying ability is being measured.\textsuperscript{97}

The ability of a state to bear debt burdens will depend in the first instance upon some very general factors. The population and population density, the wealth, income, and resources of the state, the character of the state's economy (the degree of industrialization and urbanization), the state's tax revenues, and the economic characteristics of the region of the country in which the state is located will all have some influence upon the state's ability to bear debt.\textsuperscript{98} Other factors influencing ability are the less tangible factors, such as the political stability of the people and their representatives and their collective attitudes toward debt. The tax philosophy of a people as evidenced by tax and debt limitations is also a pertinent

\textsuperscript{97}Shultz and Harriss, \textit{op. cit.}, pp. 195-96.

issue. Some of these factors cannot be measured at all and others can be only approximated.

One method of measuring ability is to select certain factors which suggest ability and to combine them into an index number to try to measure debt-bearing ability. For example, an index designed by Edna Trull is based upon the following factors: Federal income tax returns, retail sales, the number of motor vehicles, per capita property values, savings deposits, and gasoline consumption.

Some other more specific measures of debt-bearing ability are ratios of debt to single series which represent at least roughly the wealth or income of the state. Some of these measures are: (1) the ratio of net debt to assessed valuation of taxable property; (2) the rate at which debt can be increased; (3) the safe per capita net debt loads; (4) the ratio of debt service to total expenses; and

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99 These factors and other tests that follow, of course, are the very same factors that investment bankers analyze in determining the risk involved before making bids on any issues. These factors are also related to those that the investor services use in assigning bond ratings—they represent a state's credit position. Supra, pp. 41-43.

100 Edna Trull, Resources and Debts of the Forty-Eight States (New York: Dun & Bradstreet, Inc., Municipal Service Department, 1937), pp. 91-105. See also Ratchford, American State Debts, pp. 528-33.
the ratio of revenues to proposed debt service requirements. These measures are somewhat arbitrary and crude indications of taxpaying and debt-bearing ability. The first of these ratios, the ratio of debt to assessed property values, has been used perhaps more widely than the other concepts to arrive at ability, but this measure is losing favor because of the instability of assessed valuations and because of the declining importance of property taxes on the state level.

The second idea above, that which stresses rates of increase rather than debt totals alone, takes cognizance of the fact that the timing of repayments is a more critical factor than just the total amount that will have to be repaid. The translation of all debts into a per capita base is beneficial if it makes the burden more comprehensible, but, of course, no fixed norm can be given that would be of any value. Any per capita debt figure will probably need to be revised frequently, but it may be useful for comparison with per capita revenue and per capita tax totals and for comparison with other states. A comparison of various per capita ratios from several states, especially those with

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better debt and financial histories, provides still more information for the establishment of standards for safe borrowing. 103

The weight of debt service in the total budget has been used as an indication of debt-bearing ability in the past. Chatters and Hillhouse, in speaking primarily of municipal debt, concluded that debt service should not exceed 25 per cent of the total annual budget. This debt service would include not only the interest requirements, but also a sum equal to 5 per cent of the principal. Retirement of 5 per cent of the principle every year would imply, of course, that the debt should not exceed twenty 104 years in its maturity feature. While it seems to be desirable for the state to weigh carefully such factors, it is doubtful that inflexible norms are valid for all circumstances. Too much rigidity is to be avoided because of its conflict with the nature of debt management.

The various traditional measures of safety mentioned above shed some light on a very important problem, but there are still other factors that need to be considered. Any judgment about the safety or suitability of borrowing depends to a large extent upon what assumptions have been made about economic conditions and about government's

103 Ibid. 104 Ibid.
responsibilities in each of these circumstances. These economic conditions may be secular or cyclical ones. A further characteristic that would have a great and a complicating influence on determining the proper policy to follow is whether the short and the long-term changes in economic conditions are real or illusionary. Real economic growth may or may not accompany a long-run inflationary trend. Cyclical changes can be real changes in economic activity or changes in national income resulting mainly from changing price levels.

Has economic growth been assumed or is secular stagnation the thesis? Does it appear that inflation is the long-run problem? Has it been assumed that severe cyclical declines in business activity are no longer a threat? Is one of the assumptions that depression is still likely and that states should engage in fiscal policy action? These different assumptions greatly affect the problem of whether a state should borrow and whether it can borrow with safety. If economic conditions can affect the question of safety and timeliness of borrowing, then the safe limit will change from time to time as economic conditions change. Therefore, there

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105 The theoretical base for fiscal policy seems to be shifting. Some of the important implications of a reexamination of the consumption function and its effect on fiscal policy are noted by Ross, "State-Local Fiscal Policy and Economic Growth," pp. 70-77.
can be no universal rule as to what constitutes safe state borrowing.

If real economic growth is predicted, the state may be justified in taking this into consideration in planning its borrowing. This real growth would tend to increase any safe limit upon which the state has previously settled. It would be prudent, however, to inquire whether the assumption of real growth has been tacitly made all along.

Growth in real terms may or may not be accompanied by long-run inflationary tendencies. What is the implication if long-term increases in price levels are assumed? How does the case of secular inflation affect the questions of safety or suitability of borrowing? A long-run inflationary trend not accompanied by real growth would still mean that the state's nominal revenues would increase, and, in the absence of escalator clauses in indenture provisions, the relative debt burden would decline. Secular inflation, of course, would normally be considered advantageous to debtors because it is assumed that their incomes will increase thereby making it easier for them to pay their debts. State governments are no different from other debtors in this respect--inflation will generally increase state revenues

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and make debt service less burdensome. If a state government expected that the nation's economy would experience continued long-term inflation, the logical thing to do might be to borrow to finance its major capital expenditures. Borrowing under long-term inflationary conditions may result in a saving to the state because improvements that are made possible by borrowing cost less than they would after several years of inflation. Savings in construction costs may more than offset interest costs on bond financing. If this reasoning is carried even further, the conclusion may also be reached that the state should borrow as much as it can, and perhaps more than it really needs for immediate capital improvements in order to avoid rising construction costs in the future. Planning based upon this assumption might


109 Chatters did not reach this conclusion in the article mentioned in the footnote above, but instead he emphasized that high interest rates made it important that greater attention be paid to the planning of construction programs. "... delete as well as defer. Greater selectivity is highly desirable. In other words, consider whether a project is necessary--is it necessary now--is it desirable or necessary enough so that it should be done immediately even at a high price?" Ibid., p. 17.

This conclusion is a conservative one that is probably the only responsible advice that could be given to all state
even call for longer term borrowing and maximum payment deferments in order to take advantage of rising prices and increasing state revenues. Just how far the individual state should go in this type of inflationary debt policy, of course, is a difficult question to which there apparently is no clear or complete answer at the present time.

The last conclusion above—which suggests that the safe limit to state borrowing may be raised—is based on the assumption of inflationary bias alone. But this need not be the case—the long-term upward trend of prices might be associated with economic growth in the real sense. If the inflationary bias assumption is combined with expectations of real growth, the conclusion about increases in ability to borrow and to service debt is reinforced. Borrowing by the individual state might be more appropriate under this combination of circumstances than in any other.

If it is decided that instead of economic growth there will be secular stagnation,—long-term equilibrium at less than full employment—the conservative approach would

and local governments faced with high interest rates and inflation. The suggestion that inflation would lead logically to the policy of premature borrowing and building would not be consistent with the objective on the aggregate level of preventing inflation. However, if the concern is only with a single state, the suggestion of premature borrowing is not so preposterous.
probably dictate a stable or even a reduced debt limit. On the other hand, the impact of the stagnation idea might well be an expanded role for state governments with continual large-scale spending and attendant borrowing if it is decided that it is proper for state governments to try to help to compensate for stagnation.

What are the consequences of debt management if fiscal authorities assume that the economy is still subject to short-run fluctuations in business activity? Short-run conventional fiscal policy would call for reduction in borrowing in advance of depression—cyclical declines in real income. The same conservative approach would call for reductions in borrowing in anticipation of national income declines resulting purely from falling prices. Both cyclical situations would reduce ability to pay debts. Again, however, the question of safety may not be paramount and many would question the traditional approach and consider borrowing appropriate if it aided in preventing depression and deflation. Furthermore, if the assumption about depression turned out to be correct and the state found itself in a depression, the state might find depression no longer a restraining influence on borrowing but rather a stimulant. Depression might make secondary the usual concern for safety in state borrowing and might bring about large-scale public works programs financed by borrowing. This case suggests
that the question of borrowing is not only a question of whether borrowing is safe—perhaps a more important question might be whether it is appropriate or necessary.

Still another possibility would result from a combination of the various short-run possibilities. The recession of 1957-1958 is an indication that depression and deflation are not necessarily synonymous—recession accompanied inflation at that time. What is the traditional policy if this alternative must also be faced? The traditional debt management reaction to this would probably be that the recession would eventually result in a matching deflationary tendency and that this would require restrained borrowing in anticipation of the recession-inflation. On the other hand, the same reasoning that was applied in the situation above might result in large-scale borrowing for two different reasons: (1) in order to avoid recession; and (2) if the recession comes with its inflation, to borrow in order to finance counter-cyclical policy as well as to realize savings in construction costs.

Finally, what if it were evident to everyone's satisfaction that there are to be no more depressions? The state would be relieved of a very great restraint in this situation. According to the traditional debt management approach, there would be no need to gear borrowing to the lower ability which would come during recession. On the other hand, the
assumption that there will be no recession would eliminate the need for short-run counter-cyclical borrowing, and it would make possible the planning of public works and associated borrowing on a capital budget basis strictly according to need. Even more important a result of this change might be its effect upon the financial market. The market is where the restraints resulting from the fear of depression are made effective.

The question of whether it is safe or appropriate for a state to borrow will depend, therefore, on a great many things and will go much further than ratios of debt measures to ability measures. Each period may have its own set of factors which indicate that borrowing is or is not appropriate or safe. Furthermore, it would not be fair to review the suitability or safety of borrowing in any past period of time except in the light of what the most acceptable economic thinking was at that time. The conclusions about what was safe or appropriate borrowing in the 1920's, therefore, may be different from conclusions in the 1930's and both may be different from conclusions applicable to the period since World War II.

Whatever criterion or criteria are finally settled upon as the test of whether or not the borrowing should proceed, it should again be emphasized that each particular project must have merit on the basis of being a worthy or
proper purpose for borrowing. Then, if it is also safe or appropriate for the state to borrow, the borrowing can proceed.

**Machinery for Debt Management**

Another basic problem involved in debt planning is that of providing efficient machinery for handling debt. The broadest aspects of this problem are related to the questions, considered elsewhere, about whether authorities should be used, whether bonds should be direct or indirect obligations, and whether debt should be serviced from a single or a dual source of funds or from many. Should borrowing be the responsibility of one state board or should it be in the hands of half a dozen or so agencies, authorities, commissions or boards? It does not necessarily follow that any one board could manage all of a state's borrowing more efficiently than could several agencies—the one board could be completely uninformed or inefficient. However, if it is assumed that a single board or a pair of state boards are using the same rules of debt management that the individual agencies are using, then single or dual board systems would probably be more effective because of their ability to control the debt structure and their more efficient use of personnel and facilities. It may be that a single board would be the most efficient system possible; however, it does not appear
that this is absolutely necessary. It may be more realistic to recognize that separate financing of highways (basically because of the benefit principle) has become deeply engrained in the American state governments. There would seem to be no reason why a system of dual boards—one for highway finance and another for other state finance—could not be made to work. The use of one or two major boards to handle all of a state's borrowing would help to eliminate much of the complexity and instability that is so objectionable in the market. Bond ratings under such a debt structure would normally be better and interest rates would tend to decline.

The debt management unit or units should probably be an integral part of the state government in the form of a board or administrative unit in the executive branch of the government. It is neither necessary nor desirable that debt management be divorced from the normal channels of government as it has been in agency or authority borrowing in recent years. Agencies, authorities, commissions—whatever they are called—appear to have become more and more independent and free of the regular checks and balances in state government. The result tends to be complexity and widely

110 The Louisiana Legislative Council study of states with Aaa ratings showed that several of these states made special provisions, including dual funds, for highways. Louisiana Legislative Research Study No. 9, pp. 16-32.
different debt management policies, for example, in the
timing of bond sales and in the indenture provisions used in
the issues.\textsuperscript{111}

The ideal state debt management unit would vary some­
what from state to state, depending upon existing state
governmental structures. It can be suggested, however, that
the debt management unit might have four important functions.
One important function would be to aid in the formulation of
a capital budget and to make recommendations about the need
and timeliness of borrowing to the legislature and the
governor. Recommendations should include advice on how bills
or constitutional amendments should be written to make pos­
sible better debt management. It does little good to have a
team of experts handling debt if authorizations prevent
sound management practices. Secondly, when authorization to
borrow has been provided, the actual process of borrowing
should be turned over to the debt management unit. A constant
study of market conditions, the economy, and developments in
the theories of public finance would put the management unit
in a position to borrow on the best terms possible. Funds
raised by borrowing could then be turned over to the regular
agencies of government for their distribution as provided in
the various authorizations.

\textsuperscript{111}Louisiana agency borrowing during the 1947-1959
period is a good example of this. \textit{Infra}, Chap. V, pp. 356-59.
A third function of any unit would be to retire debt and to pay interest as it comes due. This duty of the debt units would include supervision of any funds established to retire debt serially, by means of sinking fund accumulations or by use of the call feature. A final important function of the administrative machinery would be to engage in debt reporting, discussed below.

The discussion here serves only to indicate a general approach that can lead to more efficient management of a state debt structure. There are probably a number of specific administrative plans that can be made to work. The administrative machinery found in the American states that have efficient systems is not exactly the same. The important thing in getting any plan to work is an understanding among the different state governmental units of the objectives and techniques of good debt management. This type of understanding will go a long way toward solving many debt management problems, even under the multiple unit system of debt management that exists today in many states. However, redesign of a complex system may be worthwhile. The main objectives that should guide such redesign of debt

112 infra, p. 139.

113 Louisiana Legislative Research Study No. 9, pp. 16-32.
management machinery and a debt structure should be clarity and simplicity.

**Planning Indenture Provisions**

The careful examination of alternative indenture provisions can profitably be included in any debt planning. Indenture provisions usually include considerations about the duration or life of the bonds, their form, and whether they are general, limited, or revenue obligations.

The first indenture provision should concern the maturity of the loan. Government loans can fall into several different categories. First, there are loans which are called "perpetual loans." It is possible for governments to issue bonds that have no definite maturities. These have been used often by European governments, but they have not been used by American governments. Of course, American governments have devised their own types of bonds, which are actually perpetual in nature, although they are not recognized as such. On the state level, a debt is perpetual for all practical purposes when no adequate provisions have been made for its retirement and it has to be refunded. The result of this type of borrowing is that the margin of credit that remains and that can be used to meet any crisis or need is reduced. It is also possible that the creation of permanent debt will tend to weaken the future credit of the
unit. Also, permanent debts will require interest payments and will generally entail great interest expense.

The second type of government loan is the long-term loan. Nominal long-term debt often develops into the type of perpetual debt described above. This effect would occur where the life of an improvement is considered to be the proper maturity term. In this case, the issue would be retired at the same time that the improvement must be replaced, and the replacement of the improvement would likely be financed by more borrowing. This procedure is sometimes defended on the grounds that improvements should be paid for during the whole period when they are in use. Generally, however, the length of life of an improvement should not be considered anything but the maximum permissible term and should not be considered the proper life of an issue. This rule has often been violated in the past. The life of the bonds should be as short as possible under

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114 Shultz and Harriss, op. cit., pp. 589-90.
116 One authority on the subject of highway finance remarked that if the life of highway bonds is examined, one would probably conclude that some of the issuers of highway bonds must have expected the highways to last as long as the Roman roads. Edna Trull, Borrowing for Highways (New York: Dun & Bradstreet, Inc., Municipal Service Department, 1937), pp. 50-56.
the prevailing market conditions and conditions of ability. Other things being equal (including economic conditions), the shorter the term involved, the less the cost of the borrowing. The sooner debt is repaid, the sooner the state frees itself to better meet subsequent emergencies or needs. 117

It is very likely that the debt activities of a state will be more concerned with the long-term loan than with any other variety. However, two other varieties of government loans are the intermediate loan and the short-term loan. The intermediate loan is usually thought of as consisting of borrowing which matures in periods ranging from one year to five years. This type of borrowing has only limited application on the state level. Intermediate loans may be used

117 Chatters and Hillhouse, op. cit., p. 354; Ratchford, American State Debts, pp. 591-92; and Neff, op. cit., p. 146. It has been suggested that an additional absolute limit be imposed on the life of bonds. Ratchford states that bonds should never run for more than twenty-five years, regardless of their purpose. While it is obvious that shorter maturities will save on costs (except perhaps in case of an inflationary secular trend), there seems to be little justification for the insertion of such inflexibility into a debt structure. Emphasis should be placed on flexibility whenever good management is the goal. It is not inconceivable that certain circumstances could make longer terms more appropriate. Some port improvements, for example, may be expected to have a useful life of more than twenty-five years. Also, if there is a stated or tacit acceptance of a long-term inflationary trend, the length of bond terms may perhaps be extended to take advantage of inflated state revenues.
when a debt has to be refunded, but at the same time it is desirable to eliminate it from the structure as soon as possible. Another circumstance where it may be appropriate to make an intermediate loan would be where it appears that a major refunding of a certain type of debt, say highway debt, (or even a revision of the entire debt structure) is due in a few years. It is also possible that the intermediate term loan may offer such attractive interest rates from the point of view of the borrower that it is advisable for the state to take advantage of it. 118

Short-term borrowing by state governments takes the form of notes or certificates sold to banks or warrants paid out to those selling goods and services to the state. These short-term instruments were, in the past, often called "floating debt." This type of borrowing is somewhat different in its application from those just mentioned. It should properly be used only to smooth out discrepancies between expenditures and receipts, 119 and even in this use it should be minimized by better budgeting. 120

118 Shultz and Harriss, op. cit., p. 592.
119 Ibid., pp. 592-93.
120 Hillhouse, op. cit., p. 477.
Methods of Debt Retirement

The problem of debt retirement is closely related to the question of the life of bonds. In line with the conclusions reached about short maturities being more desirable, it is not surprising that one of the first recommendations about the method of debt retirement is that retirement should normally begin within the same fiscal year, if possible, or at least in the year following the issue of the bonds. Payments should also be mandatory and on as regular a basis as possible. Serial retirement is usually preferred, but sinking fund retirement can be acceptable. Debt retirement requires that plans be carefully laid concerning the source of the revenues to be used for this purpose. It has been recommended that the most productive revenue source be dedicated for debt service. Judging from the criterion used in rating bonds, however, it might be more appropriate if all revenues were dedicated for debt service. Total dedication would make full faith and credit obligations more meaningful. All revenues could be paid into the single or dual funds that were described above. The first charge upon these funds would be for the debt service requirements

121 Chatters and Hillhouse, op. cit., p. 355.

122 The whole question of dedicated revenues was the subject of a special study in the Projet in 1954. The recommendation drawn from this study was that dedication of revenues to the service of individual bond issues be abolished. Projet. Vol. I, Part 2, pp. 1175-1220 and Vol. II, pp. 220-24.
of the state's full faith and credit obligations. These changes would probably increase tremendously the ratio of revenues to debt service, improving bond ratings and lowering interest costs. If only full faith and credit—general obligations—were issued, there would then be no subsidiary liens, and all debt would be paid on an equal or parity basis.

It is difficult to see how a carefully organized plan for debt payment based on full utilization of all of the resources of the state could result in anything but very high ratings in the bond markets. It is unfortunate that the dedication of revenues for debt retirement (with resulting inefficiency and added expense of interest costs) has been practiced in several states because of institutional deficiencies in policies guiding bond financing. This is one area in the planning of debt structures that is extremely promising.

Kinds of Bonds to Issue

The kind or type of bond will depend upon three major characteristics. First, how is the issue to be repaid,

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123 These changes could also obviously simplify the debt structure and the machinery for administration of the debt.

124 Ross and Sliger, op. cit., pp. 20-23.
serially or by sinking fund accumulations? A second characteristic is the security feature—whether the bonds are general obligations or revenue bonds. Finally, the issue can be either callable or noncallable.

Mention has already been made of one of the types of bonds which can be issued; this type is the serial bond. The serial bond is one in which part of the issue is retired every year until the issue is completely retired. Serials can be of several subspecies. The "straight serial" is an issue that has approximately equal annual payments for the retirement of principal. If an issue of $1,000,000 is involved, it might be paid at the rate of $50,000 for each of twenty years. This payment schedule would eliminate the principal and, since the interest charges would be based on the unpaid balance, the annual amount of interest due would decline over the years. Thus, in the case of straight serials, the total annual payments would decline steadily from a maximum amount in the first year.

A second major type of serial bond issue is the "serial annuity." In this case, the characteristic of the

125 Chatters and Hillhouse, op. cit., pp. 19-21.
126 Ibid., and Shultz and Harriss, op. cit., p. 598.
issue is equality of total annual payments. This equality is accomplished by having the serial maturities of the principal increase steadily from the first year onward. At the same time, the amount of interest paid would be declining because the unpaid balance is declining. These divergent tendencies can be calculated so that the total payments are approximately the same over the life of the issue. 128

A third type of serial bond is the "deferred serial." This type of issue is one in which the initial maturity installment is deferred. For example, if an issue is sold in 1958 but its first serial block does not mature until 1963, it would be a deferred serial issue. A final type of serial is the "irregular serial" which does not attempt to equate either the annual principal payment or the total annual payment. This type of issue does not have any consistent pattern. 129 These irregular types may be somewhat misleading because they can give the illusion that provisions have been made for serial retirement while in fact there may not be adequate provisions for paying the debt. 130

128 Ibid.
129 Ibid., p. 21.
Of the various types of serial bonds, the straight serial is perhaps best known and is also the most preferable under normal circumstances.\textsuperscript{131} The reason for the preference is that it causes the heavier burden of the debt to be carried during the first years of the issue. Heavier burdens in the years immediately after the issue are generally desirable because they automatically create \ldots a margin for increasing maintenance costs, or for new capital improvements."\textsuperscript{132} Of course, the bearing of heavy burdens soon after issue will also have the effect of reducing the average life of the bonds and will thereby lower the total interest cost of the issue.\textsuperscript{133}

The serial annuity tends to be more appropriate if the market conditions at the time of issue favor long-term borrowing. Since the average life of the bonds is longer, or, to put it differently, since the serial maturities paid increase over the years, the serial annuity would represent a movement toward longer term borrowing. If the circumstance should be reversed (that is, if long-term maturities carry higher interest rates than the short-term obligations),

\textsuperscript{131}It should not, however, be considered a panacea for all debt problems. Hillhouse, \textit{op. cit.}, pp. 260-61, 444.
\textsuperscript{132}Chatters and Hillhouse, \textit{op. cit.}, p. 22.
\textsuperscript{133}\textit{Ibid.}; and Ratchford, \textit{American State Debts}, p. 567.
it would then be appropriate to use straightserials instead of serial annuities.\textsuperscript{134}

A further necessary consideration in selecting the maturity characteristic of an issue is a study of the existing debt structure. If any peculiar maturities have so dominated bond financing in the past to the extent that the general goal of having declining total annual payments is impaired, a special type of serial--deferred or perhaps even irregular--may be appropriate. The chances are, however,\textsuperscript{135} that these types will rarely be used.

The serial bond is not, of course, the only type of bond that can be issued. Instead of being either of the three varieties of serial bonds described above, an issue could consist of sinking fund bonds. This feature of a bond issue is closely related to the method of retirement. In the case of sinking fund bonds, a fund is established and annual contributions are made into the fund so that upon maturity there will be sufficient funds accumulated to pay off the debt. If this type of bond is issued, the most advisable plan is for mandatory levies to be made, and it is sometimes considered advisable that these levies be

\textsuperscript{134} Chatters and Hillhouse, \textit{op. cit.}, pp. 19-23.

\textsuperscript{135} Ibid.
incorporated into the bond contract. Perhaps the greatest disadvantage in using the sinking fund is that the fund must constantly be guarded against raids for other purposes. The sinking fund issue can be made to work. The most important consideration is that definite provisions be made for repayment of debt so it will not have to be refunded and will not become a perpetual debt. 136

Another major decision which must be made in determining the type of bonds to issue is whether the bonds should be general, limited, or revenue bonds. 137 General obligations are backed by the full faith and credit of the state whereas revenue bonds are payable from more specific resources, usually, but not always, from revenues derived in the operation of certain enterprises or agencies. Revenue obligations are usually not backed by the state's full faith and credit. A third category of bonds would be the limited or special obligations, also frequently referred to as revenue bonds, which are state obligations and payable from state revenues, but they are not backed by the full faith and credit alone or even primarily. A final category of

136Ibid., p. 355; and Shultz and Harriss, op. cit., pp. 596-98.

137Chatters and Hillhouse, op. cit., p. 355.
bonds would be direct obligations—those that are issued in the state's own name.

The definitions given previously are not universally accepted and caution must be exercised when the terms are

There is a great deal of confusion in the literature about the meaning of these various terms. "General obligation bonds" are those "Bonds for whose payment the full faith and credit of the municipality has been pledged. More commonly, but not necessarily, general obligation bonds are payable from ad valorem property taxes and other general revenues." *Ibid.*, p. 495.

The reference here to municipalities does not materially affect the applicability of this definition to state obligations.

Even the phrase "full faith and credit" poses certain problems. The term has been used to mean not only that the state intends payment and pledges all of its credit, but also that the full faith and credit obligation has a first claim on all ad valorem tax revenues. The full faith and credit obligation apparently is also frequently expected to be associated with an unlimited ad valorem tax. It is also sometimes interpreted that full faith and credit obligations are a first claim on all revenues.

The term "direct" debt is sometimes used almost synonymously with the term "general obligations" because it appears that general obligations will generally be direct if direct debt is defined as "Debt which a government has incurred in its own name ..." *Ibid.*, p. 494. There are, however, some exceptions to this. In Louisiana, the full faith and credit of the State has been pledged to some agency issues which are indirect debts. *Infra*, Chap. IV, p. 231.

Indirect debt, on the assumption that it is the opposite of direct debt, would be debt which is not incurred under the name of the government itself, but under some other name.

There is confusion surrounding the terms "limited obligations," "revenue bonds," and "indirect debt." The term "limited" apparently is used primarily to differentiate from "general" obligations or full faith and credit obligations so the
found in some sources. For example, Moody's discusses Louisiana bonds under two headings: (1) General and limited obligations, and (2) Bonds of the agencies of the state. In this usage, it would seem that limited obligations would still

connotation here seems to be nothing more than that the full faith and credit of the state is not pledged. In this sense, revenue bonds normally would be considered limited obligations because the full faith and credit of the state is seldom involved. The terms are undoubtedly closely related. Ratchford, for example, in the index of his classic book, under limited obligations simply refers the reader to revenue bonds. Ratchford defines "revenue bonds" as "... all obligations of political units or their agencies, institutions, or departments which do not bear the full faith and credit of any political unit but which are payable from certain designated sources of revenue, whether such sources be tax revenues, fees, or earnings of proprietary enterprise." Ratchford, American State Debts, p. 497.

Another similar but narrower definition is that the revenue bond is "An obligation payable solely out of the revenues derived from a particular utility or enterprise and not a general obligation..." Chatters and Hillhouse, op. cit., p. 499.

The Financial Handbook is somewhat different in that it includes under the term "revenue bonds" those obligations "... serviced from the revenues of publicly owned facilities rather than taxes." Financial Handbook, p. 300.

These definitions would seem to lead to the conclusion that revenue bonds are limited obligations for all practical purposes since there is usually no unlimited pledge involved. But, limited obligations and revenue bonds would not necessarily be indirect debts because they could be issued in the state's own name. Of course, it would be more common for the revenue bond to be issued by some agency so that they would frequently not only be limited obligations but also indirect ones. In view of the difficulties posed by these various interpretations, it appears desirable that these terms be used in the most general sense and that when a certain meaning is involved it will have to be clearly explained.
be considered direct debt so that the breakdown in this case is basically one of directness and indirectness. The publications of the State of Louisiana have not always been consistent in their usage of these various terms.

It must be decided which of these types of obligations should be issued. Should the state use its own name and make the bond a direct obligation, or should the liability be incurred through some agency, in which case it would be an indirect obligation? As a basic principle, it would probably be most desirable for the state to use its own name and its full faith and credit.

It would appear to be unfortunate that the full faith and credit pledges of state governments have been given limited and specialized meanings. The ad valorem tax pledge, for example, is of limited value, and if this meaning is the only one attached to the bonds, their marketability might logically be impaired. There is little chance that the meaning of the full faith and credit pledge will ever be uniform; however, the state can attach its own meaning to the pledge and make it as narrow or as broad as it wishes. It would probably be wiser to use the broadest meaning of this term. This procedure would be more consistent with the

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use of the word "full" in the full faith and credit pledge. It would also be more consistent with the idea of a credit standing. The state's advantage in the money market is its normally high credit standing. The main advantage which the state has that makes its credit so strong is that the state has a wide assortment of taxes upon which it can draw to make good its word. As in corporation finance, the unit with the highest credit standing is the one which can use a general pledge most efficiently. Of course, use of the state's full faith and credit pledge in its broadest sense would have to be accompanied by effective debt reporting.

(When the question is whether the state should borrow directly or through some authority, another analogy to corporation finance is suggested. It would be a rare case when the large corporation could profit by issuing bonds through a smaller and lesser known subsidiary that has fewer assets and less attractive prospects for raising more.) If a state makes effective use of its full faith and credit and does not give it as an afterthought and in a meaningless fashion, the full faith and credit guarantee can have the weight of a sovereign government pledging all of its various resources and revenues first and foremost to the honoring of its obligations. The wise use of general, direct, and full faith and credit obligations can make state borrowing easier and cheaper.
The general conclusion drawn above cannot always be applied in the American states today. There are certain institutional factors which actually force states to issue less effective and more expensive indirect or revenue bonds. This unfortunate condition is largely the result of the debt restrictions which were adopted in most states many years ago. These restrictions, both statutory and constitutional, limit the amount of direct or general obligations that can be issued. The courts have contributed to the growth of revenue bond financing by ruling that agency funds are special funds and that debts payable from these funds are not really state debts. The states thus have frequently been driven to the use of this subterfuge by well intentioned but very inflexible laws. This ability of revenue bonds to circumvent debt limitations when borrowing is imperative is the only important advantage for this type of borrowing which is recognized by Ratchford.\textsuperscript{140} Chatters and Hillhouse do not approve of revenue issues for this purpose, but they do see some advantage in using revenue bonds where credit standings are very poor.\textsuperscript{141} This conclusion, however, was


\textsuperscript{141} Chatters and Hillhouse, \textit{op. cit.}, pp. 244-47.
oriented to municipalities and other local governments, and it is doubtful or at least rare for this type of credit standing to be associated with a modern American state.

Revenue bonds are subject to serious criticisms on financial grounds. The contention that revenue bonds help to distribute costs according to the benefit principle has not been given much weight. Ratchford points out that the benefit theory could be implemented by means of general obligations supported by the same fees, charges, and tolls that support some of the revenue bonds. Furthermore, justification of revenue financing because of compatibility to the benefit theory assumes that the benefit principle is the most equitable method of distributing costs. There is no widespread agreement to this effect. Another fallacy in the argument that revenue bonds assure the application of the benefit principle is that most revenue bonds in state financing are serviced by special taxes or state appropriations that often have no relation to the services received by the contributors. The financial advantages of revenue bonds thus are quite limited.142

Some of the more direct disadvantages of revenue obligations are as follows: (1) They are generally more

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142Ratchford, American State Debts, pp. 512-13; and Shultz and Harriss, op. cit., p. 601.
expensive than full faith and credit bonds. Greater expense is the rule because bidders must investigate the bonds more carefully before making bids and then the successful bidder must exert greater effort to dispose of these bonds, which (other things being equal) are less marketable than general obligations. (2) They are usually more complex than full faith and credit obligations. This greater complexity associated with revenue issues normally will be reflected in bond ratings as well as in yields. (3) Revenue bonds are no match for general obligations in most instances because they are protected by limited assets whereas general obligations can generally draw upon much greater protective assets. Usually, of course, the revenue bond is secured only by operating revenues while on the other hand the general obligation may be backed by all of the assets plus the taxing power of the state. (4) Revenue bonds are generally not subject to any of the traditional controls imposed on borrowing and this is inconsistent if there is a logical basis for control. The use of the general, full faith and credit, issue thus is normally superior to the use of revenue and

limited bond issues. It can be concluded that state bonds should generally be the full faith and credit type.

Another important feature of a bond as well as of a debt structure concerns the call option. The inclusion of a call feature in a particular issue may or may not be desirable depending upon the price that is charged for the privilege. However, there are at least four general situations in which it may be desirable to include the call provision in an issue if the cost of the option is not considered prohibitive: (1) When interest rates are relatively high and they are expected to decline; (2) When revenue bonds are being issued and ultraconservative revenue estimates often associated with this type of issue make it likely that funds will be available for retiring all or part of the debt prior to its maturity; (3) When the state's offerings are unpopular because of flaws in the state's debt structure and management and something will definitely be done to correct these flaws; and (4) When the market is unresponsive to a state's issues but without good cause.

The ability to reserve the call option will differ somewhat under the various conditions outlined above. It will normally be more expensive and less feasible to issue callable bonds when market conditions have driven up bond yields because this circumstance would be typical of a market where the state may have trouble even finding all of the funds it may need. The price that is associated with the call feature may thus tend to be prohibitive in cases where callable bonds appear to be desirable.

The call feature is equally desirable and probably much more feasible in the next three cases. A state that recognizes flaws in its debt structure and plans remedial action should use either short or intermediate term borrowing or else long-term borrowing that can be retired—by call—prior to maturity. If the state has significantly improved its debt structure and this fact is overlooked or ignored, the state should again refrain from creating noncallable long-term debt until debt reporting can correct the situation.

The situations above are those in which the inclusion of the call feature among the bond provisions would seem to be appropriate. A related problem deals with when the feature, if it has been included, should be exercised. If interest rates are favorable and other conditions are favorable, callable bonds of the following descriptions should be called: (1) old issues that need to be
consolidated into a simpler and more effective debt structure; (2) term bonds, in order to convert them into serials or otherwise to provide for their retirement; (3) bonds that were sold at unfavorable rates because of structural or administrative handicaps which no longer exist; (4) bonds that were sold at unfavorable rates because of inadequate debt reporting; and (5) bonds that were sold in such unfavorable market conditions that a saving can be realized by calling and refunding them.

Even with these advantages of the call feature, it must not, of course, be concluded that all bonds should necessarily be callable. The call feature is not so desirable from the point of view of the investor, and the state must expect to pay a slightly higher rate to enjoy the privilege. It has been recommended that the borrowing unit ask for alternative bids on a callable and noncallable

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145 Chatters and Hillhouse, op. cit., pp. 295-96; Shultz and Harriss, op. cit., p. 590; and Crossley, loc. cit.

146 The fact that the cost of the call option may be wholly or partly in the form of a premium, which is paid when and only if the option is exercised, is a complicating factor. It is not clear whether the contingent cost completely covers the expense of making a more complicated analysis before the bids are made. If the entire cost is covered, then the state would apparently obtain the call option at no cost whatsoever although there would be a cost if and when the option is exercised.
basis in order that the cost of the privilege can be ascertained. This technique probably is desirable; however, it may, because of its complexity, increase somewhat the costs of planning and computing bids and thus eventually the costs of borrowing. If the consensus in the market is such that the cost of the call privilege appears to be exorbitant, then it would be better not to include it.

The three major elements determining the character or type of bonds described above are: the serial or sinking fund method of retirement; the use of the state's full faith and credit pledge as opposed to the use of specific revenue pledges to secure bond issues; and, the callable or noncallable nature of issues. Of course, bond issues can consist of any combination of the three elements and obviously no one combination can once and for all be considered superior in all circumstances. Fiscal officials should carefully decide what conditions will require the use of each of the specific provisions. Then, it should be easier to apply these criteria to any particular issue.

147 Chatters and Hillhouse, op. cit., pp. 295-99, 356; and Shultz and Harriss, op. cit., p. 590.
148 Browne, loc. cit.
149 Chatters and Hillhouse, op. cit., p. 356.
III. MANAGING THE ISSUANCE OF BONDS

After the state's borrowing plan has been reviewed and it is decided that an issue is necessary, proper, and safe, fiscal authorities are then concerned with the actual process of issuing bonds. The problems of issuing bonds will depend upon some of the institutional factors that have already been recognized. Since the managing of an issue of bonds will depend so much upon such circumstances as the legal and financial practices of the time, the principles for managing the flotation of bonds obviously cannot be detailed ones. Circumstances dictate the best course of action not only where the planning of a debt is concerned, but especially when the debt is being incurred.

Authorization of Bond Issues

In a case where the state is free of any limitation on debt creation, the state legislature usually is completely responsible for the authorization of any debt. The legislature can, in this case, authorize either direct (full faith and credit) obligations or it may choose to operate indirectly through some agency to issue revenue bonds. The first choice would usually be preferable for the reasons previously given.

But, either a statutory or a constitutional limitation may prohibit the creation of debt; it may prohibit
direct or full faith and credit (general) obligations to be issued in excess of a certain amount except under certain circumstances. These exceptional circumstances generally include wars or insurrections and other unlikely events that might require the utilization of the state's credit. In the event that the purpose of the borrowing in question is not in this special permissible category, the constitutional or statutory limitation must be circumvented if borrowing is to proceed. If the limitation is a statutory one, the legislature can free itself without much ado. However, if the limitation is a constitutional one, it may be very difficult to get the issue authorized. One approach is to try to get the constitutional limitation cancelled. States have not done this to any appreciable extent. A much more popular approach is to amend the constitution to permit a particular issue.

It is extremely important, whether debt authorization is constitutional or statutory, that authorizations be framed or written in such a manner that they are consistent with principles of good debt management. Basically, this means that authorizations should not run counter to the

150 Oklahoma voters, for example, rejected every amendment proposing debt creation during the period from 1907 to 1941. Simpson, op. cit., p. 334.
objectives of simplifying debt structures while increasing the protection afforded to bondholders. If these objectives are to be achieved, it is imperative that many decisions about the nature of the authorized bonds be left to debt administrators. Flexibility through lack of detail, therefore, should be one of the characteristics of a good debt authorization. Another important characteristic of a good authorization is the generous use of phrases that will provide assurance to bondholders and to those who influence them.

The state has still another method of borrowing even where there is a constitutional debt limitation—through agencies or authorities. Use of this method is possible when there is an appropriate agency and sufficient precedent in the courts to the effect that borrowing by this agency does not constitute state borrowing. Courts have frequently ruled that the bonds issued by state agencies are paid from "special funds" (the "special fund doctrine") and that obligations payable from these funds are not really state obligations. If they are not state obligations, of course, they are not subject to the debt limitation provision.  

Whatever particular circumstances surround the authorization of a bond issue, required legal steps must be followed meticulously whether they concern the procedure for getting the constitution amended or whether they outline the steps necessary for a state agency to sell bonds. Carelessness at this point can cause the whole procedure to be repeated. Any neglect of the law will also give opponents of the issue opportunities to delay or defeat the issue. These flaws may create uncertainty in the minds of investment bankers and investors and cause the bonds not to be well received. Dealers are quite conscious of these dangers and usually suggest that issuing units consult bond attorneys and often insist on unqualified legal opinions regarding the legality and regularity of the issue. If the state has not secured such an opinion, the bids submitted may be subject to such clearance.

Fitting the Debt Instrument to the Circumstances

The variables in a debt instrument have been mentioned in connection with the general planning of the debt structure. The basic plan should contain a careful outline of

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152 Chatters and Hillhouse, op. cit., p. 15.
153 Fundamentals of Investment Banking, p. 359; and Browne, op. cit., p. 37.
the general conditions under which the alternative features should be employed. If this recommended procedure has been followed, the problem at this point is to observe conditions present in the bond market and in the state's debt structure and to make appropriate choices as to the form of the instrument. This description, however, makes the problem look too simple. It is at this stage that the decision is made between a serial bond and a sinking fund issue, between a full faith and credit or a revenue issue, and between a callable or noncallable issue. If there is sometimes a difficulty in implementing the most appropriate plans because of rigidity imposed by statutes authorizing the bonds (or by constitutional provisions in some states), then the responsible officials should use whatever flexibility they possess to fit debt instruments to the market conditions and to all of the institutions that confront them.  

The term of the new issue should be consistent with the life expectancy of the improvement with which it is associated, and it generally should mature in an even shorter time if this is possible. Any decision about the maturity schedule should be influenced somewhat also by the desire to have the future debt load declining steadily to make way for

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\[154\] Chatters and Hillhouse, op. cit., p. 17.
new borrowing. It may be important that maturity dates be planned to coincide with revenue collections in order that there will be a minimum of time during which funds remain idle. Another consideration is that savings can be achieved in the amount of interest paid by having the first serial maturity due within less than a year of the date of issue. When this is done, the life of the bond issue will be shortened by six months or more, and the interest saved is at the given rate on the whole principal.\textsuperscript{155}

Conventional Provisions in Bond Contracts

The provisions in bond contracts are important because of their impact upon the debt structure, but they are also important because they directly influence the marketability of an issue. This point might seem to be a superficial consideration, but financial institutions and individual buyers of municipals are particular in their requirements, and failure to take into account their desires, even whims, may result in a narrower market, possibly increasing the interest charges that will have to be paid. Some of the provisions that are considered conventional would concern the following details: (1) the date of issue,

\textsuperscript{155}Ibid., pp. 23-24.
(2) denominations of the bonds, (3) interest due dates, (4) places of payment, and (5) maturities.

The date of sale is an important matter because unless bonds are dated very soon after the date of sale, the investor will have a problem of paying back interest. On the other hand, if the bonds are dated ahead of the sale date, the dealer is placed in a position of having to speculate on what will happen in the future. Finally, the bond is really not a legal instrument until the day it is dated, and any opinions by attorneys are qualified until that time.

A second common provision in bond indentures concerns the denomination of bonds. The most acceptable denomination for bonds is $1,000. Institutional investors and large individual buyers favor this size bond and sometimes even larger ones because larger bonds require less bookkeeping and coupon clipping and less storage space than would several smaller denominations of bonds. Odd amounts are not popular even if they are greater than $1,000. If an odd amount of bonds is issued, the odd bond or bonds should be

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156 *Ibid.*, pp. 27-29. The importance of these provisions is evident in the treatment given to them in Moody's. Normally, each one of these details is given for every issue described in the manual. Moody's, 1959, pp. 672-77.

part of the first serial maturity if the issue is a serial one.\footnote{158} This procedure will serve to simplify the accounting and reporting on the issue. These preferences about the denominations are rational, and the state should not hesitate to provide the investors what they want.

Investors are also inclined to prefer semiannual interest dates over a single annual payment. After it has been decided that interest payments will be on a semiannual basis, the next question involves a determination of when these two pay dates will come. If the date of the issue has been decided on the basis of tax receipts, then a date six months later will usually be satisfactory as the first interest due date.\footnote{159}

A third important conventional provision concerns the place of payment. The place selected for the payment of principal and interest can be the deciding factor for some investors. They will usually demand that payment be made in a convenient and leading financial center. The thoughtful fiscal authority will provide for payment in Chicago, New York, and one or more of the largest cities within the state issuing the bonds.\footnote{160}

\footnote{158}{Ibid., p. 28; Fundamentals of Investment Banking, pp. 353-54; and Browne, \textit{op. cit.}, p. 38.}
\footnote{159}{Chatters and Hillhouse, \textit{op. cit.}, p. 28.}
\footnote{160}{Ibid., pp. 28-29; and Browne, \textit{loc. cit.}.}
Still another convenience which is often favored by bond dealers is the scheduling of serial maturities in conveniently sized blocks. Dealers prefer annual maturities that come in blocks of five to twenty-five or more bonds. Of course, the size of annual maturities is seldom the problem in state finance that it is for local governments. Dealers not only find large blocks easier to handle but also more attractive to large investors.

Timing the Issue

Proper timing in the issuance of bonds means that borrowing should take place, insofar as it is possible, when interest rates are favorable for the state. One authority has described it simply as picking the proper spots. This description gives some insight into the difficulty involved, but how does one pick these spots? What are the chances of being correct? How important is it to find the right time? How often do these opportune times present themselves?

Timing would not be so important or so promising if there were not significant changes in interest rates.

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161 Chatters and Hillhouse, op. cit., p. 29; and Browne, loc. cit.

The right times or spots should be picked on the basis of knowledge. Officials must be familiar with the literature available in the field, not only as it applies to municipals in general, but also as to how the outstanding bonds of the state are selling and how recent offerings have been received. Attention must also be given to the many factors that can influence bond prices. Among the more important of these are the tax exempt nature of the obligation, the maturity terms, the quality of the obligation, salesmanship, and the innumerable other factors which influence the demand and the supply of these securities.

Many of the factors which influence bond prices are subject to rapid changes. Furthermore, knowledge about these factors is very imperfect. The probability that the timing of particular issues will be exactly right, therefore, is not great. Over a long period, though, careful estimates of market conditions—the variables that influence bond prices—should prove to be superior to chance placement.

Timing would not be so important or promising if there were not significant changes in interest rates. The importance of timing in bond sales can be appreciated from a

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\(^{163}\)See Chatters and Hillhouse, \textit{op. cit.}, p. 33, for a list of this material.

\(^{164}\)Ragsdale, \textit{loc. cit.}
review of the range of yields in recent years. The current yields of Aaa state and local bonds during the months from February through December of 1958 ranged from 2.72 in February to a low of 2.69 in May and then increased to a high of 3.28 in September. For the 1957 calendar year, the low was 2.79 in February and the high reached 3.43 in September.

There are, of course, other fluctuations besides seasonal ones, but these highs and lows suggest that there may be a significant seasonal pattern to bond yields. If there is a seasonal pattern to these yields, one technique that might be of some value in timing issues would be to use a seasonal index such as the one shown in footnote

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167 Other possible fluctuations are cyclical, secular, and erratic ones.
The recognition and use of a seasonal index such as this would be only a small part of the over-all knowledge that good timing requires, and it is certainly not an infallible method of anticipating market conditions. With these important reservations, it is apparent that interest rates are normally lower in the spring and early summer and higher

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This index was constructed by centering 12-month moving averages. The monthly yields used in this computation date from November, 1954 to March, 1959 inclusive.

The fact that local issues are included should not invalidate the findings since it is logical to expect that state and local bonds would be subject to the same forces because they are traded together. The Baa rated bonds probably typify all bonds as far as any seasonal pattern is concerned—there is a very close correlation between the interest paid on Baa bonds and that paid on, say, Aaa bonds. (Supra, p. 44). Finally, this index is based on the yields
in the fall and winter. If this is the case, and the index in footnote 168 is offered as evidence, then it is obvious that state bond financing (other things being equal) should be timed to take place in the spring months—preferably in April. A seasonal index can also be applied more specifically of outstanding bonds. But, the yields paid on new issues are very close to the yields paid on outstanding bonds. They tend to be slightly higher because new issues presumably represent a more risky investment than tested bonds. The point, however, is that yields which must be offered on new issues will approximate current yields on similar outstanding securities.

The reasons for this apparent seasonal pattern are neither clear nor simple. Probably the most important cause is the same factor which tends to influence all interest rates: the normal increase in the demand for funds which corresponds with the rise in business activity in the late months of the year. The increase in the demand for money and the availability of investment opportunities elsewhere in the economy evidently cause the demand for bonds to decline, thereby lowering bond prices and raising bond yields. This tendency is most apparent in November and December, before and during the holiday season.

The explanation for the relatively high August and September yields may rest on another institutional factor. Yields in these months seemingly are influenced by the apparent practice of financial intermediaries of taking vacations as well as by their apparent tendency to slow the pace of their activity in general at these times.

Another factor may be that the seasonal pattern is partially self-generating. That is, the sale of bonds in the early months fixes the interest and principal at intervals of six months. Thus interest and principal payments are being paid to the same people who make the demand for the bonds. This factor would tend to explain the drop in yields in October which follows the most active month of April by half a year. It would be expected that these individuals and institutions would normally tend to return a great portion of these funds to the same market. This practice would tend to strengthen the demand and drive up prices at regular intervals.
in estimating yields for future months when historical rates are available. For example, if the seasonal index for January (based on the mean) is about normal (100) and the yields of Baa bonds in that month averaged 4.0 per cent, then the average April yields could be expected to be about 3.89 per cent, and the September yields would be around 4.16 per cent. These estimates are based on the fact that April yields average 97.2 per cent of normal and the September rates, 104 per cent of normal. These estimates are based on the assumption that the seasonal pattern will not change. Changes in the trend and cyclical patterns, of course, may also upset these estimates, and any irregular fluctuation will also influence yields. These other fluctuations would require just as thorough a review as would the seasonal pattern in the estimation of future yields and in the timing of bond offerings.

Timing, especially that based on the use of a seasonal index, depends upon whether or not borrowing can be postponed for several months without incurring other costs which might be prohibitive. An example would be cost incurred as a result of uncertainties in the letting of construction contracts. Proper planning will thus be the determining factor in timing a bond sale. If the issue is planned well

169 The change between April and September would be even greater if the index based on the median were considered more representative.
enough in advance of the time when the funds will be actually required, the state will be better prepared to take advantage of the difference in interest rates that a few months more or less can make. Selling bonds earlier than the funds will be used entails a cost that must be calculated to see if it is worthwhile. The best approach would be to plan needs for the favorable periods and to make plans as flexible as possible.

Sale of the Bonds

The actual sale of bonds is a highly complicated and technical operation. The marketing of the issue starts with advertising and the publication of financial statements. A prospectus or circular should always be supplied to financial institutions and should be very complete as to related facts as well as to the details of the specific issue. After the information has been circulated as widely as possible, the next step is to set up the procedure of actually soliciting bids. In order to get the widest market possible, it is advisable that bond dealers be contacted.

170 Chatters and Hillhouse, op. cit., pp. 31-37.

171 For an interesting description of the preparations carried on by bidders, see "Manning a Market in Municipals," Business Week, op. cit., pp. 52 ff.
The guiding principle in these steps always should be to try to get as many bids as possible.

The advertisement previously mentioned, which is also called the "notice of sale," contains information needed by dealers in preparing their bids. The notice of sale, therefore, should provide clear and complete information about the time and place of the sale as well as the details of the bidding. The state must make its position clear on all questions such as whether or not split-rate bids will be entertained, whether the bid can be for only part of the bonds, whether all bids can be rejected, whether the interest rate can be named by the bidder, whether there is any maximum rate of interest, and any other features that may be currently handled in different ways. These questions determine the "bases of bidding." Sales conditions obviously should be made clear, but another objective should be to establish bid conditions that are reasonable and conventional.

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173 A split-rate bid consists of two or more interest rates on one issue.


175 Browne, op. cit., pp. 37, 40.
Finally, the sale of the bonds must be conducted at the appointed time and place. At public sales (and it almost goes without saying that public sales are highly desirable) bids should be opened promptly and read whether they are presented by messenger or received by mail. Bids should be examined to determine the best one, and if this bid is acceptable and is made by a responsible party, the bonds should be awarded officially to that bidder. 

Auction sales, when the buyers are given the opportunity to make several bids, are generally not desirable. It is doubtful if they ever bring more favorable bids, and it is possible that they can result in higher interest rates. 

Of course, there are certain circumstances in which the state may not wish to accept any of the bids. These circumstances would include changes in the market since the notice of sale was given. The fluctuation in yields noted

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176 The most common method of calculating the best bid is by the "net interest cost" method—"Ascertain the total amount of interest required to carry the issue through to maturity at the coupon rate or rates specified in the bid. From this total deduct the premium bid, or add the discount bid, as the case may be." Chatters and Hillhouse, op. cit., p. 52.

177 Bidders are often required to post good faith deposits to ensure that only responsible bids are submitted. Ibid., p. 51; Fundamentals of Investment Banking, pp. 359-61; and Browne, op. cit., pp. 37-39.

178 Browne, op. cit., p. 39.
above would indicate that this is not a rare occurrence. It is also possible that even the lowest yield is higher than the situation really warrants. Another possibility is that the issue is a refunding one which was offered in order to save on interest costs. If the anticipated saving does not materialize when the bids are received, there would be ample justification to reject all of the bids. It has been suggested that the governmental unit rejecting bids should explain legitimate rejection to the bidders in order not to cause misunderstandings and to keep their good will. Thoughtful and considerate relations with all bond dealers would be a commendable procedure under all circumstances.

Once the bid is accepted, the fiscal authorities must turn their attention to the preparation of the bonds. Certain precautions must be taken to protect against counterfeiting and forgery. These precautions entail authentication or certification of the bonds by some bank or trust company. This process consists merely in attesting that the bonds have been prepared properly and that signatures and


seal are in order. One authority has remarked about the poor quality of paper and printing used by some borrowers and the deleterious effect of this action on their credit. When these and other routine but important steps have been taken, the bonds remain only to be delivered to the successful bidder. It is good practice for this delivery to take place within three weeks after the sale. If for some reason the bonds cannot be prepared in such a short time, temporary securities may have to be issued. This additional step, of course, is a complicating and costly factor that should be avoided if it is possible.

IV. MANAGING EXISTING DEBT

Obviously not all problems connected with debt are settled when the instruments are issued. There are at least four major and common considerations which may arise in connection with existing debt: (1) All debt, no matter what the type, will sooner or later require interest and principal payments; (2) The management of sinking funds is a very challenging problem to the fiscal officials; (3) Another very important function connected with existing debt is that of debt reporting; (4) Finally, a problem that sometimes

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181 Browne, op. cit., p. 41.
182 Chatters and Hillhouse, op. cit., pp. 62-68.
requires careful watching and control concerns the possibility of voluntary refunding.

Making Bond and Interest Payments

It is very important that the responsibility for making bond and interest payments be carefully outlined. Provisions should be made also for continuing authority to make payments whenever they come due without any further executive or legislative process. Another related and very important problem associated with making payments will be the handling of debt service revenues. Whether the revenues come from a general fund or whether there is a separate bond fund or funds, the revenues will need to be guarded carefully and used only as they are authorized. Promptness should not be neglected in making payments because failure to meet the payments for any reason whatever can bring unfavorable publicity that may hurt the state's

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183 There are other miscellaneous problems which can arise in connection with existing debt. For example, debt adjustment might conceivably result from depression, and this would require debt management skill. Chatters and Hillhouse, op. cit., pp. 85-164. For an example of debt management proposals that were recommended in 1933, see Evans Clark (ed.), The Internal Debts of the United States (New York: The Macmillan Company, 1933), p. 255.

Promptness will be promoted by careful recording of the various payments to be made. Funds due then are transferred to the authorized paying agents, and the bonds and coupons are dully cancelled, recorded, and filed.\footnote{Managing Sinking Funds}  

Although serial bonds seem to be more popular today than sinking fund bonds, there are still some situations where sinking fund bonds may be appropriate. Also, there are many issues still outstanding that will be paid by this device. One of the problems involved in administering sinking funds is that different issues usually have their own sinking funds. Whoever is responsible for the various...

\footnote{An example of this unfortunate situation, which was related by a public official who does not wish to be identified, occurred in Louisiana in the 1930's. The State was technically in default for a few days during the depression because one of the New Orleans banks acting as a paying agent for the State closed. Among the funds frozen was $500,000 which the State had deposited for debt service. The Governor at that time, Huey Long, arranged for another $500,000 to be deposited for debt service in order to reassure bondholders. This case is the nearest approach to default that Louisiana has experienced since the turn of the century.}

\footnote{Louisiana has been included in a short list of states that defaulted in the 1930's. If this is the incident that caused Louisiana to be placed in this category, the State has suffered an injustice. See Hansen and Perloff, \textit{op. cit.}, p. 52.}

\footnote{Chatters and Hillhouse, \textit{op. cit.}, pp. 95-102.}
sinking funds must keep track of the contributions, protect them at all times, and either invest them, use them to call outstanding bonds if they are callable, or, if it is inappropriate, to buy the bonds of the particular issue on the open market.

Debt Reporting

An extremely important function of management of existing debt is the careful reporting of all conditions affecting outstanding obligations. The reporting of new offerings is an important and obvious part of good debt management, but the concept of debt reporting should also be extended to include outstanding issues. Sustained reporting will certainly be welcomed by all of the reporting services and by investment bankers and bond dealers, but the benefits of continued reporting in connection with existing issues is not merely a matter of accommodating these groups. The state has a great deal to gain if it can show any improvement in its credit position. Economic growth, the discovery and utilization of new tax or other revenue sources, improvements in political and legal institutions,

\[187\] Ibid., pp. 119-64; and Ratchford, American State Debts, pp. 268-69.

\[188\] Browne, op. cit., pp. 6, 37; and Ellinwood, op. cit., p. 27.
improvements in the debt structure and debt management, and any changes connected with one outstanding issue in particular—all of these things can lead to improved ratings on outstanding bonds as well as to increases in their prices. How can the state benefit from rising prices on its outstanding bonds? Investors will probably be inclined to look favorably upon future issues of states whose bonds have given them appreciation in value. Careful reporting of outstanding issues thus may have significant indirect results. 189

The recording and reporting of debt changes to taxpayers and citizens is another extremely important part of the reporting function and should not be neglected. Taxpayers and legislators should receive accurate and complete reports from the proper agencies in order to discharge their respective duties. This grade of information, unfortunately, is not always available. Agencies of the states are beginning to involve state credit more and more, and this is not always made clear in state reports. It is very desirable that agencies be required to report to the legislatures and the public. 190

189 Ragsdale, op. cit., p. 3.
190 For example, in Louisiana the Financial Reports are incomplete. In Oklahoma, debt reporting is not required of agencies of the state. Simpson, op. cit., p. 338.
Debt Retirement

There are three different methods of eliminating debt: serially, using sinking fund accumulations, and using call options. Whatever the method of repayment, a major objective of debt management must be the retirement of debt. This conclusion does not mean, of course, that states should try to eliminate their total outstanding debts. The individual issue is what must be retired. This retirement is the only conclusion to borrowing that can presently be tolerated in the American states. Refunding of bonds may create perpetual debt, which is inconsistent with the conventional objectives of state borrowing and finance.
CHAPTER III

LOUISIANA BORROWING BEFORE 1921

Chapter I briefly outlined the major debt trends in the American states in order that developments in Louisiana would not be considered in isolation. This Chapter presents a background that deals in general terms with the early Louisiana debt.

I. BORROWING BEFORE 1913

Louisiana's early debt experiences arose out of circumstances and practices that are no longer present in state borrowing and are not likely to be repeated. Perhaps the two most important developments of this nature in Louisiana before the twentieth century were the borrowing to provide bank capital and the Reconstruction borrowing.

Ante-Bellum Borrowing and Default

The bank lending experience in Louisiana began in 1824 and reached a climax when the State defaulted in 1843. While most of the rest of the states were concerned with transportation improvements during the boom before 1837, Louisiana was borrowing mainly to provide capital for banks. There was no restriction on borrowing in the Louisiana
Constitution of 1812 to impede wide use of the State's credit. In fact, the bank borrowing in Louisiana was the largest amount borrowed by any state for a single purpose during the period. In 1840, Louisiana's debt outstanding was $23,309,246.43. At the end of the boom period, Louisiana shared the fate of eight other states—she defaulted in 1843. Payments were resumed in 1844, and the State succeeded in the rest of the 1840's in reducing its debt by selling bank stocks and using the proceeds for retiring debt.

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1Louisiana, Constitution (1812), passim.
3The amounts of debt outstanding given in this Chapter are not only bonded debt but include floating debt which consists of various warrants, certificates of indebtedness, and other short-term borrowing.
Another reaction to Louisiana's default of 1843 was the addition in 1845 of a constitutional debt limitation. The Legislature was prohibited from pledging the State's credit for the payment of the bonds of any corporation. The debt was limited to $100,000 except as provided by specific legislative authorizations for single objects or works. These authorizations were required to provide for payment of any borrowing they permitted.

Louisiana's experiences during this period were not at all unique. The theory that states could engage in various enterprises—such as banking—and thereby reduce or eliminate the need for taxation was being tested. If the experience before 1845 is considered in the context of the activities of other states and of the thinking at that time, the State of Louisiana cannot be condemned for its actions. However, by today's standards (e.g., the principles developed in Chapter II), most of the borrowing which took place before 1837 would not be considered proper.

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5Louisiana, Constitution (1845), Arts. 113 and 114.
6Ratchford, American State Debts, p. 81.
Louisiana's credit recovered sufficiently from the experiences of the 1840's to permit modest participation in the state internal improvements borrowing cycle of the 1850's. Borrowing was possible under the new Constitution of 1852 which permitted State subscription, by separate authorizations, to the stock of companies engaged in internal improvements—up to one-fifth of their capital stock. The debt limitation, however, reflected the banking disillusionment of the previous decade—aid to banking was now prohibited. In 1853, Louisiana subscribed to one-fifth of the capital stock of three railroads and paid for these subscriptions with State bonds. Borrowing during the 1850's was on a much smaller scale than in the previous period; Louisiana's total debt outstanding never approached the peak that had been reached during the previous boom in state borrowing. When the Civil War came, the total Louisiana debt was about $10,000,000. The parallel between aid to

7 Louisiana, Constitution (1852), Arts. 108, 109, and 110.

8 Louisiana, Acts (1853), Act 176, pp. 141-42; Act 177, pp. 142-43; and Act 178, pp. 144-45.

banking and aid for railroad construction apparently was not realized—Louisiana had again given aid to private ventures. Again, however, borrowing to aid railroad construction was not uncommon and was accepted as proper at that time.

Civil War and Reconstruction Borrowing and Subsequent Debt Reduction

During the Civil War, Louisiana borrowed just as did the other Confederate states. The constitutional amendment in 1861, under which this borrowing took place, did not noticeably change the 1852 debt provisions. The amount borrowed in Louisiana during this period is estimated to have been over $13,500,000, but the Civil War debt did not remain outstanding for very long. A loyal assembly meeting in the occupied part of Louisiana in 1864 adopted a Constitution in that year which declared that there was no liability for any debts connected with the rebellion. At the end of 1865, the State debt, much of which was not bonded debt, amounted to $11,182,377. The same Constitution provided


10 Louisiana, Constitution (1852), Arts. 94, 108-11, as amended 1861. This Constitution, as amended, changed Louisiana from an American state to a Confederate state. The document of 1861 is the one which is disputed and which raises doubt about whether the present Constitution is the ninth of tenth one.
that aid could be granted to companies engaged in constructing public improvements to a maximum of one-fifth of the capital stock of such companies. The maximum of debt incurred to aid the financing of such improvements was limited to $8,000,000.\(^\text{11}\)

Louisiana borrowed heavily during the Reconstruction.\(^\text{12}\) Heavy borrowing was made possible when the borrowing power was liberalized by still another Constitution adopted in 1868. This new Constitution required only that borrowing in excess of $100,000 have the method of payment of principal and interest designated in the authorization. This provision did not include any limit on the maximum debt that could be incurred in this manner.\(^\text{13}\) In Louisiana, major reasons for borrowing during the early Reconstruction


\(^{12}\)Estimates of the extent of this borrowing are complicated by several factors: (1) the officials generally were untrained and many were dishonest; these factors had an influence on the records they kept; (2) the bonds authorized during the period were not always all sold; and (3) some of the debt was contingent in the sense that it actually had no definite limits, e.g., the railroad issues were on a per-mile basis. Lonn, op. cit., p. 83.

\(^{13}\)Louisiana, Constitution (1868), Art. 111.
period were to finance levee repair and to cover current expenses. During the latter part of the Reconstruction, the nominal purpose of Louisiana borrowing was mainly to subsidize construction of railroads. This purpose, however, was clouded by many questionable activities that were taking place in the State during this period.

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14 Louisiana, Acts (1866), Act 3, pp. 6, 8; Act 5, pp. 8-12; Act 15, pp. 26, 28; (1867), Act 115, pp. 213-17; and Scott, op. cit., p. 108.

15 Louisiana, Acts (1868), Act 108, pp. 136-41; (1869), Act 26, pp. 22-30; Act 55, pp. 56-58; Act 116, pp. 166-69; Act 146, pp. 21-22; (1870), Act 31, pp. 55-63; Act 32, pp. 63-66; Act 59, p. 87; Act 84, pp. 116-17; Act 105, pp. 174-76; (1870), E.S., Act 4, pp. 5-10; Act 10, p. 52; Act 69, pp. 153-54; (1871), Act 4, pp. 29-38; Act 28, pp. 66-72; Act 31, pp. 79-80; Act 35, pp. 83-84; Act 40, pp. 88-97; Act 41, pp. 98-103; Act 55, pp. 137-38; Act 53, p. 155; Act 70, pp. 173-74; Act 95, pp. 211-13; and Scott, op. cit., p. 108.

16 Louisiana is usually mentioned as having had some of the worst officials and one of the most effective "rings" of any of the Southern states. The activities of the ring's members apparently extended to debt matters. Governor Kellogg described one bond issue as follows: "Two and a half millions of these bonds were issued without any of the safeguards required by law. The bill providing for their issue was hurried through the Legislature during the last hours of the session. It was kept by my predecessor for several weeks, and was finally signed one day, promulgated the next, and the bonds issued the next. They were delivered by the Secretary of State at his house, in the night, without the Governor's signature, the Secretary of State having been required first to sign them and attach the seal of State. They were signed by the Governor in a hurried and surreptitious manner and immediately removed from the State. It is even asserted, and I believe can be substantiated, that they were signed on a train of cars between this city and Mobile. No record was made of the issue of these bonds in the offices
The State of Louisiana fell into financial difficulties even before Reconstruction ended, and an attempt was made to restore the State's credit in 1870. Act 69 of 1870 provided for the payment or funding of floating debt. Up to $3,000,000 could be issued for this purpose. The agency established to direct the funding was the Board of Liquidation of the State Debt. This act was the origin of the Board of Liquidation, which is still an important part of Louisiana's debt structure. A constitutional debt limitation of $25,000,000 was also established in 1870, but it was ignored and exceeded. The debt on June 1, 1871, would have amounted to over $41,000,000, if the liabilities contingent on railroad construction had been counted, and $22,295,790.58 if they were not included. The $25,000,000 debt limitation, therefore, was significant mainly because it later provided

grounds for the repudiation of bonds that were sold after the amendment was adopted in 1870. 17

The $25,000,000 constitutional debt limitation of 1870 was reestablished in 1874 by another constitutional amendment which added the provision that this limit would be lowered to $15,000,000 whenever the state debt was reduced to that sum. The $15,000,000 debt limitation of 1874 was part of a comprehensive adjustment which included scaling down part of the debt and declaring some of it "not fundable" (repudiated). The debt was refunded by the Board of Liquidation under the authority of the Constitution as amended by Act 4 in 1874, Act 111 of the Extra Session of 1875, and Act 86 of 1876. The Board supervised the exchange of old bonds and warrants for new consolidated bonds at the rate of 60 cents on the dollar--this exchange is estimated

to have reduced the debt by over $8,000,000 to about $12,000,000 by January 1, 1881.

The debt adjustment of 1874 took place during the Reconstruction, and the native Louisianians were not satisfied with its results. The State was also troubled with unpaid interest that accumulated every year from 1874 to 1878. In 1879, after the Reconstruction ended, the debt adjustment of 1874 was changed by a new debt ordinance. The scaling down of the debt which had been accomplished in 1874 was accepted, but the interest rates on the refunded debt were greatly reduced and part of the unpaid interest was "remitted," i.e., repudiated. These changes were not acceptable to the bondholders and major attempts were made in 1882, 1884, 1892, and 1894 to effect some compromise and to provide for the exchange of old bonds. The results of the various adjustments of 1874, 1882, 1884, 1892, and 1894 were simply that the State defaulted on the payment of interest and repudiated some of its debt. The actions of

the constitutional conventions and the Legislature were of doubtful value in improving the State's credit, although the amount of debt was reduced. Default and repudiation are usually damaging no matter what the reason.

The Constitution adopted in 1879, in addition to its other changes, provided the strongest prohibition against borrowing that the State had ever had. The General Assembly was prohibited from borrowing except to repel invasion or to suppress insurrection. The appearance of such an inflexible debt limitation at this time was no coincidence. Debt limitation was a common reaction to the Reconstruction in all of the Southern states. An inflexible debt limitation probably was not inappropriate at the end of the Reconstruction. The State's credit had to be reestablished and restraint in borrowing was one method of repairing the damage that had been done. But, the maintenance of this

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20Louisiana, Constitution (1879), Art. 44.
type of debt limitation after the credit position has been repaired is another matter. The present debt limitation in Louisiana is very similar to the provision of 1879, and since no serious debt difficulties occurred between that time and 1921 (when the present limitation was adopted), it can be concluded that the present debt limitation is probably a result of the Reconstruction evils.

The difficulties described resulted directly from the Reconstruction. Another problem during the same period, however, could not be attributed directly to the Reconstruction. This problem was the 1879 issue of "baby" bonds sold to pay State expenses which were in the form of auditor's warrants. Of course, the condition of the Treasury which made this issue necessary was certainly partly the result of the Reconstruction. The baby bonds were in denominations of $5, paid 3 per cent during their 6-year term, and were secured by uncollected taxes from 1879. The State subsequently refused to retire some of these maturing intermediate term obligations, maintaining that there were irregularities in their issue and that some of them were fraudulent.

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21 Ibid.; and Louisiana, Constitution (1921), Art. 4, Sec. 2.

22 Louisiana, Acts (1880), Act 93, pp. 120-21; Act 104, pp. 129-31; (1894), Act 150, pp. 188-89; Caldwell, op. cit.,
After new, "clean" bonds were issued in 1892 (to replace bonds which had been stamped in the earlier scaling), debt controversies subsided temporarily until they were revived by the approach of the 1914 maturity date of the 40-year consols. The debate about what to refund began in earnest around 1910 when the holders of unpaid coupons and bonds revived their claims. Bondholders were unsuccessful in getting the State to pay these overdue obligations and coupons, but they did cause a flood of apologies and rationalizations to be made in defense of the State's past actions. Despite pressure from the bondholders, the


23 The $911,000 of baby bonds was the largest portion of unpaid debt in 1912. Other elements of this debt were certificates of indebtedness, various warrants, and certain interest coupons on the old consols. There was $126,733.96 of coupons one to eleven that had never been presented to the State for payment. Coupon number twelve on the old consols was also still held by some of the bondholders who wanted them refunded. United States Bureau of the Census, Department of Commerce, Wealth, Debt, and Taxation, 1913, Vol. I (Washington: Government Printing Office, 1915), p. 57; and Stopher, op. cit., p. 138.
recognized debt was not increased—it stood at $13,546,150 in 1912.  

Louisiana debt experiences during the Civil War and the Reconstruction were similar to the experiences of the other Southern states. The period after the Reconstruction was also typical in the South, where the problem centered on restoring ruined credit. Louisiana's actions in this connection certainly were not always wise, but they can be viewed sympathetically because of the circumstances.

**Port of New Orleans Borrowing Before 1913**

The Board of Commissioners of the Port of New Orleans was established in 1896, but it did not start borrowing immediately. The first Board issue of $750,000 was sold under the authority of Act 114 of 1904, but this act was of such doubtful constitutionality that the issue was refunded after a new authorization was provided in Act 180 of 1908. These acts marked the beginning of agency borrowing in

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Louisiana. The State did not contribute directly to the security of Port bond issues which followed, but the State's credit was involved. The refunding issue amounted to $3,500,000 and was known as the Serial Gold Issue of January 1, 1909. The purpose of the borrowing was to finance dock improvement—more transportation debt. The $3,500,000 issue, which exhausted the authorization, was a noncallable serial issue scheduled to mature between 1924 and 1958. The 5 per cent bonds were payable from Port revenues and were also considered general obligations of Louisiana although they constituted only indirect debt.

It might have been better if the Port of New Orleans debt had been incurred directly. The State certainly had an interest in developing the Port and could not avoid involvement. Direct participation by the State might have increased the marketability of early issues and would have simplified the debt structure. The State could have participated

directly without losing the services of the Port Commission in their other responsibilities. It is very doubtful, however, that the public would have approved direct borrowing for this purpose at this time. The debt limitation of 1898, which was just as strong as the one of 1879, was not simply an outmoded institution but was a very clear indication of public opinion. Any attempt to amend this limitation probably would have been doomed to failure. Under these conditions, therefore, it probably was better that the borrowing took place indirectly rather than not at all because the Port undoubtedly has played an important role in the State's growth.

Another significant feature of this early Port Commission issue was that it consisted of serial bonds. None of the Louisiana refunding and consolidating issues starting in 1874 provided any method whatsoever of retiring the debt—neither the serial feature nor any sinking fund was provided. The use of the serial device in this 1909 issue, therefore, was important not in itself, but because it provided for systematic debt retirement.

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Port of New Orleans, "Statement of Amortization," 1922, pp. 1-18; and Louisiana, Constitution (1898), Art. 46.
II. LOUISIANA BORROWING, 1913-1921

There was relatively little borrowing during the years from 1913 to 1921, but the period has more importance than the earlier years because what borrowing did take place had a distinctly modern character. This borrowing consisted of both direct and indirect issues. (See Table I, Appendix A.) The direct issues were the refunding issue of 1914 and the early highway borrowing. The indirect borrowing consisted of the Port of New Orleans and the Penitentiary issues.

Serial Gold Bonds, The Refunding of 1914

Article 32½ of the Constitution of 1913 dealt with maturing debt by establishing conditions under which the Board of Liquidation could refund the Reconstruction obligations. The General Assembly was again prohibited from contracting any debt, but the Board of Liquidation was authorized to issue enough bonds to refund most of the debt.

27 The portions of the recognized State debt that were not to be refunded consisted of a "Perpetual Loan" to the State and a certain sum that was held for the exchange of old bonds. Louisiana, Constitution (1913), Art. 32; Louisiana, Treasurer's Report, 1922/23-1934/35; Louisiana, Financial Report, 1941/42-1957/58; and Louisiana, Board of Liquidation, "Constitutional Provisions in Reference to Louisiana Bonded Debt," certified by Auditor of Public Accounts on Minutes of the Meetings of the Board of Liquidation (Baton Rouge: November and December, 1913), pp. 2, 7-8.
Refunding bonds authorized by the new Constitution of 1913 were prohibited from running more than fifty-one years or from bearing more than 4.5 per cent interest and were required to be callable serial bonds. In conjunction with the debt authorization, the Constitution of 1913 also levied a tax of one and three-twentieths (1.15) mills on all property subject to the State property tax. The revenue raised was to be put into the "State Bond and Interest Tax Fund" for debt service. This fund and the tax dedicated to it are still part of Louisiana's debt structure.

The constitutional authorization of 1913 was the basis for the 1914 refunding issue of "Serial Gold Bonds." (See Table II, Appendix A.) The bonds amounted to $10,991,500 and were scheduled to mature serially until 1964. The rate of interest was 4.5 per cent, and the

28 Louisiana, Board of Liquidation, "Constitutional Provisions in Reference to Louisiana Bonded Debt," p. 2; Louisiana, Constitution (1913), Art. 324; and Huey P. Long (comp.), Constitutions of the State of Louisiana (Baton Rouge: 1930), p. 64.

29 Interest rates given throughout this thesis are nominal or coupon rates unless it is otherwise indicated.
State reserved the right to call outstanding bonds. The Serial Gold Bonds of 1914 (later often called the "Old" Serial Bonds) were direct or general obligations of the State, i.e., they were issued in the State's name. Provision was made for payment of the bonds from the 1.15 mill State property tax that had been dedicated for that purpose in the Constitution of 1913. A further safeguard was the constitutional provision for the levy of a "special tax" in the event that the 1.15 mill tax proved insufficient at any time.

The 50-year Serial Gold Bonds were an important link between the nineteenth and the twentieth century debt developments in Louisiana. The bonds bore the scars of the Reconstruction in the difficulties associated with their sale, but they also exhibited definite provisions for retirement as had the Port Commission debt. The two previous

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31 Louisiana, Board of Liquidation, "Constitutional Provisions in Reference to Louisiana Bonded Debt," p. 6; Louisiana, Constitution (1913), Art. 324; and Moody's, 1918, pp. 191-92.
refundings, in 1845 and 1874, had followed default in one case and default and repudiation in the other. In 1913, there were signs of forethought in the refunding that took place in a relatively more favorable climate. The use of the serial feature was a step in the direction of better debt management; its use was an indication that retirement of debt was being planned. Another very desirable feature of this issue was the provision of a special tax in case the 1.15 mill tax proved insufficient. This type of provision is very attractive to bondholders and can add to the marketability of bonds if it does not unduly complicate the debt structure.

Highway Borrowing Before 1921

The only other direct debt created before 1921 was incurred to finance the Chef Menteur and Hammond-New Orleans Highways—another transportation project. Act 18 of the Special Session of 1918 provided that bonds authorized for that purpose would be payable from a newly created fund that would be called "Highway Fund Number 2." The fund was to be supported by the motor vehicle license revenues from the six interested parishes of Jefferson, St. Charles, St. John the Baptist, Tangipahoa, St. Tammany and Orleans. The first issue under this act was Series A of 1919 that consisted of $700,000 of 5 per cent noncallable obligations. (See Table
These Highway Fund Number 2 bonds were not full faith and credit obligations although they were called "... State Highway Bonds" and thus were direct obligations. The $700,000 issue of 1919, which comprised the total amount authorized by Act 18 of the Special Session of 1918, matured in 1939. However, both the tax dedication and the special fund established during this period remain part of the debt structure and add to its complexity until this day. 32

Port of New Orleans Borrowing Before 1921

The most significant debt expansion in Louisiana during the first quarter of the century took place in the category of indirect debt. This borrowing was the Port of New Orleans borrowing. Bond issues sold for Port development continued under the powers granted in 1910 and reenacted in the Constitution of 1913. The Board of Commissioners was given continuing authority to build warehouses and other structures and to finance these

structures by selling bonds. Bond issues were not limited as to their amount except that they could not be greater than the value of the buildings. Bonds were to be paid from warehouse revenues and secondly from the general revenues of the Port subject to prior liens. The authorization specified that issues sold under these provisions would be subordinate to previous issues sold under the same constitutional provisions. Other authorizations in 1914 and 1918 enabled the Board to borrow still more for a related purpose. Act 244 of 1914 amended the Constitution of 1913 to give the Board power to construct a Navigation Canal between the Mississippi River and Lake Pontchartrain. Act 3 of 1918 affirmed Act 244 of 1914 and authorized the Board of Commissioners of the Port to cooperate with and to receive financial assistance from the various jurisdictions in and around New Orleans for the construction of this canal. Bonds issued under these acts were to be backed by the real estate involved and to be paid from net receipts of the canal.

Serial Gold Bonds totaling $3,000,000 were sold in 1914 under the terms of the Constitution of 1913, and this

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33Louisiana, Constitution (1913), Art. 322; As amended 1914, Act 244; Louisiana, Acts (1910), Act 133, p. 209; (1918), Act 3, pp. 5-10; Port of New Orleans, Statement of Amortization, 1922, pp. 3-8.
sale was followed by another offering in 1915 for $1,250,000. (See Table IV, Appendix A.) The Port Commission floated a fourth issue of Harbor Improvement Bonds in 1917 for $14,000,000, and a fifth one of Serial Canal Bonds in 1918 was for $6,000,000. Two more Port Commission issues in 1919 were as follows: $2,000,000 of Harbor Improvement Bonds, and $6,000,000 of Canal Bonds. In 1920, the eighth and ninth issues produced $5,000,000 and $2,500,000 respectively for canal purposes. 34 The Port Commission Bonds issued from 1913 to 1921 were revenue bonds to be serviced first from the structures or facilities they financed, and then from general Port revenues that consisted of wharfage, tollage, and storage fees. These issues before 1921 were also considered full faith and credit obligations of the State although there was no specific acknowledgment of this in any of the authorizations. The indirect debt added to the State's liabilities during the period from 1909 through 1920

34 Louisiana, Constitution (1913), Art. 322; As amended 1914, Act 244, pp. 18-19, (this act was continued in force by Louisiana, Constitution (1921), Art. 6, Sec. 16; Louisiana, Acts (1910), Act 133, p. 209; Port of New Orleans, "Statement of Amortization," 1922, pp. 3-17; Moody's, 1918, pp. 191-92; 1919, p. 244; 1920, p. 302; and Louisiana, Acts (1918), Act 3, pp. 5-10.
for the purpose of furthering the development of the New Orleans Port area came to a total of $33,250,000. All of the Port Commission bonds sold during this period were noncallable deferred serials. The minimum period of deferment was six years. Normally, deferment is undesirable because it adds to interest costs. In this case, however, the reason for deferment is obvious—it would take many years from the time funds were first raised before the canal and various structures could be put into operation. Deferment in a case such as this probably should not be considered improper, although it does add to costs, as payments are deferred only until the facilities become operable and productive.

These issues were also all scheduled to be completely retired in forty years. If the life of the improvement is

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36 Ibid.

37 Ibid.
used as a criterion, forty years would seem to be a reasonable term for the issues used for digging the Navigation Canal. For warehouses, however, a 40-year term may be questionable. If the term of the retirement is questionable, however, the method of this retirement certainly was not. The use of the serial method of debt retirement by the Port Commission throughout the period showed good debt management.

**State Penitentiary Borrowing Before 1921**

Other indirect borrowing in the 1913 to 1921 period consisted of relatively minor amounts used to operate and maintain the State Penitentiary. (See Table V, Appendix A.) A $250,000 Penitentiary issue of noncallable 5 per cent Coupon Notes was authorized in 1912 and sold in 1914. The State pledged its full faith and credit for the support of the 25-year Penitentiary serial bonds although they were to be serviced from the revenues of the Penitentiary. The Penitentiary debt thus was very similar to the Port of New Orleans debt. The only other Penitentiary issue before 1921 was a $400,000 issue of Penitentiary Liquidation Notes. The funds raised by this bond sale were to be used to retire floating indebtedness of the Penitentiary. These 1917 bonds were also noncallable and were secured in the same manner as the 1914 issue. The interest paid on these obligations was
5 per cent, and the bonds were to mature serially between 1918 and 1927.  

The appearance of Penitentiary borrowing in the indirect portion of the debt structure probably was at least partly the result of the debt limitation provisions in the Constitutions of both 1898 and 1913. Again, however, the nature of the debt limitation at this time made it more than just a legal obstacle to be surmounted. Indirect borrowing probably was the only type of borrowing that would be tolerated by public opinion.

Summary of Borrowing, 1896-1921

The debt change probably of most practical significance during the period from 1896 to 1921 was the beginning of the indirect Port of New Orleans borrowing. This development was to be one of the more lasting legacies of the nineteenth century. The Port borrowing was to outlast and overshadow the Reconstruction debt which was refunded in

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38 Louisiana, Constitution (1913), as amended 1916, Act 134; Louisiana, Acts (1912), Act 71, p. 82; "Schedule of Bond and Coupon Maturities Handled by the Treasurer, State of Louisiana," Corrected to December 31, 1931, compiled by H. B. Conner, State Treasurer, p. 32; Smith, Compilation of Louisiana State and Municipal Bonds, 1933, p. 5; and Moody's, 1918, pp. 191-92.

39 Louisiana, Constitution (1898), Art. 46; (1913), as amended 1916, Act 134; and Louisiana, Acts (1912), Act 71, p. 82.
1914. Finally, the period before 1921 brought some early highway borrowing. The amount of this highway borrowing, however, was not large enough to place it higher than third in importance.
CHAPTER IV

DEBT STRUCTURE AND MANAGEMENT IN LOUISIANA, 1921-1946

Much of the present structure and management of the debt in Louisiana is a legacy of the 1920's and 1930's. After these decades, activity in Louisiana halted temporarily during World War II. This Chapter emphasizes the purposes of Louisiana borrowing during these recent eras. Each type of debt that was created is examined to determine the purpose, authorization, and the amount of such debt, from whence and how it was payable, whether it was direct or indirect borrowing, and the maturity or redemption provisions. The relationship of this debt to the constitutional framework of the State is also explored.

I. THE CONSTITUTION OF 1921

It was noted in Chapter II that some of the basic factors which will influence a state's debt structure as well as its financial structure are constitutional or legal ones. This influence of institutional factors is very much the case in Louisiana today. Many of the difficulties that confront the State in debt matters can be traced to the Constitution of 1921 which is still in effect. Since this
document has had such a bearing on the present debt structure of Louisiana, it is appropriate to analyze carefully the pertinent provisions of that document and to note the changes that have been made in it from time to time.

**Historical Background**

The Constitution of 1921 was either the ninth or the tenth constitution adopted in Louisiana depending upon whether a disputed one is counted. Constitutional changes in Louisiana have always had important effects upon the debt structure. Assuming that there were nine constitutions, the second and third constitutions came at the end of the first and second debt booms of 1845 and 1852 and contained articles which attempted to restore the State's credit. The documents of 1864 and 1868 were Reconstruction constitutions, and the one in 1879 dealt with Reconstruction debt problems. The Constitution of 1913 provided for the refunding of Reconstruction debt into Old Serial Gold Bonds. The present Constitution of 1921 has been equally important in debt developments since that time. The document of 1921 resulted from the unsatisfactory nature of the 1913 Constitution. The 1913 instrument had failed to repeal specifically the
provisions of the 1898 version, and the result was conflict and confusion in the law. ¹

The Constitution of 1921 Appraised

The corrective action of 1921 was treated rather severely by Alden L. Powell.

An examination of the long, wordy, detailed Constitution of 1921, which probably includes within its provisions all of the fundamentals of democratic government, and most of the non-fundamentals as well, reveals that the framers seemingly disregarded all of the precepts which, political scientists say, constitution makers should follow. ²

A recent Louisiana Legislative Council study revealed that the Louisiana Constitution is the longest in existence among the states. It was reported to contain approximately 184,000 words—more than twice as many as the next longest state constitution. ³ The conclusion that the Constitution of 1921 is too long and detailed was concurred in by Kimbrough Owen. He points out that a constitution is


² Powell, op. cit., p. 28.

supposed to be primarily an instrument which outlines fundamental policy. The Louisiana Constitution contains detailed provisions, for example, concerning the levying of taxes and the floating of bond issues. This characteristic of too much detail almost inevitably brings a large number of constitutional amendments on even minor provisions as they are found to be unsatisfactory. Louisiana's Constitution practically insures a multitude of amendments by adding to its detail a relatively easy amending process. Furthermore, the actual process of amendment can be considerably speeded by the practice of the State Legislature of passing self-operative acts which automatically become law if and when their substance is accepted by the voters as a constitutional amendment.

4Owen, op. cit., p. 3. See also Powell, op. cit., pp. 25-28; and Louisiana Legislative Research Study No. 3, pp. 3-15.

5Between the adoption of the Constitution in 1921 and the year 1937, there were 127 amendments proposed and 118 adopted. By 1947, the number of amendments had reached 219. In 1953, the total number of amendments that had been added to the 1921 Constitution was 302. Between 1954 and 1957, 31 more were approved. Debt creation contributed its share to these totals in each period. Powell, op. cit., p. 28; Owen, op. cit., pp. 1, 3, 47, 60; Public Affairs Research Council of Louisiana, Inc., "The Debt of the Louisiana State Government, 1950 and 1951," No. 6 (March 31, 1952), pp. 8-9; Projet, Vol. I, Parts 1 and 2, pp. 495, 1392; Louisiana, Constitution (1921), as amended 1954; and 1957 Supplement, p. 3.
Another major flaw in the Constitution of 1921 is its lack of systematic codification—subject matter is scattered throughout the instrument. When the mass of detail is combined with this dispersion, the problem of determining basic policy is made more difficult. But even this is not all: according to Kimbrough Owen, the Constitution of 1921, as amended, also contains "confusing terminology," "inconsistencies," "errors," "references to other legal documents," "informal amending procedures," "duplication of material," "contradictions," and "omissions." These are all difficulties which are encountered in any attempt to determine the basic structure and policy of Louisiana government in the original Constitution as well as in the amended versions.

An appraisal of the Constitution of 1921 based on principles of debt management produces conclusions that are not much more favorable. There are at least three serious flaws in the Constitution in its fiscal provisions: (1) the debt provisions of the Constitution are scattered throughout the instrument; (2) the Constitution contains specific tax dedications and other provisions for the payment of bond issues; and, (3) the Constitution contains an inflexible debt limitation.

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6Louisiana, Constitution (1921), as amended 1954; Owen, op. cit., pp. 1-16; and Louisiana Legislative Research Study No. 3, pp. 3-15.
The various constitutional articles that deal directly with the debt structure in the 1921 Constitution are as follows: Article 12 deals with public education and interest payments to certain educational funds; Article 18 deals with Confederate veterans' pensions and the dedication of the 0.75 mill tax for their payment; Article 6 deals with administrative officers and boards and contains provisions relative to the Port of New Orleans; Article 14 deals with the limitation of legislative borrowing and the pledging of the public credit; and, Article 20 deals with Penitentiary borrowing.

In addition, there is another type of dispersion to be found in the 1921 Constitution. An example is found in Article 6, Section 24, in which it is stated that the provisions of Act 18 of 1918 are not changed; but, it is not indicated exactly what these provisions consist of other than that they concern the building and financing of the New Orleans-Chef Menteur and New Orleans-Hammond Highways.

Both types of dispersion are regarded by Owen as weaknesses.

In order to avoid repetition, the various articles mentioned here are explained at length below where they resulted in borrowing or otherwise affected the debt structure.

Louisiana, Constitution (1921), Art. 4, Secs. 1, 2, 12; Art. 6, Secs 16, 21; Art. 12, Secs 19-21; Art. 8, Secs. 1-5; and Art. 20, Sec. 1.

Louisiana, Constitution (1921), Art. 6, Sec. 24.
in constitutional planning. The ideal constitution probably would have an article or two carefully planned to cover policy questions that concern the State's credit. Louisiana was far from this norm of a codified debt policy when the Constitution of 1921 was ratified, and it is even further from it today.

The specific tax dedications which contributed to the lack of organization found in the original version of the 1921 Constitution were in Articles 6 and 18. These articles dealt with the 2-cent gasoline tax, the motor vehicle license tax, and the 0.75 mill ad valorem tax. The 0.75 mill ad valorem tax was dedicated to the payment of Confederate veterans' pensions. (The original Constitution of 1921 did not authorize any borrowing for this purpose.) In addition to these specific tax dedications, other provisions were made for the payment of bond issues in which Louisiana had an interest. Article 20, for example, authorized the general manager to issue Penitentiary bonds which would be payable primarily from the revenues of that institution but which were also backed by the State's full faith and credit.

The Board of Commissioners of the Port of New Orleans was

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authorized, in Article 6, to carry on both short and long-
term borrowing which would be payable from the revenues of
the Port. 11

Only one of the articles mentioned above restricted
the use of the State's credit. Article 4, paradoxically,
prohibited the State Legislature from borrowing.

The Legislature shall have no power to
contract or to authorize the contracting of any
debt or liability on behalf of the State; or to
issue bonds or other evidence of indebtedness
thereof, except for the purpose of repelling
invasion, or for the suppression of insurrection. 12

Kimbrough Owen considers this particular provision
one of the serious defects of structure and policy in the
Louisiana Constitution of 1921. 13 It was also concluded
in Chapter II that inflexible debt limitations are generally
unsatisfactory. The shortcomings of debt limitations should
have been suspected even in 1921, but it is since that time
(since large-scale borrowing has become necessary) that they
have come to be considered especially questionable.

11 Louisiana, Constitution (1921), Art. 4, Secs. 2,
12 Louisiana, Constitution (1921), Art. 4, Sec. 2.
13 Owen, op. cit., p. 23.
The debt limitation provision made it necessary for the Constitution of 1921 to be amended before any debt, other than that constitutionally provided for, could be incurred. However, a significant amount of Louisiana's debt has been authorized by this method of constitutional amendment because of the relative ease of the amending process. Powell considered the skill of State leaders in getting people to vote the amendments into law as perhaps even more significant in explaining the wide use of the amending process in Louisiana.

There was, also, another way whereby Louisiana borrowing could proceed regardless of constitutional debt limitations. This method was by the use of the agency or authority device which had grown out of the special fund doctrine. The Constitution of 1921 contained provisions which concerned the Port of New Orleans and the State Penitentiary. The Board of Commissioners of the Port of New Orleans was given borrowing power far in excess of its immediate needs so that later borrowing, if it was necessary would not require additional amendment. Agency borrowing

\[14\] Louisiana Legislative Research Study No. 9, p. 79; Powell, op. cit., p. 30; and Owen, op. cit., p. 60.

\[15\] In fact, according to the Louisiana practice of detailing the constitutional provisions, the Board was authorized to engage in a great deal of borrowing without even legislative enactment. This was not the case with the Penitentiary authorization which is discussed later.
thus was also to play a role in Louisiana's debt structure along with constitutional amendments as a method of debt creation.

II. DIRECT BORROWING, 1921-1927

There is little question that the burden imposed by the borrowing during the 1921 to 1927 period was within the State's ability to pay. Moody's general analysis, which represents so well the traditional viewpoint about safety in borrowing, indicated in 1920 that Louisiana's economy was sound. Some of the conventional measures of debt-bearing ability also point to the same conclusion: the assessed valuation of property, which was based on 50 per cent of estimated true value, was $587,008,713 in 1916 and $726,291,145 in 1919. In 1920, when 100 per cent valuations were used, the assessed value of all property rose to $1,698,561,216. The total amount of taxes collected by the State increased from $5,086,569 in 1919 to $8,492,749 in 1920 and to $9,021,183 in 1921. The assessed valuation of all property and the amount of taxes collected both declined between 1922 and 1924, but they were still much greater than the 1919 figures. On the debt side, the general bonded debt declined from $28,935,500 in 1918 to $25,750,000 in 1919 and then increased sharply to $34,588,500 in 1920. Per capita debt declined from $7.79 in 1917 to $7.24 in 1919 and then
increased to $7.45 in 1922. 16 The State Treasurer's Reports indicate that total State receipts were increasing steadily during the same period. 17

The per cent of taxes collected to the amount of debt outstanding in 1919 was 19.8; in 1920, it was 19.0 per cent. In 1919, debt outstanding was 1.77 per cent of the assessed valuation of property, but this increased to 2.63 per cent in 1920. These measures indicate that the Louisiana debt burden was increasing; however, it would appear that, by even conservative standards, the State was in a position, around 1920 and 1921, to borrow without seriously endangering its ability to pay its debts.

The 1921 to 1927 period in the history of Louisiana debt was, like the 1913 to 1920 era, a relatively quiet one. Some of the scattered borrowing that had marked the 1913 to 1920 period was continued after the new Constitution was adopted. The total amount of borrowing from 1921 to 1927 was $13,500,000. (See Table VI, Appendix A.) This debt creation consisted of both direct and indirect borrowing, but borrowing in the name of the State was of secondary importance. There were only two types of direct borrowing

16Moody's, 1918-1925.

17Louisiana, Treasurer's Report, 1920-21, pp. 6, 24, 48; and 1922-23, pp. 6, 28, 35, 56.
carried on during the period: Confederate veterans' pension borrowing and special highway borrowing. Special highway borrowing was not considered direct borrowing by the State reporting agencies, but it is so considered here. The total direct debt incurred for the payment of Confederate pensions and the construction of certain highways together totaled $3,000,000.

Highway Borrowing, 1921-1927

The only highway borrowing in Louisiana before 1928 consisted of a relatively insignificant amount of specialized Highway Fund Number 2 borrowing. No questions may be raised concerning the purpose of this borrowing. Highways—even specific ones—belong with those improvements which may justify the use of the State's credit. The lack of other activity resulted directly from the provisions in the 1921 Constitution relative to general highway finance. A pay-as-you-go highway plan was contained in Article 6, Section 21, of the Constitution, as follows:

No debt shall be created, or certificates of indebtedness or bonds issued, to be paid in the future out of the proceeds realized from any State tax or license to be collected under and by virtue of this section, or imposed thereunder by the Legislature, but the said licenses and taxes shall be collected from year to year and expended for the purpose of the construction and maintenance of the system of State highways and bridges.18

18Louisiana, Constitution (1921), Art. 6, Sec. 21(c).
The taxes which were to pay the way were the motor vehicle tax and a 2-cents per gallon tax on gasoline and other motor fuels. The Legislature was also authorized to provide revenues to the General Highway Fund from any other sources except borrowing.

The pay-as-you-go approach to highway construction had been very strongly entrenched in most of the American states for several years. Only eleven states had borrowed for highway purposes by 1918; thirteen more states borrowed for this purpose between 1919 and 1922. Others joined the borrowing movement in 1927. The delay in highway programs in many states resulted from controversies over whether the states or the local governments would finance them and whether pay-as-you-go financing or borrowing would be used. The bias against borrowing was still very strong in 1921--it was to take several more years before large-scale borrowing would be socially and politically acceptable in Louisiana.

The constitutional prohibition against highway borrowing did not in any way affect the Highway Fund Number 2 provisions which authorized limited borrowing for a

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specialized purpose. Borrowing for special highway purposes in Louisiana had its origin with the $700,000 issue of 1919 for the purpose of constructing the New Orleans-Chef Menteur and Hammond-New Orleans Highways. These bonds were authorized by Act 18 of 1918 (which was carried over by the 1921 Constitution), and were the only ones issued until 1927 when Series B was sold. In the interim, another amendment was necessary before this 1927 borrowing could take place. The amendment came in the form of Act 179 of 1921 which authorized up to $2,000,000 additional borrowing. This act authorized the funding of the excess of motor vehicle license tax receipts in Highway Fund Number 2 over the annual service requirements on the original issue—the new issue would thus be subordinate to the 1919 bonds. The purpose of the 1927 issue was to complete the two highways, and the Board of Liquidation was again responsible for the borrowing, subject to the same restrictions that had been imposed in 1918. Series B bonds were scheduled to mature between 1928 and 1939 and carried the maximum allowable interest rate of 5 per cent. 22 (See Table VII, Appendix A.)

21 Louisiana, Constitution (1913), as amended 1918, Act 18 of the Special Session; and (1921), Art. 6, Sec. 24.

22 Louisiana, Constitution (1913), as amended 1918, Act 18 of the Special Session; (1921), Art. 6, Sec. 24; (1921), as amended 1924, Art. 6, Sec. 24.1, Act 179; and Moody's, 1928, p. 1214.
Series B bonds, like the first issue, were direct obligations (as defined here), but they were not backed by the full faith and credit of the State. The bonds were secured by the motor vehicle license tax receipts from the six parishes that supported Highway Fund Number 2. It would normally not seem advisable for a State to dedicate specific taxes for the support of individual bond issues. But, if there is a dedication of state funds, such borrowing probably would be best accompanied by the full faith and credit pledge if the State is really the issuing party. This pledge was not given in the case of the Highway Fund Number 2 borrowing in either 1919 or 1927.

Confederate Veterans' Pension Borrowing, 1921-1927

The second and final component of the direct debt added in Louisiana during the 1921 to 1927 period was the Confederate veterans' pension borrowing which started at the end of 1925. The paying of Confederate veterans' pensions was common in the Southern states, but borrowing to finance

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23*Louisiana, Constitution (1913), as amended 1918, Act 18 of the Special Session; (1921), Art. 6, Sec. 24; (1921), Art. 6, Sec. 24.1, as amended 1924, Act 179; Moody's, 1928, p. 121h; 1939, p. 559; Louisiana, Treasurer's Report, 1922-23, p. x; and Ambrose M. Smith, *Compilation of Louisiana State and Municipal Bonds* (New Orleans: A. M. Smith Investment Company, 1933), p. 8.
these pensions was not widespread. In Louisiana, the Constitution of 1921 did not mention borrowing in connection with Confederate veterans. There were included, however, several general provisions relative to the payment of veterans' pensions; a number of legislative acts and constitutional amendments had to be added before this evolved into borrowing. Article 18, Sections 1 through 5, of the Constitution of 1921 provided that pensions be paid to Confederate veterans or their widows in an amount of $30 per month as long as the incomes of the applicants were less than $1,000 annually. These pensions were authorized to be paid from the receipts of the 0.75 mill ad valorem tax which was dedicated for that purpose.

Borrowing for the purpose of paying Confederate veterans' pensions in Louisiana was authorized by a legislative act and a related constitutional amendment in 1921. The constitutional amendment validated the actions of the Legislature in appropriating $1,620,000 for pensions and in authorizing borrowing for pension purposes. The significant change was that the Board of Liquidation of the State Debt was empowered to anticipate the proceeds of the tax and

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25 Louisiana, *Constitution* (1921), Art. 18, Secs. 1-5.
borrow annually an amount equal to the expected annual revenues of the tax. It was further permitted to borrow up to $500,000 more which was to be secured by the same tax. Even this borrowing, however, was insufficient to finance the full $30 per month pension, and the pension soon had to be reduced to $20.  

Bond sales under the 1924 constitutional pension provision came in 1925 and 1926 and totaled $1,000,000. Series A was dated December 15, 1925, and consisted of $500,000 of 4.5 per cent bonds. (This first issue was paid in full in 1931.) Series B, which was dated November 1, 1926, duplicated Series A in amount and terms except that it paid 5 per cent and matured in 1932. The total borrowed to finance Confederate veterans' pensions between 1921 and 1927 thus was $1,000,000. (See Table VIII, Appendix A.)

There is a very important lesson to be learned from the developments in the Confederate veterans' borrowing. What started out as the dedication of certain revenues for

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26 Louisiana, Constitution (1921), Art. 18, as amended 1924, Act 176; and Louisiana, Acts (1924), Act 146, pp. 250-51.

27 Another amendment was added in the next period—in 1928—to pay veterans the amount that was lost when the pension was cut.

the payment of pensions eventually required borrowing; this
debt financing was introduced after the pension was already
established and could not easily be removed. These develop­
ments in Confederate veterans' pension borrowing indicate
that the debt structure can be affected by revenue dedica­
tions even though these dedications start out with no mention
of borrowing.

Borrowing for Confederate veterans' pensions was
introduced in anticipation of tax receipts. But all borrow­
ing, in the final analysis, is in anticipation of tax
receipts or some other revenue. This feature would not seem
to modify the general and conventional conclusion that
borrowing for veterans' pensions and bonuses is undesirable
and improper when viewed from the standpoint of conservative
finance.

III. INDIRECT BORROWING, 1921-1927

Direct borrowing which took place during the 1921 to
1927 period amounted to only $3,000,000, while indirect
borrowing amounted to $10,500,000. (See Table VI, Appendix
A.) Dependence upon the indirect form of borrowing in
Louisiana was not a new development but was a continuation
of the trend established by the Port of New Orleans
borrowing of the 1913 to 1920 period.
Port of New Orleans Borrowing, 1921-1927

The purpose of the borrowing by the Board of Commissioners of the Port of New Orleans was basically the same in this period as it was in the preceding years. Port development again seems to have been a worthy reason for debt creation. The constitutional provision in the 1921 Constitution which had a bearing on this borrowing was the one that dealt with administrative officers and boards—Article 6. Section 16 of this article provided that acts and amendments relative to the Port of New Orleans in existence before 1921 would be continued in force to fulfill the obligations on existing bonds, but the new Constitution prohibited the issue of any further debt under such prior acts, except for the New Orleans Navigation Canal. The Board of Commissioners was specifically authorized to borrow $6,500,000 for "public purposes," except current expense; it was authorized to borrow further for similar purposes if certain revenue requirements were satisfied. The Constitution stipulated that the total debt was not to exceed $35,000,000, but this sum did not include, nor did the article affect, the borrowing for the development of the Navigation Canal.

29Louisiana, Constitution (1921), Art. 6, Sec. 16; and Moody's, 1926, p. 1122.
The Board of Commissioners of the Port of New Orleans was also empowered to issue refunding obligations. Thus, the debt could be maintained at $35,000,000 if the Port Commission decided that it was necessary. The bonds were required to be serials, and it was indicated that the annual payments should be as nearly as practicable equal serial annuities. The Constitution of 1921 also provided that the retirement of bonds issued by the Board could be deferred up to not more than ten years from the date of their issue.30

One thing which was not contained in Article 6, Section 16, was a statement of the precise support pledged for Port of New Orleans issues. Lengthy passages prescribed the procedures that the Supervisor of Public Accounts, the State Auditor, the Governor, and the Board of Commissioners would follow in determining whether the revenues of the Port (none of which came from the State) were sufficient to justify issues beyond the $6,500,000 specified. But, it was not indicated in the Constitution whether the State's full faith and credit was pledged for any or part of the $35,000,000. This factor is one which should have been made very clear. Yet, it could only be assumed, from the impressive list of

30Louisiana, Constitution (1921), Art. 6, Sec. 16.
31Ibid.
State officials reviewing prospective issues, that the State was at all concerned in the issue.

This situation was the institutional setting when the Port Commission of New Orleans returned to the bond market after the new Constitution was adopted. The Port borrowing declined in importance, but the Port Commission was still the State's heaviest borrower from 1921 to 1927. (See Table VI, Appendix A.) The tenth issue of Port bonds was sold under the new authorization shortly before the end of 1921 and amounted to $3,500,000. These deferred noncallable serial bonds, which were simply called "Serial Bonds," were given a 50-year term. Issues of $3,000,000 each with similar provisions were floated in 1923 and 1927. The purpose of all these issues was to finance general Port

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32 The Treasurer's Report, after some of these bonds had been issued, indicated that the full faith and credit was pledged for the Port of New Orleans issues. A. M. Smith of the A. M. Smith Investment Company, in his compilation of Louisiana bonds, also indicated that Port bonds were considered full faith and credit obligations by bond attorneys. Moody's considered these obligations of the State or "general obligations" although they were payable primarily from revenues of the Board. A statement published by the Board of Commissioners in 1922 also affirmed that the first issue sold under the new constitutional authorization was a full faith and credit instrument of the Port and the State. Louisiana, Treasurer's Report, 1924-25, p. 57; A. M. Smith, Compilation of Louisiana State and Municipal Bonds (New Orleans: A. M. Smith Investment Company, 1938), p. 14; Moody's, 1927, p. 1129; and Port of New Orleans, "Statement of Amortization," 1922, passim.
improvements. (See Table IX, Appendix A.) Totaling $9,500,000, this Port of New Orleans borrowing accounted for about 70 per cent of all Louisiana debt incurred during the period 1921 to 1927. An important characteristic of the Port bonds was that the first maturity installments were deferred for ten years. This deferment procedure, of course, usually adds greatly to the cost of borrowing; as a general rule, bonds should be retired as quickly as possible. Another questionable practice made its appearance in the bond denominations. Some of the bonds issued were in denominations of $500. Any unit smaller than $1,000 is generally undesirable because small units are less marketable than large and even denominations.3

State Penitentiary Borrowing, 1921-1927

The State Penitentiary was the second agency to issue indirect bonds under the provisions of the new Constitution of 1921. There were some similarities between the Port of New Orleans and the Penitentiary authorizations. Both agencies


34 Supra, Chap. II, p. 124.
could issue bonds secured by their revenues. Bonds issued by both of the agencies were full faith and credit as well as indirect obligations. The difference was that the Port of New Orleans could have up to $35,000,000 of indebtedness outstanding while the Penitentiary was authorized to borrow only $1,000,000. This type of limited authorization is not what is ordinarily meant when reference is made to the special fund doctrine and authority borrowing. These terms are usually used in connection with blanket and/or at least very broad borrowing powers which are delegated to agencies without severe limitations as to amounts that may be borrowed. The Penitentiary borrowing obviously was not of this type. If the Penitentiary should have reason to borrow more at a later date, it would require another constitutional amendment.

The manager of the Penitentiary issued the authorized $1,000,000 of coupon bonds in January, 1922. The purpose of the issue was to acquire 5,000 acres of land adjacent to Angola Plantation on which to construct levees and to reconstruct a drainage plant. Part of the proceeds of the bond sale were also intended to pay $150,000 owed on Angola Plantation. The life of the noncallable serial bonds was

35Louisiana, Constitution (1921), Art. 20, Sec. 1
set at forty years, from 1923 to 1962. 36 (See Table X, Appendix A.)

While the purchase of the land in question might have been necessary and proper, it does not appear desirable that the State should have issued long-term debt in order to raise $1,000,000 to finance the acquisition. Short or intermediate term borrowing might have been more appropriate to raise such a relatively small amount. Under the circumstances, the life of the issue also seems to have been excessive. This case is an illustration of the danger cited in Chapter II. Whenever a maximum term is established (be it the life of the improvement or any other standard), there is a danger that the maximum term will also be the modal term.

Another questionable feature of the Port Commission and the Penitentiary debt was that the interest on this debt was payable only locally. Interest on the Port Commission and the Penitentiary obligations was made payable in Baton Rouge. 37 In order to make bond issues more marketable, it is usually desirable for interest and principal payments to

36 Louisian a, Constitution (1921), Art. 20, Sec. 1; Moody's, 1922, p. 840; Financial Report, 1941-42, p. 80; Smith, Compilation of Louisiana State and Municipal Bonds, 1933, p. 5; and 1938, p. 6.

37 Moody's, 1919, p. 244; and 1922, p. 840.
be payable in the large financial centers of the nation for the convenience of the bondholders.

**Summary of Borrowing, 1921-1927**

The total amount borrowed both directly and indirectly in Louisiana from 1921 to 1927 amounted to $13,500,000. Indirect borrowing continued to be the more important borrowing during the period. The indirect debt consisted of $9,500,000 of Port of New Orleans borrowing and $1,000,000 of Penitentiary borrowing. The direct borrowing over the same span was made up of $2,000,000 of highway borrowing and $1,000,000 of Confederate veterans' pension borrowing. (See Table VI, Appendix A.)

**IV. DIRECT BORROWING, 1928-1940**

The State's credit position near the beginning of the 1928-1940 period can be estimated from the following data: the assessed valuation of property in the State showed an increase from $1,724,954,042 in 1927 to $1,733,552,714 in 1928, and State tax collections were $9,958,758 in 1927 and $9,995,941 in 1928. The significant debt figures were the $8.51 of per capita debt in 1927 and the $8.77 in 1928 compared to the $7.45 per capita owed in 1922. The total debt reported as of August 1, 1927, was $57,319,420 and on
September 22, 1928, it was $54,099,420. Taxes collected were 17.4 per cent of the debt outstanding in 1927 and 18.5 per cent in 1928. In 1920, this measure had been 19.0 per cent. The debt outstanding was 3.29 per cent of the total assessed valuation of property in 1927 and 3.12 per cent in 1928. The comparable figure in 1920 was 2.63 per cent.

These comparisons indicate that the debt burden was somewhat greater in Louisiana in 1927 and 1928 than it had been in 1920, but it does not appear, by the criteria of the market, that Louisiana had exceeded her ability to pay. The State seems to have been in a position to borrow conservatively. Whether the market would view the large-scale borrowing that was to come very shortly in Louisiana as safe is another question. The bond ratings again provide some insight into this problem. The continuation of Aaa ratings on all Louisiana bonds through 1931 is a fairly good indication that there was no immediate alarm over the large-scale borrowing (general highway) that began in 1928.

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38 Moody's, 1926-1928 and 1931; and Louisiana, Treasurer's Report, 1922-23, 1924-25, and 1926-27.

39 The ratings did begin to change radically in 1932 when they were all reduced to Aa and in 1933 when they fell to A. Moody's, 1931, p. 1499; 1932, p. 1482; and 1933, p. 1512.

40 If criteria other than the bond market's had been used in assessing the safety of Louisiana borrowing at the
The yardstick by which Louisiana's borrowing was measured at the beginning of the 1928 to 1940 period was the conventional market criteria which did not indicate that the State's credit was questionable until 1932. The State's new borrowing was accepted for a while on traditional grounds, but Louisiana actually had embarked on a spending program that was not at all common among the states at that time. Louisiana was one of the very few heavy borrowers among the states in the middle of the Great Depression. This heavy spending program apparently was not intended as counter-cyclical fiscal policy; it took place at a time when heavy state governmental spending was considered inappropriate.

Debt changes from 1928 to 1940 were quite different from those during the preceding period. First, there was large-scale borrowing where before there had been relatively

beginning of the 1930's, the conclusion about the appropriateness of borrowing might have been reinforced but for a different reason. For example, if counter-cyclical fiscal policy had been recognized, states in the early thirties might have found themselves in a position where the considerations about safety in borrowing would have been relegated to a subordinate position. Or, it might have been concluded that it was appropriate and even safe for states to borrow at the start of this depression because borrowing and spending might have been expected to contribute enough to recovery to revive debt-paying ability. Neither of these views, of course, was prevalent in the 1930's.

\(^{41}\)Ansel M. Sharp, "The Counter-Cyclical Fiscal Role of State Governments During the 'Thirties'," *National Tax Journal*, XI, No. 2 (June, 1958), 139.
little use of the State's credit. Secondly, where the greatest previous activity had been in the indirect category, direct borrowing now assumed the greater importance. Direct borrowing was for the following purposes: the financing of Confederate veterans' pensions, the building of a new capitol building, the payment of flood and drought relief, and highway construction. Highway construction was by far the most important purpose for Louisiana borrowing. (See Table XI, Appendix A.)

Highway Borrowing, 1928-1940

In Louisiana by 1928, the pay-as-you-go approach to highway financing had been given a 6-year test, and the improvements were far from sufficient. Was borrowing now proper? Highway borrowing had characteristics which recommended it at the beginning of the 1928 to 1940 period as a proper use of the State's credit. First, it could be expected that highway improvements would help by promoting economic growth. Highway borrowing was also proper because highways are long-term, nonrecurrent, and durable improvements that are suitable for long-term indentures. In addition to financial propriety, highway construction, and borrowing for this purpose, were becoming more and more accepted as desirable functions of state governments at that time. Thus, highway borrowing at the start of this period
was not regarded as improper on political, social, or economic grounds.

Large-scale highway borrowing could not take place in Louisiana, however, until the 1921 constitutional pay-as-you-go plan was modified. The modification took the form of seven constitutional amendments affecting highway finance in the space of twelve years. Act 219 of 1928 raised the gasoline tax to 4 cents and authorized the Board of Liquidation of the State Debt to fund the proceeds of 1 cent of the 4-cent tax. There was no indication in the amendment of any specific limit to the amount of bonds that could be issued on this basis. It was provided, however, that the bonds were not to pay more than 5 per cent nor to run for more than twenty years. Bond denominations were required to be not less than $500. Finally, it was stipulated that the obligations offered should not be sold for less than par.

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43 There was another amendment in 1928 relative to the construction of toll bridges, but it was never implemented because it was legally impaired. William D. Ross, * Financing Highway Improvements in Louisiana* (Baton Rouge: Division of Research, College of Commerce, Louisiana State University, 1955), p. 44; and Louisiana, *Constitution* (1921), Art. 6, Sec. 25.1, as amended 1926, Act 266.

44 Louisiana, *Constitution* (1921), Art. 6, Sec. 22(d), as amended 1928, Act 219.
An important point that was not covered in the authorization was whether the bonds provided for would be full faith and credit obligations. Two other unfavorable elements in this first general highway policy were the sanction of denominations as small as $500, and the dedication or pledge of one-fourth of the 4-cent gasoline tax as security for the bonds authorized. Bonds are normally more expensive and less attractive to investors when they are offered in denominations smaller than $1,000. The dedication of revenues to a specific bond issue was undesirable because it would prejudice the position of subsequent issues.

The constitutional amendment of 1928 resulted in $21,000,000 of general highway borrowing which was to be serviced and retired from the proceeds of the gasoline tax. Two issues were sold under this authorization during the next year. (See Table XII, Appendix A.) Series A and B together totaled $15,000,000. Both issues consisted of noncallable serial bonds that matured in 1949. The third issue under this authorization, sold in 1930, amounted to $6,000,000 and brought the total general highway debt to $21,000,000. The bonds of the A, B, and C issues paid the

45 Ibid.

46 From 1918 through 1931, all of the Louisiana obligations were rated Aaa by Moody's. Therefore, the Moody's ratings are not analyzed until the next period when they began to change.
maximum interest rate of 5 per cent permitted under the 1928 authorization, and they also made use of the maximum life authorized—twenty years. 47

Twenty-one million dollars of borrowing in two years made a big change in Louisiana's debt structure, but it was minor compared to what was about to happen. Act 3 of the Extra Session of 1930, which was accepted as a constitutional amendment in 1930, established a large-scale highway plan. This time, the Louisiana Highway Commission was given the responsibility of borrowing under the supervision of a newly created State Advisory Board. The main purpose of the authorization was to construct paved State highways and bridges required in connection with these highways. The Commission was authorized to borrow $68,000,000 for this purpose. Another purpose, in the same act, was to finance the construction of a bridge over the Mississippi River in New Orleans. The sum of $7,000,000 was granted for this purpose bringing the total borrowing authorized to $75,000,000. Act 3 of the Extra Session of 1930 further provided that no more than $35,000,000 could be borrowed in

any single year. The bonds were required to be advertised, to be sold publicly to the highest bidder, to be sold for not less than par, to pay no more than 5 per cent, and to be retired in not more than twenty-five years. Bonds were to be in denominations of not less than $1,000, and the first maturity installment could not be deferred more than four years. Finally, the bonds were secured by the following pledges: the surplus of the previously dedicated 1-cent gasoline tax, the remaining 3-cent gasoline tax, and the State's full faith and credit.

Before 1930 came to an end, $15,000,000 of bonds were sold under the new authorization. This sale was the fourth highway issue, Series D, and the bonds had a maturity date of 1955. Borrowing for the purpose of paving highways and the constructing of bridges continued in 1931 when another $15,000,000 issue was floated. This Series E issue also matured in twenty-five years. A third issue under the same authorization was Series F of $15,000,000 which came early in 1932. The three issues of $15,000,000 each ran for the maximum allowable term of twenty-five years. Series G

48Louisiana, Constitution (1921), Art. 6, Sec. 22(e), as amended 1930, Act 3, E.S.; Louisiana, Financial Report, 1941-42, p. 81; Moody's, 1931, p. 1494; and Smith, Compilation of Louisiana State and Municipal Bonds, 1933, p. 6.
bonds, which amounted to $7,000,000, were sold to the
Reconstruction Finance Corporation in 1932 and were also
given a 25-year life. Five of the seven issues, from A
through G, paid the maximum interest rate provided under
the authorization—5 per cent. The other two issues paid
4.5 per cent.\(^4^9\)

The final highway issues sold in the 1930 to 1932
period of heavy general highway borrowing were Series H and
I, dated in September and October of 1932. Series H
amounted to $7,500,000 and I amounted to $2,500,000. Both
of the issues were callable at par. This instance was the
first use of the call option on the provisions of any high­
way bonds sold in Louisiana. The two issues were designed
to pay 5 per cent and to mature between 1936 and 1940. The
bonds thus were deferred callable serials.\(^5^0\)

The reservation of the call feature on Series H and I
bonds later made possible a very profitable and efficient

\(^4^9\) Louisiana, Treasurer's Report, 1932-33, p. 82;
Louisiana, Financial Report, 1941-42, p. 81; Smith, Complia-
tion of Louisiana State and Municipal Bonds, 1933, pp. 6-7;
Moody's, 1932, p. 1482; 1933, p. 1512; and Ambrose M. Smith,
A Supplement to the Compilation of Louisiana State and
Municipal Bonds (New Orleans: A. M. Smith Investment

\(^5^0\) Louisiana, Treasurer's Report, 1932-33, p. 83;
Moody's, 1934, p. 513; Smith, Compilation of Louisiana State
and Municipal Bonds, 1934, p. 5; and 1938, p. 8.
debt refunding. It appears at first glance that much wider use should have been made of this feature during the whole period when interest rates were so high. None of the nine issues (amounting to $83,000,000) sold between 1929 and 1932 carried interest rates of less than 4.5 per cent, and seven of the nine issues paid 5 per cent. The rates on these bonds were so high that the State would have been fortunate if it could have retained the call privilege. By this time, however, Louisiana was having a great deal of trouble floating bonds of any description. The State probably would have been unable to sell any callable bonds with its credit standing in the market which prevailed during this period.

There are several other interesting features of highway issues D through I. There was a shift of responsibility from the Board of Liquidation of the State Debt, which had been responsible for the earlier issues, to the Louisiana Highway Commission, subject to the approval of the newly created State Advisory Board. Such shifts of administrative responsibility should occur very infrequently and only when the change will clearly bring more efficient

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51 Infra, p. 206.
operation. Abuse of this principle can cause uncertainty in the minds of the investment analysts and their customers and can conceivably lead to higher interest costs. Although it cannot be concluded that the shift in this case was undesirable, there is no indication that the change had any important favorable implications. Another noteworthy characteristic of the highway borrowing which resulted from Act 3 of the Extra Session of 1930 was that the bonds issued from 1930 to 1932 all had maturities equal to the maximum time allowable. When maximum terms are stipulated in constitutional provisions, some effort should be made to encourage shorter terms.

The differences in the security provisions of issues A, B, C and of issues D through G were also important. The first three issues were given the security of 1 cent of the gasoline tax. No other bonds could henceforth be issued payable on a parity from that portion of the gasoline tax. Bonds subsequently issued, of course, might not be as desirable to investors as the senior issues, and they would consequently tend to require higher interest rates to attract buyers.

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Series D through P were payable from the surplus of the 1-cent tax, from the remaining 3 cents of the 4-cent gasoline tax, and they were also secured by the State's full faith and credit. Pledging the surplus of the first 1-cent tax to issues D through P may conceivably have done more harm than good because it lent a second lien flavor to those issues and introduced undesirable complexity into the protective features of the bonds.

The next development in Louisiana highway finance was another constitutional amendment which came in 1934. For a change, Act 2 of 1934 did not make any important debt management revisions and served mostly to bring together and reenact all of the constitutional provisions relative to highway borrowing that had been added since 1921. Some of the bonds issued after this time thus were issued under the terms of Act 3 of the Extra Session of 1930 as amended and reenacted by Act 2 of 1934. Series J through N and P (there was no Series O) that were so issued in 1934, 1935, and 1936 totaled $13,000,000. Of this total, $5,000,000 was intended for the completion of the planned road system and the remainder was for the continuation of farmer and feeder road construction.

Series J, the only highway issue sold in 1934, was a relatively small one of $500,000. It was also somewhat unique in that it contained the call feature and was scheduled to mature in only five years—in 1939. The interest rate of 5 per cent was typical of those of the period. The call feature was not exercised in this case, and Series J was retired at the end of the 5-year term. The rest of the general highway issues in 1935 and 1936 were Series K of $1,000,000; Series L of $5,000,000; Series M of $1,500,000; Series N of $2,500,000; and, Series P of $2,500,000. Series J through P (except 0) thus amounted to $13,000,000 and completed the $75,000,000 of borrowing that had been authorized initially in Act 3 of the Extra Session of 1930. None of these obligations except Series J was callable. Interest rates continued to be relatively high—between 4.25 and 5 per cent.

Act 66 of 1936 authorized $24,500,000 of regular general highway borrowing in addition to $5,500,000 for refunding. The bonds were secured by the proceeds of the 4-cent gasoline tax subject to all of the prior pledges in Acts 219 of 1928, 3 of the Extra Session of 1930, and 2 of

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1934. All of these bonds, except for the refunding bonds, therefore, were junior to the outstanding general highway obligations. Other requirements were unchanged: the bonds were to be general obligations of the State, denominations were to be not less than $1,000 each, the interest rate was not to exceed 5 per cent, and the life of the bonds was limited to twenty-five years.

Three issues sold under the terms of Act 66 of 1936 in 1937 were followed by two more in 1938, three in 1939, and a single one in 1940. Series Q of 1937 was the first of these issues and differed somewhat from the rest of them because it was the refunding issue authorized by Act 66. The call option reserved on Series H and I of the highway issues of 1932 was partially exercised in 1937 by means of this sale. There was still $5,500,000 of the bonds outstanding by 1937 when prevailing interest rates fell below 5 per cent. Sufficient funds were not available, however, to take advantage of these lower rates without further borrowing.

The refunding was authorized by the aforementioned Act 66 of 1936. The sum authorized was exactly $5,500,000, and it was

56 Louisiana, Constitution (1921), Art. 6, Sec. 22(f), as amended 1936, Act 66.

57 Some of the serials had already matured, and some of the outstanding bonds due in 1939 and 1940 had been called in 1936 and paid from Highway Commission revenues.
specifically stated that the funds raised would be used to retire Series H and I prior to their maturity. Bonds issued to raise the $5,500,000 were assigned the same protective provisions as had the bonds they were replacing. The refunding issue was scheduled to be retired between 1941 and 1960. The interest rate paid on these refunding bonds was 3.75 as opposed to the 5 per cent on the H and I issues they replaced. This issue was noncallable and was rated Baa by Moody's at the time of issue and A the following year.

Series R and S were the other issues sold in 1937 under the authority of Act 66 of 1936. Series R amounted to $6,500,000 and paid 3.5 per cent. Series S of $5,000,000 was sold at split rates of 4 per cent on the serials maturing from 1941 to 1957 and 3.75 per cent on those maturing from 1958 to 1960. These two issues, like those of Series Q, were not callable. The use of split rates here was the first instance of their use in Louisiana up to this

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58 Louisiana, Constitution (1921), Art. 6, Sec. 22(f), as amended 1936, Act 66; and Smith, Compilation of Louisiana State and Municipal Bonds, 1938, p. 8.

59 Moody's, 1938, p. 636; 1939, p. 558; and Smith, Compilation of Louisiana State and Municipal Bonds, 1938, pp. 9-10.

60 Moody's, 1938, p. 639; and 1939, p. 558.
time. Split rates would appear to be a proper technique of debt management since they can add to the marketability of bond issues and thus perhaps to better interest terms. The remaining issues authorized by Act 66 of 1936 were Series T through Y sold in 1938, 1939, and 1940. Series T and U of 1938 were both split rate issues totaling $6,500,000 together. Both were designed to mature serially by 1960. In 1939, $4,000,000 of bonds was sold under the 1936 authorization. These Series V through X bonds were scheduled to mature in 1961. Series Y of 1940 amounted to $2,500,000 and matures in 1960. Like the 1938 bonds, these

61The rating of Series R and S at the time of their issue was Ba—a very low rating for state bonds. The Ba rating at that time was given the following meaning:

Bonds carrying the Ba rating generally have some elements of uncertainty. Investment characteristics are not entirely absent, but speculative elements begin to dominate. Moody's, 1928, pp. viii.

These Ba ratings on Series R and S were lower than those that had been assigned to the other Louisiana highway issues. This lower rating was probably a result of the subordinate nature of the security pledged for the payment of the bonds. However, it may also have been indicative of the undesirable complexity and the pressure on the ability to pay that was growing in the Louisiana debt structure with each additional highway issue. The raising of the ratings on the same issues, R and S, in 1939 to Baa still recognized them as less attractive than the prior lien A through Q issues that were rated A. Moody's, 1939, p. 558.
issues were all noncallable and were rated Baa. The remarks relative to the split rates and the junior security of these bonds apply equally here.

Still other bonds were being sold in 1939 under a separate authorization. This authorization was Act 39 which was adopted as a constitutional amendment in 1938. The total amount of bonds authorized under this amendment was only $5,000,000. The purpose of this borrowing was to construct farm-to-market roads and to finance maintenance of State highways and bridges. The bonds were to be general obligations and the 4-cent gasoline tax was also dedicated to the payment of these issues subject to three substantial prior claims. The retirement of these bonds was required by the constitutional amendment to begin not more than three years after the date of issue and to be completed in not more than eight years from that time. The interest maximum continued at 5 per cent and the administrative relationship between the Highway Commission and the State Advisory Board was also maintained for this authorization. 63

The bonds sold under the second authorization of 1938--Act 39--were Series AA, BB, and CC, which together totaled


63 Louisiana, Constitution (1921), Art. 6, Sec. 22(h), as amended 1938, Act 39.
$5,000,000. Series AA and BB were of $1,000,000 each while Series CC, which bore split rates, accounted for the remaining $3,000,000. These three issues carried strikingly different interest rates: Series AA of May 1, 1939, bore a 3.5 per cent rate; Series BB of June 15, 1939, had a 3.25 rate; and Series CC was split between $2,500,000 at 2 per cent and $500,000 at 1.75 per cent. The security pledged in each case was the same, and the complexity factor was not different between the bond issues. There was one major difference between the first two issues and the last one; this was the fact that the first two matured in 1947 while the CC issue would be fully retired in 1944. The difference in the life of the bonds is more than enough to explain the difference between the interest rates of Series CC and those of the other two issues, but there is no such obvious reason for the 0.25 per cent difference between the AA and BB issues except six weeks of time. This difference does not mean, of course, that the rate paid on the AA bonds was too high or could necessarily have been avoided, but it does indicate how much interest rates can change from one month to another and how borrowing must be planned sufficiently in advance so that the debt managers can try to take advantage of the changes which seem inevitably to come.

64Ibid.; Moody's, 1940, p. 439; and 1941, p. 463.
All of the highway borrowing discussed thus far in this section was for general highway purposes. The total amount of this borrowing during the 1928 to 1940 period was $125,500,000. (See Table XII, Appendix A.) There was, however, other State highway borrowing for a more limited purpose. The motor vehicle license tax collected in six parishes had been used to issue $700,000 of bonds in 1919 and $2,000,000 more in 1927. Now, by a constitutional amendment accepted in 1936, Act 71 authorized the dedication of funds to State Highway Fund Number 2 for the purpose of constructing and completing a highway and bridges between Mandeville and New Orleans and to purchase the Pontchartrain Bridge. The funds set aside for this purpose consisted of 50 per cent of the license fees collected on farm trucks, $7.50 of the fees on all other trucks, and 25 cents per rated horsepower on all automobile licenses sold in the six parishes. The Louisiana Highway Commission was empowered, with the consent of the State Advisory Board, to fund these revenues except for an annual amount sufficient to service prior issues. It was further specified that the bonds were to be general obligations of the State. The limitation on the amount of bonds that could be issued was set at

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65Louisiana, Constitution (1921), Art. 6, Sec. 22(g), as amended 1936, Act 71.
$5,000,000. The usual terms about interest rates and the life of the bonds were also included—5 per cent and twenty-five years. The permissible deferment before the first installment was paid was four years after issue. 66

The Highway Fund Number 2 amendment of 1936 brought two issues, C and D, of $1,000,000 each in 1938. (See Table XII, Appendix A.) Series C and D mature in 1961. Series E and F followed quickly in 1939: the first of these was an issue of $600,000, and Series F totaled $1,000,000. Both E and F mature in 1962. Series C through F are subordinate to the Highway Fund Number 2 issues of the earlier periods. The total debt added during the years from 1928 to 1940 for the Chef Menteur and Hammond-New Orleans State Highways was $3,600,000. 67

The Highway Fund Number 2 debt was a direct debt of the State just as was the general highway debt, and they were both used for highway construction. The period that lasted from 1928 until 1940 brought $125,500,000 of general highway borrowing and $3,600,000 of Chef Menteur debt—a total of $129,100,000. (See Table XII, Appendix A.)

66 Ibid.
The State of Louisiana had two highway funds before 1928, so complexity in highway financing did not originate between 1928 and 1940. What had happened in this period, however, was that these separate funds had evolved, through constitutional amendment, into somewhat complex units in their own right. By this time, each of the funds had junior lien bonds to service. This growth of complexity and uncertainty in the Louisiana highway issues may have penalized the State through higher interest rates. This loss may have been quite large because highway issues made up such a great portion of the total borrowing in the State. Flaws in highway borrowing in Louisiana during the 1928 to 1940 period affected a large part of the total debt structure.

Confederate Veterans' Pension Borrowing, 1928-1940

The second type of direct borrowing between 1928 and 1940 was for the purpose of financing Confederate veterans' pensions. The constitutional amendment pertinent to Confederate veterans' pension bonds mentioned in the preceding section carried over into the 1928 period. Acts 146 and 176 of 1924 had authorized the Board of Liquidation of the State Debt to anticipate the proceeds of the 0.75 mill ad valorem tax and to pledge the proceeds of that tax as security for any indebtedness incurred. The Board was
allowed to borrow annually under the blanket authorization a sum equal to the anticipated proceeds of the tax as well as an additional $500,000 annually. Funds so borrowed were to be used to pay $30 per month to eligible Confederate veterans. A sum of $500,000 of Series C bonds were sold under these terms on October 1, 1928. Bonds of Series C were full faith and credit obligations of the State payable from the Confederate Veterans' Fund and thus the 0.75 mill ad valorem tax. The issue paid the maximum allowable interest rate of 5 per cent and was noncallable. Series C was scheduled to mature in 1933. The issue had much in common with the Confederate veterans' pension issues sold in the 1921 to 1927 period. (See Table XIII, Appendix A.)

Series D of the Confederate veterans' pension borrowing, dated January 1, 1929, had a separate authorization and a different purpose from Series C. The purpose of the issue was indicated in Act 23 of 1928 which amended the Constitution to permit the payment of back or overdue pensions. Back pensions had accumulated from October 1, 1922, to

68Louisiana, Constitution (1921), Art. 18, as amended 1924, Act 176; and Louisiana, Acts (1924), Act 146, pp. 250-51.

69Louisiana, Treasurer's Report, 1928-29, p. 77; Moody's, 1929, p. 1341; 1930, p. 1455; 1939, p. 558; and Smith, Compilation of Louisiana State and Municipal Bonds, 1933, p. 4.
July 1, 1924, when the pensions had to be cut from $30 to $20 because of lack of funds. Pensioners had lost $210 each for a total of $589,260 because of the cut, and Act 23 provided for the borrowing of funds sufficient to restore this amount. The security which the Board of Liquidation was empowered to pledge for the support of the bonds was the proceeds of the 0.75 mill tax for the years 1933 through 1938. The back pensions were financed by the January 1, 1929, bonds of Series D. The $589,260 of bonds was noncallable like the rest of the Confederate veterans' issues and matured fully in 1938. The interest rate on the obligations was 5 per cent, and they were rated Aa by Moody's. 71

Not long after back pensions were restored, there was another development in Confederate veterans' pension borrowing. Act 7 of the Extra Session of 1930, adopted as a constitutional amendment in 1930, raised Confederate veterans' pension payments to $60 per month. The Board of Liquidation was again authorized to offer as security the unpledged annual proceeds of the 0.75 mill ad valorem tax for payment of any bonds issued to finance the increase. Act 7 also

70 Louisiana, Constitution (1921), Art. 18, Sec. 6, as amended 1928, Act 23; and Louisiana, Treasurer's Report, 1934-35, p. 42.
pledged the State's full faith and credit to the payment of the bonds. The resulting offering was the noncallable Series E of April, 1931, which amounted to $2,000,000. The bonds paid 4.5 per cent and matured serially from 1939 to 1942. Series E bonds ranked on parity with Series C and D.

The third constitutional amendment pertaining to Confederate veterans' pensions in the 1928 to 1940 period was Act 82 of 1934. The act had two significant provisions. First, it provided that bonds could be issued to pay pensions and that these bonds would be paid and secured by the unpledged portion of the 0.75 mill tax. Bonds issued under this 1934 act were subordinate to the previous Confederate veterans' issues. The use of multiple lien bond financing thus had spread to another area of Louisiana's debt structure. The difference was immediately recognized by Moody's through a lower rating than the other Confederate veterans' bonds carried. This difference in the rating was justified,

72Louisiana, Constitution (1921), Art. 18, Secs. 2, 3, as amended 1930, Act 7, E.S.; Louisiana, Financial Report, 1941-42, p. 80; Moody's, 1932, p. 1482; 1939, p. 559; and Smith, Compilation of Louisiana State and Municipal Bonds, 1933, p. 4.

from the viewpoint of the prudent investor, because the bonds had a smaller margin of protection and were more complex.

The second significant change which was made in the Confederate veterans' pension borrowing by Act 82 of 1934 was the revision of the maximum interest rate provision. Where the maximum interest rate had been constitutionally fixed at 5 per cent, this amendment added the alternative that the bonds could be sold for not less than 95 cents on the dollar. $^74$ Of course, this had the effect of raising the maximum effective rate that could be paid on the bonds. Confederate veterans' pension issues sold during the period had all paid 5 per cent except Series E, and it may have been necessary to raise the limit to ensure selling future bonds. It appears, however, that if the maximum allowable rate needed to be raised, it should have been done more directly.


$^75$A bond paying a rate of 5 per cent that is sold at par has an effective current rate of 5 per cent. But the same 5 per cent coupon rate on a bond sold at 95 bears an effective current rate of 5.26 per cent.
As a result of Act 82 of 1934, Series F of $2,000,000 was sold in 1935. Like the other Confederate veterans' pension issues of the period, Series F consisted of full faith and credit bonds and was payable from the 0.75 mill ad valorem tax proceeds. But this time, the bonds were subordinate to the outstanding D and E bonds (Series C bonds had matured by 1933). The Moody's rating given to the bonds of Series F was A; the senior issues of D and E were rated Aa. Series F was noncallable like the other issues payable from the Confederate Veterans' Pension Fund, and it was retired serially between 1943 and 1950. This Series F issue was sold more than seventy-five years after the beginning of the Civil War. By this date, 1935, there were still 1,891 pensioners left. Borrowing primarily for the purpose of paying pensions to Confederate veterans and their widows was now ended. The remaining pensions continued to be paid, of course, but borrowing primarily for this purpose was discontinued. The Confederate Veterans' Pension Fund continued in operation and was supported by the same 0.75 mill tax dedication.

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77 Moody's, 1942, p. 448.
Probably the most important change in the Confederate Veterans' Fund and in the 0.75 mill ad valorem tax dedication between 1928 and 1940 was the change which permitted their use for a new purpose. The authorization for this change was provided by Act 61 of 1936, and the new purpose which it recognized was mothers' and children aid and welfare. This act seems to have been a logical extension of the earlier pension borrowing. Part of the rationalization for the Confederate veterans' borrowing had been that the pensions were a reward for their service but another aspect was their age and infirmity. It is not surprising that other aged and infirm would claim assistance from the same funds. Furthermore, a movement toward welfare legislation throughout the whole economy at the same time probably contributed to the passage of this amendment.

The 1,713 Confederate pensioners living in 1936 were not neglected in the new act. The Legislature was authorized to provide for the merger of these pensions with those for the aged needy. The Legislature was responsible for establishing the security and welfare system as well as the management of the 0.75 mill tax. Borrowing was to be processed through the Board of Liquidation in the same

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78 Louisiana, Constitution (1921), Art. 18, Sec. 7, as amended 1936, Act 61.
manner as in the previous authorizations.\textsuperscript{79} Act 61 of 1936 allowed more latitude to the Legislature than most of the debt acts mentioned thus far. The act also established a new type of relationship between the Legislature and the Board of Liquidation of the State Debt. The proceeds of the 0.75 mill tax had heretofore been dedicated to the Board of Liquidation together with the power to borrow. Now, the funds were to be used by the Legislature for the purpose indicated, but the collections could again be anticipated by the Board of Liquidation.

The bonds sold under the authority of Act 61 were those of Series G in 1939. This Series was a relatively small one of $500,000, but it was split into three parts: $70,000 at 2.3 per cent; $180,000 at 2.5 per cent; and, $250,000 at 3 per cent. The bonds were also noncallable full faith and credit obligations just as were the previous Confederate veterans' issues, but the margin of protection was narrower for this issue because of prior liens on the 0.75 mill tax. Series G bonds were junior to both the first lien E bonds and the second lien F bonds. The A rating assigned to Series G was the same as the subordinated F bonds carried, in contrast to the Aa rating that had been

\textsuperscript{79}Ibid.; and Moody's, 1942, p. 448.
The use of split rates was the only new factor involved in this issue. Normally the provision of split rates aids marketability and is therefore quite desirable. In this instance, however, the advantage may have been offset by the small size of the offering.

State Bond and Interest Tax Fund
Borrowing, 1928-1940

The final component of the direct debt created from 1928 to 1940 was the debt supported by the 1.15 mill ad valorem tax. Act 109 of 1921 pledged the proceeds of the 1.15 mill tax to the State Bond and Interest Tax Fund. The act also recognized several prior debts payable from this fund. These senior charges were the various constitutional debts and the Serial Gold Bonds of January, 1914. The act did not, however, authorize any borrowing, and none of the borrowing which took place during the 1921 to 1927 period was secured by the 1.15 mill tax. The next period was quite different; between 1928 and 1940, five separate issues of bonds were sold that were payable from the proceeds of the 1.15 mill ad valorem tax. (See Table XIV, Appendix A.)

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81 Louisiana, Acts (1921), E.S., Act 109, pp. 233-35.
Although the 1.15 mill ad valorem tax had been dedicated to the State Bond and Interest Tax Fund by Act 109 in 1921, several authorizations were required before the five issues could be sold. The first amendment concerning the 1.15 mill tax after 1927 resulted from the flood of that year. Act 5 of the Extra Session authorized the postponement of taxes and the borrowing of money in case of "... overflow, general conflagration, general destruction of crops, or other public calamity." The actual borrowing of funds was predicated upon a separate authorization by the Legislature. The management of the borrowing would then be the responsibility of the Board of Liquidation of the State Debt. This act was another somewhat rare instance of power being reserved to the Legislature. The nature of this amendment would seem to indicate that it should have been incorporated, if it was otherwise desirable, into Article 4 dealing with limitations of legislative authority. Instead it was included only in Article 10, which deals with revenue and taxation.

While the amendment which added Act 4 of the Extra Session of 1927 to the Constitution did not directly authorize

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82 Louisiana, Constitution (1921), Art. 10, Sec. 11, as amended 1928, Act 4, E.S., 1927.
83 Ibid.
the borrowing, it enabled Act 6 of the Extra Session of 1927 to become law without further constitutional amendment. The Legislature took the necessary steps in Act 6 of the same Extra Session, and the Flood Relief Bonds were issued dated December 1, 1928. The issue was quite small, amounting to only $294,642.35. The bonds, which matured from 1930 to 1938, carried the maximum permissible rate of 5 per cent. As were all of the issues payable from the State Bond and Interest Tax Fund, the bonds were full faith and credit obligations of the State. This issue was now the sixth item paid from the fund; some of the prior liens were minor, but there was still $9,847,400 of Old Serial Gold Bonds outstanding on April 1, 1928.

The next State Bond and Interest Tax Fund borrowing some two years later was similar to the flood relief issue insofar as the purpose was to repair the damages of nature. Drought relief borrowing came in April, 1931 under the authority of the same acts that had permitted the flood relief borrowing—Acts 4 and 6 of the Extra Session of 1927.

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The issue consisted of $502,000 of obligations that matured in 1941. The bonds were full faith and credit obligations, but they were subordinate to six other issues.

One observation seems to apply to both the flood and drought relief issues which took place during this period. Considering the number of acts involved and the wording of the provisions, one would have expected large issues to result in case such calamities occurred. This tendency was not apparent; the two issues were quite small and together amounted to only $796,642.35. Yet, long-term issues were sold to finance this relief. If the disasters had been more costly and greater borrowing had been required, long-term borrowing might have been appropriate, but the sums needed were so small that they probably should have been covered either out of current revenues, or if that was impossible, by short or intermediate term borrowing. It would have been better if the State had not issued long-term debt, freezing certain tax receipts and complicating debt structure, to raise such a small sum of money.

86 Louisiana, Constitution (1921), Art. 10, Sec. 11, as amended 1928, Act 4, E.S., 1927; Act 6, E.S., 1927; Louisiana, Treasurer's Report, 1930-31, p. 77; Moody's, 1932, p. 1482; and Smith, Compilation of Louisiana State and Municipal Bonds, 1933, p. 2.
The third issue between 1928 and 1940 secured by the 1.15 mill ad valorem tax was the $5,000,000 borrowed to finance the construction of a new state capitol building. The general authorization for this borrowing was granted when the voters adopted Act 5 of the Extra Session of 1930 as a constitutional amendment. The amendment was then implemented by Act 10 of the Extra Session of the same year. Act 10 provided that the Board of Liquidation of the State Debt could fund the unpledged surplus of the 1.15 mill tax up to the sum of $5,000,000. The subordinate bonds so authorized were to be full faith and credit obligations. The maximum interest rate was established at 5 per cent, and it was required that the bonds be retired in twenty years from the date of their issue. It was further required that the annual maturity installments should not exceed $250,000. The most detailed part of the act, however, was that which specified in advance the date of issue, February 15, 1931. This specification of the date of issue was unique in Louisiana borrowing. Many of the constitutional amendments investigated thus far were somewhat detailed. But the establishment of the date of issue in advance of even their

87 Louisiana, Constitution (1921), Art. 4, Sec. 12, as amended 1930, Act 5, E.S.; Louisiana, Acts (1930) E.S., Act 10, pp. 39-41.
advertisement was especially undesirable. The practice must be strongly condemned because it completely disregards the fact that the timing of bond sales is important. The setting of the date of issue in advance is a partial repudiation of debt management. There can be no management in the real sense when the fiscal authorities have their hands tied to this extent.

The ninth item to be paid from the proceeds of the 1.15 mill ad valorem tax and the State Bond and Interest Tax Fund was authorized by a new constitutional amendment in 1932. This amendment, Act 122 of 1932, provided that the Board of Liquidation could fund the surplus of the 1.15 mill tax for the following purposes:

... to pay or refund the indebtedness of the State of Louisiana to the fiscal agent banks of the State, aggregating approximately the sum of $3,482,154.00, more or less, incurred prior to May 9, 1932, and the outstanding indebtedness of Louisiana State University... amounting to the sum of $1,000,000.00, ... 88

This act authorized the conversion of short-term bank debt and certificates of indebtedness into bonds. It may be that the depression upset carefully laid plans to repay these short-run liabilities and made this funding operation the only alternative at that time. Generally, however, it

88 *Louisiana, Constitution (1921), Art. 4, Sec. 12, as amended 1932, Act 122.*
is undesirable for bonded debt to be created in this fashion.

The "more or less" authorization of Act 122 turned out to be "more." The amount of the new Serial Gold Bonds sold was $4,950,000—almost half a million dollars more than the act had indicated. The maximum interest rate to be paid had been established at 6 per cent, but the rate carried by the obligations was 5.5 per cent. The new noncallable Serial Gold Bonds were general obligations, but they were junior to the various State Bond and Interest Tax Fund issues described above.

The final Board of Liquidation action in this period in connection with the 1.15 mill tax resulted from the adoption of Act 3 of 1938. This act provided for the refunding of the $8,612,000 of outstanding Old Serial Gold Bonds of 1914 which were originally scheduled to mature in 1964. The Old Serial Golds bore rates of 4.5 per cent, but rates on new Louisiana issues in 1937 and early 1938 were generally much lower than 4.5 per cent. It thus proved fortunate that the call privilege had been reserved when the bonds were

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sold in 1914. This illustrates the desirability of considering the inclusion of the call feature when interest rates are extremely high. It may take many years, but the opportunity may present itself for the option to be profitably used.

Act 3 of 1938 which provided for the refunding was an unusual statute in more ways than one. The passage of legislation in Louisiana providing for the calling of outstanding issues was rare in itself. The most striking thing about this act, however, was the way the refunding was accomplished. The plan to refund, which was under the auspices of the State Board of Liquidation of the State Debt, had actually reached contractual form before the act was ever signed by the Governor.

Section 5. That the Contract heretofore entered into on the 26th day of May, 1938, between the Board of Liquidation of the State Debt and Edward Jones and Co., Inc., for the purchase and underwriting of said refunding bonds is hereby ratified, validated and confirmed, . . .

It is not clear whether any public bidding preceded the awarding of this contract or whether it was a private agreement. If there was no public bidding, of course, there

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90 Louisiana, Acts (1938), Act 3, pp. 28-31; Moody's, 1938, p. 639; and 1939, pp. 558, 562.

should have been. But even if the bidding was public, the letting of the contract before this action was legally authorized could not have lent certainty or security to the State's offering. It is possible that the State might have gotten better terms under more usual circumstances.

The refunding bonds offered were to be subordinate only to approximately $87,182 of annual payment due to the various school funds and other constitutional debt. Since the refunding bonds were to replace the 1914 bonds, they would be the fifth item to be paid out of nine. The bonds were further secured by the full faith and credit status like all of the other issues payable from the 1.15 mill tax. The refunding of August, 1938, was quite successful despite the unusual authorization. The 4.5 per cent was converted to 2.5 per cent on $212,000 maturing between 1939 and 1941; 3.5 per cent on $5,220,000 maturing from 1942 to 1956; and, 3.25 per cent on $3,180,000 maturing between 1957 and 1960. Equally important, but not so obvious, was the saving that would accrue from the reduction of the life of the bonds. The new bonds are noncallable and are to be

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93 In comparing the rates on the original issue and the refunding issue, it should be noted that part of the differential may perhaps be attributed to the fact that the issues were unlike in their call provisions.
fully retired by 1960 while the previous ones were to run until 1964. The saving from earlier retirement was partly offset by the new retirement schedule which decreased the size of the early installments and increased the later ones. 94 Nevertheless, the total interest savings from the refunding was approximately $2,248,000. The new bonds in 1938 were simply called "State of Louisiana Refunding Bonds." This refunding, of course, did not add to the State debt outstanding since it merely replaced the Old Serial Gold Bonds. The security on the new issue duplicated that which had been provided for the bonds it replaced.

V. INDIRECT BORROWING, 1928-1940

Indirect borrowing in Louisiana was relatively insignificant from 1928 to 1940. There was little reason to use authorities to circumvent the debt limitation when the Constitution could be so easily amended. What indirect borrowing did take place may have been influenced more by the depression and counter-cyclical fiscal policy considerations than by the debt limitation. All of the new indirect borrowers in Louisiana were educational or charitable agencies, and they were all authorized to borrow from the

Federal government. The use of the agency in Louisiana during this period, therefore, may have been partly a method of attempting to borrow or otherwise obtain Federal funds.

The Port of New Orleans was again one of the agencies creating indirect debt. New borrowing agencies were the Board of Administrators of the Charity Hospital of Louisiana in New Orleans, the Louisiana State Board of Education, and the Board of Supervisors of Louisiana State University.

**Port of New Orleans Borrowing, 1928-1940**

The Port of New Orleans had been relatively free of restraint in its borrowing prior to the 1928-1940 period. The obligations it issued were considered full faith obligations, but there was no involvement of State funds in any of the issues described previously. This status of the Board of Commissioners underwent a change in 1930. The depression made itself felt on Port revenues to the extent that the State was obliged to aid in debt service. The aid came in the form of a constitutional amendment which adopted Act 1 of 1930. The amendment levied a 1-cent gasoline tax in addition to the 4 cents already collected. The new 1-cent tax was not dedicated exclusively to the Port of New Orleans, but the Port did get 9/20ths of the tax. The main purpose of the dedication was to assist the Board in meeting
principal and interest payments. A secondary provision stipulated that revenues resulting from the dedication would be considered revenues of the Board of Commissioners and would thus be counted in determining whether revenues were sufficient to justify further borrowing as authorized in the Constitution of 1921.\(^9^5\)

Act 1 of 1930 obviously contributed more complexity to Louisiana's debt structure as well as to the Port's: the gasoline tax was being diverted from highway uses and being split between three different agencies; the Port's revenues now would not consist solely of operating revenues but would be dependent upon tax support. This situation is somewhat ironic; one of the justifications for agency borrowing is that sometimes state or municipal credit is so weak that the pledge of specific revenues can be more attractive on the market than the full faith and credit pledge. Now, however, the Port issues had to be secured by State tax revenues.

The characteristic of this important change in the Port of New Orleans debt that may be the most significant (as far as providing an insight into debt management practice in the future is concerned) is the fact that the

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\(^9^5\)Louisiana, Constitution (1921), Art. 6, Sec. 16; Art. 6, Sec. 22, as amended 1930, Act 1; and Smith, Compilation of Louisiana State and Municipal Bonds, 1938, p. 14.
borrowing had started out with the State involved only as a guarantor. There was no indication or intention that the State would ever have to contribute to the support of this Port debt. It would be well to recall this case, along with all of the other pertinent factors, when the persuasive argument is made that "the state's credit is needed only to lend prestige to these issues, but no state funds are needed or will ever be needed." What happened in Port borrowing is also ample reason for including under the category of State debt all issues in which the State has either pledged its credit or contributed any funds.

The first Port of New Orleans offering during the period came in 1936. The authorization for the issue came from a provision of the Constitution of 1921 which had heretofore not been used for any Port issue. The Constitution not only had authorized $6,500,000 of borrowing and set up conditions whereby up to $35,000,000 could be borrowed, but it had also provided that the Port Commission could refund maturing debt. This refunding provision was the basis for the July 1, 1936, sale of $1,304,000 of 4 per cent Serial Gold Refunding Bonds. The refunding bonds replaced those obligations maturing from July 1, 1936 to July 1, 1937, inclusive. The noncallable refunding bonds issued were designed to mature between 1938 and 1961. The issue was
rated Ba by Moody's in 1938, but the rating was raised to Baa in 1939 with all of the other Port debt. (See Table XV, Appendix A.)

The final Port of New Orleans borrowing before World War II was another refunding issue in 1939. This issue of $658,000 was sold under the same circumstances as were the refunding bonds of 1936. This time the refunding bonds paid 3.25 per cent and were to mature in 1959. They were non-callable and bore a Baa rating. Port of New Orleans borrowing for the 1928 to 1940 period thus totaled $1,962,000; it was all for the purpose of refunding maturing debt.

The practice of refunding maturing debt is not compatible with the principle that provision should be made for the retirement of debt. When the maturing principal of an issue is refunded, there is no retirement but rather a perpetuation of the debt. Economic conditions at the time of these Port refundings may have made it necessary to take extraordinary measures to pay maturing principal. There is no question that refunding is preferable to default. However, the blanket authorization to refund, with only the

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96 Louisiana, Constitution (1921), Art. 6, Sec. 16; Louisiana, Treasurer's Report, 1938-39, p. 56; Louisiana, Financial Report, 1941-42, p. 83; Moody's, 1938, p. 640; 1939, p. 558; and Smith, Compilation of Louisiana State and Municipal Bonds, 1938, p. 17.

97 Moody's, 1940, p. 440.
approval of the Governor, probably was an undesirable provision because it did nothing to ensure that the Port would not refund all of its debt as it matured while diverting Port revenues to operating or current expenditures.

**Charity Hospital Borrowing, 1928-1940**

One of the new, indirect, and somewhat narrow uses of the State's resources in this period was for the financing of a new Charity Hospital in New Orleans. The hospital borrowing was authorized by Acts 166 of 1934 and 72 of 1936. The powers and limitations imposed on the Board of Administration were: (1) to demolish the old hospital and to construct a new building; (2) to borrow up to $8,000,000 and to borrow from Federal agencies; (3) to pledge its own but not the State's credit to secure obligations; (4) to pay obligations out of its revenues and such revenue as it was authorized to receive from the State; and, (5) to pay the bonds within thirty years and at a rate not exceeding 6 percent. Section 2 of the authorization contained a sign of the times in its reference to the acceptance of Federal grants from the Federal Emergency Administration of Public Works or any other Federal agency dispensing funds. The State pledged, in Act 10 of the First Extra Session of 1935, aid in the payment of any obligations issued under the above conditions. The State revenue pledged was the first $400,000
collected annually from the proceeds of the corporation franchise tax.\footnote{98Louisiana, Acts (1934), Act 166, pp. 537-42; (1935), 1st E.S., Act 10, pp. 44-54; and (1936), Act 72, pp. 190-92.}

The Legislature alone was responsible for the provisions above; there was no constitutional amendment in this case. Amendment was unnecessary because there was no pledge of the State's credit; the bonds were neither direct, full faith and credit, nor general obligations. The bonds were obligations of the Board of Administrators of Charity Hospital of Louisiana in New Orleans. This borrowing was possible because of the existence of the special fund doctrine. Even the fact that certain State revenues ($400,000 of the corporation franchise tax) were pledged did not make borrowing by the Board of Administrators subject to the debt limitation. However, it is doubtful that this agency borrowing in Louisiana was primarily or solely a result of the constitutional debt limitation; there had not been much difficulty in getting constitutional amendments adopted in Louisiana since the late 1920's. There is no doubt that this indirect borrowing helped to complicate the debt structure.

The Board of Commissioners of the Charity Hospital in New Orleans sold its bonds in October, 1936. The noncallable
issue consisted of three serial blocks: $341,000 bore an interest rate of 4.5 per cent and matured from 1938 to 1941; $1,925,000 paid 4 per cent and matured from 1942 to 1956; and, $2,134,000 carried a rate of 3.5 per cent and matures from 1957 to 1966. The Moody's rating for the issue was Baa.99

The full amount of bonds authorized under Act 166 of 1934 was never sold; the next borrowing for the Charity Hospital in New Orleans had another authorization. Act 4 of 1938 was very similar to the earlier act—the purpose was the same, and the provisions relative to a maximum interest rate of 6 per cent and a maximum term of thirty years were identical. The basic difference was that this act authorized the borrowing of an additional $4,500,000. The protection offered again did not contain any pledge by the State. Instead, the issue was protected specifically by an additional $400,000, dedicated by Act 5 of 1938, from the corporation franchise tax. This amount was the second $400,000 earmarked from corporation franchise tax receipts. The bonds issued under this 1938 authorization thus were to

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99 Louisiana, Financial Report, 1941-42, p. 82; Moody's, 1937, p. 590. This borrowing was not reported in the Louisiana, Treasurer's Reports in 1936-37, p. 51, or 1938-39, pp. 55-56. Presumably, this was in keeping with the special fund fiction that certain agency obligations are not State obligations.
have a first lien on this second $1,000,000. Additional protec-
tion was afforded in that any other fees and revenues of
the hospital were to be used to pay the 1938 bonds subject to
the prior charge of the bonds sold in 1936.

The full $4,500,000 authorized by Act 4 of 1938 was
sold in August, 1938, at 3.85 per cent. The call privilege
was not reserved in this Charity Hospital issue either. The
retirement of this issue was to begin in 1942 and end in
1968. (See Table XVI, Appendix A.) The serial bonds were
rated Baa in 1940, and because of the complexity of the
issue, there would appear to be no question of overrating
here. The issue was secured by a first lien on the
second dedication from the receipts of a certain tax and by
a second lien on all other revenues and receipts of the
agency. This Charity Hospital issue of 1938 is almost a
classic in its complexity—it was indeed an issue that
required a great deal of analysis to determine the nominal
protection and stability afforded to the bondholders. Such
complexity obviously tends to impair marketability and thus
to lead to lower ratings and higher interest costs. If this

100Louisiana, Acts (1938), Act 4, pp. 31-38; and Act
5, pp. 38-41.

101Louisiana, Financial Report, 1941-42, p. 82;
Moody's, 1939, pp. 562-63; and 1940, p. 445.
Charity Hospital borrowing in the 1930's was a classic of complexity, this does not mean that it was necessarily unique. On the contrary, it was representative of Louisiana's debt management and debt structure during the period.

**Board of Education Borrowing, 1928-1940**

The next indirect Louisiana borrowing from 1928 to 1940 was incurred by the Louisiana State Board of Education. The only State Board of Education borrowing came in the closing years of the depression, apparently as a reaction to the economic conditions of that period. Act 6 of 1938 permitted the Board of Education to accept Federal grants and to enter into agreements with the Federal Emergency Administration of Public Works or any other Federal instrumentality in order to secure a loan. A related act, Act 7 of 1938, amended and reenacted Act 100 of 1922 and granted the Board of Education power over certain institutions. It also indicated that the Board could incur debt which was to be secured by any funds granted for that purpose by the Legislature. The more specific Act 6 of 1938 provided the Board of Education with certain funds and granted the power to borrow up to $6,000,000 for the purpose of constructing and furnishing State educational and charitable institutions. Bonds sold under the authorization were required to be
completely retired not more than thirty years after their date of issue. The maximum permissible deferment in the first maturity installment was four years, and interest rates on the bonds could not exceed 6 per cent. The Board of Education was given the responsibility of deciding whether the bonds would be callable and was permitted to sell the bonds either publicly or privately. The security provisions of the bonds made it clear that they were not a liability of the State of Louisiana. Other security pledged consisted of a "first lien" on one-fourth of the surplus of the corporation franchise tax remaining after the payment of certain expenses and prior dedications (the Charity Hospital of New Orleans had a prior claim of $800,000). Finally, it was provided that the tax and the Board (or a replacement) would both be continued until the bonds were fully retired.

The State Board of Education exhausted the entire authorization granted in Act 6 of 1938 with the sale of a single issue in August, 1938. The bonds of this issue were serials; the schedule of principal retirement shows an increase from $126,000 in 1942 to $405,000 in 1966. The

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102Louisiana, Acts (1938), Act 6, pp. 42-46; and Act 7, pp. 47-49.
interest rate on all of the bonds was 4.75 per cent, and the call option was not reserved.  (See Table XVII, Appendix A.)

The Board of Education borrowing in this issue was not unique in any important respect. It was very similar to the Charity Hospital borrowing: the year of the sale, the relationship with Federal fiscal policy, the security used in the bond pledges, the indirectness, and the nonrecurrent nature of the borrowing all were similar. It probably would have been desirable for the State to provide for State educational and charitable institutions directly, if not by means of taxation, by means of direct State borrowing. This practice would have contributed to the achievement of the objective of simplicity. The combined and related circumstances of depression and Federal policy, however, may have justified a temporary departure from this objective.

Louisiana State University Borrowing, 1928-1940

The Constitution of 1921 in one section authorized the Legislature to create the Board of Supervisors, and in another it dedicated, beginning in 1921, up to $1,000,000 annually of a 0.5 mill tax to support the University. An amendment to the Constitution, adopted in 1932, provided still more funds. This time it was up to $1,000,000 of the

excise-licnese taxes collected on insurance policies and from insurance companies. The third source of funds for the University was not provided until 1938 when the surplus of the soft drink tax was dedicated to Louisiana State University.

The Board of Supervisors of the University used these dedicated revenues and operating revenues to become one of the more important borrowers in Louisiana during the period before World War II. Borrowing by the Board was indirect because it was in the name of the Board of Supervisors. For this reason, there was no need for constitutional authorization of all of the borrowing, and legislative acts or resolutions of the Board of Supervisors sufficed as authorizations for the issues.

The first borrowing by the Board of Supervisors was carried out on its own authority. "By resolution of the University Board of Supervisors dated October 22, 1934 there was authorized for issuance $300,000 of 5½% Series Revenue Bonds . . ." Only $119,000 of the authorized $300,000

\[\text{104} \] Louisiana, Constitution (1921), Art. 12, Secs. 7, 17; (1921), Art. 12, Sec. 17, as amended 1932, Act 116.


was ever sold. The bonds, which were predated June, 1934, paid 5.5 per cent and were payable from revenues of the stadium and cafeteria. The obligations were callable serials and were scheduled to mature between 1939 and 1942.  

A second issue of 5.5 per cent serial revenue bonds sold in 1935 amounted to $1,500,000. A $500,000 issue which followed in April, 1937, ranked on par with these 1935 bonds. The purpose of the $2,000,000 of 1935 and 1937 sales was to provide for the construction of buildings. The bonds sold were secured by rental and other operating revenues of the University as well as by the Board's pledge of up to $200,000 annually from the receipts of the insurance excise tax revenues received by the University. (Up to $1,000,000 annually from the proceeds of this tax was appropriated to the University under provisions of the constitutional amendment, Act 116 of 1932.) The $1,500,000 of bonds sold in 1935 paid 5.5 per cent and was due between 1937 and 1955. The 1937 issue was split with $300,000 at 4.25 per cent and $200,000 at 4.5 per cent. The 4.25's were due from 1939 to 1951 and the 4.5's between 1951 and 1956. Only the 1934

issue of the Louisiana State University bonds was callable. (See Table XVIII, Appendix A.)

The next Louisiana State University borrowing was authorized by the Legislature in Act 223 of 1936. The act was somewhat similar to other acts passed around 1936 because it granted the Board the authority to borrow from any agency of the Federal government. The borrowing powers given to the Board of Supervisors in this act were quite broad:

... the Board ... shall have full authority to borrow ... in sums sufficient to provide funds necessary to accomplish or execute any purpose, power, or authority, now or hereafter vested in said Board of Supervisors by the Constitution and laws of Louisiana.  

In addition, the Board was given the right to issue refunding bonds if funds were insufficient to retire the indebtedness incurred under the above authorization. Such refunding bonds were not to exceed the amount of the indebtedness due and were to conform to the same requirements that were placed on other bonds sold under the authorizing act. The usual requirements about interest rates and maturities were included: interest rates were not to exceed 5 per cent,

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109 Ibid., pp. 896-900.
110 Ibid., pp. 596-600.
the first retirement installment could not be deferred more than three years, and all bonds issued would have to be fully retired in not more than forty years from their dates of issue. The security provisions made it clear that the bonds sold under the act would not be State obligations, but it was indicated that the Board of Supervisors could pledge its full faith and credit as security if it was deemed proper. More specific protection was made available for prospective bondholders by the Legislature when the Board was directed to pledge a sufficient amount of its gross revenues including part or all of the undedicated portions of the insurance excise tax.

Act 223 of 1936 was put to use almost immediately in an issue of $1,000,000 dated December 1, 1936. The purpose of the issue was to construct and furnish buildings. The bonds were noncallable serials due December 1, 1938, to 1955. The provisions of the authorizing act were followed, and the bonds were general obligations of the Board of Supervisors. The 4 per cent bonds were further secured by the pledge of up to $100,000 annually from the University's $1,000,000 share of the insurance excise tax if revenues from the operation of the University facilities were insufficient to pay the principal and interest requirements.

\[\text{Ibid.}\]
The 1936 bonds thus were ranked after the issues of 1935 and 1937, to which were pledged $200,000 of insurance tax receipts in case of need.\textsuperscript{112}

Act 18 of 1938 was the next important development in the growth of the Louisiana State University debt structure. Act 18 amended and reenacted Act 95 of 1936, which had dedicated the first $1,500,000 collected from the tax on bottled soft drinks to the Governor for financing the construction and improvement of educational and charitable institutions. In Act 18, a further dedication was made that the surplus of the tax after $1,500,000 would be set aside for Louisiana State University. The purpose of the dedication was to finance the construction and improvement of facilities at the University.\textsuperscript{113}

The $2,000,000 of bonds resulting from Act 18 was dated October 1, 1938. The bonds matured from 1941 to 1958 in amounts ranging from $80,000 in 1941 to $150,000 in 1958. The interest rate was 4.25 per cent, and the issue was non-callable. Security for the obligations consisted of a pledge of the first $200,000 of the soft drink tax dedicated to the University. (Of course, the soft drink tax revenues

\textsuperscript{112}Louisiana, \textit{Financial Report}, 1941-42, p. 82; and Moody's, 1938, p. 639.

\textsuperscript{113}Louisiana, \textit{Acts} (1936), Act 95, pp. 288-307; and (1938), Act 18, pp. 106-7.
received by the University were subject to a prior annual appropriation of $1,500,000.) The bonds were also full faith and credit obligations of the University.

The pledging of the first $200,000 of surplus revenues remaining after a dedication of $1,500,000 of soft drink taxes was more the result of the legal framework than it was a matter of debt management. The Board of Supervisors obviously was getting its funds in a piecemeal fashion and was never really able to consolidate its funds to make more effective use of them for borrowing purposes. The use of the Board's full faith and credit in most of the issues of the period may have been an attempt to overcome this weakness of having dedicated revenues, some subject to prior charges, as support for the issues. The degree of complexity that had been reached in the University borrowing in the short space of five years, from 1934 to 1938, was remarkable.

Summary of Borrowing, 1928-1940

The total amount of money borrowed by Louisiana in the twelve years after 1928 was $165,455,000. (See Table XI, Appendix A.) Highway borrowing in the direct category accounted for $129,100,000 or 78 per cent of this total.

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114 Louisiana, Financial Report, 1941-42, p. 82; and Moody's, 1939, p. 562.
This borrowing occurred roughly in the same period during which all of the states were devoting approximately 44 per cent of their borrowing to highway development. Other direct borrowing during the 1928-1940 period was as follows: Confederate Veterans' Pension Fund borrowing, $5,589,000; State Bond and Interest Tax Fund borrowing, $10,747,000.

The later years of the period, after 1934, brought three new agencies into the Louisiana debt structure: the Board of Administrators of the Charity Hospital of Louisiana in New Orleans borrowed $8,900,000; the Louisiana State Board of Education borrowed $6,000,000; and the Board of Supervisors of the Louisiana State University borrowed $5,119,000. The final agency active in the period was not a new one—the Board of Commissioners of the Port of New Orleans refunded $1,962,000, but this did not add to the debt.

VI. DIRECT BORROWING, 1941-1946

In 1941, the total assessed value of property in Louisiana was $1,406,759,000, and the total taxes collected amounted to $64,959,759. The debt outstanding at the time was $185,692,020. The standard ratios were as follows:

115 Ratchford, American State Debts, p. 262.
taxes collected were equal to 35 per cent of the debt outstanding; debt outstanding was 13.2 per cent of the assessed valuation of property. The ratio of taxes collected to the debt outstanding had increased markedly from 18.5 in 1928 to the 35 per cent. This comparison, therefore, was indicative of an improvement in debt-paying ability. This was not the case, however, in the ratio of debt to property values. The 13.2 per cent in 1941 did not compare favorably with the low 3.12 per cent in 1928. The measure of taxes collected to debt outstanding seems to be the more significant of the two ratios--the other ratio is indicative of the decline in importance of the property tax in Louisiana and the failure of assessments to keep up with values. The improvement in the collection of taxes by 1941 is a good sign that the State was in a fairly strong credit position in 1941. Using market standards, it might have been concluded that it was safe to borrow.

However, World War II was to make heavy borrowing on the state level inappropriate. The War had a marked effect on state borrowing; the gross debt of all the American states declined from a peak of $4,642,000,000 in 1940 to a low of $2,367,000,000 in 1946.\footnote{Tax Foundation, Inc., Facts and Figures on Government Finance, 1952-1953 (New York: Tax Foundation, Inc., 1952), p. 200.} The same trend occurred in
Louisiana—the State was back in harmony with the other states. Louisiana borrowed for only four purposes: highways, institutional improvement, welfare (for Confederate Veterans' Pension Fund), and for funding and refunding. There were no new indirect obligations issued through agencies, and the direct borrowing was for purposes that were already established in the debt structure except for the State institutional improvement borrowing.

Highway Borrowing, 1941-1946

There was no new highway debt creation from April, 1940, until July, 1943. When borrowing resumed, it added only $7,000,000 of highway debt during the course of the war. This relatively small amount of borrowing is even more remarkable because of the fact that Act 377 of 1940—three years earlier—had authorized $10,000,000 of bonds. The purpose of the 1940 authorization was to provide funds for the construction, maintenance, and extension of State highways and bridges. Authority to borrow was vested in the Louisiana Highway Commission with the approval of the State Advisory Board. Besides the State's full faith and

118 The borrowing was eventually carried out under the auspices of the State Highway Department, which replaced the Louisiana Highway Commission in 1942. Ross, Financing Highway Improvements in Louisiana, p. 48.
credit, the other security pledged for the issues sold under the provisions of Act 377 was the 4-cent gasoline tax. This lien on the gasoline tax was subordinate, however, to the claims of all of the outstanding general highway issues. Another feature of the security was the stipulation that no further bonds payable from the 4-cent gasoline tax could be issued on a parity with the $10,000,000. If the 4-cent gasoline tax was to be used as security for any later issues, the claim would be subject to all of the prior claims. This practice was far from unique in Louisiana, of course, but this does not make it acceptable.

The maximum interest rate permitted under the provisions of Act 377 of 1940 was 5 per cent, and it was further stipulated that the bonds should not be sold at less than par. Act 377 also provided that the first principal retirement could be deferred up to four years, and limited the maximum life of the bonds to twenty-five years. Serial issues sold under the authority of Act 377 were Series DD, EE, FF, and GG. (See Table XX, Appendix A.) Series DD of $2,000,000 and Series EE of $2,000,000 were both sold in

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119 Louisiana, Constitution (1921), Art. 6, Sec. 22(1), as amended 1940, Act 377; and Moody's, 1944, p. 426.

120 Louisiana, Constitution (1921), Art. 6, Sec. 22(1), as amended 1940, Act 377; and Moody's, 1944, p. 426.
July, 1943. These split-rate bonds were set to be fully retired in 1961. In 1944 and 1945, Series FF and GG sold for sums of $2,000,000 and $1,000,000. The retirement of these bonds will not be complete until 1963 and 1964. The DD through GG bonds were made callable at par, and their interest rates ranged between 1.25 and 2.5 per cent on all of the larger blocks.  

The Moody's rating in 1945 on the $7,000,000 of bonds in issues DD through FF was Baa. These ratings seem to have been appropriate from the traditional viewpoint because of the complexity which the authorization had contributed to the highway debt structure and because of the subordinate nature of the bonds. Fourteen years later, by 1958, the Series DD through GG bonds had been upgraded to A, and in 1959 they were rated Aa. This does not mean, of course, that there was anything wrong with the original rating. Changes in the Moody's ratings can usually be traced to improvements in the general credit standing of the governmental unit involved or to improvements in the protection.

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122 Moody's, 1945, pp. 421-22.

123 Moody's, 1958, p. 623; and 1959, pp. 663-65.
afforded to specific issues. In the case of the DD through GG highway bonds, by 1958 and 1959, the large highway issues of the 1928-1932 period had been retired, and the prior claims were so greatly reduced that the amount of protection afforded the remaining bonds was very large. At the same time, there was also an unmistakable growth in the State's wealth.

The highway issues described in this section were all general highway issues, and there was no special Highway Fund Number 2 borrowing during the World War II period. In the six years of war, therefore, an average of only a little more than $1,000,000 was added each year for highway purposes. This amount was the smallest sum of highway debt created in any period since the first borrowing for general highway purposes began in 1928. During the war years, highway debt redemptions were greater than $7,000,000 so that the total outstanding highway debt, including the Chef Menteur debt, declined from $106,328,000 in June, 1941, to $89,217,000 in June, 1946. Louisiana highway debt and the total Louisiana debt were still moving in concert.

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124 Act 71 of 1936 would have permitted more borrowing from this fund, but the authority was not exercised during the 1941-1946 period.

Confederate Veterans' Pension
Borrowing, 1941-1946

Act 61 of 1936, discussed in connection with borrowing in the 1928-1940 period, provided that the Legislature and the State Board of Liquidation could use the surplus proceeds of the 0.75 mill ad valorem tax for the support of an economic and social welfare system. The first activity in the Confederate veterans' segment of the debt structure during the World War II period, in April, 1941, resulted from that authorization. (See Table XXI, Appendix A.) The obligations sold were the Certificates of Indebtedness—Series A. The amount of the issue was $500,000, and the certificates, which could not be sold for less than par, carried an interest rate of 3 per cent. Full retirement of these noncallable obligations was set for 1944. The security provisions were as follows: the bonds were full faith and credit obligations of the State, and they were protected by a fourth lien on the revenues from the 0.75 mill levy. In 1942, Moody's gave a rating of A to the Series A Certificates of Indebtedness. Series B of the Certificates of Indebtedness followed two years later in May, 1943; this issue totaled $2,000,000 and matured in 1951. The rates on this group of certificates was 3 per cent on $1,550,000 and 4 per cent on the remainder. The bonds were not rated since they were sold to the State Teachers'
Retirement Fund. The critique of Series A and B bonds is the same as that which was presented in connection with the previous issues authorized by Act 61 of 1936.

The next Confederate Veterans' Pension Fund offering depended upon Act 390 of 1940. The act provided:

That each Confederate Veteran, and each widow of a Confederate Veteran, whose name was on the pension roll on June 1, 1932, and who was entitled to receive the pension provided for by this Article, and whose pension was reduced from Sixty Dollars per month to Thirty Dollars per month on June 1, 1932, shall be paid the sum of Thirty Dollars per month from June 1, 1932 to June 1, 1935, the date when said pension was again increased to $60 per month or a total sum of One Thousand and Eighty Dollars.

The Board of Liquidation was authorized to borrow up to $900,000 to raise the funds needed to pay these back pensions. Although the act did not provide as much detail as usual, it did specify a maximum interest rate of 5 per cent. The lack of further detail did not seem to affect the status of the bonds, and they were accepted as full faith and credit obligations without question. This acceptance,

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126 Louisiana, Constitution (1921), Art. 18, Sec. 7, as amended 1936, Act 61; Louisiana, Financial Report, 1941-42, p. 80; 1945-46, p. 64; and Moody's, 1942, p. 447; and 1944, p. 425.

127 Supra, pp. 220-21.

128 Louisiana, Constitution (1921), Art. 18, Sec. 6, as amended 1940, Act 390.
of course, was not unusual since the obligations were issued payable from an ad valorem tax and by a State Board. The Board of Liquidation did not avail itself of the whole authorization, and in July, 1941, issued only $675,000 of Series H bonds. This issue was now the fifth charge upon the Confederate Veterans' Pension Fund. The rates on the intermediate term bonds—maturing from 1945 to 1947—were from 1 to 1.5 per cent. The issue was noncallable and got an A rating from Moody's.

The three sales of Confederate Veterans' Pension Bonds during World War II added $3,175,000 to Louisiana's debt and brought the total borrowing for this purpose since 1925 to $9,764,260.

State Bond and Interest Tax Fund Borrowing, 1941-1946

Borrowing payable from the State Bond and Interest Tax Fund during the World War II years depended upon Acts 138 and 383 of 1940. Act 138 of 1940 raised the amount of the ad valorem tax that was dedicated to the State Bond and Interest Tax Fund from 1.15 to 1.47 mills. The 1.15 mill tax had been dedicated to the State Bond and Interest Tax Fund originally by Act 109 of the Extra Session of 1921.

The same act had also provided for the payment of 0.32 mills to the "General Engineer Fund." Now, in 1940, the 0.32 mill dedication was shifted to the State Bond and Interest Tax Fund to make the total dedication 1.17 mills. The funds from the 1.17 mill tax were to be used to pay interest on bonds authorized by: Act 6 of the Extra Session of 1927 (Flood Relief Bonds and Drought Relief Bonds); Act 10 of the Extra Session of 1930 (New State Capitol Building Bonds); Act 122 of 1932 (Louisiana Serial Bonds); and Act 3 of 1938 (Refunding Bonds). In addition, the State Bond and Interest Tax Fund was to continue to provide the minor funds needed to pay the interest on the Free School Fund, the Seminary Fund, and the Agricultural and Mechanical College Fund, as required in Article 12, Sections 19-21, of the Constitution of 1921. Act 138 also authorized the use of the State Bond and Interest Tax Fund to pay any bonds that might later be authorized.\(^\text{130}\)

Subsequent authorization was not long in coming. Act 383 of 1940, adopted as a constitutional amendment in November, 1940, provided that the surplus of the 1.17 mill tax could be funded into general obligations up to $7,000,000. It was also pledged that the State Bond and Interest Tax

\(^{130}\)Louisiana, Acts (1940), Act 138, pp. 543-45.
Fund would be maintained as long as any obligations were outstanding. The purpose of the funding was threefold: (1) to pay short-term indebtedness incurred before May 15, 1940; (2) to pay overdue Confederate veterans' pensions; and, (3) to reimburse the General Highway Fund for certain funds transferred from it to the Public School Fund by the Board of Liquidation. The maximum interest rate prescribed for any issues under the authorization was 5 per cent, and the maximum life of the bonds was set at twenty years. The Board of Liquidation was again named to administer the issue.

The Serial Bonds of April 15, 1941, were sold under the authority of the act described above. The amount of the bonds was $6,145,000, and they bore split rates as follows: $1,173,000, maturing fully in 1946 paid 4.75 per cent (noncallable); $3,041,000, maturing between 1947-1956 paid 2.25 per cent; and $1,931,000, maturing between 1957-1961 pays 2.5 per cent. The two larger blocks were callable. The whole issue was scheduled to be fully retired in 1961, but the bonds were not destined to remain outstanding that long; they brought the next State Bond and Interest

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131Louisiana, Constitution (1921), Art. 4, Sec. 12(a), as amended 1940, Act 383.

Tax Fund activity a few years later—in 1946. (See Table XXII, Appendix A.)

By 1945 and early 1946, the State of Louisiana was selling obligations at the following rates: Institutional Improvement Bonds from 1.5 to 1.75 per cent on large blocks; highway issues from 1.25 to 1.5 per cent on the longer maturities; and, in May, 1946, more Institutional Improvement Bonds were sold with the majority of them carrying interest rates of 1.25 per cent. Conditions in the bond market, thus, made logical a refunding of the callable 2.25 and 2.5 per cent Serial Bonds of 1941. Act 348 of 1946 was intended solely to provide for the refunding of the $4,972,000 still outstanding from this 1941 issue. The act provided that the Refunding Bonds would be payable from the same taxes as the bonds they replaced. This provision meant that they would also be given the same lien. It was further stipulated in the authorization that the bonds would not be sold for less than par and that the average interest cost of 2 per cent should not be exceeded. The bonds were again to be issued by the Board of Liquidation of the State Debt, but this time the State Bond and Tax Board was required to review and approve of the bonds before they could be issued.

133Moody's, 1946, p. 415; and 1947, pp. 421-22.
The Refunding Bonds were sold in September, 1946, at a rate of 1.75 per cent on $4,397,000 and 1.5 per cent on $575,000. The bonds were to be fully retired in 1958 whereas the bonds they replaced would have matured fully in 1961. According to the Financial Report of 1947, the refunding reduced average interest rates from 2.493 per cent to 1.6952 per cent. The noncallable issue was given a Baa rating by Moody's. The only new feature of this issue was the role assigned to the State Bond and Tax Board. The Board had been originally established in 1935 to deal with the financing of subdivisions of the State, but it had not been a practice even to mention its existence in the various constitutional amendments authorizing State debt.

State Institution Improvement Borrowing, 1941-1946

One of the most important changes in Louisiana's debt structure during World War II was the appearance of borrowing for a new purpose. This new direct debt was authorized by constitutional amendment (Act 364) in 1942 to finance the repair, improvement, and construction of designated State correctional and charitable institutions. The practice of dedicating taxes or revenues for the payment of bonds was

extended to this institutional improvement borrowing. In this case, it was certain mineral lease royalties received on State land that were pledged. This case was not the first time that these revenues had been earmarked; the institutional improvement dedication was subject to the following prior claims: (1) 10 per cent paid into the "Road Fund," (2) the portion pledged to cover office expenses, and (3) the amount credited to State agencies and levee boards. Besides the subordinate claim on the mineral royalty revenues, the State Institution Improvement Bonds resulting from Act 364 were further secured by Louisiana's full faith and credit. 136

These provisions relating to institutional improvement borrowing merely carried on the practices that had become well established in the State. More revenues were frozen, a new layer of dedications was established, and another explanation would have to be given to anyone who might be interested in buying the bonds.

The constitutional provisions of 1942 authorized the Board of Liquidation to issue $5,000,000 of Institution Improvement Bonds and required that the bonds be retired between four and twenty-five years from the date of their

136 Louisiana, Constitution (1921), Art. 4, Sec. 2(a), as amended 1942, Act 364.
issue. The bonds were also required to pay no more than 5 per cent, to be sold for not less than par, and to be in denominations of not less than $1,000. It was further provided that the bonds be sold to the highest bidder at public auction and that they should be callable.\(^{137}\)

This last feature—requiring that bonds be callable—was the only unusual requirement. The unqualified provision that the bonds be made callable would appear to be an undesirable requirement. It was noted earlier that the call option usually has a price attached and that this price may sometimes be prohibitive. It would normally be more advisable to leave some discretion to the fiscal authorities to include the call feature if it seems desirable. The constitutional determination of the exact provisions in connection with the call feature of bond issues again is inconsistent with the meaning of debt management.

During the 1941 to 1946 period, two series of State Institution Improvement Bonds were sold under the provisions described. Series A amounted to $378,000 and ran for ten years—it was sold in March, 1945. These A-rated bonds bore split rates of 0.75 and 1.25 per cent and were callable.\(^{138}\)

\(^{137}\)Ibid.

(See Table XXIII, Appendix A.) It is very doubtful that bonds with such low rates will ever be called. The low interest rates that prevailed in 1944 and 1945 on Louisiana bonds were a good indication that the rates would be low on Series A also, and thus it would have been undesirable to pay anything extra for the call privilege when it was so unlikely that the bonds would ever be called. There is no evidence, however, that the inclusion of the call option raised the cost of borrowing in this case.

Series A was one of the several issues sold in Louisiana during this period which raises the question of whether long-term debt should be incurred for such small amounts. Series B of Institution Improvement Bonds was sold on a parity with Series A and closed out the $5,000,000 authorization of Act 364 of 1942. The amount of this May, 1946, issue was $4,622,000. These bonds, which were also rated A, carried rates of 2 per cent on $622,000 and 1.25 per cent on $4,000,000. The issue was not made callable and will not be fully retired until 1967. Since Series B was a relatively large issue and was not callable, the observations made in connection with Series A do not apply here.

Summary of Borrowing, 1941-1946

The only four purposes of borrowing in Louisiana from 1941 through 1946 were Confederate veterans' pensions, highways, institutional improvements, and funding and refunding. The largest amount of bonds sold was the $7,000,000 for highways. A second component of the debt was the funding issue of $6,145,000 that was serviced by the 1.47 mill ad valorem tax. Institution Improvement Bonds, which made their first appearance during the period, amounted to an even $5,000,000. The fourth and final borrowing during the war period was the Confederate Veterans' Pension Fund welfare borrowing that amounted to $3,175,000. The four purposes together totaled only $21,320,000 for the war years, (See Table XIX, Appendix A,) in contrast to the $165,455,000 borrowed from 1928-1940.

VII. GENERAL CONSIDERATIONS, 1921-1946

A chronological study of the Louisiana debt structure overlooks certain general characteristics that are evident only when all of the issues are considered together. Some of these general factors are: the ratings received by Louisiana bonds, the use of the call feature in the State,
debt reporting, the timing of bond sales, and the machinery for managing the debt.

Ratings of Louisiana Bonds, 1921-1946

Between 1918 and 1932, all Louisiana obligations were rated Aaa by Moody's. The meaning of the ratings during that time was not radically different from today--Aaa was a top-grade issue. Louisiana may not have deserved the highest rating in this period because of its record of repudiation and default in the earlier periods. The complexity that was building up slowly from the time the Constitution of 1921 was adopted was also a factor which might have caused the ratings to be qualified. Finally, the State's economy was certainly not among the strongest of the states at that time. These factors, together with the depression and the $51,000,000 of highway borrowing from 1928 to 1931, may have been what prompted Moody's in 1932 to lower the rating on all Louisiana bonds to Aa (while the meaning of the ratings remained unchanged). The 1933 edition of Moody's showed another lowering of the ratings to A. The lower ratings assigned to Louisiana obligations in the 1933 Moody's manual probably were more appropriate than the earlier ones.

141Moody's, 1931, p. 1499; 1932, p. 1482; and 1933, p. 1512.
The practice of assigning blanket ratings for all of a state's obligations did not take into account the issuing of layers of subordinate bonds. This practice of assigning blanket ratings was abandoned around 1939. By this time, there was apparently enough fear, although only three states had defaulted, for the rating system to be revised. The present practice of assigning ratings to individual state issues, therefore, is probably attributable to the depression of the 1930's. Whether this method is still appropriate is questioned elsewhere.

Table A gives the distribution of the different bond ratings according to directness for selected years since 1939. (See also Tables XXIV, XXV, and XXVI, Appendix A.) The $182,227,000 of Louisiana bonds outstanding in 1939 was rated as follows: almost 50 per cent were direct bonds rated A; all of the Aa bonds (there were no Aaa bonds left) were direct obligations; there was also $28,275,000 of direct obligations rated Baa--this was 15.5 per cent. Most of the indirect obligations outstanding in 1939, some $48,077,000, were rated Baa. The remaining $8,000,000 of

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### TABLE A
MOODY'S RATINGS OF LOUISIANA DIRECT AND INDIRECT DEBT OUTSTANDING FOR THE YEARS 1939, 1941, 1946

(Thousands)

<table>
<thead>
<tr>
<th>RATING</th>
<th>1939</th>
<th>1941</th>
<th>1946</th>
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</thead>
<tbody>
<tr>
<td><strong>BONDS RATED Aa</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Direct</td>
<td>$10,169</td>
<td>$8,900</td>
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<tr>
<td>Indirect</td>
<td>0</td>
<td>0</td>
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<td>TOTAL</td>
<td>$10,169</td>
<td>$8,900</td>
<td>$16,825</td>
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<td><strong>BONDS RATED A</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
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<td>$67,875</td>
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<tr>
<td>Indirect</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$87,706</td>
<td>$39,414</td>
<td>$67,875</td>
</tr>
<tr>
<td><strong>BONDS RATED Baa</strong></td>
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<td></td>
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<tr>
<td>Direct</td>
<td>$28,275</td>
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<td><strong>BONDS NOT RATED</strong></td>
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<tr>
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<tr>
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<td>$8,000</td>
<td>$8,000</td>
<td>$8,001</td>
</tr>
</tbody>
</table>

*Ratings range from Aaa to C. These ratings are sometimes changed when new information indicates that the investment quality is different. The ratings in the Table are as of the reporting date and not at the time of issue.*

*The classifications used here are the same as those used in the text.*

*Source: Compiled from Tables XXIV, XXV, and XXVI, Appendix A.*
indirect bonds was not rated. In 1941, the only change that was noticeable in the ratings was that there were now more direct bonds rated Baa, but the amount was still less than the amount of Baa indirect bonds. This tendency changed in 1946—by that time there was $41,831,000 of direct bonds in the Baa category. An unfortunately minor change in the war period was a relative and absolute increase in the amount of bonds rated Aa—they increased from $8,900,000 in 1941 to $16,825,000 in 1946. But, the most important fact about the bond ratings in the war years is that there was no significant improvement in the ratings even though the State's economy was expanding and the debt was declining.

Use of the Call Feature in Louisiana Bond Issues, 1921-1946

The call privilege was reserved in only one of the issues outstanding in 1921. (See Table B.) The twelve noncallable issues outstanding were mostly the indirect Port of New Orleans issues. In 1928, there was still only one callable issue, but there were now nineteen noncallable issues. These nineteen issues were composed of fourteen indirect ones and five direct ones. By 1941, even the lone callable issue had disappeared. It had been called in 1938 and brought a saving of over $2,248,000 during the life of the bonds. Thus, there were fifty-eight noncallable issues in 1941. By 1946, there was an important change: there were
TABLE B
THE INCLUSION OF THE CALL FEATURE IN LOUISIANA BONDS OUTSTANDING, 1921, 1928, 1941, 1946

<table>
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<th>Description</th>
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still fifty-eight noncallable issues, but there were also five callable ones. These five callable issues were all direct issues of the State.

The success of the one refunding that depended upon the call option is an indication of the difference which the wider use of the feature might have made in the cost of the borrowing in Louisiana. At first glance, the use of the call feature thus appears to have been very desirable in the case of the expensive and large highway issues of the late twenties and early thirties. However, the State was having such difficulty marketing its bonds that callable issues might not have been sold at all.

Reporting of Louisiana Debt, 1921-1946

The classification of issues in the Treasurer's Reports placed the Highway Fund Number 2, Chef Menteur-New Orleans and Hammond-New Orleans, borrowing in the indirect category. This misclassification probably is attributable to the fact that the debt was not full faith and credit debt. Confusion surrounding the terms "full faith and credit," "general," and "direct" debt apparently existed in the reporting agencies. Perhaps the most serious reporting fault of the whole period was that the Treasurer's Reports did not include information about any of the indirect issues of the Louisiana State University, the State Board of
Education, and the Charity Hospital Board of Administra-
tors. The only excuse which can be given for this omis-
sion is that the indirect debt technically is not a part of
the State debt. This reasoning may be satisfactory in the
courts; however, it is not acceptable in the bond market.
Indirect debt that is supported with state funds can obviously
affect the state's ability to service its other direct obli-
gations. If the market is to evaluate all pertinent factors,
it must take into consideration the indirect debt. If the
state makes it difficult for interested parties to determine
how much indirect debt it is responsible for, there may be
damage to the state's credit standing. It is advisable to
report all debt in which the state is involved, no matter
what the relationship.

The Financial Reports which took over the reporting
of State debt in 1942 corrected the omission of the indirect
debt and provided more information about authorization,
original amounts of the issues, and interest rates on the
bonds. There still seem to have been a few errors or cases
of incomplete information on some of the details of particu-
lar issues even after the change. However, the Financial

\[\text{Louisiana, Treasurer's Report, 1938-39, pp. 55-56.}\]

\[\text{For example, the 1941-42 Financial Report showed}\]
the Port Commission 4 per cent bonds of 1936 as authorized
by Act 180 of 1908 when the bonds were sold in accordance
Report was a definite improvement in debt reporting; it had the merit of providing more information and being more consistent in its reporting.

Louisiana debt reporting from the standpoint of trying to provide enough information to all interested parties in the market (so that the value of the State's obligations would not be underestimated) was not so successful. The State should have gotten its bond ratings raised to reflect strength of the outstanding obligations near the end of the war period. If Louisiana could have entered the post-war borrowing period with better bond ratings, it might have added greatly to the marketability of the post-war issues.

Timing of Louisiana Bond Sales, 1921-1946

Although seasonal fluctuations are only one of several types which can occur in interest rates, the study of the seasonal pattern may offer more promise in improving the timing of bond sales than any other single timing technique. The seasonal index that was suggested in Chapter II was

with the provisions relative to Port borrowing in the 1921 Constitution. The 1945-46 Financial Report shows only $1,000,000 of Series EE issued, while other reports give the amount as $2,000,000. Louisiana, Constitution (1921), Art. 6, Sec. 16; Louisiana, Financial Report, 1941-42, pp. 80-86; 1945-46, pp. 62-66.
based only on several recent years. It probably would not be correct to try to apply that index to the issues sold from 1921 to 1946 since it is possible and perhaps even likely that the seasonal pattern has changed over this time period. It is obvious, however, that there was a great deal of diversity in the dates of issue of obligations during the period from 1921 to 1946. (See Table C.) The years of heaviest borrowing were from 1928 to 1940; there were fifty-one issues. Forty-one of the issues were direct issues with highways accounting for thirty-one of this number. The large number of highway issues was scattered throughout the year with concentrations in January, October, and December. It is difficult to imagine that such scattered borrowing could have taken advantage of anything but the most unusual pattern which might have existed.

Administrative Machinery, 1921-1946

A review of the various constitutional amendments and acts which provided for bonded debt creation in Louisiana from 1921 to 1946 reveals thoroughly confusing intragovernmental relationships. The governmental unit most frequently

146 If there was a seasonal pattern at all similar to the one of the 1950's, about one-third of the highway obligations would have been in the high-yield months.
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Source: Compiled from Tables VII-XXIII, Appendix A.
authorized to borrow for the State was the Board of Liquidation of the State Debt. The Board of Liquidation was made responsible for borrowing specific amounts for the following purposes: (1) highway construction, (2) Confederate veterans' pensions, (3) funding of short-term debt, (4) construction of a new capitol building, (5) improving institutions, and (6) welfare.

The administrative machinery might have been relatively simple if only the Board of Liquidation of State Debt had managed all bonds issued; this was far from the case. Other governmental units that were involved at one time or another in the borrowing during the 1921 to 1946 period were the Legislature, the State Advisory Board, and the State Bond and Tax Board. These units were only concerned with the different types of direct borrowing. The indirect debt was managed by several agencies or authorities: the Board of Supervisors of the Louisiana State University, the State Board of Education, the Board of Administration of the Charity Hospital, the Manager of the State Penitentiary, and the Board of Commissioners of the Port of New Orleans.

There does not seem to have been a definite pattern in the assignment of functions to the various bodies that dealt with the direct debt. The State Advisory Board replaced the Board of Liquidation in the handling of highway issues after 1930. However, the State Board of Liquidation seemed to manage most of the remaining direct authorizations. One exception was the direction in Act 348 of 1946 that the Board of Liquidation should sell a refunding issue subject to the approval of the State Bond and Tax Board. This amendment was the only one which mentioned the State Bond and Tax Board in connection with any State direct or indirect debt during the period. The State Bond and Tax Board is a unit established to oversee the borrowing activities of subdivisions of the State. The general authority of the State Bond and Tax Board does not seem to cover State issues, although the act which created the Board does mention protecting the State's credit as one of its purposes.

Besides naming boards and other governmental units to issue debt, it was also a practice in many of the constitutional amendments during the 1921 to 1946 period to charge

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148 Louisiana, Constitution (1921), Art. 6, Sec. 22(e), as amended 1930, E.S., Act 3.

certain State officials with specific responsibilities. Again, the assignments of responsibilities to officials seemingly did not follow any orderly plan. Provisions differed radically from one amendment to another. The State Treasurer and the State Auditor were mentioned about as frequently as they were omitted in the debt amendments during the period. The Governor was also mentioned in some cases and even the Manager of the State Penitentiary was involved in one issue. The most important of the State officials connected with debt management in Louisiana during the whole period were the members of the Board of Liquidation. The power of these men and their influence on both the long-term and short-term borrowing in Louisiana during the period requires closer examination.

The management of bond issues was one of the more obvious functions of the Board of Liquidation. The authorizations for this function were given in the various constitutional amendments analyzed in this Chapter. But, the management of bond issues was not the most important function of the Board of Liquidation of the State Debt during the period. The Board was probably more powerful and more important in its control of spending and short-term borrowing. The Board was still operating under several
legislative acts that provided for borrowing from fiscal agent banks in case of "grave emergency."^150

The short-term borrowing of the Board from 1921 to 1936 was repaid by several methods. As had been the practice earlier, repayment of Board liabilities by legislative appropriation continued throughout the period. This method of payment was supplemented in 1934 by a legislative grant of power to the Board to use the surplus in the general fund for debt retirement. The Board in turn gave the Treasurer continuing authority to use the general fund surplus to pay debts. A third method of repayment used both before and after 1936 (in 1932 and 1940) was the funding of short-term debt into long-term obligations.151 There is no question about the validity of these two amendments although the wisdom of creating long-term debt in this manner is questionable.

There were, however, many questions directed at some of the other acts under which the Board operated. It was claimed that there was neither clear-cut nor sufficient authority for all of the functions which the Board performed.

150 "Louisiana's 'Little Legislature'," pp. 9-11.
151 Louisiana, Constitution (1921), Art. 6, Sec. 12, as amended 1932, Act 122; Art. 4, Sec. 12(a), as amended 1940, Act 383; and "Louisiana's 'Little Legislature'," pp. 11-23.
before 1936. Skepticism about the authority of the Board of Liquidation led to the passage of Act 73 of 1936 which had the following purpose:

To protect the faith and credit of the State and of its parishes, municipalities, political subdivisions, public boards, or corporations; authorizing the Board of Liquidation of the State Debt, when it deems such action necessary to protect the faith and credit of the State or any of its parishes, municipalities, political subdivision, public boards or corporations or to adjust their financial affairs or that it is to the best interests of any of them to suspend the provisions of any law of this State providing for the appropriation, deposit, expenditure or dedication of public funds and to transfer any sum of money appropriated, deposited, or dedicated by any law of this State from the purpose for which such appropriation, deposit or dedication was made to other purposes by decreasing, adding to or increasing one or more items, or adding new items, of appropriation, deposit, expenditure or dedication or by providing that such increases or additions shall be paid out of the general fund; providing that any finding of fact under this act by the Board of Liquidation of the State Debt shall be final, and that its action hereunder shall be mandatory upon the State Treasurer and State Auditor, and other officers. 153

Act 73 of 1936 has been described as almost an abdication on the part of the Legislature in favor of the executive branch of the government. The new legislation was put to full use for almost every conceivable purpose from 1936 until

152 For example, see "Louisiana's 'Little Legislature'," pp. 1, 14-15.

153 Louisiana, Acts (1936), Act 73, pp. 192-93.
One of the most impressive actions taken by the Board of Liquidation during those years added another method for financing the Board's activities. This action was the transfer of funds from the Bond and Interest Account of the General Highway Fund to the State Public School Fund, despite a constitutional provision that required that the Bond and Interest Account maintain a sum sufficient to cover the principal and interest requirements on highway bonds for one full year.

The Board of Liquidation of the State Debt operated without any challenge in the courts until 1941. A series of specific decisions by the courts at that time served only to curb slightly the powers of the Board. It was not until 1944 that the Supreme Court ruled directly and conclusively on the basic authority of the Board of Liquidation. The ruling was that Act 73 of 1936 and all previous acts intending to give the Board rights to manage State money and to borrow were unconstitutional. The basis of the ruling was the first section of Article I on limitations:

No money shall be drawn from the treasury except in pursuance of specific appropriation made by law; nor shall any appropriation of money

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154bid.; Louisiana, Constitution (1921), Art. 6, Sec. 22(f), as amended 1936, Act 66; and "Louisiana's 'Little Legislature'," pp. 22-26.

be made for a longer term than two years. A regular statement and account of receipts and expenditures of all public moneys shall be published every three months, in such manner as shall be prescribed by law.\footnote{Louisiana, Constitution (1921), Art. 4, Sec. 1}

The stripping from the Board of Liquidation of its power left the problem of providing for necessary spending between legislative sessions. The solution was a reconstitution of the Board of Liquidation to fill this need without leading to another shift of power from the Legislature to the executive branch of the government. This plan was recognized and advocated by the privately supported Bureau of Governmental Research, Inc., of New Orleans, which had been instrumental in bringing the disputed acts before the courts for review. The reconstitution was provided in Act 327 of 1944, which was approved by the voters in November, 1944, and provided the following: (1) The Board would be composed of the Governor (or his executive counsel), the Lieutenant Governor, the Speaker of the House, the Chairman of the House Appropriations Committee, the Chairman of the Senate Finance Committee, the Auditor and the Treasurer. This change from the composition of the earlier boards added the representatives from the House and Senate who were responsible for appropriations. The Attorney General of the
State was omitted to ensure that legal advice to the Board would not be prejudiced by membership upon the same Board. (2) The Board was limited to $100,000 of borrowing or to a $100,000 appropriation for any budget unit in a fiscal year and to $1,000,000 for all budget units in the same year. It was also provided that there should never be more than $2,000,000 of outstanding debt. (There is no indication in the act about whether this borrowing is limited to short-term obligations.) (3) The borrowing or appropriations to the budget units depended upon a recognition of insufficiency by the Board of Liquidation and the written consent of a majority of the members of the House. (4) Borrowing by the Board of Liquidation could be retired from the General Fund whenever the Treasurer certified that there was a surplus and requested authority from the Board of Liquidation to use it for this purpose. 157

The activities of the Board of Liquidation from 1921 to 1946 were very significant in many respects. None of the activities was more important than the way the Board incurred short-term debt and then presented the accomplished borrowing to the voters with requests to fund this debt into long-term bonds. The Board of Liquidation was an instrument for

157Louisiana, Constitution (1921), as amended 1944, Act 327.
turning what were largely minor, recurrent, and operating expenses of the government into long-term debt. This practice appears to have been an undesirable use of the borrowing authority.

This handling of short-term debt was one of the more specific faults of the Board of Liquidation borrowing during the period. However, there was a more serious flaw in the administration by the Board. Management of state debt obviously should be entrusted only to properly constituted bodies. Any questions about the authority of such bodies to manage debt will be reflected in lower bond ratings and higher interest rates.

Besides having so much of its debt managed under such questionable conditions, Louisiana probably should not have impaired its credit standing in this period by maintaining such complex administrative machinery. There appear to have been too many officials and boards involved in Louisiana's debt structure. Furthermore, no apparent order or plan existed in the relationships between the various bodies and officials of the government. This undesirable tendency toward complexity was also being paralleled in the indirect sector of the debt where there were three new agencies added during the 1928-1940 period.
CHAPTER V

POST-WAR BORROWING IN LOUISIANA, 1947-1959

World War II produced a temporary pause in the growth of debt in Louisiana and in other states. The grand total of all debt outstanding in Louisiana was $160,764,020 on June 30, 1946, and $174,873,020 on June 30, 1947. These debt totals did not differ significantly from the pre-war total of $162,938,020. The State collected $98,915,458 in taxes in 1946 and $111,852,546 in 1947. Assessed value of property in 1946 was $1,641,000,000, and in 1947, it was $1,738,547,000. The ratios between the debt and these ability measures were as follows: In 1946, tax receipts were 61.5 per cent of the debt outstanding, and the debt outstanding was 9.8 per cent of the assessed value of property; in 1947, taxes were 64.0 per cent of debt, and debt outstanding was 10.1 per cent of assessed valuation. By comparison, taxes in 1941 were only 35.0 per cent of debt outstanding, and debt outstanding equaled 13.2 per cent of the assessed valuation of property.¹ The ability to bear

debt, according to these ratios, was greater in 1947 than it had been in 1941.

Louisiana was probably in a better position to borrow in 1947 than ever before. The actual amount which the State could safely borrow in this improved situation is another question and one which cannot be definitely answered. It appears that there was no abuse of borrowing at the start of the post-war period. The debt outstanding had increased to only $169,658,020 by 1948. The question of safety, however, became more relevant in 1949 when veterans' bonuses were proposed. It appears debatable whether Louisiana was in a position at the beginning of 1949 to increase its debt by 35 per cent. But this large increase was exactly what was about to take place.

2Moody's Bond Survey analyzed the debt structure in Louisiana at this time (in an article entitled "Complex Credit Environment Limits Appeal") in connection with a proposed veterans' bonus bond issue of $60,000,000. This reference to complexity, incidentally, set the stage for the Baa rating which was to follow the actual issue some time later. The analysis had bearing not only on that particular issue, but it also dealt with the question of whether or not it was safe for the State of Louisiana to be borrowing at that time. Conclusions about the debt structure were:

(1)"... each appreciable addition ... has a corrosive effect upon the state's general credit."

(2)"Including the ... veterans' bonus bonds, the direct general obligation debt will be ... decidedly high for a state of limited wealth."

(3)"The general level of resources ... remains quite modest and well below the average for the country as a whole."

(4)"As a result of its lavish use of bond proceeds
I. DIRECT BORROWING, 1947-1959

The direct obligations sold during the post-war period consisted of the various veterans' bonus, highway, and institutional improvement obligations. Bonds issued for all of these purposes were backed by certain dedicated taxes and also generally by the State's full faith and credit. The taxes were the beer tax, the gasoline tax, certain motor vehicle license revenues, and the 0.75 mill ad valorem tax.

Veterans' Bonus Borrowing, 1947-1959

The first important borrowing after World War II was for a new purpose—to provide bonuses for World War II veterans (See Table XXVII, Appendix A.) Louisiana had previously incurred debt in favor of Confederate veterans and their widows. The Confederate Veterans' Pension Bonds for capital improvements, Louisiana has worked its general affairs into a somewhat vulnerable position."

(5)"The weight of debt service upon the state's taxing powers is such that the pledge of general state credit is of limited value."

(6)"In a period of unusually depressed business conditions, it is not inconceivable that some of the taxes earmarked for debt might fail to produce revenues adequate to meet specified bond charges."

(7)"The state is already finding it difficult to meet all of the demands being made upon a heavy and exceedingly diverse tax structure."

The above Moody analysis can be summarized as follows: it was considered unsafe for Louisiana to borrow any substantial amounts in early 1949. This pessimistic analysis appears to have underestimated Louisiana's potential. Moody's Bond Survey, XLI, No. 3 (January 17, 1949), 673-74.
did not appear until 1925—about sixty years after the war's end. This new veterans' debt after World War II was for bonuses rather than for pensions, and the bonds were authorized and sold within three years after the conclusion of the war. Veterans' lobbies, eager politicians, and a grateful public combined to make bonus debt a thing familiar in many states. Ten states issued veterans' bonus bonds between 1946 and 1949, and seven more borrowed for this purpose in 1950. Louisiana was an enthusiastic participant in this movement.

Veterans' bonus borrowing is not consistent with good fiscal management. From the standpoint of finance alone, veterans' bonuses are not considered a proper purpose for borrowing. Of course, good fiscal management is not an end in itself, but it is simply a means of furthering the general

3 Louisiana, Treasurer's Report, 1924-25, p. 57.
welfare. After World War II, public opinion dictated that the general welfare would be furthered by paying bonuses and borrowing took place.

The actual veterans' bonus borrowing had much clearer undesirable aspects in Louisiana; it further complicated the unwieldy debt structure. The proceeds of another tax—the beer tax—were dedicated to this specific purpose. The tax had just been raised from $1.50 to $10 a barrel by Act 8 of 1948. This $10 tax would have brought in an average $4.9 million annually in the pre-war period and $9.7 million in the year before the issue. Here was another significant amount of revenue being channeled away from the payment of governmental services.

The issue of the veterans' bonus bonds had still another flaw besides complicating the debt and financial structure. The constitutional authorization did not indicate whether the bonds would be general obligations of the State. Through lack of planning or poor management, the State of Louisiana approached the conservative bond market for $60,000,000 with no more than the advice of counsel that the

6Louisiana, Constitution (1921), Art. 8, Sec. 10, as amended 1948, Act 530; Louisiana, Acts (1948), Act 8, pp. 26-49; Louisiana, Financial Report, 1949-50, p. 58; and Moody's Bond Survey, XLI, No. 3 (January 17, 1949), 529-34.
bonds would be general obligations. There had been earlier instances of this type of uncertainty, but this case occurred after World War II when enlightened management should have been the rule. The purchasers of the issue made their bid subject to a Supreme Court ruling that the bonds were full faith and credit obligations. This instance is a flagrant example of an offering of bonds fraught with needless uncertainty.\(^7\) It is impossible to calculate how much this unfortunate circumstance cost the State, but it is logical to assume that it did have a cost. It is dangerous to oversimplify, but in a case such as this, the consequences are not hard to trace: the uncertainty created by the poor handling probably influenced the Baa bond rating to some extent and thus indirectly raised the interest rate that had to be paid for the funds. Finally, the higher interest charges incurred meant that fewer government services could be made available for the residents of Louisiana with existing revenues. Such are the consequences of poor planning and management.

The World War II veterans' bonus debt, which was not to exceed $60,000,000, was authorized by Act 530 in 1948.

\(^7\)\textit{Louisiana, Constitution} (1921), Art. 8, Sec. 10, as amended 1948, Act 530; \textit{Moody's Bond Survey}, XLI, No. 3 (January 17, 1949), 673-74; and \textit{Moody's Bond Survey}, XLI, No. 5 (January 31, 1949), 651.
(See Table XXVII, Appendix A.) Series A was sold in January of 1949 for $50,000,000. This first series was composed of four blocks that paid different interest rates and matured serially from 1953 to 1964. Here is the explanation of how the State was able to add to its debt burden: the serials were deferred serials—there was no provision for retiring any of this debt for four years. Then, after four years, the following maturities were due: $3,500,000 on January 15, 1953; $3,605,000 on January 15, 1954; and $3,713,000 on January 15, 1955. The debt retirement plan was not intended to eliminate the bulk of the debt until between 1956 and 1964. With the 1953, 1954, and 1955 maturities eliminated, this would leave $39,182,000 outstanding out of the total $50,000,000 sold seven years previously. Earlier retirement than this was possible, however, since the Series was callable.

The use of deferred serials in veterans' bonus borrowing compounded the evils of financially improper borrowing and borrowing in amounts that raised doubts about safety. Deferred serials are generally undesirable because they

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8Louisiana, Constitution (1921), Art. 8, Sec. 10, as amended 1948, Act 530; Art. 8, Sec. 10, as amended 1950, Act 558; Moody's Bond Survey, XLI, No. 5 (January 31, 1949), 651; Louisiana, Financial Report, 1949-50, p. 58; 1952-53, p. 57; 1954-55, p. 57; and Louisiana Legislative Research Study No. 9, pp. 83, 87-88.
ignore the traditional criterion that the life of the bonds should be as short as possible in order to save on interest costs. Series B of the veterans' bonus debt was also a deferred serial issue and can be criticized on these same grounds.

The rest of the World War II bonus debt amounted to $10,000,000. This second issue—Series B—was sold in June, 1949, less than six months after Series A. Series B was a noncallable deferred serial issue, maturing from June 1, 1951 to June 1, 1961. One curious thing about Series B was that it was sold privately to a syndicate of investment dealers.9 This fact and the reasons for the action are not revealed at all in the Financial Report for that year.10 It appears that the issue was sold privately because the syndicate, at the time of sale of Series A, offered to buy Series B at a better price. Actually, though, it is not clear that the rates were really better. The two issues of bonds were not the same because Series B was noncallable whereas Series A was callable. The higher price paid for Series B by the buyers could have been equal to, greater, or less than the

9Moody's Bond Survey, XLI, No. 20 (May 16, 1949), 171; Louisiana Legislative Research Study No. 9, pp. 83, 87-88.
prevailing cost of avoiding the possibility of having the bonds called.

Even if there is no reason to believe that the nature of the sale had any adverse effect upon the rates paid by the State, this does not mean that private sales can be condoned. Private sales eliminate competition that could trim interest costs. Furthermore, the closed nature of the sale can lead to collusion between a state's fiscal authorities and the investment dealers, although there is no indication that this was the case here. It is not clear why a state should ever have to engage in private selling. For small municipalities where the authorities cannot be expected to be experts in financing, the whole process of borrowing may be placed in the hands of bankers who are sometimes given the opportunity to buy the whole issue without public sale. But certainly a state should not have to depend upon outside help to this extent. Should a private sale be necessary for some reason, the details surrounding it ought to be fully publicized before and after the transaction takes place.

The World War II veterans' bonus debt added a total of $60,000,000 to Louisiana's debt structure in less than six months' time. This addition brought the total debt outstanding at the end of the 1948-1949 fiscal year to about $220,000,000. The two issues of bonus debt, in their first
appearance in the financial reports, were equal to over 27 per cent of the total Louisiana debt outstanding. This ratio compared with the 38.9 per cent of total long-term debt outstanding in all of the states in 1950 that was for bonus purposes. The 27 per cent in Louisiana was second only to the 42 per cent of outstanding debt that was attributable to highways.

The fact that most of the World War II bonus debt was callable provided the opportunity in 1952 for the next development in this area of veterans' bonus debt—a refunding operation. The refunding issue was clearly authorized to be a direct issue of the State, but the full faith and credit again was not specifically mentioned in the authorization. There was no question about the State's full faith and credit this time, probably because the bonds refunded Series A which had been eventually accepted as a full faith and credit issue. The interest rate had ranged from 3.1 to 4 per cent on Series A, and this relatively high rate provided one inducement for a refunding. Another inducement was the amount of veterans' bonus debt scheduled to mature

starting in 1953. The legislation came in Act 109 of 1952, and the refunding issue appeared on January 1, 1953. This new 10-year issue amounted to $46,500,000 and refunded all but $4,500,000 of Series A. The lowering of the interest rate to a mean rate of approximately 2.51 per cent, in contrast to the 3.24 per cent paid on the original Series A, was estimated by the State reporting agency to have saved the State $2,500,000 of interest over the life of the bonds. This reduction in interest may have been at least partly the result of the exclusion of the call feature in the new issue. The new issue was noncallable even though its authorization would have permitted this type of issue. The refunding issue was given the following maturity schedule: $30,100,000 in 1960; $5,250,000 in 1961; and $11,150,000 in 1962 and 1963.\textsuperscript{13} The refunding bonds of 1953 had a better rating than the issue which they replaced; the original obligations were rated Baa, but the refunding bonds were rated A.\textsuperscript{14}


\textsuperscript{14}Moody's Bond Survey, XLIV, No. 47 (November 17, 1952), 139; and Moody's Bond Survey, XLIV, No. 45 (November 3, 1952), 162. The beer tax dedication for the payment of the new issue was no different from that provided for the initial bonds. Thus the improved rating could have been due to several factors: (1) the larger margin of protection resulting from the retirement of some of the debt and/or the productivity of the beer tax (as noted in Moody's Bond Survey, of November 3, 1952); (2) the difference in the call feature;
The calling of such a large amount of veterans' bonus debt in 1953 was an unusual occurrence for Louisiana. Most of the highway debt of the late twenties and the thirties was not redeemable prior to the maturity date. The call feature had been exercised on the following issues: the H and I highway issues of 1932, the Old Serial Gold Bonds of 1914 in 1938, and the Serial Bonds of 1941 in 1946. In the other few cases where the call was included, the interest terms happened to be so favorable that there was no advantage in refunding. The inclusion and the exercise of the call option on Series A of the veterans' bonus debt may not have been a significant improvement in debt management despite the interest savings. If the call feature was included in 1949 in order to avoid prompt retirement of the

and (3) an improvement in the over-all credit standing. It is possible that all of these factors operated to cause the rating to improve. The fact that the beer tax had provided ample revenue prior to the refunding and that this may have contributed to higher ratings is a mixed blessing at best. The bonds issued originally as well as the refunding bonds had a first lien on the beer tax revenues and any issue subsequently sold to be payable from the tax would be subject to prior claim. If second lien bonds were sold, they could be expected to reflect the fact that they were subject to prior charges in lower ratings and higher rates of interest. The State thus loses the full effectiveness for bonding purposes of any surplus revenues that may be received from this source.

15 Louisiana, Constitution (1921), Art. 6, Sec. 22(f), as amended 1936, Act 66; Louisiana, Acts (1938), Act 3, pp. 28-31; (1946), Act 348, pp. 1103-5.
debt, then the calling of the bonds in 1953 was a mockery of good debt management made possible partly by the chance of favorable ratings and partly by the sacrifice of the call feature in the refunding.

By 1953, veterans' bonus debt had become an established and accepted fiscal phenomenon in the State of Louisiana. It was axiomatic that Korean veterans would also receive bonuses and that these payments would also require borrowing. The borrowing, which came in the form of two issues, differed only in title as a result of the fact that the Korean action was not officially considered a war. The title carried by the new $12,000,000 of bonds was "Korean Combat Bonus Bonds." These obligations were sold in two separate issues in 1955 and 1957, under two different authorizations. The first issue of $10,000,000, which had been authorized by Act 748 of 1954, was inadequate and had to be supplemented to the extent of $2,000,000 under Act 614 of 1956.

The $10,000,000 issue of Korean Combat Bonus Bonds was rated A by Moody's—the beer tax, which was dedicated to the service of the bonds, had been adequate, and the success of the tax seemed to overcome the fact that

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16 Louisiana, Constitution (1921), Art. 18, Sec. 11, as amended 1954, Act 748; Art. 18, Sec. 12, as amended 1956, Act 614; Louisiana, Financial Report, 1954-55, p. 57; and 1956-57, p. 57.
the issue was junior to the existing veterans' bonus debt. The $2,000,000 issue of 1957 was also subordinated to all existing veterans' bonus bonds and thus became a third lien on the beer tax receipts. This supplementary issue of 1957, which was also a general obligation issue, was given an A rating.17

The next activity in the veterans' bonus area came in 1957. The purpose of this flotation was to finance bonuses for the veterans of the Spanish American War, the Boxer Rebellion, the Philippine Insurrection, and World War I. The Board of Liquidation of the State Debt was authorized to borrow up to $16,000,000 for this purpose. Bonds sold under the authorization—Act 620 of 1956—are secured by a fourth lien on the beer tax as well as by the full faith and credit of the State. The whole $16,000,000 of bonds was originally scheduled for sale on June 6, 1957, but market conditions were so unfavorable that the offering was withdrawn. As a result, the $16,000,000 offering was abandoned, and the State placed $10,000,000 of bonds with the State retirement system shortly after the bonds were removed from the open

17Louisiana, Financial Report, 1956-57, p. 57; Moody's Bond Survey, XLVII, No. 8 (February 21, 1955), 613; Moody's Bond Survey, XLVII, No. 10 (March 7, 1955), 591; Moody's Bond Survey, XLIX, No. 22 (May 27, 1957), 525; and Moody's Bond Survey, XLIX, No. 24 (June 10, 1957), 501.
market. A second issue, Series B, was successfully sold in 1958, but it amounted to only $1,000,000. Series B, which was described by Moody's as "Various Combat and War Veterans' Bonus Bonds," was rated A. The fact that only $11,000,000 of the authorization has been utilized means that $5,000,000 more can be borrowed for this purpose at any time. 18

The placement of the various war and combat bonus bonds in 1957 showed some skill in debt management. The withdrawal of securities from sale when conditions are not as favorable as expected is a good practice. The actions of the fiscal authorities in the case of the $16,000,000 issue indicates that discretion was used in the timing of the sale.

Even if the management of the sale was satisfactory, there remains the question—was the borrowing that took place proper? This borrowing took place in 1957 and 1958 to pay bonuses for wars that were fought in the period from 1898 to 1920. Certainly the post-war enthusiasm for rewarding veterans had subsided by 1957. What seems to have happened is that the State and its politicians had gotten themselves into a position where they could hardly refuse to

18 Louisiana, Constitution (1921), Art. 18, Sec. 13, as amended 1956, Act 620; Moody's Bond Survey, XLIX, No. 22, (May 27, 1957), 525; Moody's Bond Survey, XLIX, No. 28 (July 8, 1957), 449; Moody's Bond Survey, XLIX, No. 30 (July 22, 1957), 424; and Moody's, 1959, p. 665.
extend the bonus to all veterans. It is not hard to visualize what will happen if there should be other conflicts. 19

**Highway Borrowing, 1947-1959**

After the conclusion of World War II, highway borrowing in Louisiana resumed on four fronts. Bonds were again issued that were payable from the proceeds of the ½-cent gasoline tax and the motor vehicle tax-supported Highway Fund Number 2. A third and new tax dedication for general highway purposes was part of the nine-twentieths of the 1-cent gasoline tax. Finally, a new Long-Range Highway Program, inaugurated near the end of the period, permitted the issue of bonds payable from the 5-cent gasoline tax and certain mineral revenues. The total highway debt outstanding in 1947 was $103,676,000. The four types of highway bonds to be issued in the subsequent period were to amount to another $68,000,000. 20

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19 Even more serious is the possibility that the precedent set by Confederate veterans' pensions will bring staggering pension expenditures and borrowing when the veterans of World War II and the Korean War reach retirement age. The Old Age and Survivors' Insurance program may offset these demands to some extent.

Was this highway borrowing safe, and if it was safe, was it proper? It was debatable in 1948 or at the beginning of 1949 whether or not the State had reached a position from which it could wisely engage in large-scale borrowing. References noted earlier first show a definite pessimism about the safety of borrowing in January, 1949, but nine months later, the same source noted that the State's economy showed such growth that the general credit, though only fair, was improving. The State's economy continued growing at a rapid pace after 1949 so that restrained use of credit by 1953 and 1954 (when most of the significant post-war highway borrowing took place) probably was not a serious impairment to the safety of the debt structure.

If restrained use of credit was not unwise in 1953 and 1954, then it appears that borrowing for the construction and improvement of highways was probably desirable. The extension and repair of the highway network was postponed during the war, and the needs grew accordingly. It was noted in discussing principles of debt financing that it is usually proper to borrow when the sums needed are too great to be raised by taxes and when the purpose of the borrowing

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21 Moody's Bond Survey, XLI, No. 3 (January 17, 1949), 673-74; Moody's Bond Survey, XLI, No. 5 (January 31, 1949), 651; and Moody's Bond Survey, XLI, No. 47 (November 21, 1949), 138.
is for nonrecurrent capital construction. Therefore, it appears that highway borrowing in this post-war period not only was reasonably safe but also proper.

The 4-cent gasoline tax secured the January, 1947, sale of Series HH. (See Table XXVIII, Appendix A.) This serial issue of $3,000,000, authorized by Act 377 of 1940, is scheduled to mature in 1965. A new act, number 393 of 1946, authorized the next post-war highway debt—up to $25,000,000 payable from the 4-cent gasoline tax. The pledge of the gasoline tax revenue for this new authorization was subordinate to almost $70,000,000 of highway bonds already issued.²² The junior lien status of Series 1A and 1B, offered under the 1946 authorization, was supplemented

²²When the first bonds of the new authorization were offered, Moody's cautioned that having debt service as a first charge on the receipts of the 4-cent gasoline tax was not especially significant because part of the taxes are used for highway maintenance and are not available for debt service. This criticism does not seem to have been legitimate. A first charge means that the debt service will be handled before maintenance. The State pledged this specifically; it was not necessary to pledge that all revenues would be used for servicing the debt. Louisiana, Constitution (1921), Art. 4, Sec. 22(i), as amended 1940, Act 377; Art. 6, Sec. 22(j), as amended 1946, Act 393; Louisiana, Financial Report, 1947-48, p. 59; Louisiana Legislative Research Study No. 9, pp. 82, 87-88; and Moody's Bond Survey, XLI, No. 47 (November 21, 1949), 138.
by the fact that they were general obligations. 23 Both Series 1A and 1B were rated Baa at the time of their issue, and Series 1B was provisionally rated lower medium grade or Baa before the issue was sold. Both of these ratings were subsequently raised to Aa.

The two general highway issues authorized by Act 393 of 1946 and payable from the 4-cent gasoline tax raised $25,000,000 for highway purposes. Series 1A was dated January 1, 1947, and consisted of $15,000,000 of serial bonds that will be fully retired in eighteen years. The issue 1B of November, 1949, amounted to $10,000,000 and will mature in 1964.

23 This pledge was also discounted in Moody's analysis shortly before the issue of Series 1B on grounds that the wide use of credit based on dedications left few revenues unallocated. This charge was, unfortunately, altogether valid. Louisiana, Constitution (1921), Art. 6, Sec. 22(i), as amended 1940, Act 377; Art. 6, Sec. 22(j), as amended 1916, Act 393; Louisiana, Financial Report, 1947-48, Louisiana Legislative Research Study No. 9, pp. 82, 87-88; and Moody's Bond Survey, XLI, No. 47 (November 21, 1949), 138. 

24 Louisiana, Financial Report, 1949-50, p. 57; Louisiana Legislative Research Study No. 9, p. 82; Moody's, 1950, p. 469; 1959, pp. 672-73; Moody's Bond Survey, XLI, No. 47 (November 21, 1949), 138; and Moody's Bond Survey, XLI, No. 49 (December 5, 1949), 114.

The second type of highway debt added during the post-war period is that which is payable from surpluses in Highway Fund Number 2 over and above existing dedications and thereby from certain motor vehicle tax revenues. Act 90 of 1952 disposed of surplus vehicular license tax revenues collected from Orleans, Jefferson, St. John the Baptist, St. Charles, Tangipohoa, and St. Tammany parishes. The surplus funds in Highway Fund Number 2 were dedicated according to the following priority: (1) $50,000 annually to St. John the Baptist parish to be used for improving roads and drainage facilities, (2) $200,000 annually until 1982, which could be funded, to finance an expressway in New Orleans (3) $300,000 annually until 1982 to finance the construction and improvement of U.S. Highway 51, (4) $750,000 annually until 1956 to the Mississippi River Bridge Authority, and (5) $350,000, plus up to $5,000,000 of surpluses in Highway Fund Number 2, for the construction of approach roads to a causeway across Lake Pontchartrain (Greater New Orleans Expressway). Other surpluses remaining in the fund are dedicated to pay interest and principal on the Greater New Orleans Expressway debt until it is fully retired. These annual dedications were authorized to be

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26 *Louisiana, Constitution (1921), Art. 6, Sec. (22)g, par. 4, as amended 1954, Act 745.*
funded as follows: the $200,000 expressway dedication could be used to secure $4,000,000 of bonds, the $300,000 dedication for Highway 51 could service $6,000,000 of debt, the $750,000 dedication to the Mississippi River Bridge Authority could be used to secure bond issues, and the $350,000 and $5,000,000 dedications for the causeway could support revenue bonds. These several purposes and dedications set forth in Act 90 of 1952 served to complicate the debt structure. In this one authorization, a State fund which was supported by part of the motor vehicle license proceeds—Highway Fund Number 2—was pledged to the payment of both direct and indirect obligations and these pledges were given certain priorities.  

The indirect obligations issued under the provisions of this act are described with the other indirect debts, but the direct issues sold under these terms in 1953 and 1954 were as follows: Series A of $500,000; Series A1 of $3,750,000; and Series B of $5,150,000. (Series A2 of $250,000 and Series C of $350,000 were not sold until 1958 at which time they exhausted all of the direct authorizations.)  

(See Table XXVIII, Appendix A.) These new

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27Louisiana, Constitution (1921), Art. 6, Sec. 22(g), as amended 1952, Act 90.

28It is somewhat ironic that the debt structure of Louisiana should have been so complex and confusing at the time these bonds received A ratings from Moody's while the aforementioned highway issues received Baa ratings.
Highway Fund Number 2 issues are classified with indirect State debts in the annual financial reports; however, they are really obligations of the State and can rightly be considered direct obligations. The circumstance which caused the State reporting agency to classify these bonds as indirect probably is the fact that they are "special" obligations payable from a specifically allocated portion of revenues in State Highway Fund Number 2, and they are not backed by the State's full faith and credit pledge. But these considerations ignore the fact that directness depends upon whether or not the State issues the debt in its name. If the bonds bear the State's name, the State's credit is at stake just as surely as if it had been formally pledged. 29

The question of whether or not certain issues are direct obligations of a state is important on at least two counts: First, it is apparent that contradictory listing or classification of a particular issue breeds uncertainty concerning that issue and the whole debt structure. More important, however, is that direct debts--debts incurred in the name of a sovereign state--should, under normal

29This peculiar reporting was noted by Moody's. Notice was taken that the issues were not classified as direct obligations by the State. But, Moody's did include the issue with the bonded debt of the State of Louisiana--with direct obligations. Louisiana, Constitution (1921), Art. 6, Sec. 22(g), as amended 1952, Act 90; Art. 6, Sec. 22(g), par. 4, as amended 1954, Act 745; Moody's, 1959, pp. 663-65; Louisiana, Financial Report, 1956-57, p. 58; and Louisiana Legislative Research Study No. 9, pp. 81, 85-86.
conditions, receive higher credit ratings than indirect debts. Direct obligations should have higher standings than bonds sold through authorities or agencies that control relatively limited assets and do not enjoy the state's ability to levy taxes. If an obligation is really a direct obligation, its status as such should be fully exploited. Exploitation should take the form of clear and definite pledges, advertisements, statements, and reports that the bonds are direct obligations and, if so, general obligations.

More highway debt serviced from the gasoline tax—this time the nine-twentieths of 1-cent tax (and, in case of emergency, any excess revenues from the ¼-cent tax)—made its appearance in 1953 and 1954. A new amendment, Act 284 of 1952, authorized the borrowing of $30,000,000 for the following purposes: (1) the construction of a bridge or tunnel over or under the Inner-Harbor Navigation Canal in New Orleans; (2) the construction of approaches and an expressway to the Mississippi River Toll Bridge; and (3) the construction of roads in the State in connection with Federal aid. The bonds issued under the authorization were to be general obligation bonds. They were to be payable, however, from excess revenues of the nine-twentieths of 1-cent gasoline tax after certain other claims against the tax were satisfied. The charges against the tax were established as follows: (1) the service requirements on Port of New Orleans
obligations over and above those that can be paid with funds transferred from the Orleans Levee District and the New Orleans Public Belt Railroad Commission, (2) the payment of up to $500,000 from any excess after the first charge to a fund for current operations by the Port Commission Board, (3) the payment of any remainder after the prior charges to the General Highway Fund. This third charge on the nine-twentieths of 1-cent gasoline tax is the primary source of funds for the service of the $30,000,000 issue.

The "First Series" of $7,500,000 was sold in two lots as follows: $636,000 to mature from January 1, 1958 to January 1, 1963, and $6,861,000 to mature between 1964 and 1988. The $6,861,000 portion of the Series is callable on thirty days' notice. The original rating of the First Series Bonds was Baa (later changed to A) for both lots—the funds from which they are paid are subject to prior charges which impair both the elements of protection and of stability.

30Louisiana, Constitution (1921), Art. 6-A, Sec. 5.1, 5.2, as amended 1952, Act 284; Louisiana, Financial Report, 1953-54, p. 54; Louisiana Legislative Research Study No. 9, pp. 82-83, 86-87; Moody's Bond Survey, XLV, No. 9 (March 2, 1953), 601; and Moody's Bond Survey, XLV, No. 7 (February 16, 1953), 623-24.

31Louisiana, Constitution (1921), Art. 6-A, Secs. 5.1, 5.2, as amended 1952, Act 284; Louisiana, Financial Report, 1953-54, p. 54; Louisiana Legislative Research Study No. 9, pp. 82-83, 86-87; and Moody's Bond Survey, XLV, No. 9 (March 2, 1953), 601.
The "Second" and "Third Series" of highway bonds payable from the nine-twentieths of 1-cent gasoline tax also amounted to $7,500,000 each, and they were similar to the First Series in purpose as well as in the call and security provisions. The bonds were callable in all three series except for small blocks with relatively short maturities. The Second and Third Series issues were both rated Baa before and after they were sold. These ratings, however, have also been revised; the First and Second Series are currently rated A in the latest Moody's manual.

The next development in the highway debt came in 1955. This development was the most important improvement in Louisiana debt management of the decade and perhaps even of the century. The costly complexity repeatedly noted in this Chapter had been recognized by the Louisiana Legislative Council and the Public Affairs Research Council. There had

32Louisiana, Financial Report, 1953-54, p. 54; Louisiana Legislative Research Study No. 9, pp. 82-83, 86-87; Moody's Bond Survey, XLV, No. 26 (June 29, 1953), 396; Moody's Bond Survey, XLV, No. 28 (July 13, 1953), 373; Moody's Bond Survey, XLVI, No. 15 (April 12, 1954), 533; Moody's Bond Survey, XLVI, No. 17 (April 26, 1954), 510; and Moody's, 1959, pp. 672-73.

also been a study of highway finance in the State. All of these studies contributed to the formulation and eventual adoption of a Long-Range Highway Program in which the elements of capital planning were evident—both physical needs and fiscal needs were considered. The plan, which was implemented in the form of five acts and two constitutional amendments, was as follows: (1) It established a statewide system of highways and provided fixed engineering standards; (2) It established a Parish Road System and provided aid to the System contingent upon the adoption of better administration; (3) It established regulations for acquiring property and settling damages and established rules for limited access roads; (4) It established an open-end method of debt creation that would make all new issues rank on a parity basis as full faith and credit, general, obligations of the State payable as a first charge from the Long-Range Highway Fund; (5) It dedicated revenues from mineral leases and bonuses directly to the Long-Range Highway Fund and to debt service as a first charge; (6) It dedicated all highway revenues to the Long-Range Highway Fund and to

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34 William D. Ross, Financing Highway Improvements in Louisiana (Baton Rouge: Division of Research, College of Commerce, Louisiana State University, 1955).
debt service as a first claim, after all existing prior claims have expired.

The part of the plan dealing directly with debt bears closer examination. The Long-Range Highway Fund was to be sustained not only by the newly dedicated mineral revenues (amounting to $15,000,000 annually) but also by surplus revenues from prior dedications of motor fuel, lube oil, and motor vehicle license taxes. Surpluses in the Long-Range Highway Fund, after the payment of all debt service requirements, are available for highway operations and new construction. Another important change was the consolidation of the two gasoline taxes—the 4-cent tax and the 1-cent tax—into one 5-cent per gallon tax which is pledged for debt service as long as any bonds are outstanding. Bonds authorized under the amendment can be issued up to $60,000,000 over a 5-year period with no more than half of this sum being sold in any one year. These bonds are not to be issued unless

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35Louisiana, Constitution (1921), Art. 4, Sec. 2(c), as amended 1956, Act 142 of 1955; Art. 6, Sec. 23.1, as amended 1956, Act 141 of 1955; Louisiana, Acts (1955), Act 40, pp. 49-143; Act 92, pp. 197-98; Act 128, pp. 293-94; Act 129, pp. 244-47; Act 130, pp. 247-48; Louisiana Legislative Research Study No. 9, pp. 88-89; and Moody’s Bond Survey, XLVIII, No. 23 (June 24, 1956), 522-23.
certain revenue requirements are satisfied. The Long-Range Highway Program does not prevent subsequent authorizations of parity issues. 36

One possible flaw in the Long-Range Highway Program is that the maturity limit of twenty-five years appears to be excessively generous. Highways in Louisiana typically have not lasted well. It is not clear that highways in Louisiana can be expected to last twenty-five years. Issues of the maximum duration may do injury to the traditional principle that bond issues should never have longer terms than the life of the improvement. Shorter terms generally are desirable because of the interest savings they usually bring.

Another provision of the Long-Range Highway Program which is questionable is the 4 per cent maximum interest rate. If the predictions of a tremendous increase in the value of state borrowing noted in Chapter II should come to pass, and if inflationary tendencies continue, it is possible that states will have to pay more than 4 per cent for the funds which they borrow. The limitation on the interest

36Louisiana, Constitution (1921), Art. 4, Sec. 2(c), as amended 1956, Act 1142 of 1955; Art. 6, Sec. 23.1, as amended 1956, Act 1141 of 1955; Louisiana, Acts (1955), Act 40, pp. 149-143; Act 92, pp. 197-98; Act 128, pp. 293-94; Act 129, pp. 244-47; Act 130, pp. 247-48; Louisiana Legislative Research Study No. 9, pp. 88-89; and Moody's Bond Survey, XLVIII, No. 23 (June 24, 1956), 522-23.
rate that can be paid, therefore, does not seem to contrib-
ute much to the program, but fortunately it will probably
not do much harm either since it undoubtedly will be changed
if it becomes necessary. These two criticisms are minor in
nature and even relatively unimportant when they are compared
with the advantages of the Long-Range Highway Program.

The development of a long-range plan for highway
improvements and the financing of these improvements was an
extremely important step forward for the State of Louisiana.
Elsewhere in this study, it has been noted that transporta-
tion has always been among the most important reasons for
state borrowing and that highways have been the most impor-
tant purpose of borrowing in this century. This tendency
has been apparent in Louisiana where highway costs histori-
cally have been high. When highway debt financing was
placed on a sound basis in 1955, a major part of the State's
debt problem was eliminated. Furthermore, the tremendous
improvements in highway financing may prove to be the
example for a revision of the whole State debt structure
along the same general lines.

The principles of good debt management that were
applied in this new Long-Range Highway Program may be
summarized as follows: (1) There was a movement away from
the dedication of specific taxes to the payment of individual
bond issues which has characterized the Louisiana debt
structure until this time. (2) The full faith and credit concept was made more meaningful by directing revenues to a general type of fund (the Long-Range Highway Fund) instead of to smaller individual funds. (3) The use of a general fund to meet open-end debt service requirements eliminated the subordinate lien which is so injurious to bond ratings. (4) The use of a single fund for meeting all highway debt service requirements and the consolidation of certain taxes helped to simplify the tax system and the debt structure and eliminate the complexity which is so disturbing to investment bankers. Louisiana's debt structure and its financial structure entered a new era with this improvement in highway debt financing.

The fact that the State of Louisiana was on a new footing in respect to its debt was quickly recognized by Moody's. References to Louisiana highway borrowing since the enactment of the new laws have taken full notice of the improvements that are promised. This immediate recognition is somewhat remarkable when it is realized that the plan would directly affect only bonds sold after the adoption of this new legislation. Such sales were not to occur until four years later in 1959.

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37 Moody's Bond Survey, XLVIII, No. 23 (June 4, 1956), 522-23; and Moody's Bond Survey, L, No. 14 (March 31, 1958), 625.
Not only was the highway bond plan noted immediately in the publications of the bond rating services, but it led to a reappraisal of all Louisiana bonds then outstanding. The reappraisal, in turn, resulted in an upgrading of all highway bonds, and some other issues, by Moody's in December, 1955. This chain reaction was an impressive example of the importance and effectiveness of full reporting of all relevant information concerning the debt structure, including data on public finances and economic conditions within a state. In this case, a delegation, representing the Joint Highway Committee of the Louisiana Legislature and the Louisiana Legislative Council, in the persons of State Senator James D. Spark and State Representative Claude Kirkpatrick; the Louisiana Department of Highways, in the persons of Mr. George S. Convert, the Director of Highways, and Mr. W. C. Pegues, Jr., the Chief Counsel of the Highway Department; and with Dr. William D. Ross serving as consultant to both the Joint Committee and the Highway Department, visited the major investment services, Moody's, Standard and Poor's, and Fitch's, in New York in March, 1955. The complete information concerning the debt structure of Louisiana, and particularly the highway debt, that had been developed by Dr. Ross in connection with his study, *Financing Highway Improvements in Louisiana*, was presented in person
at this time. The plans for legislation to enact the new Long-Range Highway Program were explained, and recommendations and reactions concerning the new bond financing plan were sought. Arrangements were also made to keep the services fully informed of developments as these plans were effected, and for supplying any other information requested by the services in this connection on their own initiative. The ultimate results of this action, in December, 1955, as mentioned above, were improvements in ratings on almost all Louisiana bonds outstanding, highway and nonhighway issues; the higher ratings could be expected to save the State millions of dollars in interest charges on future bond financing.  

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It is very important that the State's outstanding bonds be given higher ratings when they deserve them. Any improvement in the price of outstanding bonds will make future offerings more attractive to buyers and will improve the terms on which they can be sold. The most important time to get better ratings, however, is when the provisional ratings are given--before new issues are sold. That is when the ratings have the greatest effect upon what the market thinks of the new issue and upon the price that will be paid.

38 Personal interview with Dean William D. Ross, College of Business Administration, Louisiana State University, June 30, 1959.
It is extremely important, therefore, that the State authorities watch very closely these provisional ratings and also the comments that accompany them. If there is some misinterpretation or lack of full appreciation of the protection provided on an issue or of some other provision, full and correct information should be pressed upon those responsible for the ratings. Sustained debt reporting consists of just such activities. Good management may even require that an offering be delayed until clarification is made.

The rating services do their best to obtain complete information and to keep abreast of new developments in the thousands of state and local governmental subdivisions whose credits they rate, but the magnitude of the task makes it almost an impossible one. Without well-organized, authoritative, and continuous effort by a given governmental unit to develop and supply information to the services about its outstanding issues as well as new offerings, it cannot expect its ratings to be accurate. Unfortunately, the successful initial effort in this regard in Louisiana, described above, has not been continued. This element of debt management was discussed in Chapter II as a matter of debt reporting. Its importance in the practical process of state financing should not be underestimated.

\[39\text{Ibid.}\]
\[40\text{Ibid.}\]
The highway offerings of 1958 did not inaugurate the new Long-Range Highway Program; rather, they consisted of three distinct issues that differed radically in their security provisions. These three issues that exhausted authorizations predating the Long-Range Highway Program were as follows: $350,000 of Series C bonds; $250,000 of Series A2; and $7,500,000 of "Fourth Series" bonds. Series C, authorized by Act 90 of 1952, is secured by a special allocation from Highway Fund Number 2 of $300,000 annually. The A2 bonds, authorized by the same act, were also issued on the basis of funds allocated from Highway Fund Number 2. This time the annual allocation from Highway Fund Number 2 of $200,000 was shared on a parity basis with Series A1 of 1954 with both issues being used for the construction of a New Orleans Expressway. Neither Series A2 nor Series C was a full faith issue, but rather they were special obligations.

The major part of the 1958 offering was the $7,500,000 Fourth Series which had the same protection as the first three series authorized by Act 284 of 1952—a junior lien on

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41Louisiana, Constitution (1921), Art. 6, Sec. 22(g), as amended 1952, Act 90; Moody’s Bond Survey, L, No. 14 (March 31, 1958), 625; and Moody’s Bond Survey, L, No. 12 (March 17, 1958), 651.
part of the nine-twentieths of 1-cent gasoline tax, a fifth lien on the gasoline tax of 4 cents, and finally the guarantee of the State's full faith and credit. This issue was the fourth and final $7,500,000 offering under a $30,000,000 authorization. These three issues had the same characteristics and the same faults as their companion issues.

The first issue under the Long-Range Highway Program was sold on February 4, 1959; it consisted of $20,000,000 of Long-Range Highway Bonds. The review made by Moody's before the date of sale duly noted the changed nature of these bonds, and they were given an A rating. The issue initiated a desirable practice which it is hoped will be continued. The maturity of the issue was limited to twenty years although the authorization would have permitted a twenty-five year term. This type of debt management is reassuring and indicates that the objection given previously in connection with this maximum permissible life of highway bonds may not be very serious.

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42 Louisiana, Constitution (1921), Art. 6-A, Sec. 5, as amended 1952, Act 284; Moody's Bond Survey, L, No. 14 (March 31, 1958), 625; and Moody's Bond Survey, L, No. 12 (March 17, 1958), 651.

43 Moody's Bond Survey, LI, No. 5 (February 2, 1959), 743; and Moody's Bond Survey, LI, No. 6 (February 9, 1959), 725.

44 Moody's Bond Survey, LI, No. 5 (February 2, 1959), 743; and Moody's Bond Survey, LI, No. 6 (February 9, 1959), 725.
The most recent highway borrowing was the sale of $10,000,000 more of Long-Range Highway Bonds. The April 30, 1959, offering ranks on a parity with the first series of $20,000,000 and also bears an A rating.

Institutional Improvement Borrowing, 1947-1959

Another component of the direct debt incurred from 1947 to the present was for the purpose of institutional improvement. Institutional Improvement Bonds are payable from the proceeds of the 0.75 mill ad valorem tax. This tax had been the security for the Confederate veterans' issues. Now, finally, the passing of Confederate veterans' pension needs removed a burden from the ad valorem tax revenues. The availability of these tax funds provided a wonderful opportunity in 1947 for making basic improvements in the debt structure. The logical thing to do with the 0.75 mill ad valorem tax at the end of World War II would have been to make it the keystone of a new debt structure. The surpluses of tax revenues over and above those needed for debt service could have been channeled into the general fund. All revenues flowing into the fund each year could then have been pledged as a first charge to support debt service payments.

Moody's Bond Survey, LI, No. 16 (April 20, 1959), 588; and Moody's Bond Survey, LI, No. 18 (May 4, 1959), 562.
on all full faith and credit obligations of the State. The full faith and credit pledge would then have become more meaningful and ratings and interest rates, undoubtedly, would have a relative decline. Unfortunately, this reform was not accomplished; the surplus 0.75 mill ad valorem tax revenues were not left free for very long. The tax became the source of funds from which State Institutional Improvement Bonds would be paid.

Act 414 of 1946 authorized the issue of Institutional Improvement Bonds and dedicated the 0.75 mill property tax to their payment. The $16,000,000 of Series D through I bonds sold under this authorization were secured by the full faith and credit of Louisiana as well as by the greater portion of the 0.75 mill tax. There was only a small prior claim upon these tax receipts at the time of the authorization. The excess of these receipts over the amounts required for debt service was intended to be used for general State purposes after 1960. This dedication gave the Institutional Improvement Bonds of Series D through I a closed-end characteristic since no bonds could be issued on par with the

$16,000,000.

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Louisiana, Constitution (1921), Art. 18, Sec. 8, as amended 1946, Act 414; Louisiana, Financial Report, 1952-53, p. 57; Louisiana Legislative Research Study No. 9, pp. 81, 84-85; Moody's, 1959, pp. 663-65; Moody's Bond Survey, XLI, No. 21 (May 23, 1949), 458; and Moody's Bond Survey, XLII, No. 16 (April 17, 1950), 514.
The closed-end feature may be attractive to bondholders, but it has an unfavorable impact upon the fiscal structure of a state. If, for example, the tax dedicated to servicing an issue should become highly productive--more so than anticipated--then the closed-end characteristic would mean that a great surplus of revenues would be available for securing one particular issue while the service needs might not even be covered for other issues. The closed-end feature on the $16,000,000 authorization was not attractive enough to overcome the "fair medium grade" label and an initial Baa rating for most of the bonds. Series D was not rated because it was sold to the State Teachers' Retirement System. Series G, bought by the National American Bank of New Orleans and not reoffered, was not rated because it was not of general interest to investors. Series E later was raised from the initial Baa rating to A. The dates and the amounts of these issues were as follows: Series D, Series D,

47Louisiana, Constitution (1921), Art. 18, Sec. 8, as amended 1946, Act 114; Louisiana, Financial Report, 1952-53, p. 57; Louisiana Legislative Research Study No. 9, pp. 81, 84-85; Moody's, 1959, pp. 663-65; Moody's Bond Survey, XLII, No. 21 (May 23, 1949), 458; and Moody's Bond Survey, XLII, No. 16 (April 17, 1950), 514. The relatively unsatisfactory ratings that were given to the Institutional Improvement Bonds were ascribed to the fact that the obligations were marginally protected when the whole authorization was considered. In the case of the $3,251,000 Series F issue of 1949, the original Baa rating was given with full knowledge that the State's credit was improving because of the broadening of the State's economy. The State's general credit,
$3,000,000 in 1947; Series E and F, $5,000,000 together in 1949; and, Series G, $4,000,000 in 1950. Issues of $2,000,000 each, Series H and I of 1951 and 1952, concluded the borrowing for this purpose and brought the total institutional improvement debt issued to the authorized $16,000,000. (See Table XXIX, Appendix A.)

The Institutional Improvement Bond issues described above were not destined to remain outstanding until their scheduled maturity dates. Early retirement by exercise of the call option began in the 1954-55 fiscal year. The remaining principal of $6,346,000 of Series F and Series G was paid at that time. In 1955-56, the $1,525,000 balance of Series H was paid, and two years later, $1,569,000 of Series I bonds was retired.

II. INDIRECT BORROWING, 1947-1959

Louisiana's debt history from 1947 to 1959 has been marked by a growing importance of indirect borrowing. The

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however, was still considered only fair because of the prevailing high tax and debt burdens in relation to other states. Moody's Bond Survey, XLI, No. 36 (September 5, 1949), 270.


reasons for this change are not entirely clear. The first impulse would be to blame the constitutional debt limitation since this is the major reason for indirect borrowing in other states. In Louisiana, however, the importance of this factor must be minimized because there is little difficulty in amending the Constitution to authorize borrowing. Most of the agency issues in Louisiana during the recent period have been authorized in this manner. One of the main reasons for the widespread adoption of the indirect technique may well have been political. Davis, in his recent publication, *Louisiana, The Pelican State*, makes reference to the establishment of citizens' boards to regulate highways, welfare, and institutions as part of Governor Kennon's reform of 1953. This observation leads one to suspect that the use of indirect borrowing may have been a manifestation of reform designed to inject rigidities into the State fiscal structure in order to reduce political influence.

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51 The trend towards agencies in Louisiana has been checked and perhaps even reversed if what has happened to the Building Authority is any indication. The Building Authority was stripped of most of its authority by Act 132 of 1956. The purpose of this act was "to curtail, limit and restrict the powers, duties and functions of the Louisiana State Building Authority solely to the issuance of any remaining bonds authorized . . ." Louisiana, Acts (1956), Act 132, pp. 325-27.
Another political factor which may have been important in the movement toward agency borrowing in Louisiana was the fact that a great many of the improvements financed by this means were geographically limited. As a result, their political backing may also have been so limited that it might have been impossible to induce the people in the entire State to support direct borrowing for these purposes. People in the other parts of the State might not have been favorably inclined to direct borrowing for the purpose of financing the Greater New Orleans Expressway and the downtown New Orleans Mississippi River Bridge. Finally, Louisiana probably was influenced by the activities of other states and by the common assumption that agencies and authorities expedite the acquisition of physical improvements. The State of Louisiana now has nine agencies which either have acted or can act in the creation of debt. Five of these instrumentalities are of long standing in the State financial structure. The Port of New Orleans Board of Commissioners has been active since its charter in 1896. The Manager of the State Penitentiary engaged in borrowing as an agent of the State in the 1920's. The Charity Hospital's Board of Administrators, the Board of Supervisors of the Louisiana State University, and the Louisiana State Board of Education have all been agents of the State since the 1930's.
Of these older agencies, only the Port of New Orleans and Louisiana State University have borrowed during the current period.\textsuperscript{52}

Except for the Port of New Orleans Board, the various authorities existing in Louisiana before World War II had not played a very important role in the State's debt structure. The debt activities of these five authorities alone would not have been highly significant in the post-war period either. However, this relative insignificance of authority borrowing was not to continue. The change came in 1952. Act 7 of that year was a general law that enabled two or more parishes to join in establishing authorities for the purpose of constructing toll bridges and ferries that would improve the State highway system. This legislation was the first step in the organization of the Greater New Orleans Expressway Commission and the Mississippi River Bridge Authority.\textsuperscript{53} Other legislation, also passed in 1952, chartered the Greater Baton Rouge Port Commission and the Louisiana State Building Authority.\textsuperscript{54}

\begin{footnotes}
\item[53] Louisiana, \textit{Acts} (1952), Act 7, pp. 9-24.
\item[54] Louisiana, \textit{Constitution} (1921), Art. 6, Sec. 29, as amended 1952, Act 9; Louisiana, \textit{Acts} (1952), Act 317, pp. 833-38; and Moody's, 1959, pp. 672-76.
\end{footnotes}
The creation of new agencies, the dedication of tax revenues to these agencies, and the granting to them of the authority to borrow large sums of money would appear to have been an undesirable development. The specific objections to the agency device noted previously seem to be valid criticisms. The wide and increasing use of authorities in Louisiana certainly has added complexity to the debt structure when every effort should have been made to simplify the structure according to principles of good debt management.

Port of New Orleans Borrowing, 1947-1959

Of the "charter member" agencies in Louisiana's debt structure, the Port of New Orleans debt is somewhat unique. The New Orleans Port debt is both an agency debt and a full faith and credit debt of the State. It is supported by the operating revenues of the Port but also by part of nine-twentieths of the 1-cent gasoline tax and the State's full faith and credit.

When the Board of Commissioners of the Port of New Orleans borrowed $10,000,000 in October, 1955, it was their first venture into the bond market since 1939. This 1955 issue was part of a planned expansion program which will entail borrowing $20,450,000. This new issue is protected by Port revenues, the first $500,000 annually from the nine-twentieths of the 1-cent gasoline tax, and the State's full
faith and credit. The rating given the $10,000,000 offering was A. The bonds are of the serial variety, and they will not be completely retired until 1990. (See Table XXX, Appendix A.)

Greater Baton Rouge Port Commission Borrowing, 1952-1959

The Greater Baton Rouge Port Commission bonds are supported, like the New Orleans Port debt, primarily by the revenues resulting from the operation of the Port. But in this case, there is no specific dedication of any State tax or of State funds for the purpose of servicing the debt. The connection that the State has with this debt is as a guarantor—the full faith and credit of the State is constitutionally pledged in case the revenues of the Port, the sale of Port property, and the full faith and credit of three parishes (East Baton Rouge, West Baton Rouge, and Iberville) should be insufficient to pay the bonds.

55 Louisiana, Constitution (1921), Art. 6-A, Sec. 51, as amended 1952, Act 284; Louisiana, Financial Report, 1956-57, p. 57; Moody's, 1959, pp. 673-74; Moody's Bond Survey, XLVII, No. 44 (October 31, 1955), 177-79; and Moody's Bond Survey, XLVII, No. 45 (November 7, 1955), 168.

56 Louisiana, Constitution (1921), Art. 6, Sec. 29, as amended 1952, Act 9, Moody's, 1959, pp. 673-74; Moody's Bond Survey, XLVI, No. 41 (October 11, 1954), 220; Moody's Bond Survey, XLVI, No. 43 (October 25, 1954), 201; and Moody's Bond Survey, XLIX, No. 29 (July 15, 1957), 432-34.
The bonds issued by this Commission, however, are not even listed in the Financial Report of the State. This reporting practice can hardly be reassuring to investors who might be considering obligations issued by this agency in the future.

Series A of the Greater Baton Rouge Port bonds, which was issued under the terms required by Act 9 of 1952, raised $12,500,000 for the Port. The same authorization can be used to issue another $2,500,000 for the Baton Rouge Port if debt service requirements are covered one and one-fourth times. However, the $12,500,000 Baa rated Series A issue—now rated A—is the only one that has been sold under the 1952 authorization. (See Table XXX, Appendix A.)

The next development in Greater Baton Rouge Port Commission borrowing began with Act 597 of 1956, a constitutional amendment, that increased the borrowing authorization from the original $15,000,000 to $50,000,000 of debt outstanding at one time. Another change introduced by the amendment was the addition of Ascension parish to the

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58 Louisiana, Constitution (1921), Art. 6, Sec. 29, as amended 1952, Act 9; Moody's, 1959, pp. 673-74; Moody's Bond Survey, XLVI, No. 41 (October 11, 1954), 220; Moody's Bond Survey, XLVI, No. 43 (October 25, 1954), 201; and Moody's Bond Survey, XLIX, No. 29 (July 15, 1957), 432-34.
parishes represented on the Commission Board; provision was also made for the pledge of that parish's full faith and credit to support Commission bonds on a parity with the original three parishes. The first issue under the revised authorization was rated Baa. This Series B issue consists of $19,400,000 of callable bonds which are junior to the $12,500,000 Series A. Series B bonds mature from 1960 to 1977. The maturity provisions for Series B require annual payments ranging from $160,000 in 1960 to $1,659,000 in the final year.

Series C of the Baton Rouge Port debt followed quickly under the same authorization as Series B—it was dated May 1, 1958. This issue is junior to both Series A and B, but it is secured by the same full faith and credit pledges of the interested parishes and the State and also by the proceeds from the operation of the Port. These bonds were rated Baa—medium grade— provisionally. The $3,500,000 of Series C is scheduled to mature from 1960 to 1975, with the maturity payments ranging from $155,000 in the first year to $267,000 in the last year. The Port of Baton Rouge

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59 Louisiana, Constitution (1921), Art. 6, Sec. 29, as amended 1952, Act 9; Art. 6, Secs. 29.1, 29.2, 29.3, 29.4, as amended 1956, Act 597; Moody's, 1959, pp. 673-74; Moody's Bond Survey, XLIX, No. 29 (July 15, 1957), 432-34; Moody's Bond Survey, XLIX, No. 49 (December 2, 1957), 176-77; and Moody's Bond Survey, XLIX, No. 51 (December 16, 1957), 154.
borrowing authorization was not exhausted by the sale of Series C—under certain circumstances, an additional $1,500,000 may be issued that will rank on parity with Series C. The sale of Series C, however, did have the effect of closing out Series B which had been open.

**Louisiana State University Borrowing, 1947-1959**

The Louisiana State University borrowing during this period was very complex and had several different sources of revenue for security. The issues during this period came in 1947, 1950, 1952, 1953, 1954, 1956, and 1958. The issues of 1952 and 1954 were payable mostly from operating revenues of the University—for example, dormitory rentals. These issues were also secured by part of the $1,000,000 of dedicated funds received from the State insurance excise license tax. The 1950 and 1953 Louisiana State University issues were secured on a parity basis by the portion of the State corporation franchise tax that is pledged to the State University after four other dedications. 61

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60Moody's, 1959, p. 674; and *Moody's Bond Survey*, L, No. 30 (July 21, 1958), 410-11.

The recent borrowing by Louisiana State University proceeded as follows. Soon after the end of the war, in 1947, a $3,500,000 issue of serial bonds was sold which was to mature in 1967. (See Table XXXI, Appendix A.) But the bonds were callable, and they did not remain outstanding until that date, as noted below. No further University debt activity took place until after a new authorization, Act 54 of 1950, was provided. The first sales under Act 54 came in December, 1950, when several blocks were sold that amounted to $5,700,000. Louisiana State University bonds sold in 1947 and 1950 were given A ratings while the $300,000 issue of 1953, floated under the same terms as the 1950 bonds, was given an Aa rating.

The 1947 Louisiana State University issue was refunded in 1952. Most of the original 1947 issue was still outstanding in 1952 so that the amount refunded was large—$3,235,000. The first of these serial blocks totaled $1,610,000 and matures in 1962, and the second block of $1,625,000 matures serially between 1963 and 1967. The interest cost on these two refunding issues averaged 2.13

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per cent, as opposed to the 2.73 per cent carried by the 1947 bonds they replaced. The 1952 refunding issues are protected by dormitory revenues primarily, but any deficiency is covered by the full faith and credit of the Board of Supervisors of the University; the bonds are not general obligations of the State. Any deficiencies which might occur were to be paid from all revenues of the Board that are not specifically dedicated and also by a third lien on the $1,000,000 of revenues dedicated to the Board from the proceeds of the insurance excise tax. A second issue with this same security, except that it has a fourth lien on the insurance excise tax, is the $850,000 issue sold in 1954. This callable issue of 1954, which matures in 1979, was given an A rating. The same protection was also afforded to the holders of the $2,650,000 of bonds sold in December, 1956. These A-rated bonds, which are also callable, were sold for the purpose of financing the construction of two new residence halls.

Recent activity in Louisiana State University borrowing began with a relatively small issue on April 1, 1958. This issue, which was authorized by Act 230 of 1954, consisted

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63Louisiana, Financial Report, 1956-57, p. 68; 1951-52, p. 60; 1955-56, p. 54; 1956-57, p. 58; Louisiana Legislative Research Study No. 9, p. 95; and Moody's, 1959, pp. 677-78.
of $850,000 of serial bonds that are to mature from 1959 to 1978. The purpose of this issue was very specific—to construct and equip buildings for use in research on fertilizers, feeds, soils, and pesticides. The sole protection afforded the bondholders in this issue was the dedication of $70,000 annually from the registration fees and fines connected with the sale of feeds, fertilizers, and pesticides. Moody's assigned these bonds a rating of A. (See Table XXXI, Appendix A.)

The security for the issue probably had an adverse effect on its marketability. The flotation indicates clearly the extent to which the atomization of a debt structure can be carried. The issue also shows how far the State of Louisiana has departed from the proper use of its full faith and credit in all of its borrowing.

Another Louisiana State University sale in April, 1958, amounted to $7,500,000. The issue, which was to be used to construct and improve University buildings, is secured by the following: (1) a first lien on $1,000,000 annually dedicated from the proceeds of the 0.5 mill State

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65Moody's Bond Survey, L, No. 15 (April 7, 1958), 613; and Moody's, 1959, pp. 677-78.
ad valorem tax, (2) a fourth lien on $1,000,000 annually dedicated from the insurance excise tax, and (3) a fifth lien on $500,000 annually dedicated from the racetrack and bookmaking license taxes. Additional bonds can be issued on a parity basis with the $7,500,000 if certain revenue requirements are satisfied.

The $7,500,000 issue of 1958 was offered three different times during a nine month period before finally being placed on April 17 of that year. The offering and reoffering of the building issue resulted from a desire to get better terms on the borrowing and appears to have been good debt management. However, this case exemplifies the point made in an earlier chapter that good debt management cannot be expected to overcome all debt difficulties arising out of faulty debt structures and unfortunate political and legal institutions. Debt management could not overcome the difficulties dating back at least as far as the adoption of specific revenue dedications and subsidiary liens in Louisiana bond financing. The results are inefficient use of the State's credit with correspondingly higher costs for borrowing and for State services.

66Moody's Bond Survey, L, No. 15 (April 7, 1958), 613; and Moody's, 1959, pp. 677-78.

67Moody's Bond Survey, L, No. 15 (April 7, 1958), 613; Moody's Bond Survey, L, No. 17 (April 28, 1958), 584; and Moody's, 1959, pp. 677-78.
It is worth noting here that the uncertainties of legal priorities of claims on the general revenues of the State and the other complexities of the direct, general obligation debt structure of the State of Louisiana result in some of the subsidiary State agency obligations, such as the Louisiana State University bonds, receiving higher ratings and involving lower interest costs than many direct, full faith and credit bonds of the State. The $7,500,000 issue described above was rated A while most of the direct and full faith and credit Institutional Improvement Bonds outstanding were rated Baa. (See Table XXXI and XXIX.)

Greater New Orleans Expressway Commission Borrowing, 1952-1959

A recently created agency which has authority to issue bonds ultimately involving the State's credit is the Greater New Orleans Expressway Commission. This agency was established in October, 1954, according to the provisions of enabling Act 7 of 1952. The purpose for the creation of the Expressway Commission and for borrowing by this group was to construct a toll bridge across Lake Pontchartrain. The bridge tolls were pledged to service the debt so that the obligations are nominally revenue bonds. 68 The Greater

68 It is somewhat misleading to call the Greater New Orleans Expressway bonds "revenue" bonds. Revenue bonds usually are considered to be self-sustaining and
New Orleans Expressway Commission is not strictly an agency of the State; it is primarily an instrumentality of the parishes of St. Tammany and Jefferson. But the State is involved to the following extent: (1) it pledged $5,000,000 of surpluses from Highway Fund Number 2 for the construction of approaches to the Expressway; and (2) it pledged remaining surpluses over $5,000,000 to the payment of the Expressway bonds until all such bonds are retired. The Greater New Orleans Expressway was originally given a fourth lien on the surpluses in Highway Fund Number 2, but this was changed to a fifth lien when the Mississippi River Bridge Authority was chartered and given priority. It must be stressed that only a portion of Highway Fund Number 2 was being pledged here—only the surplus over the existing dedications. There is no full faith and credit pledge by either the State or the parishes to the payment of any of these Expressway bonds. However, the subordinate claim upon the revenues of a State department requires the inclusion of the Expressway Commission debt in the indirect category with the obligations of self-liquidating. This Greater New Orleans Expressway issue has neither of these characteristics. The use of such issues is not advisable if a state's credit is to be improved.
agencies of the State of Louisiana, even though there is no general State pledge.

69The original amount issued by the Expressway Commission in November, 1954, was $46,000,000. These bonds were initially rated as substandard—long after their issue in August of 1958 they were still simply rated as "speculative." The reason for this rating was that the toll operation was unproven. 70 There also seemed to be some specific doubt about the chances of success of the toll bridge because of proposed improvements on competing toll-free facilities. It was not until March of 1959 that the $46,000,000 issue of 1954 finally received a regular rating—it was rated Baa but was still considered speculative because of the threat of competition. 71 (See Table XXXII, Appendix A.)

The New Orleans Expressway revenue bond issue in 1954 created what may amount to a perpetual debt if the maturity schedule is followed. The terms of retirement of the issues are as follows: $1,000 each year until 1993 and $45,963,000

69Louisiana, Constitution (1921), Art. 6, Sec. 22(g), par. 5, as amended 1952, Act 90; and Moody's, 1959, pp. 675-76.

70The practice of not rating toll operations until they are proven may be a result of recent disappointing toll ventures in several states.

71Moody's, 1959, pp. 674-75; Moody's Bond Survey, L, No. 32 (August 4, 1958), 389; and Moody's Bond Survey, LI, No. 9 (March 2, 1959), 687.
in 1994. If this amount requires refunding in 1994, there will have been no debt retirement and the issue will resemble a perpetual debt. Perpetual debts were found to be undesirable because they reduce the State's ability to borrow in the future—they make no provision for sustaining the State's credit standing. Furthermore, the interest costs on this type of borrowing are great.

**Mississippi River Bridge Authority**

_Borrowing (Greater New Orleans Bridge), 1952-1959_

The second agency or authority resulting from the general enabling Act 7 of 1952 was the Mississippi River Bridge Authority. The two units directly involved in this Authority are Orleans and Jefferson parishes. The purpose of the proposed borrowing was to construct a bridge over the Mississippi River in downtown New Orleans. The State, as in the case of the New Orleans Expressway Commission, is committed to the extent that after 1957, 50 per cent of the surplus of the State Highway Fund Number 2 is pledged to the Authority. The State also contributed $750,000 either for preliminary work or for use as security for bond issues. These pledges together were the fourth charge on the surplus.

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72Moody's, 1959, pp. 674-75; Louisiana, Constitution (1921), Art. 6, Sec. 22(g), par. 5, as amended 1952, Act 90.
in Highway Fund Number 2. The Mississippi River Bridge Authority was given its place ahead of the Greater New Orleans Expressway by a constitutional amendment in 1954. State Highway Fund Number 2 is sustained by motor vehicle license taxes collected in the six parishes around New Orleans. This revenue from the State is not, however, the only source of revenue for the Authority. The Authority is expected to derive toll revenues from the operation of the bridge and from ferries. Thus, the bridge bonds that were issued are also (somewhat carelessly) called revenue bonds. (See Table XXXII, Appendix A.)

The Mississippi River Bridge Authority exercised part of its borrowing power by selling a $65,000,000 issue on October 5, 1954. There is no specific limit to the amount that the Authority can borrow. The bonds, which were dated November 1, 1954, are callable and are due to mature in November of 1994. This large bridge Authority issue of

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73 Louisiana, Constitution (1921), Art. 6, Sec. 22, as amended 1954, Act 745; Moody's, 1959, pp. 674-75; and Moody's Bond Survey, XLVI, No. 40 (October 4, 1954), 231-33.

74 Louisiana, Constitution (1921), Art. 6, Sec. 22(g), par. 4, as amended 1954, Act 745; Moody's, 1959, pp. 674-75; Moody's Bond Survey, XLVI, No. 40 (October 4, 1954), 231-33; and Moody's Bond Survey, XLVI, No. 41 (October 11, 1954), 222.

75 Moody's, 1959, pp. 674-75; Moody's Bond Survey, XLVI, No. 40 (October 4, 1954), 231-33; and Moody's Bond Survey, XLVI, No. 41 (October 11, 1954), 222.
1954 has the same characteristics as the Greater New Orleans Expressway Commission debt described previously. The evaluation is no different except that in this case, the purpose of the borrowing was to construct a major river bridge. The tendency toward piecemeal financing had progressed still further. The $65,000,000 of bridge Authority bonds still were not rated by Moody's as late as February, 1959. 76

The Mississippi River Bridge Authority has had a rare opportunity to exercise some of the principles of good debt management in 1959. During this time, the Authority has been able to retire a part of its debt by buying its bonds on the open market. The funds which have made these purchases possible have come from bridge tolls and from the State. Bridge tolls actually have been less than anticipated, but the receipts from the surpluses dedicated to the Authority by the State have been greater than estimated. The Authority has retired the bonds by purchasing them on the open market although the obligations are callable. The open market purchase has been more appropriate because the relatively low nominal interest rates on the bonds have caused them to be valued at considerably less than par

76Moody's Bond Survey, LI, No. 5 (February 2, 1959), 745.
during this period. Retirement of the bonds by exercise of the call feature would have been considerably more expensive.

The open market purchases have been as follows:
January, 1959, $2,550,000; June, 1959, $4,000,000; July, 1959, $900,000; and, September, 1959, $770,000. The amount of bonds retired in this fashion thus totaled $4,620,000 and reduced the amount of the Mississippi River Bridge Authority debt outstanding to $60,380,000. It has been estimated that these bond purchases have reduced the annual interest costs by $166,320. 77

The debt management in this phase of the Mississippi River Bridge Authority financing seems to have been excellent. There is no intention of disparaging this performance when it is pointed out that the whole process depended upon the unexpectedly large receipts from State tax dedication as well as the extremely high yields that prevailed in the market during this time. Debt management is passive to some extent, and some of the best debt management results from seizing upon such favorable circumstances.

Louisiana State Building Authority
Borrowing, 1952-1959

The Louisiana State Building Authority was created by Act 317 of 1952 for the express purpose of providing adequate buildings for educational, correctional, and charitable institutions. The Authority was empowered to borrow $9,750,000 under this act for certain designated purposes as well as $20,000,000 for the general purpose. This additional $20,000,000 could be borrowed on a parity basis with the originally specified $9,750,000 of bonds as soon as additional legislation was provided. The initial A, B, and C issues of $9,750,000, and any bonds sold under the blanket authorization, are payable from the proceeds of the State's 1.17 mill ad valorem tax. At the time of the sale of Series A, B, C, and AA, the tax was already dedicated to the payment of about $8,800,000 of bonds serviced from the State Bond and Interest Tax Fund. The second lien status of the bonds appears to have been responsible for the Baa rating which they were given. The prior claims are scheduled to be eliminated completely by 1960. Series A, B, and C were sold

78 This fund is the same State Bond and Interest Tax Fund that originally serviced direct debt payable from the 1.15 mill ad valorem tax.
in 1952, 1953, and 1954 and exhausted the specific authorization of $9,750,000. (See Table XXXIII, Appendix A.)

Before any further Building Authority borrowing could take place, there had to be more legislation. It came in the form of Act 13 of 1954 which provided for the issue of the aforementioned $20,000,000 of bonds that would rank on par with Series A, B, and C. The act also went further and amended the original act of 1952 so that still another $21,984,500 can be borrowed to be junior to the $29,750,000. The last $21,984,500 was scheduled to remain in this subordinate position until the first $9,750,000 (Series A, B, and C) had been retired. It was provided that after this retirement the remaining bonds would all be paid on a parity basis. The $20,000,000 authorization resulted in the sale of Series AA, BB, and CC in 1954, 1955, and 1956. The final $21,948,500 came in the form of Series DD, EE, and FF in 1956 and 1957. (See Table XXXIII, Appendix A.)


80Louisiana, Acts (1954), Act 13, pp. 21-31; Louisiana, Financial Report, 1956-57, p. 57; Moody's, 1959, 675-76; Louisiana Legislative Research Study No. 9, pp. 3, 92; Moody's Bond Survey, XLV, No. 49 (December 7, 1953), 128; and Moody's Bond Survey, XLV, No. 42 (October 19, 1953), 208.
The retirement of the senior Building Authority issues of $9,750,000 was accomplished early by the use of the call feature. Series A was called at the end of 1957 and Series C, in September of 1958. Series B thus was the only barrier to the establishment of parity among the Building Authority issues. That issue was scheduled to mature serially until 1962, but it was called in May of 1959. The use of the call feature to eliminate subordination of liens and to simplify debt structures is recognized as one situation in which the use of the call feature is proper. The removal of Series B by this method thus seems to have been an example of good debt management.

The issues of the Building Authority totaling $41,948,500—AA through FF—are all serial issues now payable on a parity basis. The last of these will mature by 1985. They are callable except for Series EE, which was sold to the State Teachers' Retirement System. Series EE is not rated by Moody's, but all of the other issues in the AA-FF group were rated Baa.  

There was one other Building Authority issue during the current period. This issue of $3,025,000, dated  

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\[\text{Moody's, 1959, pp. 675-76; and Moody's Bond Survey, LI, No. 20 (May 11, 1959), 552.}\]

\[\text{Moody's, 1959, pp. 675-76.}\]
April 15, 1956, was sold to improve a medical center and a charity hospital. The issue was sold at the same time as Series DD and also bears that identifying symbol. This issue of $3,025,000 was different from the others sold by the Authority because it was secured by an entirely different tax—the 0.53 mill ad valorem tax. The tax had previously been paid into the general fund. The issue of 1956 represented the whole amount that was authorized to be borrowed. The bonds, which are not callable, are scheduled to mature by 1964.

The last $3,025,000 Building Authority issue described above is another example of complexity being added to the debt structure. The other Building Authority issues required analysis, but this issue was entirely different and thus required a new study and a new explanation. The fact that another tax which had been free of any dedication was being diverted from the general fund was also an undesirable feature in that issue.

Summary of Borrowing, 1947-1959

The direct obligations added during this period consisted of $83,000,000 of Veterans' Bonus Bonds, $98,000,000

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of highway obligations, and $16,000,000 of Institutional Improvement Bonds. (See Table XXXIV, Appendix A.) The direct obligations sold during the decade thus totaled $197,000,000. This borrowing was added in a decade when the State's credit was not well recognized relative to the other states, although tremendous economic growth occurred during the period. Some of this direct borrowing was for questionable purposes. Furthermore, some of the management in connection with the issue of this new debt was not as efficient as it should have been. Finally, the continued dedication of taxes for servicing specific issues had the effect of further undermining the value of the full faith and credit pledge offered to secure these direct obligations.

The indirect obligations, sold by agencies in which the State had some interest, were as follows: Board of Commissioners of the Port of New Orleans, $10,000,000; Greater Baton Rouge Port Commission, $35,400,000; Louisiana State University $21,350,000; Greater New Orleans Expressway Commission, $46,000,000; Mississippi River Bridge Authority, $65,000,000; and the Louisiana State Building Authority, $54,723,000. Indirect borrowing totaled $232,473,000 in the period since 1947.

Much of this indirect borrowing came in 1954 and later—after the State had made great progress in its post-war economic development. For this reason, it probably
should not be concluded that this large amount of indirect borrowing was unsafe. This indirect borrowing generally was for proper purposes, but the management of the issues was not always satisfactory. Finally, the main defect in this indirect borrowing since 1947 has been its addition of so much complexity to the debt structure.

III. GENERAL CONSIDERATIONS, 1947-1959

Several general matters in connection with Louisiana's debt structure are not brought out clearly when individual purposes of borrowing and specific bond issues are analyzed. Have Louisiana bond ratings tended to improve or deteriorate over the period? To what extent has the call provision been used lately by the State? Has recent debt reporting in Louisiana been satisfactory? Has the timing of bond sales during recent years been consistent with the finding in Chapter II that there was a seasonal pattern to interest charges during the same period?

Ratings of Louisiana Bonds, 1947-1959

There have been several changes in the composition of the ratings of Louisiana debt during the last decade. (See Table A below and Tables XXVI, XXXV, and XXXVI, Appendix A.) In 1946, A and Baa bonds accounted for 85 per cent of the outstanding debt. The Baa rated debt amounted to $69,904,000
### TABLE A

**MOODY'S RATINGS OF LOUISIANA DIRECT AND INDIRECT DEBT OUTSTANDING FOR THE YEARS 1946, 1952, AND 1958**

*(thousands)*

<table>
<thead>
<tr>
<th>RATING</th>
<th>1946</th>
<th>1952</th>
<th>1958</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BONDS RATED Aa</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td>$7,525</td>
<td>$6,268</td>
<td>$50,159</td>
</tr>
<tr>
<td>Indirect</td>
<td>$9,300</td>
<td>$14,321</td>
<td>$9,624</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$16,825</td>
<td>$20,589</td>
<td>$59,783</td>
</tr>
<tr>
<td><strong>BONDS RATED A</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td>$67,875</td>
<td>$145,591</td>
<td>$85,151</td>
</tr>
<tr>
<td>Indirect</td>
<td>$0</td>
<td>$5,530</td>
<td>$47,232</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$67,875</td>
<td>$151,121</td>
<td>$132,383</td>
</tr>
<tr>
<td><strong>BONDS RATED Baa</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td>$41,831</td>
<td>$68,014</td>
<td>$0</td>
</tr>
<tr>
<td>Indirect</td>
<td>$28,073</td>
<td>$20,248</td>
<td>$117,672</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$69,904</td>
<td>$88,262</td>
<td>$117,672</td>
</tr>
<tr>
<td><strong>BONDS NOT RATED</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td>$2,009</td>
<td>$7,000</td>
<td>$13,000</td>
</tr>
<tr>
<td>Indirect</td>
<td>$5,992</td>
<td>$900</td>
<td>$65,180</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$8,001</td>
<td>$7,900</td>
<td>$78,180</td>
</tr>
</tbody>
</table>

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* Ratings range from Aaa to C. These ratings are sometimes changed when new information indicates that the investment quality is different. The ratings in this Table are as of the reporting date and not at the time of issue.

* Several issues sold during the 1947-1959 period were rated Baa, but by 1958 they had either been called or rerated.

* The classifications used here are the same as those used in the text. For example, Port of New Orleans and Baton Rouge Port Commission debt is classified as indirect.

Source: Compiled from Tables XXVI, XXXV, and XXXVI, Appendix A.
and the A rated debt totaled $67,875,000. Only 10.3 per cent of Louisiana's outstanding debt was rated Aa at the beginning of this period.

By 1952, and before the agency debt had its greatest growth, the modal rating of Louisiana debt was the A rating. Over 54 per cent of all the direct and indirect debt was rated A. Baa rated debt was second in importance, accounting for almost 33 per cent of the outstanding debt. The ratio of outstanding debt rated Aa actually declined during this period and comprised only 7.7 per cent of the total. Of course, the absolute amount of Aa rated bonds did increase slightly from 1946 to 1952.

By 1958, there was a significant change in the distribution of ratings in the State. There was an encouraging increase both absolutely and relatively in the amount of debt rated Aa—now 15.4 per cent of the total debt outstanding—and a slight decline in the per cent of the debt rated Baa—to 30.3 per cent. But there was another development: $78,180,000 of the debt was not rated by Moody's. The main reason why so much of Louisiana's debt is not rated is that one of the recent large issues was floated to

\[81\text{ Probably the most important factor contributing to this change was the temporary improvement in reporting which led to higher ratings in 1955. Supra, pp. } 314-16.\]
finance construction of a major river toll bridge. Moody's practice is to label all such issues as "speculative" until such time as facilities are completed and some earning record is established.

When ratings given to Louisiana bonds in the 1947-1959 period are studied in terms of whether the debts are direct or indirect, it appears that the improved ratings have been associated with direct borrowing while indirect debt includes the large percentage of bonds that are rated Baa. Examination of the differences between the debt outstanding in 1952 and that outstanding in 1958 reveals the following changes: (1) Direct bonds rated Aa increased from $6,268,000 in 1952 to $50,159,000—an increase of about 700 per cent; (2) Indirect debt in the Aa category declined from $14,321,000 to $9,621,000—32.2 per cent; (3) Bonds rated A in the direct category declined from $145,591,000 to $85,151,000—a decline of 41.5 per cent; (4) Bonds rated A increased in the indirect class from $5,530,000 to $47,232,000—an increase of over 750 per cent; (5) In the Baa category, the amount of direct bonds fell from $68,014,000 to nothing; (6) In the indirect grouping, where there had been $20,248,000 of Baa bonds in 1952, there was $117,672,000 in 1958—an increase of 481 per cent; (7) The bonds not rated almost doubled in the direct class from
$7,000,000 in 1952 to $13,000,000 in 1958; (8) In the indirect class, the unrated bonds increased from $900,000 to $65,180,000.

From the changes noted in the preceding comparisons, it appears that the direct debt is faring better than the indirect debt when ratings are given. The existence of $117,672,000 of indirect debt in the Baa category—where there was only a little more than $20,000,000 before—is especially disturbing. It is perhaps even more disturbing since agency borrowing is a relatively new phenomenon and since further borrowing by these agencies will probably be secured by the same dedicated taxes and funds subject to prior charges. Thus, if the agency device is widely used in the future, and if there are no large increases in the funds made available for debt service, there will probably be more subrated bonds added to Louisiana's debt structure.

Use of the Call Feature in Louisiana Bond Issues, 1947-1959

Another important characteristic of a debt structure is the extent to which the call feature is employed. The inclusion of a call feature may or may not be desirable, depending upon the price charged for the privilege. It will be wise, however, for the state to consider using the option if there is any prospect that the state's debt structure and
management will improve markedly in the future, and/or if the market and the rating services are underrating the state's credit.

Both of these conditions appear to have existed to some extent in Louisiana during the current post-war period. If a comprehensive debt improvement plan had been in the process of being formulated, it would have been desirable (other things equal) to use the call option in issues sold prior to the implementation of such a plan. Although there should have been, there was no such plan for the whole debt structure. But there was a suitable situation in the case of highway borrowing. If the price of the call feature was not prohibitive in 1958, it might have been suitable to make the three highway issues of that year callable. This practice was followed in the case of only one of these issues, but since there is no data available about the cost of the call, this approach is suggested only as one which may be useful in the future. (See Table XXVIII, Appendix A.)

Louisiana's economy obviously has gained strength in the past fifteen years. This economic growth, however, has apparently not been quickly recognized by the rating services and by the bond market. Louisiana's credit seems to have been underrated during the early part of the post-war period. Later the situation was temporarily remedied when

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85 Infra, Chap. VI, p. 380.
the bond ratings were revised as a result of a single and short-lived, but highly successful, debt reporting program. If Louisiana's credit was generally underrated during this period, the use of the call feature, other things being equal, would have been appropriate.

The actual use of the call feature in Louisiana is analyzed in Table B. In 1946, 8 per cent of Louisiana's obligations were callable and 91 per cent were not callable. By 1952, the callable obligations constituted 21 per cent

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**TABLE B**


<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>1946</th>
<th>1952</th>
<th>1958</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CALLABLE ISSUES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td>5</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Indirect</td>
<td>0</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td><strong>NONCALLABLE ISSUES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td>37</td>
<td>29</td>
<td>31</td>
</tr>
<tr>
<td>Indirect</td>
<td>21</td>
<td>21</td>
<td>14</td>
</tr>
<tr>
<td><strong>NOT INDICATED</strong></td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Moody's, 1947, pp. 421-29; 1953, pp. 472-83; and 1959, pp. 663-78.
of the total, and the per cent of noncallable bonds declined to 78 per cent. The same tendencies were apparent in 1958: 35 per cent of the bonds were callable and 62 per cent were noncallable. If the assumption made previously is correct—that is, if it was advisable for Louisiana to include the call feature more frequently since World War II—then Louisiana has been improving her debt structure in this respect.

Also commendable is the fact that the call options that were being included more often were also being effectively exercised during the period. One case was cited in this Chapter where the State called bonds with a consequent saving in interest payments. In another case, a senior issue was eliminated with the result that subsequent issues were put on a parity basis. These are the advantages that accrue to good debt management. Still another, and perhaps a greater, benefit is possible. The fact that 35 per cent of the debt outstanding is callable would help greatly in any large-scale revision of the debt structure.

87 The call feature was included and exercised in one case that led to the question of whether good debt management or good fortune was the most important characteristic.
88 Supra, pp. 293-95, 322, and 324.
89 A debt reform based on the use of the call feature has been suggested by William D. Ross and B. F. Sliger. William D. Ross and B. F. Sliger, "Dedication of State
The reporting of Louisiana's debt in the period, 1947-1959, left something to be desired if a major objective of reporting is to inform the taxpayer and the general public. The following inadequacies are apparent: (1) There is no indication in Louisiana Financial Reports that the State is involved at all in the Greater New Orleans Expressway, the Mississippi River Bridge Authority, and the Greater Baton Rouge Port borrowing. Yet the State's credit is clearly involved in each of these issues. (2) The Financial Reports have never given the specific purposes for which the various issues were sold, and they presently do not indicate interest rates and maturity schedules. Thus it is impossible to determine whether a prompt payment is planned or whether deferred serials are being issued. (3) The Financial Reports contain some incorrect and misleading information.


For example, in the 1956-57 Financial Report, the 1950 issues of Louisiana State University bonds were listed as having been sold in 1953. The $9,400,000 issue of highway bonds payable from Highway Fund Number 2 which were sold in 1953 and 1954 were listed as indirect obligations. Still in the same report, there is no mention of the State's commitment in the borrowing noted in (1) above.
Another difficulty is the lack of coordination and consistency that is evidenced by the variety of dates upon which the debt outstanding is reported.

Reporting in another sense—that of informing investors and those that serve them of all pertinent matters and especially of improvements which would make offerings more attractive—apparently has been somewhat more satisfactory in Louisiana. The debt reporting carried on by a special group in 1955 showed just how important and worthwhile this could become if it were sustained. The task of supplying investors complete information on coming issues has been difficult because of the complexity of the debt structure. Improvements in the general debt structure will make good reporting easier.

Timing of Louisiana Bond Sales, 1947-1959

Another question that was not covered in the analysis of individual bond issues concerns the timing of bond sales. Since the date of issue is usually the same or very close to the date of the bond sale, a review of these dates of issue provides a basis for determining whether Louisiana has taken advantage of the seasonal pattern which seems to exist in bond yields.\(^2\) Of the fifty-one bond sales in Louisiana

between 1947 and 1959, twenty-seven (52.9 per cent) consisted of direct obligations. (See Table C.) These direct obligations were sold mostly in the first seven months of the year when rates appear to be lower than normal. Twenty-four, or 88.9 per cent, of the direct bond issues were floated in those months. The only three issues sold at other times were two institutional improvement flotations totaling $6,251,000 and one highway issue of $10,000,000. Only one issue was sold in April when the seasonal yields apparently are lowest, but the timing of the sales of these direct obligations seems to have been generally satisfactory.

In the indirect category, there were twenty-four separate sales during this post-war period. Five of these issues were sold in the favorable month of April and eleven issues were sold in the first six months of the year. But, there were also eleven or 45.8 per cent of the indirect issues sold in the months of November and December. On the whole, direct borrowing seems to have been better timed to take advantage of the favorable rates. If the seasonal pattern is important, there remains a great deal of room for improvement in the timing of indirect sales. Less efficient timing in the sale of indirect obligations is perhaps additional evidence of the overuse of the authority device—the result being loss of effective control and efficient fiscal
TABLE C
DATES OF ISSUE OF LOUISIANA BONDS SOLD
DURING THE YEARS 1947-1959a

<table>
<thead>
<tr>
<th>DATE</th>
<th>TYPE OF DEBT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DIRECT</td>
</tr>
<tr>
<td>JANUARY</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>FEBRUARY</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>MARCH</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>APRIL</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>MAY</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>JUNE</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>JULY</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>AUGUST</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>SEPTEMBER</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>OCTOBER</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>NOVEMBER</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>DECEMBER</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>27</td>
</tr>
</tbody>
</table>

aThe classifications of direct and indirect obligations here are the same as those used in this Chapter. For example, the Port of New Orleans and Port of Baton Rouge debts are listed under the indirect heading above. Two of the direct issues above are classified by the date of sale instead of the date of issue.

Source: Compiled from Tables XXVII-XXXII, Appendix A.
management. The consequences can be better appreciated if it is realized that indirect borrowing since 1947 has amounted to $232,473,000. The lowering of the interest rate by even one-half of 1 per cent on say 4½ per cent of this indirect debt would make careful timing very worthwhile.

The classification of the dates of issue of bonds sold recently clearly brings out another indisputable fact about the debt; there have been a great many issues—fifty-one—in the 12-year period. Many of these issues have been relatively small ones. According to good debt management principles, frequent and relatively small issues are undesirable. They tend to clutter and complicate debt structures and to drive up interest costs and administrative expenses. Better planning could have undoubtedly reduced the number of issues that were sold by the State in recent years.

Administrative Machinery, 1947-1959

There have been no significant changes in the functions of the Board of Liquidation since 1947. During the same period there have been only a few types of direct borrowing. The only new direct borrowing, which was for the purpose of financing veterans' bonuses, was managed by the Board of Liquidation and thus did not change or add to the administrative machinery for debt management. The most
important change in the direct debt administration since World War II has been the improvement in the machinery for managing highway issues. This highway debt reform was actually much more significant than would have been the case for any other borrowing. This change alone has made the 1947-1959 period more successful than previous periods in Louisiana's debt history.

Another major recent change in the machinery for managing the debt structure in Louisiana has been the tendency toward more indirect agency borrowing. Four new agencies have been added to the administrative machinery since 1952, bringing the total number of agencies with outstanding debt to nine. This growing list of authorities bespeaks the lack of any centralization and order in this important segment of the debt structure. When there are so many agencies, there is really no "administrative machinery" in the sense of coordinated and unified administration. When reference is made to Louisiana's debt "administrative machinery" and its debt "management," therefore, the terms are used loosely.
CHAPTER VI

SUMMARY AND CONCLUSIONS

The final Chapter of this study summarizes Louisiana debt experience with emphasis on the important trends in this borrowing. The major defects that have appeared in the debt structure and in debt management in recent times are also outlined. Important characteristics of the existing debt structure are then compared with debt structures that are found in several other states. Finally, proposals for the improvement of Louisiana's debt structure and debt management are submitted.

I. TRENDS AND INFLUENCES OF EARLY BORROWING ON LOUISIANA'S DEBT STRUCTURE

From the standpoint of influence on the present debt structure in Louisiana, one of the more significant developments before 1900 was the establishment of the Board of Liquidation of the State Debt. The Board of Liquidation, however, has changed a great deal; its original function of exchanging bonds in a refunding operation has been greatly expanded. Another obvious influence of the early period was the carry-over of some of the early debt into this century,
although the amount brought forward was relatively insignifi­
cant. A third influence of early borrowing is that the
record of default and repudiation in the nineteenth century
was not overlooked when some of the Louisiana debt was
refunded in 1914. It is even possible that this repudiation
has had a subtle and indirect influence on the State's more
recent credit standing. Finally, some of the provisions of
acts in the early period were incorporated in whole or in
part into the Constitution of 1921 and some of them still
affect the debt structure. One of the most important of
these provisions in the present Constitution is the debt
limitation.

For the first two decades of the twentieth century,
Port development in New Orleans was the major reason for
borrowing in Louisiana. On the whole, these twenty years
were conservative and peaceful ones in debt matters. A
major factor contributing to this quiet was that Louisiana
did not engage in bonus borrowing after World War I as did
some of the other states. The tempo of borrowing increased
rapidly at the end of the twenties and continued at a very
high rate until about 1932. After 1932, the rate of borrow­
ing declined somewhat, but debt financing still continued at
a high level. Highway borrowing was the most important debt
issuance throughout the 1930's. When World War II came,
Louisiana practically suspended her borrowing and debt
development, while the economy kept growing. By the end of World War II, the State was in a relatively strong financial position, but pressure was put on the debt structure by veterans' bonus borrowing. The most important recent trend in the evolution of Louisiana's debt structure has been the movement toward indirect borrowing which has taken place since 1952. In most periods, Louisiana's debt practices have had some unique characteristics, but in general, practices and trends have paralleled closely the experience of other American states. This similarity is evident when the debt structure in Louisiana is compared with the debt structure in other states.

II. MAIN DEFECTS OF THE DEBT STRUCTURE AND DEBT MANAGEMENT IN LOUISIANA SINCE 1921

The major defects of structure and management in Louisiana borrowing in recent times have been of two types. In the first category are the institutional defects which are included in the Constitution of 1921. The second group of flaws, resulting partly from the poor legal framework, are the inefficiencies in the administrative machinery.

Legal Impediments to Efficient Borrowing

Many institutional impediments to efficient public finance are contained and perpetuated in the Constitution of
1921. There is no systematic treatment of debt policy in
this document, and the provisions relative to borrowing are
detailed and scattered. The constitutional debt limitation
is highly inflexible and is not representative of the public
attitude toward borrowing in the State.

Other institutional flaws that have their origin in
the Constitution of 1921 are the various tax dedications.
Tax dedications developed at a time when the State's credit
was relatively poor; they were apparently intended to lend
security to bond issues in order to make them more marketa-
ble. The main results of the dedications, however, have
been to add complexity to the debt structure and to use tax
revenues and other funds inefficiently as protection for
bond issues. The dedication of tax revenues to certain bond
issues has also contributed to wide use of prior and subor-
dinate liens in Louisiana. Other things equal, bonds with
subordinate liens are less marketable and such borrowing is
more expensive. Still another defect in the relationship
between taxation and borrowing is the existence of a property
1 tax limitation in the Constitution. This restriction is
not at all reassuring to bondholders. It has been noted
that the states which have received the highest ratings on
their bond issues usually have had unlimited taxing power.

1Louisiana, Constitution (1921), Art. 10, Sec. 3, as
amended 1954.
Administrative Impediments to Efficient Borrowing

The second major institutional impediment in Louisiana's debt structure is in the administrative machinery. This problem, of course, cannot be entirely separated from the constitutional or legal framework. The administrative machinery for debt management in Louisiana has had these weaknesses: (1) there has been no centralized management of the entire debt structure; (2) the lines of authority in debt management have been changed repeatedly and provision has not always been made for clear and consistent administrative machinery; (3) there has seldom been enough flexibility in administrative authority to permit efficient debt management; and, (4) finally, there has been no clear and consistent planning or comprehensive policy in the shaping of the debt structure.

Examples of these major flaws in Louisiana's debt structure and management are numerous. The lack of centralized management, which has resulted from the use of separate and uncoordinated constitutional authorizations, is evident in the fact that not all Louisiana borrowing is reviewed by a single governmental unit but rather the borrowing is done on an independent or semi-independent basis by the several agencies and departments of the State. The fact that the administrative machinery has been changed frequently and is still not clear is illustrated by the "off-again-on-again"
role of the Board of Liquidation in State borrowing. Today it is still difficult to discover exactly the relationships between say, the State Treasurer, the Board of Liquidation, the Highway Commission, and the State Bond and Tax Board.

The lack of freedom to vary provisions in bond sales, which freedom is necessary if debt management is to take place at all, has been an especially serious flaw in Louisiana. Authors of constitutional amendments authorizing borrowing have usually included a superabundance of directions about bond provisions. It has often been indicated that bonds should be serials, that they should be deferred, that they should be callable, and even, on one occasion, the exact date of issue was specified. The problem of getting the best terms is a matter requiring the utmost in flexibility to cope with fast changing conditions in the bond markets—it is, therefore, a function of management and not a matter of policy.

In addition to the overdetailing of debt provisions in Louisiana's Constitution, there has also been a lack of clarity and consistency in debt policy. Some bonds have been direct obligations without being full faith and credit obligations. Other bonds have been secured by the State's full faith and credit pledge while at the same time being indirect obligations. In still other issues, the
State's role is not expressly given. The use of the call feature has not been consistent, and the timing of bond sales has been less predictable. Even the offices charged with the actual process of selling the bonds have often been changed. All such practices have contributed uncertainty to the debt structure, and this uncertainty is considered reprehensible by the rating agencies and the bond buyers.

III. LOUISIANA'S DEBT STRUCTURE, 1957

Louisiana's debt structure is summarized in Table XXXVII, Appendix A. The 1957 data are used in order to facilitate comparisons with other states. The total Louisiana debt outstanding on June 30, 1957, was approximately $351,359,000. This total consisted of $143,763,000 of direct debt and $210,596,000 of indirect debt.

Debt Outstanding in 1957 Compared to Debt Outstanding in 1946

On June 30, 1946, the total debt outstanding in Louisiana was $160,676,000; in 1957, it had increased by

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2The data in the Table were compiled from three sources. The Financial Report omits $123,299,000 of debt for which the State either contributes funds or has guaranteed payment by pledging its full faith and credit. Moody's is the most complete of the three sources. The Census Bureau's Compendium of State Government Finances reclassifies data supplied by the states according to uniform categories. (See Table XXXVIII, Appendix A.)
121 per cent to $354,359,000. (See Table XXXVII, Appendix A.) Debt service requirements reported in the Financial Report were $12,387,000 in the fiscal year 1947-1948, and they reached a high of $21,730,000 in 1955-1956—an increase of 75 per cent. The absolute debt burden thus has increased considerably over the last decade.

The State's economy has also grown since 1946. Total tax collections in Louisiana have increased from $98,915,000 in 1946 to $351,893,000 in 1958—an increase of over 250 per cent. (See Tables XXXIX, XL, and XLI, Appendix A.) The various taxes dedicated for the payment of the State's obligations have all increased in yield over the last seven years. Total revenues have increased by about threefold. Personal incomes within the State increased during the same period by over 130 per cent. The ability to bear debt has increased in Louisiana more than enough to offset the increase in debt.

Louisiana's Debt Structure Compared to Other States, 1957

The present debt burden in Louisiana is somewhat lighter than it was in the past. But, how does this burden

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3Louisiana, Financial Report, 1947-48, p. 3; and 1955-56, p. 8. Actual debt service payments were somewhat higher than this sum because the report omits several issues.
compare with state debt burdens in other states? The Compendium of State Government Finances in 1957 is the source of much valuable information for comparing the debt structures of the states. The states selected for this comparison are the five states that in 1953 had significant amounts of general obligations outstanding, all rated Aaa. Louisiana's general obligations outstanding at that time consisted of 44.4 per cent rated Aa, 48.2 per cent rated A, 44.4 per cent rated Baa, and 3.1 per cent not rated. The comparison then is a rigorous one for the State of Louisiana—it compares the State with the leaders in the field.

The purposes of borrowing in the six states in the comparison were the familiar ones. The percentage of total long-term debt devoted to highway finance ranged from 47.2 per cent in Louisiana to 67.1 per cent in Connecticut. (See Table A.) Highway borrowing was the most important purpose for borrowing in the selected states as well as in all forty-eight states. (See Table XLII, Appendix A.) Highway obligations accounted for 54.3 per cent of long-term debt outstanding in the forty-eight states in 1957. Assuming that amounts outstanding indicate the volume of borrowing, highway borrowing has actually accounted for a smaller share of total borrowing in Louisiana than in other states.

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\textsuperscript{4}Louisiana Legislative Research Study No. 9, p. 81.
TABLE A

LONG-TERM DEBT OUTSTANDING BY PURPOSE FOR ALL STATES
AND SELECTED STATES, 1957\(^a\)

<table>
<thead>
<tr>
<th>State</th>
<th>Highways to Long-Term Debt Outstanding (per cent)</th>
<th>Education to Long-Term Debt Outstanding (per cent)</th>
<th>Veterans(^b) Bonus to Long-Term Debt Outstanding (per cent)</th>
<th>Nonhighway Transportation to Long-Term Debt Outstanding (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All States</td>
<td>54.3</td>
<td>13.1</td>
<td>8.9</td>
<td>1.8</td>
</tr>
<tr>
<td>Louisiana</td>
<td>47.2</td>
<td>5.5</td>
<td>14.5</td>
<td>10.3</td>
</tr>
<tr>
<td>Conn.</td>
<td>67.1</td>
<td>10.8</td>
<td>6.7</td>
<td>0.5</td>
</tr>
<tr>
<td>Maryland</td>
<td>64.7</td>
<td>18.2</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Mass.</td>
<td>60.2</td>
<td>.7</td>
<td>6.0</td>
<td>3.6</td>
</tr>
<tr>
<td>New York</td>
<td>52.4</td>
<td>.4</td>
<td>1.5</td>
<td>6.5</td>
</tr>
<tr>
<td>Ohio</td>
<td>60.8</td>
<td>4.9</td>
<td>21.7</td>
<td>---</td>
</tr>
</tbody>
</table>

\(^a\) The percentages here are based on the amounts given in Table XLII, Appendix A. The Louisiana amounts are not changed in order that the comparison with other states will be valid. The Compendium classifications are uniform.

Source: Table XLII, Appendix A.
Other important purposes for which the states have borrowed heavily are education and veterans' bonuses. The states as a group devoted 13.1 per cent of their borrowing to education. Louisiana was far below this average with only 5.5 per cent of its borrowing for education. Veterans' bonus debt was 8.9 per cent of the total debt outstanding in all states in 1957. In this case, Louisiana was much higher than average—14.5 per cent of the debt outstanding was incurred for this purpose. Among the states in the sample, only Ohio borrowed more to finance veterans' bonuses.

Another very important fraction of the Louisiana debt outstanding at that time was for nonhighway transportation. The average borrowed for nonhighway transportation was only 1.8 per cent in all the states, but it was 10.3 per cent in Louisiana. Two of the other states in the selection also had substantial amounts for this purpose—New York had 6.5 per cent of its borrowing in the nonhighway category, and Massachusetts had 3.6 per cent.

Table B contains several comparisons which show the relative importance of borrowing in the various state financial structures. The State of Louisiana had the lowest ratio of borrowing to borrowing plus other revenue of any of the individual states selected. Only 2.8 per cent of State funds in Louisiana in 1957 came from borrowing. However, average annual borrowing in Louisiana actually has been much
TABLE B
FINANCIAL STRUCTURES IN ALL STATES AND SELECTED STATES, 1957

<table>
<thead>
<tr>
<th>State</th>
<th>Borrowing (per cent)</th>
<th>Debt Redemption to Revenue (per cent)</th>
<th>Borrowing to Revenue (per cent)</th>
<th>Per Capita Debt (dollars)</th>
<th>Per Capita Income (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All 48 States</td>
<td>5.7</td>
<td>2.6</td>
<td>6.2</td>
<td>$81.25</td>
<td>4.2</td>
</tr>
<tr>
<td>Louisiana</td>
<td>2.8</td>
<td>2.5</td>
<td>2.9</td>
<td>106.74</td>
<td>7.4</td>
</tr>
<tr>
<td>Conn.</td>
<td>23.5</td>
<td>2.8</td>
<td>22.8</td>
<td>175.00</td>
<td>6.5</td>
</tr>
<tr>
<td>Maryland</td>
<td>12.0</td>
<td>5.4</td>
<td>12.2</td>
<td>184.17</td>
<td>8.8</td>
</tr>
<tr>
<td>Mass.</td>
<td>17.4</td>
<td>6.0</td>
<td>17.0</td>
<td>210.61</td>
<td>9.5</td>
</tr>
<tr>
<td>New York</td>
<td>5.9</td>
<td>4.5</td>
<td>6.4</td>
<td>124.75</td>
<td>5.2</td>
</tr>
<tr>
<td>Ohio</td>
<td>9.9</td>
<td>2.2</td>
<td>11.5</td>
<td>78.08</td>
<td>3.6</td>
</tr>
</tbody>
</table>

\*If the average borrowing in Louisiana for the period 1947-1957 had been used instead of the borrowing in 1957 alone, borrowing as a per cent of revenue and borrowing would have been 5 per cent and borrowing as a per cent of expenditure would have been 5.1 per cent.

Source: Tables XLII and XLIII, Appendix A.
greater than the $18,748,000 upon which this ratio was based. If the average of $33,036,384.62 for the years 1947-1957 had been used, the figure would have been 5 per cent. In all of the forty-eight states in 1957, borrowing was 5.7 per cent of the total revenue and borrowing. In the same Table, Louisiana debt redemption was a slightly smaller percentage of revenue and borrowing than the average for all states and considerably smaller than the average for most of the states in the sample. This ratio could mean that the State was postponing its debt retirement and/or that it had a relatively light debt burden. Other evidence will show that the second proposition is the correct one.

In the third comparison in Table B, borrowing as a percentage of expenditure, Louisiana in 1957 again depended far less upon borrowing than the average state. Borrowing in 1957 constituted only 2.9 per cent of Louisiana's expenditures, but it was 6.2 per cent in all states. If average Louisiana borrowing for the years 1947-1957 ($33,036,384.62) is used instead of 1957 borrowing only, the State of Louisiana still compares favorably, with borrowing constituting 5.1 per cent of expenditures. The nearest other state in the sample was New York, which was above the 48-state average with 6.4 per cent. The remainder of the states in the sample ranged from 11.5 per cent in Ohio to 22.8 per cent in Connecticut.
Louisiana's per capita debt in 1957 was $106.74. This sum was substantially greater than the national average of $81.25. There were, however, five other states with per capita debts between $100 and $120 and eight others with per capita debts greater than $120. Of the five other states in the above comparison, only Ohio had a lower per capita debt than Louisiana. Connecticut, Maryland, Massachusetts, and New York all had greater per capita debts than Louisiana. The fact of greater per capita debts in other states, of course, is not a sufficient test—per capita debt must be related to some income figure to measure relative burdens.

This comparison is also made in Table B. Per capita debt was 4.2 per cent of per capita income in the forty-eight states. Louisiana's per capita debt was 7.4 per cent of per capita income. In the states with prime ratings, the ratios were as follows: Connecticut, 6.5 per cent; Maryland, 8.8 per cent; Massachusetts, 9.5 per cent; New York, 5.2 per cent; and Ohio, 3.6 per cent. The debt in Louisiana measured by this criterion was greater than the national average, but less than the average for the five other states.

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As of 1957, Louisiana was using its borrowing power sparingly. In this respect, Louisiana compares favorably with states that have far surpassed it in the bond ratings. This difference in ratings does not seem to be justified on the basis of relative debt burdens and ability to pay. Yet, these are nominally the basic criteria used in the bond market.

The next important table, Table C, shows the long-term debt outstanding in selected states in 1957 and classifies this debt according to its character. Of the five states selected for the comparison, only one state had relatively as much full faith and credit debt as did Louisiana. Louisiana and Massachusetts had 27.2 per cent of their debt in the nonguaranteed category. New York had 39.1 per cent nonguaranteed while Connecticut and Maryland had 64.3 and 65.8 per cent of their debt nonguaranteed. Ohio had 75.7 per cent not covered by the full faith and credit of the state. In all of the forty-eight states, 52 per cent of all long-term debt was nonguaranteed. It has been indicated in

6The relatively high percentage of nonguaranteed debt in most of the selected states may have another implication; it may be a reason why all of the guaranteed or full faith and credit bonds of these states have been given the top rating by Moody’s. There may be some significance to this; however, the states were selected not only because they had Aaa ratings but also because they had large amounts of general obligations outstanding. It cannot be concluded, therefore, that the states had Aaa ratings on their full faith and credit debt mainly because they specialized in nonguaranteed issues and thus had little full faith and credit debt.
**TABLE C**

**LONG-TERM DEBT OUTSTANDING AT END OF FISCAL YEAR**
**BY CHARACTER FOR ALL STATES AND SELECTED STATES IN 1957**

<table>
<thead>
<tr>
<th>State</th>
<th>FULL FAITH AND CREDIT</th>
<th>Nonguaranteed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total (per cent)</td>
<td>General (per cent)</td>
</tr>
<tr>
<td>All 48 States</td>
<td>48.0</td>
<td>33.9</td>
</tr>
<tr>
<td>Louisiana</td>
<td>72.8</td>
<td>72.8</td>
</tr>
<tr>
<td>Connecticut</td>
<td>35.7</td>
<td>29.5</td>
</tr>
<tr>
<td>Maryland</td>
<td>34.2</td>
<td>20.6</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>72.8</td>
<td>58.9</td>
</tr>
<tr>
<td>New York</td>
<td>60.9</td>
<td>20.9</td>
</tr>
<tr>
<td>Ohio</td>
<td>24.3</td>
<td>24.3</td>
</tr>
</tbody>
</table>

This information is not entirely accurate. The Port of New Orleans debt, which is a long-term full faith and credit liability of the State, is payable partly from Port revenues.

Source: Compiled from Table XLIV, Appendix A.
several places in this study that use of the full faith and credit of a state appears to be desirable; if the state is to be involved at all in debt financing, it is probably best to make the most of the involvement by making it as effective as possible. If this reasoning is correct, it would appear that Louisiana is following good debt management policy by giving its pledge to a large portion of its issues.

Another interesting part of Table C is the breakdown of the full faith and credit debt of the states into the debt that was payable initially from specific nontax revenues and the debt secured solely by the full faith and credit pledge. Louisiana is shown as having only general obligations and no debt payable initially from specific nontax revenues. The other five states have a relatively high incidence of full faith and credit obligations that are payable initially from specific nontax revenues. Here it appears that the rating services may have drawn a distinction between tax dedication and nontax revenue dedication. The distinction has validity in Louisiana; the pledge of specific tax revenues is backed by the full faith and credit pledge. But this practice amounts to financial redundancy.

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7This information is not entirely accurate. The Port of New Orleans debt, which is a long-term full faith and credit liability of the State, is payable partly from Port revenues.
In some other states, significant portions of full faith and credit obligations are payable from nontax revenues and then ultimately from tax revenues if all else fails. Whether this type of double protection actually is really necessary for the protection of holders of state bonds still seems to be questionable. However, as long as the present bond criteria remain unchanged, it behooves alert state authorities to shape their debt structures and debt management to make the best of the situation.

Another important comparison between Louisiana and the selected states concerns the rate at which obligations are retired. (See Table XLV, Appendix A.) In this comparison, Louisiana's scheduled maturities decline from $20,565,000 in 1960 to $7,041,000 in 1969. During the period from 1957 to 1969, 54.2 per cent of the debt outstanding will be retired. Massachusetts' debt maturity schedule will require approximately $25,000,000 each year until 1969, and the portion retired by that time will be almost the same as in Louisiana. The only state, of those examined, that will retire its debt more quickly than Massachusetts and Louisiana is Maryland. (See Table D.) In that state, 61.5 per cent of the debt will be retired before 1970. In the other states in the sample, Ohio will retire only 41.7 per cent of its debt before 1970; New York will retire only 32 per cent, and Connecticut will retire 31.3
TABLE D
LONG-TERM DEBT OUTSTANDING AT END OF FISCAL YEAR, BY SELECTED SCHEDULED MATURITY PERIODS FOR ALL STATES AND SELECTED STATES, 1957

<table>
<thead>
<tr>
<th>State</th>
<th>Total Debt (thousands)</th>
<th>Maturing 1970 and thereafter (thousands)</th>
<th>Maturing 1970 and thereafter (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All 48 States</td>
<td>$13,521,970</td>
<td>$7,577,616</td>
<td>56.0</td>
</tr>
<tr>
<td>Louisiana</td>
<td>321,301</td>
<td>146,859</td>
<td>45.8</td>
</tr>
<tr>
<td>Connecticut</td>
<td>388,671</td>
<td>266,935</td>
<td>68.7</td>
</tr>
<tr>
<td>Maryland</td>
<td>520,274</td>
<td>192,928</td>
<td>38.5</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>1,013,681</td>
<td>463,430</td>
<td>45.7</td>
</tr>
<tr>
<td>New York</td>
<td>1,974,278</td>
<td>1,342,520</td>
<td>68.0</td>
</tr>
<tr>
<td>Ohio</td>
<td>708,307</td>
<td>393,310</td>
<td>55.3</td>
</tr>
</tbody>
</table>

*This sum does not include all of Louisiana's indirect debt, but it has not been changed in order that the comparison with other states will be valid.

Source: Compiled from Table XLV, Appendix A.
per cent. All of the forty-eight states will have only 44 per cent of their debts retired by the end of 1969. Louisiana, therefore, is providing well for debt retirement in comparison with selected states and all states.

In most of the above analysis, Louisiana's debt structure compares favorably. The amount borrowed for highways is not disproportionate. The debt burden is higher than the average for all states but lower than in the selected states. Full faith and credit obligations have been widely used; and, finally, the debt is being retired rapidly. If the basic economic strength of the State and the intrinsic soundness of its financial structure were given the weight they deserve (and the weight that the rating services claim to give these factors), Louisiana would have a good part of its outstanding debt rated Aaa. There is, nevertheless, ample opportunity for improvement in debt management and in the debt structure in Louisiana. This internal improvement is imperative as long as the rating systems and the market criteria are unchanged.

IV. PROPOSALS

Alternate proposals suggested here for improving the State's debt structure and debt management are based upon two different assumptions: the first assumption is
that a full scale reform of the Constitution and the adminis-
trative machinery is possible; the second assumption is
that present legal institutions will be continued. Some
general ideas are presented at the end of this Chapter which
raise questions about intergovernmental relationships and
relationships of state and local units to each other and to
the various rating services.

Constitutional Codification and
Reform Objectives

A comprehensive reform of Louisiana's debt structure
and management could best start with the Constitution of
1921. It would probably be easier to adopt a new constitu-
tion than to try to amend the present one into a satisfactory
form, but it would not be impossible to amend certain
existing provisions of the Constitution and to add others.
In either case, constitutional provisions covering the debt
structure and debt management should be treated separately
and in an orderly fashion. This procedure would be a very
important first step in any reform because it would attack
the evil of complexity at its source.

In codifying and revising constitutional debt provi-
sions, there are several other objectives besides simplicity
which would be important in improving the debt structure.
These objectives would include: building confidence in the
State's credit standing; allowing for more flexibility in
debt management; and, providing greater margins of protection for all issues.

The observation was made in Chapter II that the success of a state's debt structure and debt management depends to a great extent on building confidence. With the market criteria prevailing today, a state must give very careful attention to creating confidence in issues by observing all of the conventions which are highly regarded in the market, even if there is less than one chance in one thousand that a threat of default or repudiation will ever cause the extra guarantees to be tested. For this reason, the constitutional reform must be written so as to inspire confidence in the State's intention to repay and also in the protection offered to the bondholders. A good starting point in establishing this debt policy might be a paragraph like the following:

The State government of Louisiana and any agency chartered by the State is hereby charged with the responsibility of maintaining the State's credit by every means possible. It is hereby provided that there shall always be prompt and complete payment of every valid outstanding obligation of the State and of the interest due

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8 The term "valid outstanding obligation" is used to eliminate difficulty from the Reconstruction issues that may be still outstanding.

It is possible that Louisiana made a mistake in not paying this debt, if only for the purpose of removing this
on such obligations on their due dates. The State of Louisiana hereby waives its sovereign right to repudiate any valid direct or indirect obligations of the State.

The objective of permitting better debt management could be achieved in a comprehensive reform of the Constitution by leaving decisions about such matters as timing, advertising, selling, and other sundry bond provisions to be determined by some body created primarily to perform the debt management function. More latitude can be provided for the debt managers by omitting the management details from the constitutional debt ordinance.

Methods of Increasing Protective Margins

An entirely feasible approach to the matter of increasing protective margins was proposed by Ross and Sliger in a 1957 study of Louisiana tax dedications. The relationship between tax dedications and the debt structure blemish from its credit record. Such action would have required about $14,000,000 and could have been extended over several years. The decision of the United States government to assume the debts incurred by the states during the Revolutionary War succeeded dramatically in building this nation's credit. More recently, the repayment of its World War I debts by Finland did much to improve that nation's credit. A similar effect might have resulted from the action suggested above for Louisiana. Of course, fortuitous windfalls and other problems make the suggestion impractical at this late date.

was analyzed in that study, and proposals were made as to what might be done about existing dedications which were considered to be undesirable. The study distinguished three time periods and indicated what action would be possible in each period. It was found that it would have been possible for the Louisiana Legislature alone to free 35 per cent of existing State tax dedications between 1957 and the beginning of 1959. It was also possible that 25 per cent more of the dedications could have been removed by constitutional change in the short-run. Since 16 per cent of Louisiana taxes was not dedicated at the time of the study, this meant that about 75 per cent of all State tax dedications could have been eliminated by the end of 1958.

The second time period examined was the period from January 1, 1959 to December 31, 1964. Scheduled debt retirement would have freed most nonhighway tax revenues by the end of this intermediate period. A longer period would have brought more debt retirement which would have eliminated most of the remaining tax dedications. Complete freedom from tax dedication would have been possible by 1975 if some dedication-supported bonds with 1985 maturities had been called.

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10 Ibid.
11 Ibid.
The value of this analysis has not been altered substantially by the lapse of time since 1957. Changes in tax dedications are not necessarily an almost impossible matter pertinent only in the long-term. Changes in the handling of tax revenues should be started as soon as it is decided that they will make the State's fiscal structure sounder. The elimination of such tax dedications by constitutional and other means would be important in its effect on the debt structure, but, of course, dedications are only one aspect of the debt problem.

Another type of reform, similar but more comprehensive than that proposed by Ross and Sliger and provided by means of a new State Constitution, could follow these lines:

1. All existing pledges and dedications to holders of outstanding bonds could be reenacted. It could be made clear that no existing pledges will be extended to bonds or issues sold subsequent to the adoption of this policy.

2. There could be no borrowing except in the State's name either by departments, agencies, commissions, or boards, for financing ports, expressways, public institutions, or similar public improvements or for any other reason. There could be no indirect State debt, and all State debt could be full faith and credit debt of the State of Louisiana.

3. All direct State bonds could be payable from the general fund of the State. The general fund could consist of: (a) all tax and license revenues, mineral lease and royalty receipts which are not dedicated to the payment of bonds or for other purposes at
the date when the document is ratified;
(b) all taxes and revenues presently dedicated, as the bonds issued and payable from the said taxes and revenues are retired and/or called; (c) all undedicated surpluses of presently dedicated taxes in the interim until they revert to the general fund.

4. There could be no further dedication of either taxes, revenues, or receipts for the payment of specific bond issues or for any other purpose. All taxes and revenues not presently dedicated and all taxes and revenues presently dedicated, as soon as bonds backing them are retired, could be paid into the general fund. Taxes and revenues presently dedicated for other purposes than debt service could be either undedicated or the other purposes clearly could be given a subordinate claim to debt service.

5. The first charge upon the general fund could be for the payment of principal and interest on all direct obligations. No other payments could be made out of said fund until all debt service requirements are satisfied.

6. There could be no legal limitation on the Legislature's authority to levy ad valorem taxes for the payment of interest and principal on the full faith and credit obligations of the State.

Greater margins of protection for the State's issues would result automatically if the various obligations of the State were not differentiated. The use of the State's full faith and credit pledge, made fully and unequivocally effective by a constitutional prior claim on all State revenues,

12 The views here about dedications are similar to those recommended in the Project, II, p. 227.
in support of each new State issue would mean that no issue would be subordinate to any other issue. All issues, individually and in the aggregate, would then clearly be protected by the total revenues and other resources of the State. Such action would have to be taken in the beginning subject to prior specific bond liens. Eventually, however, all issues outstanding would be single lien bonds protected by the total resources of the State government of Louisiana. The results could unquestionably be expected to be Aaa ratings for all Louisiana bonds. Every existing excuse for not awarding such ratings would have been removed.

**Constitutional Debt Limitation**

A very important part of any constitutional reform of the debt structure in Louisiana would have to deal with the present debt limitation. Louisiana may still need some sort of debt limitation, but the present one is too rigid. A flexible limitation, somewhat along the lines suggested by Ratchford, might be appropriate. The Legislature could be permitted to borrow so long as the debt outstanding, including

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new borrowing, does not exceed a certain amount or a certain percentage of taxes or revenues collected in the preceding year or in several earlier years. Because of the time lag, the percentage rule would tend to limit borrowing when prices and tax collections are rising and permit borrowing when they are falling. Borrowing in excess of the basic permissible amount might be made possible by having proposed borrowing approved by means of referenda. A referendum would give the electorate the opportunity to control borrowing when the limit of safety is being approached, but such action would not involve complicating the Constitution by amendment. A debt limitation might also be modified to give special consideration to borrowing for projects that are self-supporting. Borrowing for such self-supporting projects might properly not be counted at all against the debt limitation or else be counted at some fraction of the actual amount borrowed.

Capital Budgeting

Capital budgeting could be an important part of any constitutional debt reform. It would be desirable to establish procedures whereby various departments and agencies of the State would prepare estimates of their long-term

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14 Ross and Sliger, loc. cit.
capital needs. These different needs could then be reviewed, compared, and ranked according to priority. The next step would be to compare the cost of the various needs with the current revenues available to finance them. The difference between current revenues and needs would then be subject to still another set of considerations. Is it proper for the State to borrow for these purposes? Is it safe for the State to engage in borrowing? Can these needs be postponed and how long can they be postponed? Any planning that would make possible discretion in the timing of bond sales would be extremely important.

Some refinement of capital budgeting might be necessary to recognize the fact that there are many existing agencies in the State and that these agencies would probably continue in operation even after constitutional reform, if for no other reason than that they have debt commitments that must be honored. It might be necessary to consider these agencies separately in the capital budget. In reviewing the different requests, it would appear to be proper to allow the anticipated receipts of revenue-producing projects to be given special consideration.

**Administrative Machinery**

After the capital budget has been formulated, and if it includes any proposals for borrowing, these proposals
could be reviewed by a constitutionally established special Board (or perhaps two Boards). Reports about the financial and economic feasibility of this proposed borrowing could then be returned to the budget group for a decision. The Bond Boards would have the authority to manage the borrowing that might eventually result and to administer any special bond service fund that might be established. In Louisiana, it would not be necessary and it probably would not even be desirable to eliminate the highway debt structure that has recently been put in order. In fact, the long-range highway plan which has been implemented could well serve as a model for redesigning the remaining debt structure of the State. The long-range highway plan embodies the basic techniques for improving a debt structure.\textsuperscript{15} Remarks here about a Bond Board, therefore, could apply either to a single board system or to all other parts of the debt structure except the highway debt. If a dual system were installed, both would benefit from close cooperation, and it might be desirable and economical for the two bodies to share research and other facilities since their objectives would necessarily be similar.

\textsuperscript{15}For an analysis of the long-range highway plan, supra, Chap. V, pp. 308 ff.
There should be one or two bodies clearly responsible for all phases of State borrowing. These units would best be composed of legal experts, economists, statisticians, and possibly representatives in the financial centers. The savings realized by eliminating duplications of debt management personnel and facilities in the several agencies of the State would probably more than cover the expenses required to operate these new units. Consolidation would then provide a net gain for the State if it could improve bond ratings and make possible lower cost borrowing. One function of such a Board would be to establish and to maintain legislative liaison. The debt Board would be responsible for receiving and processing requests for borrowing indicated in the capital budget. With this as a guide, the Board could formulate and even draft bills for submission to the proper legislative committees. The initiation of borrowing legislation by a body concerned with building and maintaining an effective debt structure would eliminate some troublesome provisions from Louisiana's debt structure which have never been eliminated simply because no one has had either the responsibility or the authority to study, suggest, explain, or protest against the effects of such provisions. It might be more politic for the drafting of legislation to start with the liaison group in the Legislature rather than with
the Board. However, it would be necessary and proper for the Board to explain to the legislative group fully and exactly the nature of the provisions recommended for such legislation.

The Bond Board, of course, would have to be well-informed. In order to be well-informed, it would have to include within its organization a research unit. The second important function of the Bond Board, therefore, would be fact finding. Data that would aid in the advertisement and marketing of bonds, the timing of sales, and the reporting of debt would need to be gathered.

After bills authorizing borrowing are approved—either by the Legislature or by the Legislature and the public in the case of a referendum—the problem would then again revert to the Bond Board where the advertising and the requesting of bids would be initiated. The same group then could review the bids received and select the best bid or reject them all according to priorities established in the capital budget. After the bid is accepted, the Bond Board could begin the process of preparing and finally delivering the bonds. Funds received as a result of the borrowing would then be placed in the Treasury and made available for the purpose designated.
A final but extremely important function of the Bond Board would be debt reporting. This reporting function would include responsibility not only for seeing that complete information is published in the regular State reports, but also informing rating services and investors about the State's debt structure. In addition to answering all inquiries about the debt structure, the Bond Board should review all official published statements about the debt structure in order to avoid errors. Finally, it would also be helpful for the Board to study all information released by rating services about the State's outstanding and new offerings and to correct any misinterpretations which do the State injustice.

Another of the major policies that would have to be decided in any constitutional revision of the administrative debt machinery would be what to do about agency or authority borrowing. The agency appears to be popular today mainly because it circumvents debt limitations and because it has met with some success in expediting the financing, the construction, and the operation of certain improvements. These reasons, however, are predicated on the failure of the normal machinery of government. If institutional impediments are eliminated and the normal channels of government are made more effective, and if there is no outdated constitutional limitation, then there may be less justification
for the use of the agency device. The question here, however, is not primarily whether the agency is justified but whether it should borrow for the state. If states engaged only in direct borrowing and agencies were not permitted to exercise this function, the alleged advantages of the agencies might be utilized without running the risks or suffering the disadvantages which may be associated with borrowing by the agency means. Agencies could continue planning, supervising, and operating improvements while being relieved of their borrowing powers. This change would not only ensure better control of funds but would also make more effective use of the state's credit in the financing of improvements which usually contribute to economic growth on the state level.

Improving the Debt Structure and Management Under Existing Institutions

A great deal can be done to improve the State's debt structure and management and its credit standing even under the existing legal framework and administrative machinery. If these cannot be changed, the various agencies authorized to borrow in the State's name could each follow individually as far as possible the principles of good debt management suggested in Chapter II. For example, agencies requesting legislative approval for borrowing could ask for more
flexibility in the provisions of the act. Or, if it is impossible to get this freedom of action, it would be desirable for the agencies to request specifically those provisions which will make the bonds more marketable. Agencies could also keep in mind the general objectives of simplicity and confidence, could try to afford maximum protection to the bondholders, and could try to time their issues as effectively as possible. These objectives are valid for an entire debt structure and for each individual issue comprising that debt structure. If the structure in the aggregate cannot be given these characteristics, it would still be desirable to try to extend them to the debt structures of the individual agencies and to their issues.

Another very general improvement that could be made, with existing institutions, would be for the various agencies of the State to cooperate on a voluntary basis. There is no limit to what could be accomplished by this approach. Cooperation would make agencies more cognizant of their influence on the entire State's debt structure. Cooperation would also provide a wealth of information about the methods and techniques of debt management as well as about market conditions. This knowledge would benefit the individual agencies as well as the taxpayers. The various agencies could also cooperate in research and in field work in the financial centers of the country. Finally, one of
the places where cooperation is extremely important, and urgently needed if more direct means are not provided, is in debt reporting. Not even the Financial Report of the State gives a true picture of the debt structure. In 1957, for example, the following agency debts were not even mentioned: Mississippi River Bridge Authority, $65,000,000; Baton Rouge Port Commission, $12,500,000; and, the Greater New Orleans Expressway Commission, $46,500,000. Yet, the State is clearly involved in each of these debts. It is very doubtful that the State can profit in the long run by providing incomplete or inaccurate information to those who are interested.

V. GENERAL CONSIDERATIONS

These miscellaneous considerations relate to matters external to state debt structures such as bond ratings and Federal and local relationships.

Bond Ratings

A state has a good credit standing if its obligations have a high standing in the market, i.e., if its bonds are highly rated. But how accurately do bond ratings reflect true ability and willingness to bear and to pay debts?

Bond ratings are subject to question from several different standpoints. From what has been seen in the comparisons of Louisiana ratings with the ratings in selected states, it would appear that, with respect to the really fundamental measures, Louisiana's debt structure compares very favorably. Why then are Louisiana's ratings substandard?

The superficialities upon which the bond ratings are so largely based have been thoroughly violated in the State. There has been widespread neglect of even the most obvious amenities which would help to get better ratings. The debt structure has been made more and more complex, and the margin of protection has been dissipated by the device of dedication. Specific taxes have been pledged many times, and there has evolved a maze of liens. Detailed studies are thereby made necessary before the rating services and investors can determine the nature of Louisiana's obligations.

Violation of market standards is not the only factor that underlies the poor ratings. First, appropriately or not, Louisiana's credit standing may still be affected by the fact that the State twice defaulted on interest payments and once repudiated part of its debt. Second, the State is relatively remote from the financial centers where munici­pals are rated and traded. Distance may act as a baffle to obscure the fact of rapid economic growth in Louisiana.
Another factor which cannot be ignored in trying to explain why ratings seem to be too low in Louisiana is the nature of the ratings themselves. The ratings are not intended primarily as a public service but as a commercial service. The rating agencies thus actually depend for their existence upon finding or emphasizing differences upon which they can base and vary their ratings. There are many differences in indenture provisions and in the nominal protection afforded to various issues, and these superficial differences can be used very plausibly to justify differences in ratings, without any intention of discriminating against any specific state or political subdivision. Unquestionably, ratings based upon more profound criteria would tend to become more uniform, no doubt in the upward direction, but the rating services can hardly be expected to lead such a movement. They may be willing to follow if someone else supplies the necessary information to support it.

If the rating services have an interest in perpetuating the present system of ratings based on traditional criteria, they are not alone. The investment bankers and the investors have something to gain from the existence of differences in ratings. The difference in ratings is supposed to reflect differences in investment quality. This "investment quality" apparently also is supposed to show
differences in risk. The difference in quality and risk is then a basis for differences in bids and yields. Lower ratings lead to higher yields and higher yields normally will enable bidders to enjoy higher spreads between their bids and their reofferings. If the risk is more superficial than real, then the buyers of the lower-rated state obligations profit from the unreal differentiation caused by the ratings. It must not be expected that investment bankers or investors would be in favor of revised criteria which would emphasize only the total protection afforded by a state's wealth, resources, and honor.

Federal, State, and Local Debt Relationships

This study analyzes the means by which a state may make its debt financing more efficient. Federal-state-local cooperation in this connection may also offer possibilities. One of the things that might be done would be to insure municipals under some type of plan similar to the Federal Deposit Insurance Corporation. Perhaps bondholders could have the first $10,000 of any state (or state and local) bonds insured. States might be induced to support such a plan by paying into a fund according to the amount of bonds they sell.

The Federal Government would have a great deal to gain from participation in this type of program. It would
aid in any coordinated Federal-state local fiscal policy. Also, any aid that the Federal government makes available to the states may lessen the chances that the Federal government will have to assume more of the functions of government. The Federal government would also be helping its own credit standing by protecting that of the states. The identification of the American states with the Federal government in the minds of investors and other nations may be greater than is generally recognized. For example, when there was a question of whether foreign nations should pay their war debts after World War I, one of the arguments against payment was that the American states had defaulted on their bonds in the nineteenth century when many of these state bonds were held by foreign bondholders.

It might be possible for states to join regionally or nationally, even without Federal aid or encouragement, into this type of plan. If either of these programs were established, it would not be difficult to take the next logical step and to add an organization that would provide research facilities, expert consultants, information about market conditions, and perhaps even new market outlets to the

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member states. The development of such an organization would automatically tend to reduce dependence upon investment bankers and vulnerability to rating services. This type of organization might also be better prepared to cope with the problems that states some day may have in finding enough funds for their needs.

Another great intergovernmental problem which has been entirely neglected in this study is that facing sub-divisions of the states in their borrowing. They, too, could certainly profit greatly from assistance from some sort of centralized reviewing and reporting agency. For example, one of the problems presently facing many sub-divisions of this State is that the Federal Deposit Insurance Corporation is rating some of the bank-held bonds of Louisiana sub-divisions as substandard, largely because there is insufficient information available about these small issues. There are many problems confronting sub-divisions, which cost the citizens of the State dearly, that probably could be solved with some State assistance. Of course, this assistance should be predicated on the State's first putting its own house in order.

The State's responsibility to improve its own credit may even require that the State first deliberately disassociate itself from the "municipal" category. There is
really a great deal of difference between state borrowing and
city or subdivision borrowing. One basic difference is
found in the respective abilities to raise revenue. The
State obviously can control more funds because it is able to
use some highly productive taxes which are unavailable on
the local level. The income tax is the most obvious example
of this type of tax, and the same thing is true to a lesser
extent of sales and excise taxes. Since state governments
have greater revenue potential and sounder financial founda-
tions than the local governments, should their obligations
be appraised according to the same basic standards that are
applied to local obligations? Perhaps states should
emphasize these differences and demand that they be rated
according to different standards, especially when their full
faith and credit is involved.
TABLE I

LOUISIANA BORROWING BY PURPOSE, 1913-1920

(thousands) \(^a\)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>DIRECT</th>
<th>INDIRECT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Serial Gold Bonds</td>
<td>Chef Menteur Hwy. Fund No. 2</td>
<td>Port of New Orleans</td>
</tr>
<tr>
<td>1913</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1914</td>
<td>$10,992</td>
<td>---</td>
<td>$3,000</td>
</tr>
<tr>
<td>1915</td>
<td>---</td>
<td>---</td>
<td>1,250</td>
</tr>
<tr>
<td>1916</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1917</td>
<td>---</td>
<td>---</td>
<td>4,000</td>
</tr>
<tr>
<td>1918</td>
<td>---</td>
<td>---</td>
<td>6,000</td>
</tr>
<tr>
<td>1919</td>
<td>---</td>
<td>$700</td>
<td>8,000</td>
</tr>
<tr>
<td>1920</td>
<td>---</td>
<td>---</td>
<td>7,500</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$10,992</td>
<td>$700</td>
<td>$29,750</td>
</tr>
</tbody>
</table>

\(^a\)Rounded to the nearest thousand.

Source: Compiled from Tables II-V, Appendix A.
### TABLE II

**STATE BOND AND INTEREST TAX FUND BORROWING, 1913-1920**

<table>
<thead>
<tr>
<th>Series</th>
<th>Date</th>
<th>Interest</th>
<th>Original Amount (thousands)</th>
<th>Moody's Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serial Gold Bonds</td>
<td>1/1/14</td>
<td>4.5%</td>
<td>$10,992</td>
<td>Aaa</td>
</tr>
</tbody>
</table>

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**a** These direct and full faith and credit obligations were payable from the proceeds of the 1.15 mill ad valorem tax in the State Bond and Interest Tax Fund.

**b** Interest rates given throughout this Appendix are nominal or coupon rates unless it is otherwise indicated.

**c** These bonds were called and refunded prior to 1939; the rating is that which was given at the time of issue.

**d** Rounded to the nearest thousand.

TABLE III
HIGHWAY BORROWING, 1913-1920

<table>
<thead>
<tr>
<th>Series</th>
<th>Date</th>
<th>Interest Rate</th>
<th>Original Amount (thousands)</th>
<th>Callable Maturity</th>
<th>Moody's Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2/1/19</td>
<td>5.0</td>
<td>$700</td>
<td>NC</td>
<td>1920-1939</td>
</tr>
</tbody>
</table>

Act 18, Special Session, 1918

Payable from the portion of motor vehicle license taxes in Highway Fund Number 2. These obligations were not full faith and credit obligations of the State, but they are considered to have been direct obligations.

Source: Louisiana, Constitution (1913), as amended 1918, Special Session, Act 18; Louisiana, Treasurer's Report, 1922-23, pp. ix-x; "Schedule of Bond and Coupon Maturities Handled by the Treasurer, State of Louisiana," Compiled by H. B. Conner, State Treasurer (corrected to December 31, 1929), p. 25; Smith, Compilation of Louisiana State and Municipal Bonds, 1933, p. 8; and Moody's, 1919, p. 244.
### TABLE IV
PORT OF NEW ORLEANS BORROWING, 1913-1920<sup>a</sup>

<table>
<thead>
<tr>
<th>Series and Authorization</th>
<th>Date of Issue</th>
<th>Interest Rate</th>
<th>Original Amount (thousands)</th>
<th>Callable or Non-callable</th>
<th>Maturity Date (1939)</th>
<th>Moody's Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Louisiana, Constitution (1913), Article 322; and Act 133 of 1910:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/1/14</td>
<td>5.0</td>
<td>$3,000</td>
<td>NC</td>
<td>1920-54</td>
<td>Baa</td>
<td></td>
</tr>
<tr>
<td>5/1/15</td>
<td>5.0</td>
<td>1,250</td>
<td>NC</td>
<td>1923-55</td>
<td>Baa</td>
<td></td>
</tr>
<tr>
<td>3/1/17</td>
<td>4.5</td>
<td>4,000</td>
<td>NC</td>
<td>1925-57</td>
<td>Baa</td>
<td></td>
</tr>
<tr>
<td>3/1/19</td>
<td>5.0</td>
<td>2,000</td>
<td>NC</td>
<td>1927-59</td>
<td>Baa</td>
<td></td>
</tr>
<tr>
<td>Louisiana, Constitution (1913), Article 322; and Act 244 of 1914; and Act 3 of 1918:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7/1/18</td>
<td>5.0</td>
<td>6,000</td>
<td>NC</td>
<td>1929-58</td>
<td>Baa</td>
<td></td>
</tr>
<tr>
<td>1/1/19</td>
<td>5.0</td>
<td>6,000</td>
<td>NC</td>
<td>1930-59</td>
<td>Baa</td>
<td></td>
</tr>
<tr>
<td>1/1/20</td>
<td>5.0</td>
<td>5,000</td>
<td>NC</td>
<td>1931-60</td>
<td>Baa</td>
<td></td>
</tr>
<tr>
<td>1/1/20&lt;sup&gt;b&lt;/sup&gt;</td>
<td>5.0</td>
<td>2,500</td>
<td>NC</td>
<td>1931-60</td>
<td>Baa</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>These indirect but full faith and credit obligations were payable from the operating revenues of the Port.

<sup>b</sup>These bonds were dated in 1920 but not issued until 1921.

### TABLE V

**STATE PENITENTIARY BORROWING, 1913-1920**

<table>
<thead>
<tr>
<th>Series and Authorization</th>
<th>Date</th>
<th>Interest</th>
<th>Original Issue Amount (thousands)</th>
<th>Callable</th>
<th>Maturity (1939)</th>
<th>Moody's Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Act 71, 1912</td>
<td>3/1/14</td>
<td>5.0</td>
<td>$250</td>
<td>NC</td>
<td>1915-39</td>
<td>Baa</td>
</tr>
<tr>
<td>Louisiana, Constitution (1913), as amended 1916, Act 131</td>
<td>1/1/17</td>
<td>5.0</td>
<td>400</td>
<td>NC</td>
<td>1918-27</td>
<td>Aaa</td>
</tr>
</tbody>
</table>

These indirect but full faith and credit obligations were payable from the revenues of the Penitentiary.

This rating was given at the time of issue rather than in 1939.

Source: Louisiana, Constitution (1913), as amended 1916, Act 131; Louisiana, Acts (1912), Act 71, p. 82; Louisiana, Treasurer's Report, 1922-23, p. x; Smith, Compilation of Louisiana State and Municipal Bonds, 1933, p. 5; and Moody's, 1918, pp. 191-92.
TABLE VI
LOUISIANA BORROWING BY PURPOSE, 1921-1927
(Thousands)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>DIRECT</th>
<th>INDIRECT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Highway</td>
<td>Confederate Veterans' Pension</td>
<td>Port of New Orleans</td>
</tr>
<tr>
<td>1921</td>
<td>---</td>
<td>---</td>
<td>$3,500</td>
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<tr>
<td>1922</td>
<td>---</td>
<td>---</td>
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<tr>
<td>1923</td>
<td>---</td>
<td>---</td>
<td>3,000</td>
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<tr>
<td>1924</td>
<td>---</td>
<td>---</td>
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<tr>
<td>1925</td>
<td>---</td>
<td>$500</td>
<td>---</td>
</tr>
<tr>
<td>1926</td>
<td>---</td>
<td>500</td>
<td>---</td>
</tr>
<tr>
<td>1927</td>
<td>$2,000</td>
<td>---</td>
<td>3,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$2,000</td>
<td>$1,000</td>
<td>$9,500</td>
</tr>
</tbody>
</table>

Source: Compiled from Tables VII-X, Appendix A.
### TABLE VII

**HIGHWAY BORROWING, 1921-1927**

<table>
<thead>
<tr>
<th>Series and Authorization</th>
<th>Date</th>
<th>Interest Rate</th>
<th>Original Amount (thousands)</th>
<th>Callable or Non-Callable</th>
<th>Maturity Date</th>
<th>Moody's Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Act 179, 1924</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>3/15/27</td>
<td>5.0</td>
<td>$2,000</td>
<td>NC</td>
<td>1928-39</td>
<td>Aa</td>
</tr>
</tbody>
</table>

*These obligations were payable from a portion of motor vehicle license taxes in Highway Fund Number 2. They were not full faith and credit obligations of the State. Since borrowing by a department is considered borrowing in a state's name, these bonds are considered direct obligations regardless of the fact that they were not full faith and credit bonds.

Source: Louisiana, Constitution (1921), Art 6, Sec. 24.1, as amended 1924, Act 179; Louisiana, Treasurer's Report, 1926-27, p. 59; and Moody's, 1928, p. 1214.
TABLE VIII
CONFEDERATE VETERANS’ PENSION BORROWING, 1921-1927

<table>
<thead>
<tr>
<th>Series</th>
<th>Date Issue</th>
<th>Rate</th>
<th>Amount or Non-Callable</th>
<th>Maturity</th>
<th>Moody’s Date</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Act 176, 1924</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>12/15/25</td>
<td>4.5</td>
<td>$500</td>
<td>NC</td>
<td>1931</td>
<td>Aaa</td>
</tr>
<tr>
<td>B</td>
<td>11/1/26</td>
<td>5.0</td>
<td>500</td>
<td>NC</td>
<td>1932</td>
<td>Aaa</td>
</tr>
</tbody>
</table>

These direct and full faith and credit obligations were payable from the proceeds of the 0.75 mill ad valorem tax in the Confederate Veterans’ Pension Fund.

These ratings are those which were given at the time of issue.

Source: Louisiana, Constitution (1921), Art. 18, as amended 1924, Act 176; Louisiana, Treasurer's Report, 1926-27, p. 59; and Moody's, 1927, p. 1128; 1931, p. 1499.
TABLE IX

PORT OF NEW ORLEANS BORROWING, 1921-1927\(^a\)

<table>
<thead>
<tr>
<th>Series</th>
<th>Date</th>
<th>Interest</th>
<th>Original Amount (thousands)</th>
<th>Callable Maturity Date (1939)</th>
<th>Moody's Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Louisiana, Constitution (1921), Article 4, Section 16:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/1/21</td>
<td>5.0</td>
<td>$3,500</td>
<td>NC</td>
<td>1931-71</td>
<td>Baa</td>
</tr>
<tr>
<td>12/1/23</td>
<td>4.75</td>
<td>3,000</td>
<td>NC</td>
<td>1933-73</td>
<td>Baa</td>
</tr>
<tr>
<td>8/1/27</td>
<td>4.5</td>
<td>3,000</td>
<td>NC</td>
<td>1937-77</td>
<td>Baa</td>
</tr>
</tbody>
</table>

\(^a\)These indirect but full faith and credit obligations were payable from the operating revenues of the Port. These three issues sold by the Port during this period were all General Improvement Bonds.

Source: Louisiana, Constitution (1921), Art. 4, Sec. 16; Louisiana, Treasurer's Report, 1924-25, p. 57; 1926-27, p. 59; Moody's, 1923, p. 970; 1925, p. 939; 1928, p. 1214; and Smith, Compilation of Louisiana State and Municipal Bonds, 1933, pp. 10-11
### TABLE X

**STATE PENITENTIARY BORROWING, 1921-1927**

<table>
<thead>
<tr>
<th>Series</th>
<th>Date</th>
<th>Interest Rate</th>
<th>Original Amount (thousands)</th>
<th>Callable Date</th>
<th>Maturity Date (1939)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1/1/22</td>
<td>5.0</td>
<td>$1,000</td>
<td>NC</td>
<td>1923-62</td>
<td>Baa</td>
</tr>
</tbody>
</table>

Louisiana, Constitution (1921), Article 20, Section 1:

These indirect but full faith and credit obligations were payable from revenues of the Penitentiary.

TABLE XI

LOUISIANA BORROWING BY PURPOSE, 1928-1940
(thousands)\(^a\)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>DIRECT</th>
<th></th>
<th>INDIRECT</th>
<th></th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Highway</td>
<td>Confederate</td>
<td>State</td>
<td>Board of</td>
<td>Board of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bond and</td>
<td></td>
<td>Comm.</td>
<td>Admin.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Veterans</td>
<td></td>
<td>Port of</td>
<td>Charity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interest</td>
<td></td>
<td>N.O.</td>
<td>Hospital</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tax Fund</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1928</td>
<td>---</td>
<td>$ 500</td>
<td>$ 295</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1929</td>
<td>$15,000</td>
<td>589</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1930</td>
<td>21,000</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1931</td>
<td>15,000</td>
<td>2,000</td>
<td>5,502</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1932</td>
<td>32,000</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1933</td>
<td>---</td>
<td>---</td>
<td>4,950</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1934</td>
<td>500</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1935</td>
<td>7,500</td>
<td>2,000</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1936</td>
<td>5,000d</td>
<td>---</td>
<td>---</td>
<td>$1,304</td>
<td>$4,400</td>
</tr>
<tr>
<td>1937</td>
<td>17,000</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1938</td>
<td>8,500</td>
<td>---</td>
<td>8,612</td>
<td>---b</td>
<td>4,500</td>
</tr>
<tr>
<td>1939</td>
<td>10,600</td>
<td>500</td>
<td>---</td>
<td>658</td>
<td>---</td>
</tr>
<tr>
<td>1940</td>
<td>2,500</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>$129,100c</td>
<td>$5,589</td>
<td>$10,747c</td>
<td>$8,900</td>
<td>$6,000</td>
</tr>
</tbody>
</table>

\(^a\) Rounded to the nearest thousand.
\(^b\) Refunding issues
\(^c\) Refunding issues are not included in the totals.
\(^d\) This sum includes $5,500,000 of Series Q that was sold in order to call Series H and I.

Source: Compiled from information in Tables XII-XVIII, Appendix A.
TABLE XII
HIGHWAY BORROWING, 1928-1940a

<table>
<thead>
<tr>
<th>Series</th>
<th>Date</th>
<th>Interest</th>
<th>Original Amount</th>
<th>Callable</th>
<th>Maturity</th>
<th>Moody's Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(per cent)</td>
<td>(thousands)</td>
<td></td>
<td>(1939)</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>3/1/29</td>
<td>5.0</td>
<td>10,000</td>
<td>NC</td>
<td>1930-49</td>
<td>A</td>
</tr>
<tr>
<td>B</td>
<td>12/15/29</td>
<td>5.0</td>
<td>5,000</td>
<td>NC</td>
<td>1930-49</td>
<td>A</td>
</tr>
<tr>
<td>C</td>
<td>3/15/30</td>
<td>5.0</td>
<td>6,000</td>
<td>NC</td>
<td>1932-50</td>
<td>A</td>
</tr>
</tbody>
</table>

PAYABLE FROM THE 1-CENT GASOLINE TAX:

Act 219, 1928; and Act 1, E.S., 1928:

<table>
<thead>
<tr>
<th>Series</th>
<th>Date</th>
<th>Interest</th>
<th>Original Amount</th>
<th>Callable</th>
<th>Maturity</th>
<th>Moody's Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>12/15/30</td>
<td>4.5</td>
<td>15,000</td>
<td>NC</td>
<td>1934-55</td>
<td>A</td>
</tr>
<tr>
<td>E</td>
<td>5/1/31</td>
<td>4.5</td>
<td>15,000</td>
<td>NC</td>
<td>1935-56</td>
<td>A</td>
</tr>
<tr>
<td>F</td>
<td>3/15/32</td>
<td>5.0</td>
<td>15,000</td>
<td>NC</td>
<td>1936-57</td>
<td>A</td>
</tr>
<tr>
<td>G</td>
<td>10/1/32</td>
<td>5.0</td>
<td>7,000</td>
<td>NC</td>
<td>1936-57</td>
<td>A</td>
</tr>
<tr>
<td>H</td>
<td>9/20/32</td>
<td>5.0</td>
<td>7,500</td>
<td>C</td>
<td>1936-39</td>
<td>n.r. b</td>
</tr>
<tr>
<td>I</td>
<td>10/15/32</td>
<td>5.0</td>
<td>2,500</td>
<td>C</td>
<td>1936-40</td>
<td>n.r.</td>
</tr>
<tr>
<td>J</td>
<td>2/15/34</td>
<td>5.0</td>
<td>500</td>
<td>C</td>
<td>1939</td>
<td>A</td>
</tr>
<tr>
<td>K</td>
<td>7/1/35</td>
<td>5.0</td>
<td>1,000</td>
<td>NC</td>
<td>1939-49</td>
<td>A</td>
</tr>
<tr>
<td>L</td>
<td>9/1/35</td>
<td>5.0</td>
<td>5,000</td>
<td>NC</td>
<td>1939-60</td>
<td>A</td>
</tr>
<tr>
<td>M</td>
<td>12/15/35</td>
<td>4.5</td>
<td>1,500</td>
<td>NC</td>
<td>1939-60</td>
<td>A</td>
</tr>
<tr>
<td>N</td>
<td>3/1/36</td>
<td>4.5</td>
<td>2,500</td>
<td>NC</td>
<td>1940-60</td>
<td>A</td>
</tr>
<tr>
<td>P</td>
<td>4/15/36</td>
<td>4.25</td>
<td>2,500</td>
<td>NC</td>
<td>1940-61</td>
<td>A</td>
</tr>
</tbody>
</table>

PAYABLE FROM THE 3-CENT GASOLINE TAX AND THE SURPLUS OF THE 1-CENT GASOLINE TAX:

Act 3, E.S., 1930, as amended by Act 2, 1934:

<table>
<thead>
<tr>
<th>Series</th>
<th>Date</th>
<th>Interest</th>
<th>Original Amount</th>
<th>Callable</th>
<th>Maturity</th>
<th>Moody's Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q</td>
<td>1/1/37</td>
<td>3.75</td>
<td>5,500</td>
<td>NC</td>
<td>1941-60</td>
<td>A</td>
</tr>
<tr>
<td>R</td>
<td>1/1/37</td>
<td>3.5</td>
<td>6,500</td>
<td>NC</td>
<td>1941-60</td>
<td>Baa</td>
</tr>
<tr>
<td>S</td>
<td>7/1/37</td>
<td>4.0</td>
<td>2,580</td>
<td>NC</td>
<td>1941-57</td>
<td>Baa</td>
</tr>
<tr>
<td>T</td>
<td>1/1/38</td>
<td>3.75</td>
<td>2,420</td>
<td>NC</td>
<td>1958-60</td>
<td>Baa</td>
</tr>
<tr>
<td>U</td>
<td>10/1/38</td>
<td>3.5</td>
<td>1,959</td>
<td>NC</td>
<td>1957-60</td>
<td>Baa c</td>
</tr>
<tr>
<td>V</td>
<td>1/1/39</td>
<td>4.0</td>
<td>1,052</td>
<td>NC</td>
<td>1942-55</td>
<td>Baa c</td>
</tr>
<tr>
<td>W</td>
<td>5/1/39</td>
<td>3.5</td>
<td>1,269</td>
<td>NC</td>
<td>1956-61</td>
<td>Baa c</td>
</tr>
</tbody>
</table>

Act 66, 1936:

<table>
<thead>
<tr>
<th>Series</th>
<th>Date</th>
<th>Interest</th>
<th>Original Amount</th>
<th>Callable</th>
<th>Maturity</th>
<th>Moody's Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q</td>
<td>1/1/37</td>
<td>3.75</td>
<td>5,500</td>
<td>NC</td>
<td>1941-60</td>
<td>A</td>
</tr>
<tr>
<td>R</td>
<td>1/1/37</td>
<td>3.5</td>
<td>6,500</td>
<td>NC</td>
<td>1941-60</td>
<td>Baa</td>
</tr>
<tr>
<td>S</td>
<td>7/1/37</td>
<td>4.0</td>
<td>2,580</td>
<td>NC</td>
<td>1941-57</td>
<td>Baa</td>
</tr>
<tr>
<td>T</td>
<td>1/1/38</td>
<td>3.75</td>
<td>2,420</td>
<td>NC</td>
<td>1958-60</td>
<td>Baa</td>
</tr>
<tr>
<td>U</td>
<td>10/1/38</td>
<td>3.5</td>
<td>1,959</td>
<td>NC</td>
<td>1957-60</td>
<td>Baa c</td>
</tr>
<tr>
<td>V</td>
<td>1/1/39</td>
<td>4.0</td>
<td>1,052</td>
<td>NC</td>
<td>1942-55</td>
<td>Baa c</td>
</tr>
<tr>
<td>W</td>
<td>5/1/39</td>
<td>3.5</td>
<td>1,269</td>
<td>NC</td>
<td>1956-61</td>
<td>Baa c</td>
</tr>
</tbody>
</table>
TABLE XII (continued)

<table>
<thead>
<tr>
<th>Series</th>
<th>Date</th>
<th>Interest Rate (per cent)</th>
<th>Original Amount (thousands)</th>
<th>Callable Date</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>6/15/39</td>
<td>4.0</td>
<td>$ 801</td>
<td>NC</td>
<td>1943-59</td>
</tr>
<tr>
<td></td>
<td>3.75</td>
<td></td>
<td>155</td>
<td>NC</td>
<td>1960</td>
</tr>
<tr>
<td></td>
<td>3.5</td>
<td></td>
<td>44</td>
<td>NC</td>
<td>1961</td>
</tr>
<tr>
<td>Y</td>
<td>4/15/40</td>
<td>3.5</td>
<td>750</td>
<td>NC</td>
<td>1944-55</td>
</tr>
<tr>
<td></td>
<td>3.0</td>
<td></td>
<td>1,200</td>
<td>NC</td>
<td>1956-59</td>
</tr>
<tr>
<td></td>
<td>2.75</td>
<td></td>
<td>550</td>
<td>NC</td>
<td>1960</td>
</tr>
<tr>
<td>Act 39, 1938:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AA</td>
<td>5/1/39</td>
<td>3.5</td>
<td>1,000</td>
<td>NC</td>
<td>1947</td>
</tr>
<tr>
<td>BB</td>
<td>6/15/39</td>
<td>3.25</td>
<td>1,000</td>
<td>NC</td>
<td>1947</td>
</tr>
<tr>
<td>CC</td>
<td>12/15/39</td>
<td>2.0</td>
<td>2,500</td>
<td>NC</td>
<td>1942-43</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.75</td>
<td>NC</td>
<td>1944</td>
</tr>
</tbody>
</table>

PAYABLE FROM PORTION OF MOTOR VEHICLE LICENSE TAXES (HIGHWAY FUND NUMBER 2):

| Act 71, 1936:  |          |                          |                             |               |        |        |
| G      | 1/1/38    | 4.0                       | 750                         | NC            | 1943-56 | A      |
|        | 3.5       |                          | 750                         | NC            | 1957-61 | A      |
| D      | 10/1/38   | 3.0                       | 100                         | NC            | 1942-43 | A      |
|        | 3.5       |                          | 700                         | NC            | 1944    |        |
|        | 3.25      |                          | 200                         | NC            | 1958-61 |        |
| E      | 1/1/39    | 3.0                       | 360                         | NC            | 1943-54 | A      |
|        | 2.75      |                          | 240                         | NC            | 1955-62 | A      |
| F      | 6/15/39   | 3.0                       | 750                         | NC            | 1943-57 | A      |
|        | 3.25      |                          | 250                         | NC            | 1958-62 |        |

a These obligations are direct and full faith and credit ones.

b Series H and I were not rated at the time of their sale and were either matured and/or called by 1939.

c All of these ratings are those which were given at the time of issue instead of 1939.

Source: Louisiana, Constitution (1921), Art. 6, Sec. 22(d), as amended 1928, Act 219; Art 6, Sec. 22, as amended 1930, Act 3, E.S.; Art. 6, Sec. 22, as amended 1934, Act 2; Art. 6, Sec. 22(f), as amended 1936, Act 66; Art. 6, Sec.
TABLE XII (continued)

### TABLE XIII

**CONFEDERATE VETERANS' PENSION BORROWING, 1928-1940**

<table>
<thead>
<tr>
<th>Series and Date of Authorization</th>
<th>Interest Rate (per cent)</th>
<th>Original Issue Amount (thousands)</th>
<th>Callable Date (1939)</th>
<th>Moody's Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Act 176, 1924:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>5.0</td>
<td>$500 NC</td>
<td>1933</td>
<td>Aaa</td>
</tr>
<tr>
<td>Act 23, 1928:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>5.0</td>
<td>589 NC</td>
<td>1938</td>
<td>Aa</td>
</tr>
<tr>
<td>Act 7, E.S., 1930:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>4.5</td>
<td>2,000 NC</td>
<td>1939-42</td>
<td>Aa</td>
</tr>
<tr>
<td>Act 82, 1934:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>5.0</td>
<td>2,000 NC</td>
<td>1943-50</td>
<td>A</td>
</tr>
<tr>
<td>Act 61, 1936:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>2.3</td>
<td>70 NC</td>
<td>1951</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>2.5</td>
<td>180 NC</td>
<td>1951</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.0</td>
<td>250 NC</td>
<td>1951</td>
<td></td>
</tr>
</tbody>
</table>

---

These direct and full faith and credit obligations were payable from the 0.75 mill ad valorem tax revenues in the Confederate Veterans' Pension Fund.

Since this issue was not outstanding in 1939, the rating shown is the one which was given at the time of issue.

This rating was assigned in 1940.

Source: *Louisiana, Constitution (1921), Art. 18, Secs. 2 and 3, as amended 1924, Act 176; Art. 18, Sec. 6, as amended 1928, Act 23; Art. 18, Secs. 2 and 3, as amended 1930, E.S., Act 7; Art. 18, Sec. 3, as amended 1934, Act 82; Art. 18, Sec. 7, as amended 1936, Act 61; Louisiana, Treasurer's Report, 1928-29, p. 77; 1932-33, p. 82; 1934-35, p. 42; 1938-39, p. 55; Louisiana, Financial Report, 1941-42, p. 80; Moody's, 1929-1940; and Smith, *Compilation of Louisiana State and Municipal Bonds*, 1938, p. 5.
### TABLE XIV

**STATE BOND AND INTEREST TAX FUND BORROWING, 1928-1940**

<table>
<thead>
<tr>
<th>Series</th>
<th>Date of Issue</th>
<th>Interest Rate</th>
<th>Original Amount (thousands)</th>
<th>Callable Date</th>
<th>Maturity Date</th>
<th>Moody's Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Act 6, E.S., 1927; Flood Relief Bonds</td>
<td>12/1/28</td>
<td>5.0</td>
<td>$295</td>
<td>NC</td>
<td>1930-38</td>
<td>Aa</td>
</tr>
<tr>
<td>Drought Relief Bonds</td>
<td>4/15/31</td>
<td>4.5</td>
<td>502</td>
<td>NC</td>
<td>1932-41</td>
<td>Aa</td>
</tr>
<tr>
<td>Act 5, 1930; and Act 10, E.S., 1930; Capitol Building Bonds</td>
<td>2/15/31</td>
<td>4.25</td>
<td>5,000</td>
<td>NC</td>
<td>1933-52</td>
<td>A</td>
</tr>
<tr>
<td>Act 122, 1932; Serial Gold Bonds</td>
<td>1/1/33</td>
<td>5.5</td>
<td>4,950</td>
<td>NC</td>
<td>1934-53</td>
<td>Baa</td>
</tr>
<tr>
<td>Act 3, 1938; State of Louisiana Refunding Bonds</td>
<td>8/1/38</td>
<td>2.5</td>
<td>212</td>
<td>NC</td>
<td>1939-41</td>
<td>Aa</td>
</tr>
<tr>
<td></td>
<td>3.5</td>
<td>5,220</td>
<td>NC</td>
<td>1942-56</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.25</td>
<td>3,180</td>
<td>NC</td>
<td>1957-60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*These direct and full faith and credit obligations were payable from the proceeds of the 1.15 mill ad valorem tax in the State Bond and Interest Tax Fund.*

**Source:** Louisiana, Constitution (1921), Art. 10, Sec. 11, as amended 1928, E.S., Act 4; Art. 4, Sec. 12, as amended 1930, Act 5; Art. 4, Sec. 12, as amended 1932, Act 122; Louisiana, Acts (1927), E.S., Act 6, pp. 18-20; (1930), E.S., Act 10, pp. 39-41; (1938), Act 3, pp. 28-31; Louisiana, Treasurer's Report, 1928-29, p. 77; 1930-31, p. 77; 1938-39, p. 55; Louisiana, Financial Report, 1941-42, p. 80; Moody's, 1930, p. 1155; 1932, p. 11582; 1934, p. 513; 1938, p. 639; 1939, pp. 558-62; and Smith, *Compilation of Louisiana State and Municipal Bonds*, 1938, pp. 3-4.
<table>
<thead>
<tr>
<th>Series</th>
<th>Date</th>
<th>Interest</th>
<th>Original Amount</th>
<th>Callable</th>
<th>Maturity</th>
<th>Moody's Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>of Rate</td>
<td>(thousands)</td>
<td></td>
<td>(1939)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Issue (per cent)</td>
<td>Issued callable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Louisiana, Constitution (1921), Article 6, Section 16; Serial Gold Refunding Bonds:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7/1/36</td>
<td>4.0</td>
<td>$1,301</td>
<td>NC</td>
<td>1938-61</td>
<td>Baa</td>
<td></td>
</tr>
<tr>
<td>7/1/39</td>
<td>3.25</td>
<td>658</td>
<td>NC</td>
<td>1941-59</td>
<td>Baa</td>
<td></td>
</tr>
</tbody>
</table>

*These indirect but full faith and credit obligations were payable from operating revenues of the Port and from part of nine-twentieths of the 1-cent gasoline tax.*

TABLE XVI
CHARITY HOSPITAL BORROWING, 1928-1940

<table>
<thead>
<tr>
<th>Series and Authorization</th>
<th>Date of Issue</th>
<th>Interest Rate</th>
<th>Original Amount</th>
<th>Callable or Non­ (thousands)</th>
<th>Moody's Rating</th>
<th>Date for Maturity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Act 166, 1934, as amended</td>
<td>10/16/36</td>
<td>4.5</td>
<td>$341</td>
<td>NC</td>
<td>1938-41</td>
<td>Baa</td>
</tr>
<tr>
<td>by Act 72, 1936:</td>
<td></td>
<td>4.0</td>
<td>1,925</td>
<td>NC</td>
<td>1942-56</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.5</td>
<td>2,134</td>
<td>NC</td>
<td>1957-66</td>
<td></td>
</tr>
<tr>
<td>Act 4, 1938:</td>
<td>8/1/38</td>
<td>3.85</td>
<td>4,500</td>
<td>NC</td>
<td>1942-68</td>
<td>Baa</td>
</tr>
</tbody>
</table>

**a**These indirect obligations were not full faith and credit obligations but were payable from the operating revenues of the hospital and from a portion of the corporation franchise tax.

TABLE XVII
BOARD OF EDUCATION BORROWING, 1928-1940

<table>
<thead>
<tr>
<th>Series</th>
<th>Date</th>
<th>Interest</th>
<th>Original Amount</th>
<th>Callable</th>
<th>Maturity</th>
<th>Moody's Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acts 6 and 7, 1938:</td>
<td>8/1/38</td>
<td>4.75</td>
<td>$6,000</td>
<td>NC</td>
<td>1942-66</td>
<td>n.r.</td>
</tr>
</tbody>
</table>

\(^a\)These indirect obligations were not full faith and credit obligations but were payable from a portion of the corporation franchise tax.

\(^b\)This issue was never rated by Moody's.

TABLE XVIII

LOUISIANA STATE UNIVERSITY BORROWING, 1928-1940

<table>
<thead>
<tr>
<th>Series</th>
<th>Date</th>
<th>Interest</th>
<th>Original Amount</th>
<th>Callable</th>
<th>Maturity</th>
<th>Moody's Date</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>of Rate</td>
<td></td>
<td>or Non-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Issue (per cent)</td>
<td>Issued</td>
<td>Callable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(thousands)</td>
<td></td>
<td></td>
<td></td>
<td>(1939)</td>
<td></td>
</tr>
</tbody>
</table>

Serial Bonds:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>5.5</th>
<th>119</th>
<th>C</th>
<th>1939-42</th>
<th>n.r.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/1/34</td>
<td></td>
<td>5.5</td>
<td>1,500</td>
<td>NC</td>
<td>1937-55</td>
<td>Baa</td>
</tr>
<tr>
<td>4/1/37</td>
<td>5.5</td>
<td>4.25</td>
<td>300</td>
<td>NC</td>
<td>1939-51</td>
<td>Baa</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.5</td>
<td>200</td>
<td>NC</td>
<td>1951-56</td>
<td></td>
</tr>
</tbody>
</table>

Act 223, 1936:

|        |      | 4.0 | 1,000 | NC | 1938-55 | Baa  |

Act 95, 1936, as amended by
Act 18, 1938:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>4.25</th>
<th>2,000</th>
<th>NC</th>
<th>1941-58</th>
<th>n.r.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/1/38</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These indirect obligations were not full faith and credit obligations of the State; the security pledged for these issues was not the same. Some of the funds involved were University operating revenues, the proceeds of the 0.50 mill tax, a portion of the excise license tax collections on insurance policies and companies, and a portion of the taxes collected on bottled soft drinks.

The University Board of Supervisors on October 22, 1934, authorized the issuance of $300,000 of 5.5 per cent revenue bonds, only $119,000 of which was ever sold.

Neither of these issues was ever rated by Moody's.

### TABLE XIX

LOUISIANA BORROWING BY PURPOSE, 1941-1946

*(thousands)*

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Highway</th>
<th>Confederate Veterans¹</th>
<th>State Bond and Interest Tax Fund</th>
<th>State Institution Improvement</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1941</td>
<td>---</td>
<td>$1,175</td>
<td>$6,145</td>
<td>---</td>
<td>$7,320</td>
</tr>
<tr>
<td>1942</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1943</td>
<td>$4,000</td>
<td>2,000</td>
<td>---</td>
<td>---</td>
<td>6,000</td>
</tr>
<tr>
<td>1944</td>
<td>2,000</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>2,000</td>
</tr>
<tr>
<td>1945</td>
<td>1,000</td>
<td>---</td>
<td>---</td>
<td>$378</td>
<td>1,378</td>
</tr>
<tr>
<td>1946</td>
<td>---</td>
<td>---</td>
<td>4,972</td>
<td>4,622</td>
<td>4,622</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$7,000</td>
<td>$3,175</td>
<td>$6,145</td>
<td>$5,000</td>
<td>$21,320</td>
</tr>
</tbody>
</table>

¹There was no indirect borrowing during this period.
²This refunding issue is not included in the totals.

Source: Compiled from Tables XX-XXIII, Appendix A.
TABLE XX
HIGHWAY BORROWING, 1941-1946

<table>
<thead>
<tr>
<th>Series</th>
<th>Date</th>
<th>Interest</th>
<th>Original Amount</th>
<th>Callable Date</th>
<th>Maturity</th>
<th>Moody's Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>of Rate</td>
<td>(thousands)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Issue</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Act 377, 1940:**

|        | 7/1/43 | 4.0      | $50              | Cb            | 1947-48  | Baa            |
|        | 3.0    | 50       | C                | 1947-48       |          |                |
|        | 2.25   | 275      | C                | 1949-59       |          |                |
|        | 1.25   | 275      | C                | 1949-59       |          |                |
|        | 2.0    | 675      | C                | 1960-61       |          |                |
|        | 1.5    | 675      | C                | 1960-61       |          |                |

|        | 7/1/43 | 3.0      | 50               | Cb            | 1947-48  | Baa            |
|        | 2.25   | 50       | C                | 1949-50       |          |                |
|        | 1.25   | 225      | C                | 1951-59       |          |                |
|        | 1.5    | 675      | C                | 1960-61       |          |                |
|        | 1.25   | 150      | C                | 1951-56       |          |                |
|        | 1.5    | 850      | C                | 1957-61       |          |                |

|        | 7/1/44 | 2.5      | 100              | NC            | 1948-49  | Baa            |
|        | 1.5    | 700      | C                | 1950-61       |          |                |
|        | 1.75   | 1,200    | C                | 1962-63       |          |                |

|        | 12/1/45 | 4.0      | 50               | NC            | 1949-50  | Baa            |
|        | 1.25   | 225      | C                | 1951-59       |          |                |
|        | 1.5    | 725      | C                | 1960-64       |          |                |

*a These direct and full faith and credit obligations were payable from the proceeds of the 4-cent gasoline tax.

*b Bonds maturing after July 1, 1947 are callable on July 1, 1948 at par.

TABLE XXI

CONFEDERATE VETERANS' PENSION BORROWING, 1941-1946

<table>
<thead>
<tr>
<th>Series</th>
<th>Date of Issue</th>
<th>Interest Rate</th>
<th>Original Amount (thousands)</th>
<th>Callable Issue Date</th>
<th>Maturity Date</th>
<th>Moody's Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>4/15/41</td>
<td>3.0</td>
<td>$500</td>
<td>NC</td>
<td>1944</td>
<td>A</td>
</tr>
<tr>
<td>B</td>
<td>5/1/43</td>
<td>3.0</td>
<td>1,550</td>
<td>NC</td>
<td>1947-50</td>
<td>n.r.</td>
</tr>
</tbody>
</table>

Act 390, 1940:

| H      | 7/15/41       | 1.5           | 225                        | NC                  | 1945          | A              |
|        |               | 1.25          | 175                        | NC                  | 1946          |                |
|        |               | 1.5           | 125                        | NC                  | 1946          |                |
|        |               | 1.0           | 150                        | NC                  | 1947          |                |

---

a These direct and full faith and credit obligations were payable from the proceeds of the 0.75 mill ad valorem tax in the Confederate Veterans' Fund.

b This issue was not rated because it was sold to the State Teachers' Retirement System.

Source: Louisiana, Constitution (1921), Art. 18, Sec. 7, as amended 1936, Act 61; Art. 18, Sec. 6, as amended 1940, Act 390; Louisiana, Financial Report, 1941-42, p. 80; 1945-46, p. 64; Moody's, 1942, p. 447; and 1944, p. 425.
TABLE XXII

STATE BOND AND INTEREST TAX FUND BORROWING, 1941-1946

<table>
<thead>
<tr>
<th>Series</th>
<th>Date</th>
<th>Interest</th>
<th>Original Issue</th>
<th>Callable Date</th>
<th>Maturity</th>
<th>Moody's Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Act 383, 1940:</td>
<td>4/15/41</td>
<td>4.75</td>
<td>$1,173</td>
<td>NC</td>
<td>1946</td>
<td>Baa</td>
</tr>
<tr>
<td></td>
<td>2.25</td>
<td>4,397</td>
<td>NC</td>
<td>1947-57</td>
<td>Baa</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.5</td>
<td>1,931</td>
<td>C</td>
<td>1957-61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Act 348, 1946:</td>
<td>9/1/46</td>
<td>1.75</td>
<td>4,397</td>
<td>NC</td>
<td>1947-57</td>
<td>Baa</td>
</tr>
<tr>
<td></td>
<td>1.5</td>
<td>575</td>
<td>NC</td>
<td>1958</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These direct and full faith and credit obligations were payable from the proceeds of the 1.47 mill ad valorem tax in the State Bond and Interest Tax Fund.

This issue refunded the outstanding portion of the above bonds; the issue was privately placed.

TABLE XXIII
STATE INSTITUTION IMPROVEMENT BORROWING, 1941-1946

<table>
<thead>
<tr>
<th>Series</th>
<th>Date</th>
<th>Interest</th>
<th>Original Amount</th>
<th>Callable Maturity</th>
<th>Moody's Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3/1/45</td>
<td>1.25</td>
<td>$78</td>
<td>C</td>
<td>1949-51 A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.75</td>
<td>300</td>
<td>C</td>
<td>1952-55</td>
</tr>
<tr>
<td>B</td>
<td>5/1/46</td>
<td>2.0</td>
<td>622</td>
<td>NC</td>
<td>1950-51 A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.25</td>
<td>4,000</td>
<td>NC</td>
<td>1952-67</td>
</tr>
</tbody>
</table>

These direct and full faith and credit obligations were payable from certain mineral lease royalties.

TABLE XXIV

MOODY'S RATINGS OF LOUISIANA DEBT OUTSTANDING IN 1939^a

(Thousands)

<table>
<thead>
<tr>
<th>RATING</th>
<th>AMOUNT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DIRECT DEBT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BONDS RATED Aa</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payable from 1.17 mills ad valorem tax</td>
<td>$8,669</td>
<td></td>
</tr>
<tr>
<td>Payable from 0.75 mill tax</td>
<td>$1,500</td>
<td>$10,169</td>
</tr>
<tr>
<td><strong>BONDS RATED A</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payable from 1.17 mills ad valorem tax</td>
<td>3,250</td>
<td></td>
</tr>
<tr>
<td>Payable from 0.75 mill tax</td>
<td>2,500</td>
<td></td>
</tr>
<tr>
<td>Payable from certain motor vehicle license taxes</td>
<td>3,600</td>
<td></td>
</tr>
<tr>
<td>Payable from gasoline taxes</td>
<td>78,356</td>
<td>87,706</td>
</tr>
<tr>
<td><strong>TOTAL DIRECT DEBT</strong></td>
<td>$126,150</td>
<td></td>
</tr>
<tr>
<td><strong>INDIRECT DEBT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BONDS RATED Baa</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payable from earnings of the State Penitentiary</td>
<td>$575</td>
<td></td>
</tr>
<tr>
<td>Payable from Port Commission revenues and nine-twentieths of 1-cent gasoline tax</td>
<td>35,819</td>
<td></td>
</tr>
<tr>
<td>Charity Hospital of Louisiana at New Orleans</td>
<td>8,820</td>
<td></td>
</tr>
<tr>
<td>Louisiana State University and A &amp; M College</td>
<td>2,863</td>
<td>$48,077</td>
</tr>
</tbody>
</table>
### TABLE XXIV (continued)

<table>
<thead>
<tr>
<th>RATING</th>
<th>AMOUNT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>BONDS NOT RATED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Louisiana State Board of Education</td>
<td>$6,000</td>
<td></td>
</tr>
<tr>
<td>Louisiana State University and A &amp; M College</td>
<td>$2,000</td>
<td>$8,000</td>
</tr>
</tbody>
</table>

**TOTAL INDIRECT DEBT**

| Total         | $56,077 |

**TOTAL DIRECT AND INDIRECT DEBT**

| Total         | $182,227 |

---

*a* Direct debt as of August 31, 1939, and indirect debt as of various other dates.

*b* The classification used here is the same as that used in the text.

TABLE XXV
MOODY'S RATINGS OF LOUISIANA DEBT OUTSTANDING IN 1941 (thousands)

<table>
<thead>
<tr>
<th>RATING</th>
<th>AMOUNT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DIRECT DEBT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BONDS RATED Aa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payable from 1.47 mills ad valorem tax</td>
<td>$ 8,400</td>
<td></td>
</tr>
<tr>
<td>Payable from 0.75 mill tax</td>
<td>$ 500</td>
<td>$ 8,900</td>
</tr>
<tr>
<td>BONDS RATED A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payable from 1.47 mills ad valorem tax</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>Payable from 0.75 mill tax</td>
<td>3,675</td>
<td></td>
</tr>
<tr>
<td>Payable from certain motor vehicle license taxes</td>
<td>3,600</td>
<td></td>
</tr>
<tr>
<td>Payable from gasoline taxes</td>
<td>73,139</td>
<td>83,414</td>
</tr>
<tr>
<td>BONDS RATED Baa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payable from 1.47 mills ad valorem tax</td>
<td>10,020</td>
<td></td>
</tr>
<tr>
<td>Payable from gasoline taxes</td>
<td>29,459</td>
<td>39,479</td>
</tr>
<tr>
<td><strong>TOTAL DIRECT DEBT</strong></td>
<td></td>
<td>$131,793</td>
</tr>
<tr>
<td><strong>INDIRECT DEBT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BONDS RATED Baa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payable from earnings of the State Penitentiary</td>
<td>$ 525</td>
<td></td>
</tr>
<tr>
<td>Payable from Port Commission revenues and nine-twentieths of 1-cent gasoline tax</td>
<td>33,742</td>
<td></td>
</tr>
<tr>
<td>Charity Hospital of Louisiana at New Orleans</td>
<td>8,650</td>
<td></td>
</tr>
<tr>
<td>Louisiana State University and A &amp; M College</td>
<td>2,419</td>
<td>$ 45,366</td>
</tr>
</tbody>
</table>
TABLE XXV (continued)

<table>
<thead>
<tr>
<th>RATING</th>
<th>AMOUNT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>BONDS NOT RATED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Louisiana State Board</td>
<td>$6,000</td>
<td>$6,000</td>
</tr>
<tr>
<td>of Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Louisiana State University</td>
<td>2,000</td>
<td>$8,000</td>
</tr>
<tr>
<td>and A &amp; M College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL INDIRECT DEBT</td>
<td>$53,366</td>
<td></td>
</tr>
<tr>
<td>TOTAL DIRECT AND INDIRECT DEBT</td>
<td>$185,159</td>
<td></td>
</tr>
</tbody>
</table>

\(^a\)Direct debt as of August 5, 1941, and indirect debt as of various other dates.

\(^b\)The classification used here is the same as that used in the text.

Source: Moody's, 1942, pp. 447, 453-54.
# TABLE XXVI

MOODY'S RATINGS OF LOUISIANA DEBT OUTSTANDING IN 1946

(Thousands)

<table>
<thead>
<tr>
<th>RATING</th>
<th>AMOUNT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DIRECT DEBT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BONDS RATED Aa</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payable from 1.47 mills ad valorem tax</td>
<td>$7,525</td>
<td>$7,525</td>
</tr>
<tr>
<td><strong>BONDS RATED A</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payable from 1.47 mills ad valorem tax</td>
<td>1,750</td>
<td>1,750</td>
</tr>
<tr>
<td>Payable from 0.75 mill tax</td>
<td>1,750</td>
<td></td>
</tr>
<tr>
<td>Payable from certain motor vehicle license taxes</td>
<td>2,830</td>
<td></td>
</tr>
<tr>
<td>Payable from certain royalties from mineral leases</td>
<td>5,000</td>
<td></td>
</tr>
<tr>
<td>Payable from gasoline taxes</td>
<td>56,545</td>
<td>67,875</td>
</tr>
<tr>
<td><strong>BONDS RATED Baa</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payable from 1.47 mills ad valorem tax</td>
<td>12,569</td>
<td>41,831</td>
</tr>
<tr>
<td>Payable from gasoline taxes</td>
<td>22,262</td>
<td></td>
</tr>
<tr>
<td><strong>BONDS NOT RATED</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payable from 1.47 mills ad valorem tax</td>
<td>9</td>
<td>2,009</td>
</tr>
<tr>
<td>Payable from 0.75 mill tax</td>
<td>2,000</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL DIRECT DEBT</strong></td>
<td></td>
<td>$119,210</td>
</tr>
<tr>
<td><strong>INDIRECT DEBT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BONDS RATED Aa</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charity Hospital of Louisiana at New Orleans</td>
<td>$7,505</td>
<td></td>
</tr>
<tr>
<td>Louisiana State University and A &amp; M College</td>
<td>1,795</td>
<td>$9,300</td>
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</table>
TABLE XXVI (continued)

<table>
<thead>
<tr>
<th>RATING</th>
<th>AMOUNT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BONDS RATED Baa</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payable from earnings of the State Penitentiary</td>
<td>$400</td>
<td></td>
</tr>
<tr>
<td>Payable from Port Commission revenues and nine-twentieths of 1-cent gasoline tax</td>
<td>27,673</td>
<td>$28,073</td>
</tr>
</tbody>
</table>

**BONDS NOT RATED**
Louisiana State University and A & M College | 534 |
Louisiana State Board of Education | 5,458 |

**TOTAL INDIRECT DEBT** | $43,365 |

**TOTAL DIRECT AND INDIRECT DEBT** | $162,605 |

---

^a Direct debt as of August 1, 1946, and indirect debt as of various other dates.

^b The classification used here is the same as that used in the text.

TABLE XXVII
WORLD WAR II VETERANS' BONUS, KOREAN COMBAT BONUS, AND WAR VETERANS' BONUS BORROWING, 1947-1959a

<table>
<thead>
<tr>
<th>Series Date of Issue</th>
<th>Interest Rate (per cent)</th>
<th>Original Amount (thousands)</th>
<th>Callable Date</th>
<th>Maturity Date (1959)</th>
<th>Moody's Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Act 530, 1948;</td>
<td></td>
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<td></td>
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<tr>
<td>World War II Bonus Bonds:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A 1/15/49</td>
<td>4.0</td>
<td>$3,500</td>
<td>C</td>
<td>1953-54</td>
<td>Baa</td>
</tr>
<tr>
<td></td>
<td>4.0</td>
<td>3,605</td>
<td>C</td>
<td>1953-54</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.25</td>
<td>3,713</td>
<td>C</td>
<td>1955</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.1</td>
<td>39,182</td>
<td>C</td>
<td>1956-64</td>
<td></td>
</tr>
<tr>
<td>Act 8 and 530, 1948;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>World War II Bonus Bonds:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B 6/1/49</td>
<td>2.75</td>
<td>10,000</td>
<td>NC</td>
<td>1951-61</td>
<td>A</td>
</tr>
<tr>
<td>Act 109, 1952;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bonus Debt Refunding Bonds:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/15/53</td>
<td>2.75</td>
<td>30,100</td>
<td>NC</td>
<td>1960</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>2.2</td>
<td>5,250</td>
<td>NC</td>
<td>1961</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.1</td>
<td>11,150</td>
<td>NC</td>
<td>1962-63</td>
<td></td>
</tr>
<tr>
<td>Act 748, 1954;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Korean Combat Bonus Bonds:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/1/55</td>
<td>2.75</td>
<td>1,400</td>
<td>NC</td>
<td>1960-62</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>2.0</td>
<td>3,100</td>
<td>NC</td>
<td>1963-65</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.25</td>
<td>5,500</td>
<td>NC</td>
<td>1966-70</td>
<td></td>
</tr>
<tr>
<td>Act 611, 1956;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Korean Combat Bonus Bonds:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/1/57</td>
<td>2.9</td>
<td>400</td>
<td>NC</td>
<td>1961-62</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>3.0</td>
<td>1,600</td>
<td>NC</td>
<td>1963-70</td>
<td></td>
</tr>
<tr>
<td>Act 620, 1956;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Various Combat and War Veterans' Bonus Bonds:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6/15/57</td>
<td>3.1</td>
<td>3,000</td>
<td>NC</td>
<td>1964</td>
<td>n.r.</td>
</tr>
<tr>
<td></td>
<td>3.2</td>
<td>3,000</td>
<td>NC</td>
<td>1965</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.3</td>
<td>4,000</td>
<td>NC</td>
<td>1966</td>
<td></td>
</tr>
<tr>
<td>B 1/15/58</td>
<td>2.6</td>
<td>1,000</td>
<td>NC</td>
<td>1966</td>
<td>A</td>
</tr>
</tbody>
</table>
TABLE XXVII (continued)

These direct and full faith and credit obligations are payable from the $10 per barrel beer tax.

This issue was refunded in 1953; the rating is that which was given at the time of issue.

Moody's rating has changed from Baa to A on this issue.

The issue was sold to the State Teachers' Retirement System and was not rated.

Source: Louisiana, Constitution (1921), Art. 8, Sec. 10, as amended 1948, Act 530; Art. 8, Sec. 11, as amended 1954, Act 748; Art. 8, Sec. 12, as amended 1956, Act 614; Art. 8, Sec. 13, as amended 1956, Act 620; Louisiana, Acts (1948), Act 8, pp. 28-49; (1952), Act 109, pp. 272-74; Louisiana, Financial Report, 1948-49, p. 58; 1949-50, p. 58; 1952-53, p. 57; 1954-55, p. 57; 1956-57, p. 57; Louisiana Legislative Research Study No. 9, p. 83; Moody's, 1959, pp. 663-65; Moody's Bond Survey, XLI, No. 5 (January 31, 1949), 651; Moody's Bond Survey, XLI, No. 20 (May 16, 1949), 471; and Moody's Bond Survey, XLIV, No. 47 (November 17, 1952), 139.
TABLE XXVIII
HIGHWAY BORROWING, 1947-1959

<table>
<thead>
<tr>
<th>Series and Authorization</th>
<th>Date</th>
<th>Series</th>
<th>Date</th>
<th>Interest of Issued</th>
<th>Callable or Non-callable</th>
<th>Amount (thousands)</th>
<th>Maturity Issued Date</th>
<th>Moody's Rating (1959)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAYABLE FROM 1-CENT GASOLINE TAX:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Act 377, 1940:</td>
<td></td>
<td>HH</td>
<td>1/1/47</td>
<td>3.5- $ 50, NC 1951-52</td>
<td>Aa b</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.5 $ 2,950, C 1953-65</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Act 393, 1946:</td>
<td></td>
<td>1A</td>
<td>1/1/47</td>
<td>3.5- $ 200, NC 1951-52</td>
<td>Aa b</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.5 $ 14,800, C 1953-65</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1B</td>
<td>11/1/49</td>
<td>4.0 $ 150, NC 1954</td>
<td>Aa b</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.5 $ 6,350, C 1955-63</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.25 $ 3,500, C 1963-64</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAYABLE OUT OF A PORTION OF NINE-TWENTIETHS OF 1-CENT GASOLINE TAX:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Act 284, 1952:</td>
<td></td>
<td>First</td>
<td>1/1/53</td>
<td>3.5 $ 636, NC 1958-63</td>
<td>A b</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.5 $ 6,864, C 1964-88</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.75 $</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second 7/15/53</td>
<td></td>
<td></td>
<td>3.25  $ 1,572, C 1964-69</td>
<td>A b</td>
<td>1958-63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.5   $ 2,892, C 1970-80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.6   $ 2,400, C 1981-88</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Third 5/1/54</td>
<td></td>
<td></td>
<td>5.0   $ 636, NC 1959-64</td>
<td>A b</td>
<td>1958-63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2.5   $ 1,572, C 1965-70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2.75  $ 2,629, C 1971-80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2.9   $ 2,663, C 1981-89</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fourth 3/15/58</td>
<td></td>
<td></td>
<td>4.0   $ 636, NC 1963-68</td>
<td>A</td>
<td>1958-63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.5   $ 6,564, C 1969-92</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.0   $ 300, C 1993</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE XXVIII (continued)

<table>
<thead>
<tr>
<th>Series and Authoriz.</th>
<th>Date</th>
<th>Interest of Rate</th>
<th>Original Amount or Non-Issue (per cent)</th>
<th>Callable Maturity</th>
<th>Date</th>
<th>Moody's Rating (1959)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PAYABLE FROM THE 5-CENT GASOLINE TAX, CERTAIN MINERAL REVENUES, AND SURPLUS REVENUES FROM OTHER SOURCES (LONG-RANGE HIGHWAY FUND):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acts 40 and 92, 1955:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2/4/59</td>
<td>2.75-</td>
<td>$20,000</td>
<td>C</td>
<td>1979</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>4/30/59</td>
<td>2.8-</td>
<td>10,000</td>
<td>C</td>
<td>1979</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td><strong>PAYABLE FROM PORTION OF MOTOR VEHICLE LICENSE TAXES (HIGHWAY FUND NUMBER 2):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Act 90, 1952:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>1/1/53</td>
<td>3.2</td>
<td>387</td>
<td>NC</td>
<td>1978</td>
<td>A</td>
</tr>
<tr>
<td></td>
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<td>3.0</td>
<td>113</td>
<td>C</td>
<td>1979-83</td>
<td></td>
</tr>
<tr>
<td>A1</td>
<td>7/1/54</td>
<td>4.0</td>
<td>1,009</td>
<td>NC</td>
<td>1965</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.4</td>
<td>2,741</td>
<td>NC</td>
<td>1966-84</td>
<td></td>
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<tr>
<td>B</td>
<td>7/1/54</td>
<td>2.5</td>
<td>2,129</td>
<td>NC</td>
<td>1970</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.6</td>
<td>3,021</td>
<td>NC</td>
<td>1971-84</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>3/15/58</td>
<td>4.0</td>
<td>42</td>
<td>NC</td>
<td>1960-62</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.0</td>
<td>224</td>
<td>NC</td>
<td>1963-78</td>
<td></td>
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<td></td>
<td></td>
<td>3.3</td>
<td>84</td>
<td>NC</td>
<td>1979-84</td>
<td></td>
</tr>
<tr>
<td>A2</td>
<td>3/15/58</td>
<td>4.0</td>
<td>30</td>
<td>NC</td>
<td>1960-62</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.0</td>
<td>160</td>
<td>NC</td>
<td>1963-78</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.3</td>
<td>60</td>
<td>NC</td>
<td>1979-84</td>
<td></td>
</tr>
</tbody>
</table>

*These obligations are all direct obligations, but they are not all full faith and credit bonds. The exceptions are the several issues sold under the authority of Act 90 of 1952 which are payable from a special allocation of Highway Fund Number 2.*
bMoody's ratings have changed from Baa to Aa and A on these issues.

cThis block of the issue is callable on January 1, 1963, or any interest date thereafter.

dThis block of the issue is callable on July 15, 1963, or any interest date thereafter.

eThis block of the issue is callable after January, 1963.

Source: Louisiana, Constitution (1921), Art. 6, Sec. 22(i), as amended 1940, Act 377; Art. 6, Sec. 22(j), as amended 1946, Act 393; Art. 6, Sec. 22(g), as amended 1952, Act 90; Art. 6-A, Secs. 5.1, 5.2, Act 284; Art. 4, Sec. 2(c), as amended 1956, Act 142 of 1955; Art. 6, Sec. 23.1, as amended 1956, Act 141 of 1955; Louisiana, Acts (1955), Act 40, pp. 49-143; Act 92, pp. 197-98; Act 128, pp. 293-94; Act 129, pp. 244-47; Act 130, pp. 247-48; Louisiana, Financial Report, 1946-47, p. 67; 1956-57, p. 56; Louisiana Legislative Research Study No. 9, pp. 81-83; Moody's, 1950, p. 469; 1959, pp. 663-65; Moody's Bond Survey, XLV, No. 9 (March 2, 1953), 601; Moody's Bond Survey, LI, No. 5 (February 2, 1959), 743-45; Moody's Bond Survey, LI, No. 6 (February 9, 1959), 725; Moody's Bond Survey, LI, No. 16 (April 20, 1959), 588; Moody's Bond Survey, LI, No. 18, (May 4, 1959), 562.
TABLE XXIX

INSTITUTIONAL IMPROVEMENT BORROWING, 1947-1959 \(^a\)

<table>
<thead>
<tr>
<th>Series</th>
<th>Date</th>
<th>Rate</th>
<th>Amount</th>
<th>Callable</th>
<th>Maturity</th>
<th>Moody's Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Act 411</td>
<td>12/1/47</td>
<td>2.7</td>
<td>3,000</td>
<td>NC</td>
<td>1969-73</td>
<td>n.r.</td>
</tr>
<tr>
<td>D</td>
<td>3/1/49</td>
<td>3.0</td>
<td>1,299</td>
<td>NC</td>
<td>1969-72</td>
<td>A</td>
</tr>
<tr>
<td>E</td>
<td>3/1/49</td>
<td>2.75</td>
<td>450</td>
<td>NC</td>
<td>1972-73</td>
<td>d</td>
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<tr>
<td>F</td>
<td>9/1/49</td>
<td>5.0</td>
<td>478</td>
<td>NC</td>
<td>1959</td>
<td>Baa</td>
</tr>
<tr>
<td>G</td>
<td>3/15/50</td>
<td>1.75</td>
<td>2,641</td>
<td>C</td>
<td>1963</td>
<td>n.r.</td>
</tr>
<tr>
<td>H</td>
<td>6/1/51</td>
<td>2.25</td>
<td>1,359</td>
<td>C</td>
<td>1964</td>
<td>d</td>
</tr>
<tr>
<td>I</td>
<td>7/15/52</td>
<td>2.5</td>
<td>545</td>
<td>C</td>
<td>1957</td>
<td>Baa</td>
</tr>
</tbody>
</table>

\(^a\)These direct and full faith and credit obligations are payable from the 0.75 mill tax in the Confederate Veterans' Fund.

\(^b\)This issue was sold to the State Teachers' Retirement System and was not rated.

\(^c\)Moody's rating has changed from Baa to A on this issue.

\(^d\)These issues were called prior to the maturity schedule above; the ratings are those which were given at the dates of issue.

\(^e\)This issue was sold to the National American Bank of New Orleans and was not reoffered for sale; it was not rated. The whole issue was retired in the 1954-55 fiscal year.

TABLE XXX
PORT OF NEW ORLEANS AND PORT OF BATON ROUGE
BORROWING, 1947-1959\(^a\)

<table>
<thead>
<tr>
<th>Series</th>
<th>Date</th>
<th>Interest</th>
<th>Original Amount (thousands)</th>
<th>Callable Maturity Date</th>
<th>Moody's Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Rate</td>
<td>Issue (per cent)</td>
<td>of Issue</td>
<td></td>
</tr>
</tbody>
</table>

**PORT OF NEW ORLEANS**

PAYABLE FROM REVENUES OF NEW ORLEANS PORT COMMISSION, NINE-TWENTIETHS OF 1-CENT GASOLINE TAX, AND FULL FAITH AND CREDIT OF LOUISIANA

Act 281, 1952:

| 10/1/55 | 2.58 | $10,000 | C | 1990 | A |

**GREATER BATON ROUGE PORT COMMISSION**

PAYABLE FROM OPERATING REVENUES OF THE PORT, AND THE FULL FAITH AND CREDIT OF LOUISIANA AND THREE PARishes

Act 9, 1952:

<table>
<thead>
<tr>
<th>A</th>
<th>11/1/54</th>
<th>2.75</th>
<th>$1,890</th>
<th>C</th>
<th>1961-68</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.6</td>
<td>1,695</td>
<td>C</td>
<td></td>
<td>1969-73</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.75</td>
<td>3,955</td>
<td>C</td>
<td></td>
<td>1974-85</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.8</td>
<td>4,960</td>
<td>C</td>
<td></td>
<td>1986-94</td>
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</table>

Act 597, 1956:

<table>
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<th>B</th>
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<th>5.0</th>
<th>2,393</th>
<th>NC</th>
<th>1960-64</th>
<th>Baa</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.25</td>
<td>8,012</td>
<td>C</td>
<td></td>
<td>1965-71</td>
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<tr>
<td></td>
<td>3.3</td>
<td>8,995</td>
<td>C</td>
<td></td>
<td>1972-77</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>5/1/58</td>
<td>4.5</td>
<td>314</td>
<td>NC</td>
<td>1960</td>
<td>Baa</td>
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<tr>
<td></td>
<td>3.0</td>
<td>1,712</td>
<td>C</td>
<td></td>
<td>1961-69</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.4</td>
<td>1,474</td>
<td>C</td>
<td></td>
<td>1970-75</td>
<td></td>
</tr>
</tbody>
</table>

\(^a\)The indirect and full faith and credit obligation of the Port of New Orleans is payable from the nine-twentieths of the 1-cent gasoline tax as well as operating revenues of
The indirect and full faith and credit obligations of the Greater Baton Rouge Port Commission are payable from the operating revenues of the Port and are also protected by the full faith and credit pledge of three interested parishes of Louisiana.

b Moody's rating has changed from Baa to A on this issue.

c Callable beginning November 1, 1967.

d Callable beginning November 1, 1963.

Source: Louisiana, Constitution (1921), Art. 6-A, Sec. 5.1, as amended 1952, Act 284; Art. 6, Sec. 29, as amended 1952, Act 9; Art. 6, Secs. 29.1, 29.2, 29.3, 29.4, as amended 1956, Act 597; Moody's, 1955, p. 543; and 1959, pp. 663-65, 674.
### TABLE XXXI

LOUISIANA STATE UNIVERSITY BORROWING, 1947-1959^a

<table>
<thead>
<tr>
<th>Series and Date of Authorization</th>
<th>Date</th>
<th>Interest Rate (per cent)</th>
<th>Original Issue (thousands)</th>
<th>Callable</th>
<th>Maturity (1959)</th>
<th>Moodys Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Serial Bonds:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/1/47</td>
<td>4.0</td>
<td>$ 265</td>
<td>NC</td>
<td>1949-52</td>
<td>A^b</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.5</td>
<td>1,610</td>
<td>C</td>
<td>1953-62</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.75</td>
<td>1,625</td>
<td>C</td>
<td>1963-67</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Act 54, 1950:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/1/50</td>
<td>4.0</td>
<td>893</td>
<td>NC</td>
<td>1953-55</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.5</td>
<td>788</td>
<td>C</td>
<td>1956-59</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.0</td>
<td>1,570</td>
<td>C</td>
<td>1960-66</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.1</td>
<td>2,449</td>
<td>C</td>
<td>1967-75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11/1/53</td>
<td>2.5</td>
<td>150</td>
<td>NC</td>
<td>1958</td>
<td>Aa</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.25</td>
<td>150</td>
<td>NC</td>
<td>1959-63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/1/56</td>
<td>4.0</td>
<td>305</td>
<td>NC</td>
<td>1957-62</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.5</td>
<td>1,380</td>
<td>C</td>
<td>1963-75</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.6</td>
<td>965</td>
<td>C</td>
<td>1976-81</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Refunding Bonds:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7/1/52</td>
<td>2.0</td>
<td>1,610</td>
<td>C^d</td>
<td>1953-62</td>
<td>Aa</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.25</td>
<td>1,625</td>
<td>C</td>
<td>1963-67</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Act 230, 1954:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11/1/54</td>
<td>2.25</td>
<td>450</td>
<td>C^e</td>
<td>1955-69</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.5</td>
<td>280</td>
<td>C</td>
<td>1970-76</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.65</td>
<td>120</td>
<td>C</td>
<td>1977-79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/1/58</td>
<td>4.0</td>
<td>850</td>
<td>NC</td>
<td>1959-63</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.5</td>
<td></td>
<td>C</td>
<td>1963-67</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.7</td>
<td></td>
<td>C</td>
<td>1968-78</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Act 54, 1950:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/1/58</td>
<td>4.5</td>
<td>7,500</td>
<td>NC</td>
<td>1959-63</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.5</td>
<td></td>
<td>C</td>
<td>1963-67</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.7</td>
<td></td>
<td>C</td>
<td>1968-78</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.75</td>
<td></td>
<td>C</td>
<td>1979-83</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
These indirect obligations are not full faith and credit obligations but are payable from University operating revenues, proceeds of the 0.5 mill tax, certain proceeds of the excise license tax on insurance policies and insurance companies, and certain proceeds of the tax on bottled soft drinks.

These bonds were refunded in 1952; the rating is that which was given at the time of issue.

These bonds refunded the balance of the Serial Bonds of 1947.

Callable after July, 1957.

Callable after November 1, 1960.

# TABLE XXXII

GREATER NEW ORLEANS EXPRESSWAY COMMISSION  
AND MISSISSIPPI RIVER BRIDGE AUTHORITY  
BORROWING, 1952-1959

<table>
<thead>
<tr>
<th>Series</th>
<th>Date</th>
<th>Interest Rate</th>
<th>Original Amount</th>
<th>Callable</th>
<th>Maturity Date</th>
<th>Moody's Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Rate (per cent)</td>
<td>Amount (thousands)</td>
<td>Issue (per cent)</td>
<td></td>
<td>(1959)</td>
</tr>
</tbody>
</table>

**GREATER NEW ORLEANS EXPRESSWAY COMMISSION**  
PAYABLE FROM OPERATING REVENUES AND CERTAIN SURPLUS MOTOR VEHICLE LICENSE TAXES:

- Act 90, 1952:  
  11/1/54 4.0 $46,000 C 1994 Baa

**MISSISSIPPI RIVER BRIDGE AUTHORITY**  
PAYABLE FROM OPERATING REVENUES AND CERTAIN SURPLUS MOTOR VEHICLE LICENSE TAXES:

- Act 745, 1954:  
  11/1/54 3.6 $65,000 C 1994 n.r.

*These indirect obligations are payable from operating revenues and certain surplus motor vehicle license taxes. They are not protected by the full faith and credit of either the parishes or the State of Louisiana.

*Due $1,000 on each January 1 to 1993 and $45,799,000 on January 1, 1994. Callable after January 1, 1964.

*Not rated pending the establishment of a stable record of toll receipts. Callable on January 1, 1959, from debt service funds or after January 1, 1964, from revenues other than debt service funds.

Source: Louisiana, Constitution (1921), Art. 6, Sec. 22(g), par. 4, as amended 1954, Act 745; Art. 6, Sec. 22(g), par. 5, as amended 1952, Act 90; Moody's, 1959, pp. 674-75; Moody's Bond Survey, L, No. 32 (August 4, 1958), 389; Moody's Bond Survey, XLVI, No. 40 (October 4, 1954), 231-33; Moody's Bond Survey, XLVI, No. 41 (October 11, 1954), 222; and Moody's Bond Survey, LI, No. 9 (March 2, 1959), 687.
TABLE XXXIII

LOUISIANA STATE BUILDING AUTHORITY BORROWING, 1947-1959

<table>
<thead>
<tr>
<th>Series</th>
<th>Date of Issue</th>
<th>Interest Rate (per cent)</th>
<th>Original Amount (thousands)</th>
<th>Callable or Non-Callable</th>
<th>Maturity Date</th>
<th>Moody’s Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>12/1/52</td>
<td>2.2</td>
<td>$500</td>
<td>NC</td>
<td>1956</td>
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<tr>
<td></td>
<td></td>
<td>2.1</td>
<td>1,500</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>12/15/53</td>
<td>2.6</td>
<td>200</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.6</td>
<td>650</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.5</td>
<td>3,150</td>
<td>C</td>
<td>1957-59</td>
<td>Baa</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>9/1/54</td>
<td>2.75</td>
<td>3,750</td>
<td>C</td>
<td>1958-74</td>
<td>Baa</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.0</td>
<td></td>
<td>C</td>
<td></td>
<td></td>
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</table>

PAYABLE FROM THE PROCEEDS OF THE 1.47 MILLL AD VALOREM TAX:

Act 317, 1952:

<table>
<thead>
<tr>
<th>Series</th>
<th>Date of Issue</th>
<th>Interest Rate (per cent)</th>
<th>Original Amount (thousands)</th>
<th>Callable or Non-Callable</th>
<th>Maturity Date</th>
<th>Moody’s Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>12/1/52</td>
<td>2.2</td>
<td>2,400</td>
<td>C</td>
<td>1959-82</td>
<td>Baa</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.0</td>
<td>100</td>
<td>C</td>
<td>1983</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>6/1/55</td>
<td>4.0</td>
<td>9,900</td>
<td>C</td>
<td>1960-63</td>
<td>Baa</td>
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<tr>
<td></td>
<td></td>
<td>2.9</td>
<td></td>
<td>C</td>
<td>1964-70</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.75</td>
<td></td>
<td>C</td>
<td>1971-80</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.9</td>
<td></td>
<td>C</td>
<td>1981-84</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>2/1/56</td>
<td>4.0</td>
<td>593</td>
<td>NC</td>
<td>1961-63</td>
<td>Baa</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.1</td>
<td>2,291</td>
<td>C</td>
<td>1964-72</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.0</td>
<td>3,824</td>
<td>C</td>
<td>1973-83</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>3.1</td>
<td>892</td>
<td>C</td>
<td>1984-85</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>4/15/56</td>
<td>3.3</td>
<td>2,500</td>
<td>C</td>
<td>1961-66</td>
<td>Baa</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.3</td>
<td>500</td>
<td>C</td>
<td>1961-66</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.0</td>
<td>6,000</td>
<td>C</td>
<td>1967-85</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>2/1/57</td>
<td>3.5</td>
<td>3,000</td>
<td>n.a.</td>
<td>1962-77</td>
<td>n.r.</td>
</tr>
<tr>
<td>F</td>
<td>4/1/57</td>
<td>4.0</td>
<td>9,948</td>
<td>NC</td>
<td>1962-65</td>
<td>Baa</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.75</td>
<td></td>
<td>NG</td>
<td>1966-67</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.75</td>
<td></td>
<td>C</td>
<td>1968-69</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.75</td>
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<td>C</td>
<td>1970-71</td>
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</tr>
</tbody>
</table>
TABLE XXXIII (continued)

<table>
<thead>
<tr>
<th>Series</th>
<th>Date</th>
<th>Interest Rate (per cent)</th>
<th>Original Amount (thousands)</th>
<th>Callable</th>
<th>Maturity Date (1959)</th>
<th>Moody's Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DD</td>
<td>4/15/56</td>
<td>3.25</td>
<td>$3,025</td>
<td>NC</td>
<td>1960-64 Baa</td>
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</table>

PAYABLE FROM THE PROCEEDS OF THE 0.53 MILL AD VALOREM TAX:

Act 30, 1955:

<table>
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<tr>
<th>Series</th>
<th>Date</th>
<th>Interest Rate (per cent)</th>
<th>Original Amount (thousands)</th>
<th>Callable</th>
<th>Maturity Date (1959)</th>
<th>Moody's Rating</th>
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</thead>
<tbody>
<tr>
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<td>DD</td>
<td>4/15/56</td>
<td>3.25</td>
<td>$3,025</td>
<td>NC</td>
<td>1960-64 Baa</td>
</tr>
</tbody>
</table>

a These indirect but full faith and credit obligations are payable from the proceeds of the 1.47 and 0.53 mill ad valorem taxes.

b Issue A was called on December 1, 1957, and issue C was called on September 1, 1958. The ratings are those which were given at the times of issue.


d Callable on December 1, 1962.

e Callable on June 1, 1962.

f Callable on February 1, 1963.

g Callable on April 15, 1965

h Issue EE was sold to the State Teachers' Retirement System and was not rated. Information about the call feature is not available on this issue.

i Callable on April 1, 1967.

TABLE XXXIV
DIRECT AND INDIRECT LOUISIANA BORROWING BY PURPOSE, 1947-1959
(thousands)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>DIRECT</th>
<th>INDIRECT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1947</td>
<td>---</td>
<td>$18,000</td>
<td>$3,000</td>
</tr>
<tr>
<td>1948</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1949</td>
<td>$60,000</td>
<td>10,000</td>
<td>5,000</td>
</tr>
<tr>
<td>1950</td>
<td>---</td>
<td>---</td>
<td>4,000</td>
</tr>
<tr>
<td>1951</td>
<td>---</td>
<td>---</td>
<td>2,000</td>
</tr>
<tr>
<td>1952</td>
<td>---</td>
<td>2,000</td>
<td>3,235(^{b})</td>
</tr>
<tr>
<td>1953</td>
<td>46,500(^{b})</td>
<td>15,500</td>
<td>---</td>
</tr>
<tr>
<td>1954</td>
<td>16,400</td>
<td>---</td>
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</tr>
<tr>
<td>1955</td>
<td>10,000</td>
<td>---</td>
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</tr>
<tr>
<td>1956</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1957</td>
<td>12,000</td>
<td>---</td>
<td>19,400</td>
</tr>
<tr>
<td>1958</td>
<td>1,000</td>
<td>8,100</td>
<td>3,500</td>
</tr>
<tr>
<td>1959</td>
<td>---</td>
<td>30,000</td>
<td>---</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$83,000</td>
<td>$98,000</td>
<td>$16,000</td>
</tr>
</tbody>
</table>

\(^{a}\)The classification used here is the same as that used in the text.

\(^{b}\)These are refunding issues; they are not included in the totals.

Source: Compiled from Tables XXX-XXXVI, Appendix A.
## TABLE XXXV

**MOODY'S RATINGS OF LOUISIANA DEBT OUTSTANDING IN 1952**

(Thousands)

<table>
<thead>
<tr>
<th>RATING</th>
<th>AMOUNT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DIRECT DEBT</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BONDS RATED Aa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payable from 1.47 mills ad valorem tax</td>
<td>$6,268</td>
<td>$6,268</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BONDS RATED A</td>
<td>Payable from certain motor vehicle license taxes</td>
<td>$1,800</td>
</tr>
<tr>
<td></td>
<td>Payable from gasoline taxes</td>
<td>$33,891</td>
</tr>
<tr>
<td></td>
<td>Payable from certain royalties from mineral leases</td>
<td>$4,200</td>
</tr>
<tr>
<td></td>
<td>Payable from $10 per barrel beer tax</td>
<td>$105,700</td>
</tr>
<tr>
<td></td>
<td>114,591</td>
<td></td>
</tr>
<tr>
<td>BONDS RATED Baa</td>
<td>Payable from 1.47 mills ad valorem tax</td>
<td>$3,350</td>
</tr>
<tr>
<td></td>
<td>Payable from 0.75 mill tax</td>
<td>$9,000</td>
</tr>
<tr>
<td></td>
<td>Payable from gasoline taxes</td>
<td>$55,664</td>
</tr>
<tr>
<td></td>
<td>68,014</td>
<td></td>
</tr>
<tr>
<td>BONDS NOT RATED</td>
<td>Payable from 0.75 mill tax</td>
<td>$7,000</td>
</tr>
<tr>
<td></td>
<td>7,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOTAL DIRECT DEBT</td>
<td>$226,873</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>INDIRECT DEBT</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BONDS RATED Aa</td>
<td>Charity Hospital of La. at New Orleans</td>
<td>$5,935</td>
</tr>
<tr>
<td></td>
<td>Louisiana State University and A &amp; M College</td>
<td>$3,967</td>
</tr>
<tr>
<td></td>
<td>Louisiana State Board of Education</td>
<td>$4,419</td>
</tr>
<tr>
<td></td>
<td>14,321</td>
<td></td>
</tr>
</tbody>
</table>
TABLE XXXV (continued)

<table>
<thead>
<tr>
<th>RATING</th>
<th>AMOUNT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BONDS RATED A</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Louisiana State University and A &amp; M College</td>
<td>$5,530</td>
<td>$5,530</td>
</tr>
<tr>
<td><strong>BONDS RATED Baa</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payable from Port Commission revenues and nine-twentieths of 1-cent gasoline tax</td>
<td>$19,998</td>
<td></td>
</tr>
<tr>
<td>Payable from earnings of the State Penitentiary</td>
<td>250</td>
<td>$20,248</td>
</tr>
<tr>
<td><strong>BONDS NOT RATED</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Louisiana State University and A &amp; M College</td>
<td>900</td>
<td>900</td>
</tr>
</tbody>
</table>

**TOTAL INDIRECT DEBT**

$40,999

**TOTAL DIRECT AND INDIRECT DEBT**

$267,872

---

*a* Direct debt as of January 1, 1952, and indirect debt as of various other dates.

*b* The classification used here is the same as that used in the text.

Source: Moody's, 1953, pp. 472-83.
TABLE XXXVI

MOODY'S RATINGS OF LOUISIANA DEBT OUTSTANDING IN 1958

<table>
<thead>
<tr>
<th>RATING</th>
<th>AMOUNT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DIRECT DEBT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BONDS RATED Aa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payable from 1.47 mills ad valorem tax</td>
<td>$2,428</td>
<td></td>
</tr>
<tr>
<td>Payable from certain motor vehicle license taxes</td>
<td>670</td>
<td></td>
</tr>
<tr>
<td>Payable from gasoline taxes</td>
<td>$47,061</td>
<td>$50,159</td>
</tr>
<tr>
<td>BONDS RATED A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payable from 0.75 mill tax</td>
<td>1,749</td>
<td></td>
</tr>
<tr>
<td>Payable from certain motor vehicle license taxes</td>
<td>9,177</td>
<td></td>
</tr>
<tr>
<td>Payable from gasoline taxes</td>
<td>29,850</td>
<td></td>
</tr>
<tr>
<td>Payable from certain royalties from mineral leases</td>
<td>2,250</td>
<td></td>
</tr>
<tr>
<td>Payable from $10 per barrel beer tax</td>
<td>$42,125</td>
<td>85,151</td>
</tr>
<tr>
<td>BONDS NOT RATED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payable from 0.75 mill tax</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>Payable from $10 per barrel beer tax</td>
<td>10,000</td>
<td>13,000</td>
</tr>
<tr>
<td><strong>TOTAL DIRECT DEBT</strong></td>
<td></td>
<td>$118,310</td>
</tr>
</tbody>
</table>

<p>| <strong>INDIRECT DEBT</strong> |        |       |
| BONDS RATED Aa |        |       |
| Charity Hospital of La. at New Orleans | $3,948 |       |
| Louisiana State University and A &amp; M College | 2,650 |       |
| Louisiana State Board of Education | 3,026 | $9,624 |</p>
<table>
<thead>
<tr>
<th>RATING</th>
<th>AMOUNT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>BONDS RATED A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Louisiana State University and A &amp; M College</td>
<td>$16,213</td>
<td></td>
</tr>
<tr>
<td>Payable from Port Commission revenues and nine-twentieths of 1-cent gasoline tax</td>
<td>18,519</td>
<td></td>
</tr>
<tr>
<td>Payable from revenues of Baton Rouge Port Commission</td>
<td>12,500</td>
<td>$47,232</td>
</tr>
<tr>
<td>BONDS RATED Baa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Louisiana State Building Authority</td>
<td>48,873</td>
<td></td>
</tr>
<tr>
<td>Payable from revenues of Baton Rouge Port Commission</td>
<td>22,900</td>
<td></td>
</tr>
<tr>
<td>Greater New Orleans Expressway Commission</td>
<td>45,799</td>
<td></td>
</tr>
<tr>
<td>Payable from earnings of the State Penitentiary</td>
<td>100</td>
<td>117,672</td>
</tr>
<tr>
<td>BONDS NOT RATED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mississippi River Bridge Authority</td>
<td>65,000</td>
<td></td>
</tr>
<tr>
<td>Louisiana State University and A &amp; M College</td>
<td>180</td>
<td>65,180</td>
</tr>
<tr>
<td>TOTAL INDIRECT DEBT</td>
<td></td>
<td>$239,708</td>
</tr>
<tr>
<td>TOTAL DIRECT AND INDIRECT DEBT</td>
<td></td>
<td>$388,018</td>
</tr>
</tbody>
</table>

*Direct debt as of June 30, 1958, and indirect debt as of various other dates.

The classification used here is the same as that used in the text.

Source: Moody's, 1959, pp. 663-78.
TABLE XXXVII
OUTSTANDING DEBT OF THE STATE OF LOUISIANA AS OF
JUNE 30, 1957a

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DIRECT</strong></td>
<td></td>
</tr>
<tr>
<td>State Bond and Interest Tax Fund</td>
<td>$3,755</td>
</tr>
<tr>
<td>Confederate Veterans' Fund</td>
<td>4,749</td>
</tr>
<tr>
<td>Highway Fund Number 2</td>
<td>800</td>
</tr>
<tr>
<td>Special Allocation of Highway Funds</td>
<td>8,789</td>
</tr>
<tr>
<td>General Highway</td>
<td>76,634</td>
</tr>
<tr>
<td>Institutional Improvement</td>
<td>2,500</td>
</tr>
<tr>
<td>Veterans' Bonus</td>
<td>46,536</td>
</tr>
<tr>
<td><strong>TOTAL DIRECT DEBT OUTSTANDING</strong></td>
<td>$143,764</td>
</tr>
<tr>
<td><strong>INDIRECT</strong></td>
<td></td>
</tr>
<tr>
<td>New Orleans Port Commission</td>
<td>$20,632</td>
</tr>
<tr>
<td>Baton Rouge Port Commission</td>
<td>12,500</td>
</tr>
<tr>
<td>Penitentiary</td>
<td>125</td>
</tr>
<tr>
<td>Mississippi River Bridge Authority</td>
<td>65,000</td>
</tr>
<tr>
<td>Greater New Orleans Expressway</td>
<td>45,799</td>
</tr>
<tr>
<td>Louisiana State University</td>
<td>10,693</td>
</tr>
<tr>
<td>Charity Hospital of Louisiana at New Orleans</td>
<td>3,948</td>
</tr>
<tr>
<td>Louisiana State Board of Education</td>
<td>3,026</td>
</tr>
<tr>
<td><strong>TOTAL INDIRECT DEBT OUTSTANDING</strong></td>
<td>$210,596</td>
</tr>
<tr>
<td><strong>TOTAL DIRECT AND INDIRECT DEBT OUTSTANDING</strong></td>
<td>$354,359</td>
</tr>
</tbody>
</table>

aThe major portion of indirect debt is from Moody's report of 1959, reported for 1958, instead of for 1957. However, since most of the issues are deferred serials, the difference in amounts would be slight.

### TABLE XXXVIII

**TOTAL DEBT OUTSTANDING IN LOUISIANA AS REPORTED BY THREE AGENCIES, JUNE 30, 1957**

<table>
<thead>
<tr>
<th>Description</th>
<th>Financial Report</th>
<th>Moody's</th>
<th>Compendium</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Debt Reported</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Debt Outstanding</td>
<td>$240,723</td>
<td>$354,359</td>
<td>$321,301</td>
</tr>
<tr>
<td><strong>Debt Not Reported</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mississippi River Bridge Authority</td>
<td></td>
<td>65,000</td>
<td></td>
</tr>
<tr>
<td>Baton Rouge Port Commission</td>
<td></td>
<td>12,500</td>
<td></td>
</tr>
<tr>
<td>Greater New Orleans Expressway Commission</td>
<td></td>
<td>45,799</td>
<td></td>
</tr>
<tr>
<td><strong>ADJUSTED TOTAL</strong></td>
<td>$354,022</td>
<td>$354,359</td>
<td>$367,100</td>
</tr>
</tbody>
</table>

*aAll of the indirect debt or other debt of the State of Louisiana is the amount outstanding as of 1958, not 1957. However, most of the issues were deferred serials, and the total amount outstanding in Moody's as of 1957 would not be much larger than that reported for 1958. A $10,000,000 issue sold after June 30 was included in Moody's but is omitted here.

*bThe Compendium data are classified according to a uniform census classification and are not usually expected to compare exactly with data supplied by state reporting agencies.

### TABLE XXXIX

**TOTAL DEBT OUTSTANDING, STATE-WIDE INCOME, TAX REVENUES, AND TOTAL AD VALOREM TAX COLLECTIONS IN LOUISIANA, 1946, 1952, AND 1958**

(Thousands)

<table>
<thead>
<tr>
<th>Description</th>
<th>1946</th>
<th>1952</th>
<th>1958</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Ad Valorem Tax Collections</td>
<td>$9,266</td>
<td>$13,781</td>
<td>---a</td>
</tr>
<tr>
<td>Total Tax Collections</td>
<td>98,915</td>
<td>240,270$</td>
<td>351,893</td>
</tr>
<tr>
<td>Total Revenues</td>
<td>141,106</td>
<td>361,771$</td>
<td>557,246$c</td>
</tr>
<tr>
<td>Total Expenditures</td>
<td>107,459</td>
<td>336,417$</td>
<td>576,967$c</td>
</tr>
<tr>
<td>Total Direct Debt Outstanding</td>
<td>142,964d</td>
<td>199,371</td>
<td>202,107</td>
</tr>
<tr>
<td>Total Agency Debt Outstanding</td>
<td>16,778</td>
<td>21,255</td>
<td>70,905$e</td>
</tr>
<tr>
<td>State-Wide Income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Louisiana Total</td>
<td>2,066,000</td>
<td>3,128,000$b</td>
<td>4,804,000$c</td>
</tr>
<tr>
<td>Louisiana Per Capita</td>
<td>($814)</td>
<td>($1,135)$b</td>
<td>($1,566)$c</td>
</tr>
<tr>
<td>U. S. Per Capita</td>
<td>($1,215)</td>
<td>($1,584)</td>
<td>($2,027)</td>
</tr>
</tbody>
</table>

*Collections not complete for this year.*  

*Reported for the year 1951.*  

*Reported for the year 1957.*  

*Reported for the year 1945.*  

*Does not include Mississippi River Bridge Authority or the New Orleans Expressway Commission debt outstanding.*  

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Total Revenue (thousands)</th>
<th>Total Expenditures (thousands)</th>
<th>Debt Service (thousands)</th>
<th>Debt Service to Total Expenditures (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1947-48</td>
<td>$199,928</td>
<td>$170,761</td>
<td>$12,387</td>
<td>7.25</td>
</tr>
<tr>
<td>1948-49</td>
<td>322,635</td>
<td>344,336</td>
<td>13,013</td>
<td>3.78</td>
</tr>
<tr>
<td>1949-50</td>
<td>348,660</td>
<td>327,171</td>
<td>15,781</td>
<td>4.82</td>
</tr>
<tr>
<td>1953-54</td>
<td>437,945</td>
<td>405,373</td>
<td>18,619</td>
<td>4.59</td>
</tr>
<tr>
<td>1955-56</td>
<td>535,399</td>
<td>496,326</td>
<td>21,730</td>
<td>5.50</td>
</tr>
<tr>
<td>1956-57</td>
<td>585,676</td>
<td>576,967</td>
<td>18,979</td>
<td>4.09</td>
</tr>
</tbody>
</table>

*Amounts are rounded to the nearest thousand.

TABLE XLI

REVENUES FROM THE VARIOUS TAXES DEDICATED FOR THE PAYMENT OF CERTAIN OBLIGATIONS OF THE STATE OF LOUISIANA, 1950-1957

(Thousands)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>$2,945,666</td>
<td>$1,586,234</td>
<td>$1,652,733</td>
<td>$18,740,794</td>
<td>$4,653,341</td>
<td>$11,244,442</td>
</tr>
<tr>
<td>1951</td>
<td>2,741,363</td>
<td>1,492,285</td>
<td>1,831,946</td>
<td>20,087,837</td>
<td>4,921,847</td>
<td>11,004,689</td>
</tr>
<tr>
<td>1952</td>
<td>3,080,309</td>
<td>1,672,049</td>
<td>1,953,148</td>
<td>21,901,903</td>
<td>4,944,900</td>
<td>11,501,669</td>
</tr>
<tr>
<td>1953</td>
<td>3,492,201</td>
<td>1,896,166</td>
<td>1,962,788</td>
<td>23,176,727</td>
<td>5,743,462</td>
<td>11,477,716</td>
</tr>
<tr>
<td>1954</td>
<td>3,448,499</td>
<td>1,877,101</td>
<td>2,200,627</td>
<td>25,260,514</td>
<td>6,083,238</td>
<td>12,032,082</td>
</tr>
<tr>
<td>1955</td>
<td>3,568,899</td>
<td>1,953,401</td>
<td>2,248,312</td>
<td>26,626,883</td>
<td>6,615,200</td>
<td>11,949,073</td>
</tr>
<tr>
<td>1956</td>
<td>3,553,025</td>
<td>1,948,942</td>
<td>2,498,234</td>
<td>29,585,762</td>
<td>7,175,652</td>
<td>12,086,968</td>
</tr>
<tr>
<td>1957</td>
<td>3,890,464</td>
<td>2,150,616</td>
<td>2,496,911</td>
<td>31,574,890</td>
<td>7,531,983</td>
<td>12,774,942</td>
</tr>
</tbody>
</table>

TABLE XLII
LONG-TERM DEBT OUTSTANDING AT END OF FISCAL YEAR BY PURPOSE
FOR ALL STATES AND SELECTED STATES, 1957
(continuing)

<table>
<thead>
<tr>
<th>State</th>
<th>Total (thousands)</th>
<th>Education Higher (thousands)</th>
<th>Other (thousands)</th>
<th>Highways State Toll Facilities (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All 48 States</td>
<td>$13,521,970</td>
<td>$706,423</td>
<td>$1,068,319</td>
<td>$5,075,191</td>
</tr>
<tr>
<td>Louisiana</td>
<td>321,301</td>
<td>14,449</td>
<td>3,287</td>
<td>65,000</td>
</tr>
<tr>
<td>Conn.</td>
<td>388,671</td>
<td>32,092</td>
<td>9,611</td>
<td>260,905</td>
</tr>
<tr>
<td>Maryland</td>
<td>520,274</td>
<td>6,190</td>
<td>88,483</td>
<td>175,131</td>
</tr>
<tr>
<td>Mass.</td>
<td>1,013,681</td>
<td>6,981</td>
<td>---</td>
<td>263,749</td>
</tr>
<tr>
<td>New York</td>
<td>1,974,278</td>
<td>8,825</td>
<td>---</td>
<td>814,955</td>
</tr>
<tr>
<td>Ohio</td>
<td>708,307</td>
<td>34,128</td>
<td>---</td>
<td>326,000</td>
</tr>
</tbody>
</table>

(continued)

<table>
<thead>
<tr>
<th>State</th>
<th>Highways (thousands)</th>
<th>Public Hospitals (thousands)</th>
<th>Public Welfare (thousands)</th>
<th>Public Safety (thousands)</th>
<th>Natural Resources (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All 48 States</td>
<td>$2,260,893</td>
<td>$4,433</td>
<td>$164,157</td>
<td>$20,579</td>
<td>$479,368</td>
</tr>
<tr>
<td>Louisiana</td>
<td>86,778</td>
<td>---</td>
<td>13,481</td>
<td>125</td>
<td>---</td>
</tr>
<tr>
<td>Conn.</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>3,178</td>
</tr>
<tr>
<td>Maryland</td>
<td>161,523</td>
<td>---</td>
<td>2,216</td>
<td>1,273</td>
<td>---</td>
</tr>
<tr>
<td>Mass.</td>
<td>346,100</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>New York</td>
<td>219,215</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>359,563</td>
</tr>
<tr>
<td>Ohio</td>
<td>175,620</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

(continued)

<table>
<thead>
<tr>
<th>State</th>
<th>Nonhighway Transportation (thousands)</th>
<th>Housing &amp; Community Redevelopment (thousands)</th>
<th>Miscellaneous and Unallocable Veterans Bonus (thousands)</th>
<th>Other (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All 48 States</td>
<td>$247,729</td>
<td>$397,575</td>
<td>$1,202,072</td>
<td>$1,895,231</td>
</tr>
<tr>
<td>Louisiana</td>
<td>33,142</td>
<td>---</td>
<td>46,536</td>
<td>58,503</td>
</tr>
<tr>
<td>Conn.</td>
<td>1,750</td>
<td>---</td>
<td>25,950</td>
<td>55,185</td>
</tr>
<tr>
<td>Maryland</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>85,458</td>
</tr>
<tr>
<td>Mass.</td>
<td>36,160</td>
<td>---</td>
<td>60,960</td>
<td>299,731</td>
</tr>
<tr>
<td>New York</td>
<td>128,904</td>
<td>386,515</td>
<td>30,000</td>
<td>26,301</td>
</tr>
<tr>
<td>Ohio</td>
<td>---</td>
<td>---</td>
<td>153,509</td>
<td>18,750</td>
</tr>
</tbody>
</table>

a This sum does not include $47,799,000 of Greater New Orleans Expressway debt and otherwise does not reconcile with the Financial Report and Moody's. The figures are used despite this in order to make valid comparisons with other states.

b Includes $14,086,400 for Metropolitan District.

### TABLE XLIII

COMPARISONS OF FINANCIAL STRUCTURES IN ALL STATES AND SELECTED STATES, 1957

(Thousands)

<table>
<thead>
<tr>
<th>State</th>
<th>Revenue and Borrowing</th>
<th>Expenditure and Debt Redemption</th>
<th>Borrowing</th>
<th>Debt Redemption</th>
</tr>
</thead>
<tbody>
<tr>
<td>All 48 States</td>
<td>$26,157,796</td>
<td>$24,903,681</td>
<td>$1,502,003a</td>
<td>$669,693</td>
</tr>
<tr>
<td>Louisiana</td>
<td>664,017</td>
<td>660,889</td>
<td>18,748</td>
<td>16,914</td>
</tr>
<tr>
<td>Conn.</td>
<td>431,452</td>
<td>456,779</td>
<td>101,453</td>
<td>11,929</td>
</tr>
<tr>
<td>Maryland</td>
<td>415,685</td>
<td>424,177</td>
<td>50,036</td>
<td>22,318</td>
</tr>
<tr>
<td>Mass.</td>
<td>779,542</td>
<td>814,904</td>
<td>136,144</td>
<td>46,610</td>
</tr>
<tr>
<td>New York</td>
<td>2,181,059</td>
<td>2,406,239</td>
<td>147,675</td>
<td>111,887</td>
</tr>
<tr>
<td>Ohio</td>
<td>1,524,821</td>
<td>1,339,367</td>
<td>150,343</td>
<td>32,827</td>
</tr>
</tbody>
</table>

(continued)

<table>
<thead>
<tr>
<th>State</th>
<th>Revenue and Borrowing</th>
<th>Expenditure General Revenue and Deb</th>
<th>General Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>All 48 States</td>
<td>$24,665,793</td>
<td>$24,233,988</td>
<td>$20,381,595</td>
</tr>
<tr>
<td>Louisiana</td>
<td>645,269</td>
<td>643,975</td>
<td>606,389</td>
</tr>
<tr>
<td>Conn.</td>
<td>329,999</td>
<td>344,850</td>
<td>283,656</td>
</tr>
<tr>
<td>Maryland</td>
<td>365,649</td>
<td>401,859</td>
<td>328,433</td>
</tr>
<tr>
<td>Mass.</td>
<td>643,398</td>
<td>602,394</td>
<td>548,924</td>
</tr>
<tr>
<td>New York</td>
<td>2,336,384</td>
<td>2,294,352</td>
<td>1,799,233</td>
</tr>
<tr>
<td>Ohio</td>
<td>1,374,478</td>
<td>1,306,560</td>
<td>902,235</td>
</tr>
</tbody>
</table>

(continued)

<table>
<thead>
<tr>
<th>State</th>
<th>Total Tax Revenue</th>
<th>Total Population (1956)b</th>
<th>Personal Incomec</th>
<th>Personal Income Per Capitad</th>
</tr>
</thead>
<tbody>
<tr>
<td>All 48 States</td>
<td>$14,530,749</td>
<td>166,428,000</td>
<td>$322,228</td>
<td>$1,937</td>
</tr>
<tr>
<td>Louisiana</td>
<td>372,927</td>
<td>3,010,000</td>
<td>4,338</td>
<td>1,444</td>
</tr>
<tr>
<td>Conn.</td>
<td>227,614</td>
<td>2,221,000</td>
<td>5,966</td>
<td>2,673</td>
</tr>
<tr>
<td>Maryland</td>
<td>250,637</td>
<td>2,825,000</td>
<td>5,911</td>
<td>2,102</td>
</tr>
<tr>
<td>Mass.</td>
<td>413,595</td>
<td>4,813,000</td>
<td>10,614</td>
<td>2,206</td>
</tr>
<tr>
<td>New York</td>
<td>1,440,454</td>
<td>15,826,000</td>
<td>38,784</td>
<td>2,395</td>
</tr>
<tr>
<td>Ohio</td>
<td>676,731</td>
<td>9,071,000</td>
<td>19,594</td>
<td>2,154</td>
</tr>
</tbody>
</table>

a The sum borrowed in the 1956-57 fiscal year in Louisiana was less than average. The average borrowing between 1947 and 1959 was $33,036,384.62.

b Estimated population excluding armed forces overseas.

c Millions of dollars.

d Actual dollar amount.

### TABLE XLIV

**LONG-TERM DEBT OUTSTANDING AT THE END OF FISCAL 1957, BY CHARACTER FOR ALL STATES AND SELECTED STATES**

(Thousands)

<table>
<thead>
<tr>
<th>State</th>
<th>Total Long-Term Debt Outstanding</th>
<th>Full Faith and Credit</th>
<th>Nonguaranteed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>General Obligations</td>
<td>Payable Initially from Specific Nontax Revenues</td>
</tr>
<tr>
<td>All 48 States</td>
<td>$13,521,970 $6,490,264 $4,584,800 $1,905,464 $7,031,706</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Louisiana</td>
<td>321,301 233,902 233,902</td>
<td>87,399</td>
<td></td>
</tr>
<tr>
<td>Conn.</td>
<td>388,671 138,671 114,638</td>
<td>24,033 250,000</td>
<td></td>
</tr>
<tr>
<td>Maryland</td>
<td>520,274 117,897 107,346</td>
<td>70,551 342,377</td>
<td></td>
</tr>
<tr>
<td>Mass.</td>
<td>1,013,681 737,521 596,657</td>
<td>140,864 276,160</td>
<td></td>
</tr>
<tr>
<td>New York</td>
<td>1,974,278 1,203,381 416,866</td>
<td>786,515 770,897</td>
<td></td>
</tr>
<tr>
<td>Ohio</td>
<td>708,307 172,259 172,259</td>
<td>536,048</td>
<td></td>
</tr>
</tbody>
</table>

---

This information does not seem to be entirely accurate. The Port of New Orleans debt, which is a long-term full faith and credit liability of the State, is payable partly from Port revenues.

### TABLE XLV

**LONG-TERM DEBT OUTSTANDING AT END OF FISCAL YEAR 1957, BY SCHEDULED MATURITY PERIODS FOR ALL STATES AND SELECTED STATES**

(thousands)

<table>
<thead>
<tr>
<th>State</th>
<th>Total 1957</th>
<th>1958</th>
<th>1959</th>
<th>1960</th>
</tr>
</thead>
<tbody>
<tr>
<td>All 48</td>
<td>$13,521,970</td>
<td>$221,453</td>
<td>$519,096</td>
<td>$513,037</td>
</tr>
<tr>
<td>Louisiana</td>
<td>321,301</td>
<td>2,847</td>
<td>18,523</td>
<td>18,132</td>
</tr>
<tr>
<td>Conn.</td>
<td>388,671</td>
<td>8,386</td>
<td>12,961</td>
<td>11,574</td>
</tr>
<tr>
<td>Maryland</td>
<td>520,274</td>
<td>14,076</td>
<td>21,643</td>
<td>22,529</td>
</tr>
<tr>
<td>Mass.</td>
<td>1,013,681</td>
<td>28,147</td>
<td>50,599</td>
<td>50,998</td>
</tr>
<tr>
<td>New York</td>
<td>1,974,278</td>
<td>25,862</td>
<td>53,176</td>
<td>46,663</td>
</tr>
<tr>
<td>Ohio</td>
<td>708,307</td>
<td>20,244</td>
<td>44,280</td>
<td>32,181</td>
</tr>
</tbody>
</table>

(continued)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All 48</td>
<td>$522,358</td>
<td>$520,459</td>
<td>$466,927</td>
<td>$508,795</td>
<td>$466,428</td>
</tr>
<tr>
<td>Louisiana</td>
<td>20,205</td>
<td>19,404</td>
<td>19,376</td>
<td>13,942</td>
<td>7,568</td>
</tr>
<tr>
<td>Conn.</td>
<td>11,621</td>
<td>6,996</td>
<td>7,266</td>
<td>7,166</td>
<td>8,061</td>
</tr>
<tr>
<td>Maryland</td>
<td>26,464</td>
<td>26,937</td>
<td>27,208</td>
<td>27,070</td>
<td>27,828</td>
</tr>
<tr>
<td>Mass.</td>
<td>50,535</td>
<td>50,240</td>
<td>49,760</td>
<td>45,718</td>
<td>44,199</td>
</tr>
<tr>
<td>New York</td>
<td>59,227</td>
<td>60,956</td>
<td>28,960</td>
<td>82,243</td>
<td>55,418</td>
</tr>
<tr>
<td>Ohio</td>
<td>33,080</td>
<td>33,514</td>
<td>26,233</td>
<td>18,218</td>
<td>14,594</td>
</tr>
</tbody>
</table>

(continued)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All 48</td>
<td>$465,137</td>
<td>$454,964</td>
<td>$402,209</td>
<td>$376,818</td>
<td>$7,577,616</td>
</tr>
<tr>
<td>Louisiana</td>
<td>7,568</td>
<td>6,778</td>
<td>6,423</td>
<td>7,041</td>
<td>146,859</td>
</tr>
<tr>
<td>Conn.</td>
<td>8,511</td>
<td>8,866</td>
<td>9,126</td>
<td>9,356</td>
<td>266,935</td>
</tr>
<tr>
<td>Maryland</td>
<td>28,627</td>
<td>25,708</td>
<td>27,934</td>
<td>25,314</td>
<td>192,928</td>
</tr>
<tr>
<td>Mass.</td>
<td>38,168</td>
<td>32,194</td>
<td>30,583</td>
<td>28,400</td>
<td>463,430</td>
</tr>
<tr>
<td>New York</td>
<td>55,307</td>
<td>59,749</td>
<td>35,677</td>
<td>35,057</td>
<td>1,342,520</td>
</tr>
<tr>
<td>Ohio</td>
<td>14,790</td>
<td>14,915</td>
<td>15,061</td>
<td>15,213</td>
<td>393,310</td>
</tr>
</tbody>
</table>

---

*a* This sum does not include all of Louisiana's indirect debt, but it has not been changed in order that the comparison with other states will be valid.

*b* The per cents of debt outstanding in each state for 1970 and thereafter are as follows: All states, 56.0; Louisiana, 45.8; Connecticut, 68.7; Maryland, 38.5; Massachusetts, 45.7; New York, 68.0; and, Ohio, 55.3.

A. BOOKS


B. ARTICLES AND PERIODICALS


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The Commercial and Financial Chronicle, CLXXXI, No. 54834 (Thursday, June 2, 1955), 6 ff.

Forbes, William A. "The Billion Dollar Debt of Massachusetts," 
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Hardwick, C. Cheever. "Developments in Municipal Finance," 


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Ragsdale, George T. "Revenue Bond Financing and Interest Rate Trends," The Commercial and Financial Chronicle, CLXXXVI, No. 5 (July 4, 1957), 3 ff.


C. PUBLICATIONS OF THE GOVERNMENT, LEARNED SOCIETIES, AND OTHER ORGANIZATIONS


Louisiana, Constitution(s). 1812, 1845, 1852, 1864, 1868, 1879, 1895, 1913, 1921, and amendments.


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"Statement of Amortization Requirements for All Outstanding Bonds of the Board of Commissioners of the Port of New Orleans." June, 1922. 30 pp.


D. THESSES


E. NEWSPAPERS

Times Democrat [New Orleans] and Daily Picayune, April 11, 1914.

F. OTHER SOURCES


Personal interview with William D. Ross, Dean, College of Business Administration, Louisiana State University, Baton Rouge, Louisiana, June 30, 1959.
VITA

Joseph Maurice Bonin was born on March 21, 1930, in LeRoy, Louisiana. He is the son of Mr. and Mrs. E. Whitney Bonin. He is married to the former Margie Ann Johnson and has two daughters.

His elementary education began at the LeRoy school and was completed at St. Stanislaus, Bay St. Louis, Mississippi. He was graduated from the secondary division of the same school in May of 1947.

In August of 1950, he received the degree of Bachelor of Science in the Department of History at Spring Hill College in Mobile, Alabama. Louisiana State University granted him the degree of Master of Arts in the Department of Economics in June, 1952.

From 1952 until 1955, he served in the United States Navy with the rank of Lieutenant (Junior Grade). Since September of 1955, he has been working toward a Doctor of Philosophy degree in the Department of Economics at Louisiana State University. During this same period, he has been an Earhart Fellow, an Instructor at Louisiana State University, and an Assistant Professor at the University of Arkansas. He is presently an Assistant Professor at Louisiana State University in New Orleans.
EXAMINATION AND THESIS REPORT

Candidate: Joseph M. Bonin

Major Field: Economics

Title of Thesis: "A Critical Analysis of the Debt Structure and Management in Louisiana"

Approved:

[Signatures]

Major Professor and Chairman

Dean of the Graduate School

EXAMINING COMMITTEE:

[Signatures]

Date of Examination:

January 8, 1960