Sovereign Default in the US

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Abstract

In the absence of a court-supervised mechanism to reduce the debt burden of a sovereign member of our Union, the resolution process can be quick but perhaps too indifferent to the health, safety and the welfare of the affected residents. In this paper, I use evidence from the Arkansas state archives to provide a description of the events surrounding the default of the state in 1933. I examine the evolution of the negotiations, the outcomes and the role for fiscal policy.

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I. Introduction

On January 4, 2016, Puerto Rico defaulted on approximately $174 million in debt payments. While municipalities (cities and counties) default from time to time, the default of a sovereign entity such as a state or territory is a different affair.[1] In the case of a municipal default, Chapter 9 of the bankruptcy code clearly defines the rights and obligations of the debtor and the creditors and guarantees that the basic governmental functions (such as, health, education, and safety) of the locality continue without interruption. When a sovereign entity defaults, however, there is no formal, court-supervised resolution mechanism. In fact, the only means to extract payment from the sovereign is a combination of formal negotiations and the informal ways in which the parties can pressure one another. When countries default, this process can take years.[2] Research shows that drawn-out resolutions can be detrimental to the well-being of the affected population because they reduce transparency, create uncertainty, and delay the recovery (IMF, 2013).

Given the economic consequences, it is natural to ask how events are likely to unfold when a state or territory of the United States finds itself in that quandary and a federal solution—such as a bailout or an extension of Chapter 9 to sovereigns who submit themselves voluntarily to federal court jurisdiction—is unavailable. The most relevant historical analog for such a case is the default of the state of Arkansas on its highway bonds in 1933. While Arkansas was not the first state to default (English, 1996; Sargent, 2012), it is unique as the first state to default after the ratification of the 14th Amendment (1868) and the passage of the Jurisdiction and Removal Act of 1875, which gave federal courts jurisdiction to hear all cases alleging a violation of the US Constitution, federal law, or treaty (a.k.a. federal question jurisdiction). Until then, suits against state officials were restricted to tort (trespassory) claims.[3]

In this paper, I use evidence from the Arkansas state archives to document the events that led to the default, and the negotiation process that took place in the absence of a bankruptcy mechanism. The paper has three main findings. First, informal contract-enforcement mechanisms exist and the creditors deployed them effectively and swiftly against the state. Debt renegotiations in 1932 took about three months and the 1933-34 negotiations took about seven months. Second, the state's sovereign rights under common law and the 11th Amendment did not provide any protection to its population. During the darkest period of the Great Depression, taxes were raised and basic government functions such as health and education were cut, but senior creditors were made practically whole. In other words, the process was swift and effective, but to the public it seemed unfair. As I will show later, the resulting mistrust of the financiers made the population vulnerable to conspiracy theories and led to poor economic choices in later years. Third, even though the default was technically cured in 1934, the state's reputation suffered for a long time and it was unable to return to credit markets without federal

[1] Puerto Rico is not a state, but the US Supreme Court has recognized Puerto Rico's common-law sovereign immunity as a Territory since 1913. The First Circuit Court of Appeals consistently recognized Puerto Rico's immunity under the 11th Amendment as well. However, the Supreme Court never granted certiorari (review) to challenges to the First Circuit's interpretation of the 11th Amendment in cases related to Puerto Rico. So that is still an open question according to some scholars (Chandler, 2011).
[2] Argentina recently reached an agreement with its creditors, 15 years after its default.
[3] The US Supreme Court continued to defend state sovereignty rigorously even after this expansion of powers (Louisiana v. Jumel, 107 U.S. 711 (1883)).

assistance. Thus, the default experience of Arkansas is in line with the reputational models (e.g. English, 1996) but it also highlights the informal sanctions that can be imposed to compel repayment.

In the remainder of this paper, I will describe the events preceding the default (Section II), which will clarify the types of debt outstanding and their relative seniority. In Section III, I will describe the first "economic" default in 1932, which was not a default on the state's direct obligations but a reneging of its promise to subsidize the debts of property owners. Section IV covers the actual default on the state's highway obligations in 1933. Section V reviews the tools deployed by the senior creditors. Section VI examines the aftermath of the default. Section VII concludes.

II. The Construction Boom

In 1903, there were only about 50 automobiles on the roads of Arkansas, but the need for hard-surfaced roads was already clear.[4] Following their cherished principle of "local self-government," Arkansas legislators enacted the Arnold Road Bill in 1907 to allow counties to set up road improvement districts at the request of the local land owners. The districts were responsible for funding the construction and maintenance of the new roads through local property taxes. State oversight did not exist until the passage of Act 302 in 1913. The Act established a State Highway Commission under the new State Highway Department to supervise road construction and maintenance. The legislation also charged the Commission with providing advice and assistance to road improvement districts, but it had limited rulemaking powers and a small annual budget to work with—initially $1.7 million in 2015 dollars.[5]

The creation of new improvement districts sped up after two legislative developments. In 1915, the Alexander Road Improvement Law enabled the districts to issue their own bonds---backed by the revenue stream of property taxes and secured by liens on local private property—to fund their activities,[6] and in 1916, Congress provided federal aid for state highway construction with the first federal highway funding legislation. Arkansas established hundreds of road districts between 1915 and 1923 and channeled the federal dollars to the districts by simply designating certain roads state highways but without imposing the necessary oversight on the districts. According to period sources (Sparlin, 1942), "There was little or no state supervision, so the commissioners of the road districts built the 'highways' as they chose. The quality and width of the pavement varied from district to district, and if roads in adjoining districts connected, it was purely coincidental. Roads were a fine thing, and no road commissioner's property could be without one, even if a bridge had to be built across a stream and back again."

Booming road construction activity nationwide drove the cost of labor, material, and equipment to new heights. Rather than slowing down their activity, the road districts relied on federal dollars and bond issuance to maintain the pace of new construction. Servicing the debt was not an issue while real estate and agricultural prices were rising as they did during World War I. However, the price declines during

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[4] Encyclopedia of Arkansas History and Culture, http://www.encyclopediaofarkansas.net, a project of the Butler Center for Arkansas Studies at the Central Arkansas Library System in Little Rock, Arkansas.

[5] Historical Review – Volume Two. Arkansas State Highway Commission and Arkansas State Highway and Transportation Department, April 2014

[6] Bond issuance by districts was permitted under Act 302, but the Attorney General of Arkansas blocked all issuance until the 1915 law clarified the conditions that a road improvement district had to meet to be eligible to issue bonds.

the 1920-1921 recession hurt the tax base of the road improvement districts. As the tax burden of existing bonds increased, new issuances dried up, and districts were stuck with half-built roads that could no longer be completed with the resources at hand. As the highways began reverting back to dirt roads, the state legislature passed the Harrelson Road Law in 1923 and took charge of state highway construction and maintenance. The transfer of responsibilities reduced the road improvement district tax burdens and shifted the cost of construction and maintenance onto the state. From that point forward, the state would do most of the borrowing and road work, and the users of the roads would pay gasoline taxes and license fees to retire that debt—at least in theory.

Still, the debt burden of the districts did not go away. In 1926, tax foreclosures on unpaid property taxes were rising. In the gubernatorial elections held that year, the Democratic candidate John Ellis Martineau ran on the platform of helping out the distressed property owners and won. Soon after he took office, the General Assembly passed the Martineau Road Act of 1927 and promised to make the payments on the $64 million ($878 million in 2015 dollars) debt of the road improvement districts as long as funds from state sources were available. Note that the state did *not* assume the bonds; it merely agreed to make the payments to prevent foreclosures on property. If the state stopped making the payments, the obligation would revert back to the property owners. Still, $64 million is a sizable figure given that the state's entire bonded debt until that time was $3.1 million. In the years leading to its default, the state borrowed an additional $91 million to fund its highway and bridge projects, pledging the highway revenues—gasoline taxes, license fees, and tolls—as security.

III. The First Default: The Failed Refunding

With the onset of the economic slowdown, 1931 gasoline tax and auto licensing revenues came in 10 percent below their 1930 levels, as people traveled less and let their licenses expire; income and severance taxes dropped 55 percent. The financial distress of the state was apparent in the news reports. The Highway Department announced in early January 1932 that it ran out of cash and was suspending payments to contractors for the road work already completed. It issued post-dated vouchers and blamed large debt payments over the previous months for the cash shortage.[7]

Distress of such magnitude inevitably triggered the scrutiny of road district and highway department finances, which revealed widespread corruption. The $1,290 labor and material cost of a 5-mile dirt road in Pulaski County was billed to the state at $11,250 plus interest. When asked to explain, the attorney for the road district said the expenses of the district were "none of the public's business."[8] It was also revealed that road districts were collecting principal and interest payments from the state treasurer on bonds registered but not issued, contractors were using lower-quality material than specified in their contracts but charging the state the price of the higher quality material, some road improvements were billed but not started, some roads reportedly built did not exist, multiple road districts sent bills to the state for the same road construction, district funds were invested in projects unrelated to road

[7] "State Unable to Pay Contractors," Arkansas Gazette, January 3, 1932.
[8] "Fails to Itemize District's Claims," Arkansas Gazette, February 7, 1932.

construction promoted by the contractors, and contractors that contributed to the governor's campaign fund were given jobs on a noncompetitive basis.[9]

Whatever role corruption may have played in creating Arkansas' debt problem, no investigation, probe, or grand jury inquiry could provide relief for the state's cash shortage as the Great Depression took hold. It became apparent by the end of January 1932 that the state would not have the resources to make the nearly \$11 million in principal and interest payments due on its bonds (including \$6.5 million due on the road district bonds) and nearly \$2 million owed to contractors in post-dated vouchers. Faced with the possibility that the road district obligations would revert back to the districts and exacerbate the foreclosures, the Highway Commission proposed that the state refund the road district bonds with state obligations. The proposal presented to the General Assembly on March 15, 1932 (details are in the Appendix Table A-1) is the state's initial offer. It called for the issuance of 5 percent coupon state revenue bonds to replace the \$47 million in remaining road district bonds (with coupons averaging 5¾ percent), payable from the highway revenues, junior to the state's own obligations and road maintenance costs, not backed by the full faith and credit of the state, and with maturities that exceeded the substituted district bond maturities by 10-to-21 years. The exchange was to take place on a voluntary basis to avoid the appearance of default.

Investors quickly rejected the initial offer and demanded higher coupons, a maximum maturity extension of 10 years, and seniority over maintenance expenses. During the three weeks of closed-door negotiations that followed, the only time the public heard back from the bondholders was when the state refused to yield to their demands and they threatened to start the tax foreclosures. Still, we can observe the direction of the negotiations in the alternative bills that are submitted to the General Assembly as the state slowly acquiesced to bondholder demands. In the final bill that became Act 15 of 1932, the revenue bond maturity was extended 10 years beyond the life of the exchanged district bond. The priority of the bonds was placed ahead of the state's road maintenance expenses, and the state promised it would never let the highway revenues drop below a level sufficient to pay the interest and principal on its highway and revenue bonds. In return, the coupon rate was lowered to 4½ percent.

Bondholders had two options at this point. The first option was to go through with the voluntary exchange and accept a lower coupon rate and a longer maturity, with the expectation that the state might be able to make the lower coupon payments. The second option was to refuse the exchange, reinstate the property taxes that had been on hold since 1927, and potentially foreclose on farms that had lost their value after the collapse in grain prices. Some banks and bond houses favored the first option, especially those holding bonds from the weaker road districts. But overall, the interest was subdued.

The lack of enthusiasm for the exchange can be explained by two aspects of the deal. The first is that having a state with constitutional immunity as the obligor rather than property owners who can be foreclosed on puts bondholders at a disadvantage. The second is that investors doubted that the state would be able to make the lower coupon payments. In July, Governor Parnell's bipartisan committee on

[9] "Board Hears of Campaign Gifts by Contractor," Arkansas Gazette, March 12, 1932.
"Suit Names All State Highway Commissioners," Arkansas Gazette, June 12, 1932.

highway finances announced that the state had sufficient funds to meet all its obligations for at least 10 years as long as revenues remained at their current levels and the state maintained its access to the bond market. Despite these assurances, there were indications that some investors already knew that the state was insolvent. Just a month after the commission's report, the Boatmen's National Company, a St. Louis bond house, publicly questioned the state's ability to pay the September coupons and reversed its support for the bond exchange, deciding it was safer to maintain the ability to tax the property owners and to foreclose on the property liens of the district bonds.[10]

The Boatmen's National Company was right. The state did not make the coupon payments due in September, blaming court delays and a lack of funding to hire the clerks to process the exchanged bonds. However, it was no secret that the state treasury had $100,000 in its vaults—much less than the $1,000,000 that would be needed to make the coupon and principal payments on the district bonds if all of them were tendered for exchange.[11] Given the clear lack of capacity to pay, it is perhaps no surprise that the bond exchange program was a failure. About half of the outstanding road district bonds were delivered to the state for exchange by the time the year came to a close. Because Act 15 mandated the payment of missed coupons on district bonds during the exchange, only half of the delivered district bonds were actually exchanged; the remaining bonds were returned to their owners.

This episode is not considered to be a default by the state because the state did not have the "obligation" to make the payments on road district bonds. Yet, it may be considered as an economic default given that the state did not have the resources to make the payments it intended to make.

IV. The Second Default: The Failed Legislative Cramdown

State revenues continued to fall in 1932. In October, the State Comptroller announced that revenues were at their lowest level since 1924-1925 despite a multitude of new taxes and higher rates on existing ones. Interest costs to total revenue reached 29.7 percent, the highest among all states (Table 1).[12] That ratio was expected to reach 50 percent in 1933.[13] On January 27, 1933, Governor Futrell advised the Roads and Highways Committee of the legislature that the state could not pay its bond obligations and if bondholders did not agree to a new refunding in negotiations, it would be the legislature's duty to "protect the homes of the people."[14] The remark was in response to a renewed threat by district bondholders to re-institute the property taxes and initiate foreclosures.

The negotiations were fruitless. In a personal letter to the governor, a bond-house representative warned him of the reputational consequences of a new refunding and why it was likely to fail.[15] He argued that the state did not take its obligations seriously and attempted to improve its position by

[10] "Return of Road Bonds Requested: Securities Company Advises Customers Arkansas Can't Pay Interest", Arkansas Gazette, August 20, 1932.
[11] "No Interest Till Bonds Refunded: Over $100,000 On Hand, With Over $1,000,000 Due September 1; Officials Unperturbed", Arkansas Gazette, August 21, 1932.
[12] The same ratio for Puerto Rico in FY 2013 is 13.2 percent (Commonwealth of Puerto Rico Basic Financial Statements and Required Supplementary Information, June 30, 2013).
[13] "General Revenue Deficit $1,000,000: Heavy Bond Debt Shown", Arkansas Gazette, December 4, 1932.
[14] The state considered imposing a moratorium on foreclosures but the legislative commission investigating this issue concluded that the open-ended moratorium necessitated by the dire conditions in Arkansas would be unconstitutional.
[15] Letter to Governor Futrell by Mr. De E Bradshaw, dated February 20, 1933. Arkansas History Commission, Governor Futrell Papers. Box 13 Folder 320.

legislative dicta at the expense of investors, which made them unwilling to give up their liens on property. In his response letter, the governor pushed aside the warning on reputation consequences and explained that the state was unable to raise new revenue or collect from the existing sources. He asked for sympathy but did not hide his contempt.[16] "You speak of the credit of the State – that our failure to pay will destroy its credit. That has already been done. … It is a poor time for creditors to use the male [*sic*] [*recte* mailed] fist. You can't imagine the desperate condition of the people. I know that you are not situated in a way to do so. You do not visualize it. It is a time for the creditors to show some sympathy. It is no time to bear down and take people's property, when they are helpless… I want to say this to you now, and don't forget it, it is no time to be driving the people to desperation. The ship of State, meaning the nation, is rocking, and you know it." He accused investors of greed and questioned why they kept lending to the state when he had warned them publicly four years earlier that the state was coming to the point of default. "Why the money lenders couldn't see this," he said, "I am unable to understand."

A week after this letter, on March 1, 1933, Arkansas stopped payments on all its highway bonds. The governor addressed a joint session of the state legislature on the same day and announced his plan:[17] All state-highway bonds, road-district bonds, refunding-revenue bonds under Act 15, toll-bridge bonds, short-term notes issued to contractors, and all other claims against the Highway Commission, totaling approximately $146 million, would be consolidated into one refunding issue with a 3 percent coupon and 25 years' maturity. The 3 percent-coupon par bond would impose a severe haircut on the creditors of the state as the 20-year, 4 percent-coupon New York State Highway Improvement Bonds were yielding 3.75 percent in this period.[18] Furthermore, highway bondholders' claims on highway revenues would become subordinate to road maintenance expenditures up to $2 million. Bondholders were not obligated to accept the deal, but no payment was appropriated for the old bonds. The General Assembly passed Act 167 (Ellis bill) in March as recommended by the governor without any consideration for creditor demands.

V. The Squeeze

Creditors did not like the offer. Road district bondholders refused to exchange their bonds because they did not want to lose their tax liens on property. State highway and toll-bridge bondholders (referred to as state bondholders from now on) did not want to accept parity with all the other creditors. The laws that authorized the issuance of state bonds had pledged the highway revenues to bondholders, and they would be giving up their first claim on those revenues by accepting parity with the district bondholders. Bondholder protection groups formed in major financial centers—the most powerful in New York City—soon after the passage of the Act, and lawyers threatened lawsuits.

The governor's public comments that spring disseminated the message that the state, as a sovereign entity, is protected from bondholder lawsuits. The argument is a correct but incomplete interpretation

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[16] Letter to Mr. De E Bradshaw by Governor Futrell, dated February 24, 1933. Arkansas History Commission, Governor Futrell Papers. Box 13 Folder 320.
[17] Journal of the Senate of Arkansas of the 49th General Assembly, pages 980-982.
[18] The Commercial and Financial Chronicle, March 24, 1933, https://fraser.stlouisfed.org/scribd/?item_id=517119&filepath=/docs/publications/cfc/cfc_19330325.pdf#scribd-open

of the state's rights under common law and the 11th Amendment to the US Constitution, which prohibits individuals, groups, or corporations from bringing a suit against a sovereign state without its consent. Creditors took advantage of the two holes in this immunity argument. First, while a state cannot be sued in federal court, a state official can be prevented from taking an illegal action. That is, the federal court cannot reach into a state's vaults and collect cash to satisfy creditors. But, if the state is handling the default in a way that violates the rights of the creditors under the US Constitution, the court can issue an injunction to stop a state official from committing an unconstitutional act.[19] Second, the 11th Amendment's restrictions on the jurisdiction of federal courts apply to suits brought by individuals but not by other states of the Union.

Even before Futrell signed the Ellis bill, the Commonwealth of Pennsylvania, acting on behalf of its teachers' retirement fund, and Nevada and Connecticut, reportedly acting on behalf of large insurance companies in Hartford, had announced their intention to sue Arkansas. In late August, the General Assembly passed legislation to continue the coupon payments to other states to prevent them from obtaining judgment against Arkansas. This action may have made the situation worse since it provided preferential treatment to a particular type of creditor at the expense of others with same seniority.

In September, road district bondholders filed suit in state courts to reinstate the property taxes. State bondholders sued the state Treasurer in federal court to prevent him from making the coupon payments authorized by the legislature in late August.[20] The Ellis bill, they argued, impaired the priority of their claim, and violated the promise of an earlier law to never let highway revenues drop below a level commensurate with the state's debt payments. Thus, the bill violated the contract clause of the US Constitution and the 14th Amendment, which provides that no state shall deprive any person of life, liberty, or property without due process of law, nor deny to any person within its jurisdiction the equal protection of the laws. The federal court agreed and granted state bondholders a temporary injunction against the use of highway revenues.

The Commonwealth of Pennsylvania filed its suit in the US Supreme Court in November and declared that it would have declined the special coupon payment authorized by the Arkansas legislature in August even if the state's funds were not tied up in federal court.[21] It was more interested in testing the constitutionality of the Ellis bill and restoring the security of the highway bonds in its portfolio.[22] Namely, Pennsylvania argued that Arkansas' reduction of its gasoline tax and license fees in response to the declining economy violated its promises in earlier legislation that the taxes and fees would be maintained at a level consistent with full payment of the highway bonds. It asked the Supreme Court to compel Arkansas to raise its taxes again.

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[19] This is of course an extreme oversimplification of the issue. See Kian (2009) for an excellent review of the nuances of common-law and 11th amendment immunity.

[20] The presiding judge was none other than former-governor John Ellis Martineau, who was appointed to the federal bench by President Coolidge in 1928.

[21] The Supreme Court has original jurisdiction when states sue one another.

[22] "Pennsylvania to Press Bond Suit: Interest Not Important," Arkansas Gazette, October 27, 1933. Nevada and Connecticut did not sue. Connecticut's case was on shaky ground because the Supreme Court does not allow states to sue other states on behalf of citizens just to get around the 11th Amendment (New Hampshire v. Louisiana, 108 U.S. 76 (1883)).

It is doubtful Pennsylvania's claim would ever have been decided in its favor. Neither is it clear that some of the complaints of state bondholders would survive Supreme Court scrutiny. For example, in Rector of Christ Church v. County of Philadelphia, 65 U.S. 300 (1860) and multiple other decisions, the Supreme Court recognized that when a sovereign promises a future action (such as boosting highway revenues as needed), it is merely conferring a privilege and not establishing a contract (unless it explicitly declares so in the law). A privilege can be revoked at the pleasure of the sovereign.[23] Yet, as the governor acknowledged in a newspaper story, even if the cases did not have merit, they would still tie up the state's highway funds for an extended period while all the appeals ran their course.

The final blow to the state's resistance to creditor demands came in December when the federal Public Works Administration (PWA) suspended all loans to the state until its bond-refunding issues were resolved. One loan held up by the PWA was for the maintenance of the state hospital and another was for the University of Arkansas. The loans were meant to be retired from tax sources other than highway revenues and therefore not affected by the federal court injunction. On the day of the PWA suspension, Governor Futrell called for an immediate resumption of negotiations with the New York bondholders committee. He also expressed his frustration with PWA's action in a letter to US Senator Caraway of Arkansas: "Funds which, by all the rules of fairness should come to this state are being held up in the Finance Division by Director Mansfield. I am told that Mr. Mansfield is a bond broker, and is or has been connected with the Prudential Life Insurance Company."[24] In other words, he attributed the PWA action to the political clout of the New York bondholders. His attribution may have merit because a high-level representative of the state in the negotiations told the legislature and the newspapers that "assurance has been given that the bondholders' [federal] suit and the suit filed against the State by Pennsylvania … would not be permitted to interfere with a new refunding program if one is worked out that would be satisfactory to bondholders."[25]

VI. Negotiations and Resolution

Negotiations started with the arrival of bank and insurance company representatives to Little Rock on December 4, 1933. Let's consider the bargaining power of major creditors before we list their demands.

i. *State Bondholders:* Mostly a collection of New England and Mid-Atlantic banks and insurance companies represented by a New York group. They were owed about $95 million in face value and interest in arrears. These are the direct obligations of the state.
    a. *Contractual Security:* Debt secured by a pledge of state-highway revenues.[26]
    b. *Informal Clout:* Based on their assurance to end all the federal lawsuits and the governor's allegations, it is likely that they were behind the Pennsylvania lawsuit and the PWA action.

[23] Carter v. Greenhow, 114 U.S. 317, 322 (1885) is another example to how difficult it is for a federal court to pierce state immunity to enforce a contract.
[24] "Much at Stake in Bond Conference," Arkansas Gazette, December 3, 1933.
[25] "Bond Negotiations Will Be Resumed," Arkansas Gazette, December 2, 1933.
[26] State bondholders' seniority was confirmed in Hubbell v. Leonard, 6 F. Supp. 145 (E.D. Ark. 1934) on January 5, 1934, which declared the Ellis bill unconstitutional and made the injunction permanent.

c. *Weakness:* Restricted ability to enforce their contractual rights in the court system due to constitutional barriers.

ii. *District Bondholders:* A collection of Midwestern and Southern banks and insurance companies represented primarily by a St. Louis group. They were owed about $50 million in face value and interest in arrears. These are *not* direct obligations of the state but of the property owners in road districts.

a. *Contractual Security:* Secured by property taxes in the road districts and a lien on the underlying private property. Payment could be enforced through foreclosure in state courts.

b. *Informal Clout:* While the state was not legally on the hook for these obligations, it was sensitive to the fate of the road-district property owners and responsive to the bondholders' threats of foreclosure.

c. *Weakness:* The threat to foreclose on farmland, when commodity prices were so low that the harvest was left to rot in the fields, was not a credible one.

Note that it is the state, not district, bondholders who cornered the state financially by the federal injunction and the PWA action. That fact makes it clear that the former had the upper hand. Also, with its highway revenues and PWA aid frozen, the state was like an impatient player in a simple bargaining game. Therefore, we would expect the most gains from the refunding to accumulate to the state bondholders.

Road-district bondholders submitted their recommendations to the governor's subcommittee on refunding—which practically represented the interests of state bondholders—as soon as the negotiations began (details in the Appendix Table A-2). They cut their coupon rates to 3 percent, but they also demanded the same coupon for the state bondholders. They also requested compensation for missed district-bond coupons in the form of new 5-year 3%-coupon bonds. There is little indication in their demands that they saw themselves as junior claimants, which may just have been pre-negotiation posturing.

The final recommendations that came out of the governor's subcommittee on refunding on December 12 show that the threat to foreclose gave the district bondholders little power in negotiations with the state bondholders. The subcommittee proposed to give the district bondholders the 3 percent coupon that they had requested but for state bondholders, it proposed a bond that paid the *same* coupon as the existing state bonds but not all in cash. In the first three years, 3½ percent would be paid as a cash coupon, 4 percent would be paid in the next two years, and the contract rate would be paid fully in cash any time after that. The difference between the contracted coupon rate and the cash coupon was to be made up with additional 3½ percent coupon bonds (priced at par) with maturities of at least 15 years. Lowest-rated corporate bonds traded at 7.75 percent in December 1933.[27] The after-tax yield at 63 percent marginal tax rate would be 3.57 percent. Thus, state bondholders are not taking much of a loss

[27] NBER Macrohistory database Chapter XIII. Interest Rates: m13036 U.S. Yields On Corporate Bonds, Lowest Rating

here. If one considers that unlike a lowest-rated corporation, a state in default still has an infinite life and maintains its taxing power, the deal may actually be a favorable one.[28]

The subcommittee recognized the need to maintain the roads and set aside some money for that purpose, but it also imposed much stricter restrictions on state aid and subsidies to localities and industries. For example, the state was prohibited from building new roads until all the bonds were paid off, which could technically be as late as 1977. It proposed a sinking fund to retire the outstanding debt that was more generous to the district bondholders than they had requested (to release the lien on properties as quickly as possible), but it refused to compensate them for missed coupons. The district bondholders agreed to this inferior plan before it is was sent to the legislature without much objection. Thus, they were fully aware of their weak position in the negotiations.

The legislative committee deviated from the submitted plan by increasing the gas tax half a cent more than requested and channeling the new resources to county, agricultural, commercial, and industrial subsidies. This action led to a revolt among the district bondholders. If the state had untapped power to tax, they argued, that resource should be channeled to those who had suffered the greatest loss. After a few days of negotiations, they received 15-year zero-coupon bonds (priced at par) in compensation for missed interest, and a shorter maturity on their refunding bonds.

The first bill introduced in the General Assembly on December 30, 1933, reflects every bondholder demand (details in Appendix Table A-3). In the 26 days of debates that followed, the only source of contention among legislators was how to distribute the pain among the Arkansas residents. The terms of the refunding bonds were never challenged (except in the form of futile amendments to delay final action). After the introduction of an alternative bill on January 10, which attempted to assist municipal highway continuation districts with higher gas taxes but reduced county aid, the House was inundated with amendments to rescue one representative's constituency at the expense of another's. Among the most hotly debated topics were which type of vehicle should bear the brunt of license-fee hikes (down to the specific tonnage of trucks and busses to be affected), whether the state should honor the debt certificates it had issued to municipal highway continuation districts[29] for its share of the maintenance and construction costs, whether contractors should be paid in cash or bonds, how much to cut the gasoline subsidies to municipalities, commercial, industrial, and agricultural interests, how to keep the state hospital open, and whether it was fair to tax food, clothing, and medicine so that bond district property holders did not get foreclosed on.

The final bill introduced on January 26 differs from the original one in the state's assumption of the maintenance costs of highway continuations and in the refunding of the debt certificates given to municipal highway continuation districts in lieu of cash aid. In essence, the state bondholders gave very little ground. After all, it was to their benefit if all roads and highways were maintained by a single entity that could be monitored. The district bondholders did not give up their lien on property. Their bonds were to be held in escrow and returned back to them if the state defaulted again. Even though the

[28] According to Moody's, the 10-year cumulative default rate of Caa-C rated municipals in the 1970-2014 period was 16.88 percent. The same rate is 63.77 percent for Caa-C rated corporates. Moody's Investor Service's Special Comment: US Municipal Bond Defaults and Recoveries, 1970–2014.

[29] These are districts that maintain roads that connect to state highways.

governor insisted on the lien issue, the state got nothing it asked for. He signed the bill into law, which became Act 11 of 1934, and after district bondholders formally approved the deal, a federal judge dismissed the injunction, and Pennsylvania dropped its action in the Supreme Court.

VI. The Aftermath

Act 11 of 1934 technically cured the default of Arkansas on its $155 million debt. Yet, the state suffered under the stigma for many years to come. Arkansas bonds remained "speculative grade" until 1939, which prevented banks in the nation from investing in them. Even Arkansas' own banks were not allowed to invest in the state's bonds until 1937. Large financial centers remained closed to the state for a decade or more. State banks and trusts in New York and Pennsylvania could not invest in Arkansas bonds until 1944, and not until 1954 in Massachusetts and Connecticut.[30]

Nevertheless, Arkansas' economy does not seem to have done worse than neighboring states despite the default. Table 2 shows the change between 1930 and 1940 in population and incomes in Arkansas and in states similar to Arkansas in 1930 in terms of personal incomes, the prevalence of the agricultural economy, and debt burden (South Carolina, Tennessee). Among the comparable states, Arkansas remained one of the poorest. Still, personal incomes in Arkansas grew faster than all the other states except South Carolina, the second most heavily indebted state in 1932, and Mississippi. Population growth was relatively slow but still better than the Dust Bowl states of Kansas and Oklahoma. Corporate incomes, conditional on income being positive, grew 186 percent from 1930 to 1940, the third-highest growth rate among the listed states after Alabama and South Carolina. Corporate losses declined at a rapid rate too. Thus, Arkansas remained poor, but the income gap with other states closed to some extent.

The recovery of the state's reputation in the financial markets took longer than the recovery of its economy. When an opportunity arose in June 1939 to refund the Act 11 bonds—with coupons around 4.1 percent on average—Arkansas was asked to pay 3¾, nearly 50 basis points more than Louisiana or Mississippi and 125 basis points more than Tennessee at comparable maturities.[31]

There are many reasons for this yield premium. Even though the state had reduced its interest expense-to-revenue ratio by almost half to below 16 percent in 1939, this ratio was still well above that of Louisiana (6.7 percent), Mississippi (7 percent), and Tennessee (7.6 percent).[32] The state did not help its reputation by attempting to violate the sinking-fund clause of the 1934 Act by providing preferential treatment to class A bondholders in 1935, and the revenue-pledge clause by channeling some revenue to road construction in 1938. Therefore, there is surely a credit risk component to the spread.

However, the liquidity premium must be non-negligible too. Because all highway revenues were pledged to all classes of the Act 11 bonds, the new debt would not receive a senior claim on those revenues unless all the 1934 bonds were refunded all at once. In 1939, that meant that Arkansas would have to

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[30] "Refunding Arkansas Bonds From the Viewpoint of the Underwriters," speech by John S. Linen, vice president, Chase National Bank of the City of New York, delivered to the Arkansas Bankers Association Seminar, Fayetteville, Arkansas, August 10, 1939.

[31] Anonymous memo on financial market conditions to Governor Bailey on June 13, 1939. Arkansas History Commission, Governor Bailey Papers. Box 1 Folder 28. The information is also available in *The Commercial & Financial Chronicle*, vol. 149, no. 3863, July 8, 1939, p. 282.

[32] Financial Statistics of States: 1939, Bureau of the Census, various issues.

borrow $140 million in a single issuance. At a time when single-issue sizes in the tens of millions of dollars were a rarity among states comparable to Arkansas, a state with a restricted investor pool would have had trouble raising $140 million in a single issue. Indeed, under the proposal, Arkansas would have needed government assistance in addition to paying higher coupons than other states. The Reconstruction Finance Corporation (RFC)—an agency created by Congress under President Hoover to inject liquidity and capital into the banking system as well as to make direct loans—would buy half the issue and keep it off the market to support prices.[33] Thus, the 50 bps premium Arkansas was asked to pay over Louisiana highway bonds, as noted earlier, does not seem excessive given that Louisiana was raising only $1 million and did not have a tarnished reputation. Furthermore, only two months after the 3-¾ percent-coupon demanded from Arkansas in June 1939, Mississippi was asked to pay 4 percent to raise $5 million in highway bonds.[34,35] Thus, Arkansas's borrowing costs don't seem excessive.

Yet, Governor Bailey's 1939 attempt to refund the highway bonds failed, not because the 3-¾ percent coupon was economically unjustifiable, but mostly due to the public mistrust of the financiers. The opponents of the refunding took advantage of this mistrust and fed the public misinformation about the proposed deal. One argument against was that the suggested 3¾ coupon was excessive given that the city of Little Rock (Arkansas) was able to issue bonds at 1.03 percent, ignoring the fact that the maturity of the state bonds was many decades longer than that of the city's. Others argued that the state should dictate the bond features (coupon, callability, etc.) in enabling legislation rather than negotiating it with creditors, perhaps forgetting the failed cramdown (Ellis bill) in 1933. The Arkansas Taxpayers Association vowed to protect "Arkansas' honest, overtaxed taxpayers from the dishonest, conniving carpetbaggers of Missouri and New York, and the self-serving banks and industrialists of the state." As this discussion was taking place in public, Governor Bailey's political rival and the next governor, Homer Martin Adkins, received a memo that refuted all criticisms by explaining the economic reasons behind Bailey's proposal and concluding that "so far no objection has been offered or question raised that was not fully answered to the satisfaction of any reasonable person not blinded by political prejudices, fears or ambitions." The Arkansas Taxpayers Association successfully circulated a petition to refer the governor's refunding act to a vote of the people, who defeated it with 76 percent of the vote in November 1940.[36]

I do not have hard evidence to prove the origin and purpose of the negative attacks on the refunding deal.[37] One could plausibly speculate that misinformation was spread by the existing bondholders, who did not want to give up their bonds at par (call price set in the 1934 Act) after interest rates declined in the 1930s.

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[33] "Refunding Plan Wins Approval of Businessmen," Arkansas Gazette, July 21, 1939.

[34] *The Commercial & Financial Chronicle*, vol. 149, no. 3872, September 9, 1939, p. 1647.

[35] RFC stepped in and committed to buy the Mississippi bonds in their entirety at par with a 3-½ percent coupon (*The Commercial & Financial Chronicle*, vol. 149, no. 3875, September 30, 1939, p. 2118). The RFC also agreed to purchase all the remaining authorized-but-not-issued Mississippi highway bonds ($16.3 million) priced to yield 4 percent with a 3-½ percent coupon unless a better yield is received from the market (*The Commercial & Financial Chronicle*, vol. 149, no. 3876, October 7, 1939, p. 2263). A $5 million slice was sold in the market in November to yield 2.84 percent after the RFC commitment (*The Commercial & Financial Chronicle*, vol. 149, no. 3883, November 25, 1939, p. 3438).

[36] https://ballotpedia.org/Arkansas_General_Refunding_Bonds,_Referred_Act_No._4_(1940)

[37] Attacks on the governor are documented in anonymous articles among his personal papers as well as the papers of his intraparty rival Homer Martin Adkins. I cannot identify the source or purpose of the documents among Governor Adkins's papers. Arkansas History Commission, Governor Bailey Papers. Box 1 Folder 28; Governor Adkins Papers. Box 5 Folder 138 (Office Communications) and Box 7 Folder 208 (Political Correspondence).

Three months after the November defeat, this time under the new Governor Adkins, Arkansas made a new attempt to refund its bonds. The underwriting syndicate agreed to a lower coupon rate of 3½ percent and to buy $90 million of the issue.[38] The governor sought the help of Jesse Jones, who was both the chairman of the RFC and the secretary of commerce. Instead of sharing the risk with the financial institutions, the agency purchased the entire issue at par at an average coupon of 3.2 percent.

Not everybody was content with this deal. The Commercial & Financial Chronicle fumed that "It was a relatively simple matter for the RFC administration to impose his own ideas as to the value to be placed on the bonds. Backed by the huge resources of the Government, he could well afford to ignore basic market conditions. Then, too, unlike private banking interests, he is in the fortunate position being able to keep investments 'on ice' ad infinitum, and not being required to concern himself about such mundane, daily matters as the payment of space for office quarters, employees' salaries, general operating expenses, and taxes."[39] A Chicago Tribune article noted: "Jesse Jones has apparently limitless funds at his disposal and can undercut private bankers whenever he feels like it. Other states will not be slow to take advantage of the precedent he has set in the case of Arkansas. If he is willing to refinance the debts of Arkansas at 1/4 of 1 per cent under the open market rate, he ought to be willing to do as much for Illinois, Indiana, Michigan, Iowa, and all of the rest of the states. Even Secretary Morgenthau does not need to worry any longer about where he is going to sell the 20 billions in bonds he will have to put out in the next two years. Maybe he can just sell them to Jesse Jones of the RFC."[40] The RFC did not bail out any other state.

Nevertheless, it is worthwhile to consider whether RFC was unjustified in its intervention. In the absence of unexpected changes in municipal market conditions post-purchase, if the agency kept "investments 'on ice' ad infinitum" or sold the bonds at a loss, one might conclude that it overpaid for them at the time of purchase. However, the evidence shows that this certainly was not the case. First, there is little indication of an unexpected change in the municipal market conditions: yields on AAA-rated municipal bonds continued their long-term decline until the attack on Pearl Harbor (Figure 1). Second, RFC was able to unload two-thirds of the $136 million issue *within three weeks* and 90 percent within nine months to various banks and bond houses at significant premiums. Overall, the agency made a $3.9 million profit, which corresponds to an 8.6 percent annualized daily return on investment or an approximately 7 percent spread over AAA-rated municipal bonds.[41] Jones claimed that these buyers made "their customary profits" when they resold the bonds to the public (Jones and Angly, 1951). Thus,

[38] *The Commercial & Financial Chronicle*, vol. 152, no. 3946, February 8, 1941, p. 1013. By that time the total obligation had dropped to $136 billion and the average coupon was 4.4 percent

[39] *The Commercial & Financial Chronicle*, vol. 152, no. 3950, March 8, 1941, p. 1620.

[40] "The Arkansas Loan," Chicago Tribune, March 7, 1941.

[41] According to market records, Halsey, Stuart & Co. paid 1½ percent premium for a $15 million piece and Bank of America National Trust and Savings Association paid a 1 percent premium for $10 million face value *the day after* the bonds were purchased by the RFC. Three weeks later, an underwriting group led by Chase National Bank paid a 1½ percent premium for a $35 million piece (*The Commercial & Financial Chronicle*, vol. 152, no. 3952, March 22, 1941, p. 1953). A week after that purchase, Halsey, Stuart & Co. came back to RFC to purchase another $28 million at a 2½ percent premium (*The Commercial & Financial Chronicle*, vol. 152, no. 3954, April 5, 1941, p. 2271). In November of the same year, Halsey, Stuart & Co. formed a 166-member syndicate to purchase $30 million at a 6 percent premium (*The Commercial & Financial Chronicle*, vol. 154, no. 4004, November 8, 1941, p. 945). The next sale of $4.14 million took place in February 1943 at a 3 percent premium (*The Commercial & Financial Chronicle*, vol. 157, no. 4153, February 22, 1943, p. 681). The final lot $9.768 million was sold in May 1943 at a 4 percent premium (*The Commercial & Financial Chronicle*, vol. 157, no. 4181, May 31, 1943, p. 1993).

it is plausible that the small number of bond houses specializing in distressed debt were attempting to extract oligopsonistic rents from Arkansas.

VII. Concluding Remarks

The last time a sovereign member of the United States defaulted on its debt in 1933, state bondholders—the senior secured creditors—were made practically whole. They received a portion of their coupons in cash in the first five years, and for the difference, they received new coupon-paying bonds. District bondholders—the junior secured creditors—lost a sizeable chunk. They exchanged their bonds for state bonds of the same face value but with much lower coupons. The payment of their coupons in arrears was postponed for 15 years (in the form of zero-coupon bonds). Unsecured creditors lost the most. Contractors received only half of their payment in cash, with the other half paid after 25 years with interest. Municipal highway continuation districts received no cash; so creditors of those districts got no cash compensation either. In other words, some of the losses were pushed down to the subdivisions of the state and to local businesses.

The people of Arkansas also suffered greatly. In 1934, the state agreed to collect 6.5¢ per gallon in gasoline taxes ($1.15 in 2016 dollars; today, Arkansans pay 21.5¢ per gallon) and gave up its control over the use of its highway-related revenues; every penny had to go into the sinking fund to retire the debt early. The schools were kept open only with the assistance of grants that constituted 19 percent of the state's total revenue that year. In 1939, 43 percent of the state's own revenues were still dedicated solely to debt payment and road maintenance.[42]

The default experience of Arkansas shows that formal and informal contract enforcement mechanisms exist and they were used effectively by the creditors. Namely, the senior bonds accumulated in the hands of the investors with most clout to extract payment from the state, as economic principles would dictate; these are the investors who would have the highest valuations for the bonds. In situations like the freezing of the Public Works Administration loans for health and education, the methods may be unseemly but PWA reversed the suspension soon after a deal was reached. The important lesson is that in the absence of a dedicated judicial process for preserving the governmental functions of a state in debt renegotiations, sovereignty offers meager protection for the interests of the general public. Under a court-supervised bankruptcy, the sovereign has the upper hand. For example, it cannot be forced to devote all resources to the repayment of creditors and be prevented from serving the government functions related to the health, safety, and wealth of its residents (Lawall and Miller, 2012). Thus, the process puts a limit on how much cash can be extracted from the debtor.

Arkansas' experience also shows the importance of a good reputation in credit markets, much like the experience of corporate and individual debtors. Reputational concerns may hurt a debtor many years later, long after the offending executives or legislators have left office. Therefore, it is in a sovereign's best interest to faithfully follow the terms of a refunding/restructuring agreement even in changing political or economic environments.

[42] This is the share of motor vehicle fees and gasoline taxes in total taxes and assessments. Bureau of the Census Financial Statistics of States: 1939, Volume 1, Number 34, September 23, 1941.

Finally, fiscal policy may have some limited role to play in the recovery process, but the response must be designed carefully. Recent research suggests that official sector support for delinquent sovereigns creates moral hazard, politicizes debt renegotiations, delays reforms, and makes future policy adjustments more costly when they become inevitable (Brooke et al., 2013). The dilemma is that it is also a government's primary responsibility to protect the safety, health, and wealth of its people even if taxpayers must take credit risk in the process. The fact that banks were willing to pay significant premiums on the 1941 bonds a day after their issuance but did not budge during the February negotiations suggests a lack of competition among the few lenders who specialize in distressed borrowers. How to balance market discipline and the welfare of the people is an important policy question.

Arkansas's experience may be one (but not necessarily the only) way out of this dilemma. Act 11 of 1934 was a market-driven resolution to the state's insolvency. The RFC was not involved, and private creditors bore the risks, took the losses, and demanded the necessary reforms. When it was time for the state to tap the public debt markets again, there was a role for the RFC to step in to absorb the *excess* supply (clear the market) at an affordable coupon rate for Arkansas.[43] It was perhaps a lucky coincidence that in 1933, the RFC did not yet have the authority or his chairman the clout to step into the resolution process too early and delay the painful but necessary reforms in the management of the highway revenues.

Bibliography

Brooke, Martin, Rhys Mendes, Alex Pienkowski, and Eric Santor. 2013. Sovereign Default and State-Contingent Debt. *Bank of England Financial Stability Paper No. 27*. November 2013.

Chandler, Adam D. 2011. Puerto Rico's Eleventh Amendment Status Anxiety. *Yale Law Journal* 120: 2183-2197.

English, William B. 1996. Understanding the Costs of Sovereign Default: American State Debts in the 1840's. *American Economic Review* 86(1): 259-275.

International Monetary Fund. 2013. Sovereign debt restructuring—recent developments and implications for the fund's legal and policy frameworks. available at www.imf.org/external/np/pp/eng/2013/042613.pdf

Jones, Jesse H., and Edward Angly. 1951. Fifty Billion Dollars: My Thirteen Years With The RFC (1932-1945). The Macmillan Company. New York.

Kian, Sina. 2009. Pleading Sovereign Immunity: The Doctrinal Underpinnings of Hans v. Louisiana and Ex Parte Young. *Stanford Law Review* 61: 1233-1280.

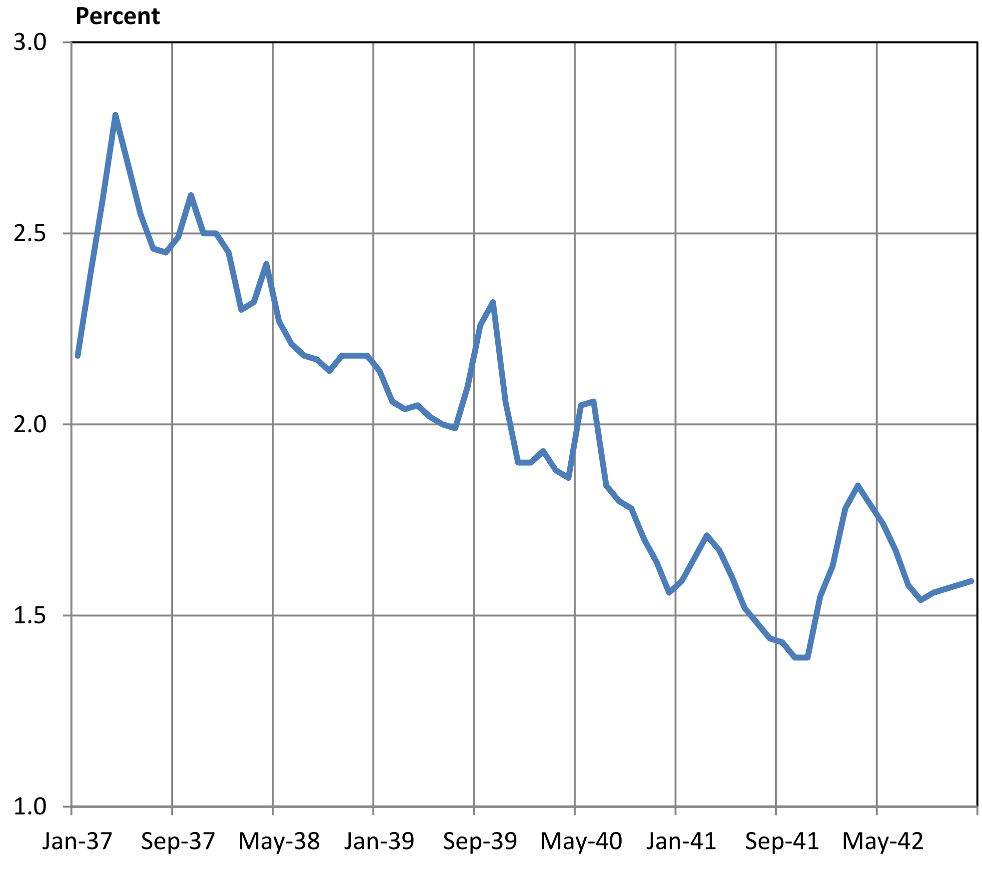
[43] In the end, RFC's limited commitment morphed into a full-scale bailout but this escalation has more to do with Jesse Jones' political power and priorities than with economic necessity. His success at the helm of the RFC earned him significant clout (his epithet was "the fourth branch of government"). He shocked a senate committee shortly before the Arkansas bailout with the audacious statement: "we are at war now and when you are at war, you throw money away."

Lawall, Francis J., and J. Gregg Miller. 2012. Debt Adjustments for Municipalities Under Chapter 9 of the Bankruptcy Code. *Collier Monograph Series*.

Sargent, Thomas J. 2012. Nobel Lecture: United States Then, Europe Now. *Journal of Political Economy*, 120(1): 1-40.

Sparlin, Estal E. 1942. The Special Assessment District in Arkansas. *The Southwestern Social Science Quarterly*, 23(3): 226-235.

Figure 1: Yield on AAA-Rated Municipal Bonds



Source: NBER Macrohistory Database Series 13043

Table 1: States' Debt Burden in 1932

The Table shows the ratio of interest expense to total revenues as a flow measure and the ratio of net debt to taxable property valuations as a stock measure of debt. All statistics belong to state governments and exclude political subdivisions. Net debt is gross debt minus sinking fund assets. All numbers are percentages.

Source: Bureau of the Census Financial Statistics of State and Local Governments: 1932

State	Interest Expense to Total Revenue	Net Debt to Taxable Property Value
Alabama	14.0	6.8
Arizona	0.7	0.5
Arkansas	29.7	29.6
California	5.0	1.8
Colorado	1.6	0.5
Connecticut	1.6	0.0
Delaware	1.3	0.7
Florida	0.0	0.1
Georgia	2.9	1.0
Idaho	3.1	1.6
Illinois	9.3	3.0
Indiana	0.2	0.1
Iowa	1.6	1.1
Kansas	4.5	0.6
Kentucky	2.2	0.5
Louisiana	7.8	5.0
Maine	4.8	3.6
Maryland	4.3	1.1
Massachusetts	1.6	0.8
Michigan	4.4	0.7
Minnesota	6.7	1.7
Mississippi	7.9	5.2
Missouri	8.0	2.2
Montana	2.8	2.3
Nebraska	0.0	0.0
Nevada	1.0	0.7
New Hampshire	2.4	1.0
New Jersey	4.2	0.9
New Mexico	5.3	3.4
New York	6.9	1.6
North Carolina	18.3	5.8
North Dakota	13.9	0.6
Ohio	0.6	0.1
Oklahoma	0.8	0.7
Oregon	9.3	3.1
Pennsylvania	1.7	0.6
Rhode Island	6.4	1.2
South Carolina	18.8	19.1
South Dakota	15.4	1.0
Tennessee	18.0	5.7
Texas	0.0	0.2
Utah	3.4	0.9
Vermont	4.0	2.2
Virginia	2.2	1.1
Washington	1.3	0.7
West Virginia	14.9	4.6
Wisconsin	0.1	0.0
Wyoming	1.1	1.3

Table 2: Income Taxes 1930-1940.

The Table shows the population and income tax filings in select states that are similar to Arkansas in 1930 in terms of region, income or debt burden. Taxable income is net income reported on tax filings that show a positive net income. All dollar figures are nominal. *Source:* Statistics of Income 1930, Statistics of Income 1940. Internal Revenue Service.

A. Individual Income Tax Filings

	1930			1940				
	Population	% Population Filing Returns	Taxable Income ($)	Population	% Population Filing Returns	Taxable Income ($)	% Population Growth	% Income Growth
Alabama	2,646,248	0.85	93,900,510	2,833,000	3.56	248,275,665	7.06	164.40
Arkansas	1,854,482	0.67	43,282,986	1,949,000	2.58	124,786,767	5.10	188.30
Kansas	1,880,999	1.74	127,629,176	1,801,000	7.32	266,463,951	-4.25	108.78
Louisiana	2,101,593	1.57	138,836,043	2,364,000	5.48	324,675,957	12.49	133.86
Mississippi	2,009,821	0.60	40,556,389	2,184,000	2.23	117,402,660	8.67	189.48
Oklahoma	2,396,040	1.36	157,410,695	2,336,000	4.89	278,140,347	-2.51	76.70
South Carolina	1,738,765	0.70	42,714,132	1,900,000	3.38	142,394,934	9.27	233.37
Tennessee	2,616,556	1.25	140,222,521	2,916,000	4.78	357,764,786	11.44	155.14
West Virginia	1,729,205	1.57	110,726,146	1,902,000	6.61	303,720,764	9.99	174.30

B. Corporate Income Tax Filings

	1930			1940				
	Taxable Income ($)	Losses ($)	Total	Taxable Income ($)	Loss ($)	Total	Taxable Income Growth (%)	Change in Losses (%)
Alabama	12,393,874	25,019,857	-12,625,983	43,682,000	6,386,000	37,296,000	252	-74
Arkansas	6,755,416	19,093,901	-12,338,485	19,309,000	2,933,000	16,376,000	186	-85
Kansas	74,320,733	29,351,949	44,968,784	39,291,000	9,703,000	29,588,000	-47	-67
Louisiana	33,217,314	51,988,388	-18,771,074	63,400,000	12,927,000	50,473,000	91	-75
Mississippi	5,999,753	14,364,516	-8,364,763	13,801,000	4,496,000	9,305,000	130	-69
Oklahoma	71,297,425	69,417,719	1,879,706	74,716,000	24,221,000	50,495,000	5	-65
South Carolina	6,281,234	25,630,017	-19,348,783	33,524,000	5,509,000	28,015,000	434	-79
Tennessee	33,117,367	46,887,973	-13,770,606	63,856,000	10,942	63,845,058	93	-100
West Virginia	27,487,239	73,340,050	-45,852,811	49,241,000	10,501,000	38,740,000	79	-86

APPENDIX
For Online Publication

Table A-1: Changes in the terms of refunding during the General Assembly debate of Act 15 of 1932.

The Table shows the evolution of the crucial refunding terms from the introduction of the initial refunding bill to the final draft that became law. If a cell is blank, the terms set in the previous bill are included in the new bill. Limits on borrowing appear for the first time on March 23rd.

	Bill Date			
	March 15, 1932	March 17, 1932	March 23, 1932	April 6, 1932 (Final)
Coupon (%)	5			4 ½
Maturity	• 10 to 35 years; o ½ of bond face value: District bond maturity + at least 10 years (max 21 years); o ½ of bond face value: 1 year more than the first half	District bond maturity + 10 years		
Limits on borrowing			No (senior) highway bond issuance in 1932; limited to $1.75 million per year thereafter	
Priority of Refunding Revenue Bond	4 (junior to state's own obligations and road maintenance costs)			3
Priority of Tendered District Bond Until Exchange is Completed	4			3
Priority of District Bond Not Tendered (interest/principal)	7/8			9/10
Security for the Revenue Bonds	• Automobile license fees and gasoline taxes except dollars pledged as county subsidies. • Ability to reclaim the district bonds and collect taxes (or foreclose) if state misses revenue bond payments		In addition, promise to not let highway revenues drop below an amount sufficient to pay the highway and revenue bonds	In addition, new 5¢ gasoline tax on operators of interstate airplanes
Sinking Fund for Revenue Bonds	• Residual highway revenues after all expenses			
Bondholder Demands After Bill is Introduced[45]	• Same coupon as the district bond being substituted (5-6%; average 5 ¾) • 1¢ in new gasoline tax or reduced county subsidies • Min. maturity 5 years; max maturity 10 years • $1 million set aside each year to retire the revenue bonds early • Revenue bond priority: 3 (senior to highway maintenance expenses but junior to state's own highway bonds) • No split maturities • Cost cutting measures • Realistic revenue forecasts and appropriations		Same as before with the added threat that bondholders would prefer to collect the property taxes (or foreclosure) than accept the current offer. [46]	

[45] "Measures Pile In As Session Opens", Arkansas Gazette, March 16, 1932.
"None of Refunding Bills Satisfactory", "Modified Bill on Bonds Introduced", "Says Bondholders Must Be Satisfied", Arkansas Gazette, March 17, 1932.

[46] "The bondholders, most of them institutions that know their rights and are thoroughly familiar with all the laws governing public debts, will not accept any legislation that might cause their securities to be less desirable. If they are not satisfied with the refinancing plan finally adopted by the legislature, they will have the officials of the various counties extend the taxes on the lands. If necessary they will bring this about by mandamus proceedings." John Potts, vice president of W.B. Worthen Company, Bankers, at the Little Rock Real Estate Board luncheon meeting, March 16, 1932.

Table A-2: Bondholder recommendations submitted to the legislative committee in December 1933.

The Table shows the evolution of the crucial refunding terms from the Ellis bill of 1933 to the final recommendations presented to the legislature. Each column shows only the variation from the previous column.

	Ellis Bill (March 1933)	District Bondholders' Recommendations to Governor's Subcommittee (December 5, 1933)[47]	Recommendations of the Governor's Subcommittee to Legislative Committee (December, 12, 1933)	Legislative Committee Amendments (December, 12, 1933)[48]	Renegotiated Legislative Committee Amendments (December, 18, 1933)[49]
Coupon (%)	3	• State bonds: 3 • District bonds: 3 o ½ of coupons during next two years paid in 25-year bonds o coupon savings used to purchase 1932 refunding revenue bonds at market value (25-30¢ on dollar) • Certificates held by Municipal Highway Continuation (Pavement) Districts issued under Acts 8 and 85 (MHCD8-85): 3	• State bonds: o First three years: 3 ½ o Next two years: 4 o Thereafter: Present contract rate (4.75 on average) o Difference between contract rate and first five year coupon rate paid with 3 ½ coupon bonds maturing no sooner than 1949 • District bonds covered by 1927 law only: 3		
Maturity	• 25 years • 5 year note to replace delinquent coupons	• State bonds:10 years • District bonds: 25 years • MHCD8-85: 25 years	• State bonds: All maturities extended by 10 years; first maturity in 1945 • District bonds: 25 years		• District bonds: 15 years
Sinking Fund	• $125,000 every three months	• District bonds: see coupon savings above • Highway revenues be allocated to each category of bond on a percentage basis and surplus allotment be used to call the bonds in that category at the lower of market price or par • Highway revenues in excess of $10.5 million to retire certificates held by MHCD issued according to Act 248 (MHCD248).	• Surplus highway revenue share used to retire state, district bonds, contractor debt and other highway claims o First two years: State bonds 25%; all other 75% o Third year: State bonds 50%; all other 50% o Thereafter: All bonds in proportion to principal • No commitment to retire MHCD248.		
Missed Coupons on Tendered Bonds	• Coupons in arrears paid by 5 year note with 3% coupon	• "Reasonably long-term" refunding bonds in exchange for missed coupons of state bonds • 25-year state 3% coupon bonds in exchange for missed coupons of district bonds	• State bonds: 3 ½% coupon bonds that mature annually after 1950		• District bonds: 15-year zero coupon bonds
Security for the New Bonds	• Full faith and credit of the state.	• Highway revenues after maintenance costs (25% of gross revenues) • Old district bonds held in escrow in case the state defaults again			
Revenue Generation		• Higher license fees and an extra ½ cent of gasoline tax	• Higher license fees and an extra ½ cent of gasoline tax	• Higher license fees and an extra cent of gasoline tax	
Adjustments to Subsidies and Spending		• Cut the gas tax refunds to counties by half starting in 1935	• Gas tax subsidies for industrial and commercial use eliminated; exception for agricultural use • Half of county road subsidies cut and added to highway fund • No new road construction except with federal money • No refunding for claims held by MHCD8-85 except for a cash payment of 3% of face value and further ad hoc payments from highway revenues in excess of debt service • Half of contractors claims paid with 25-year 3% coupon bonds and half in cash	• Fully restore the gas tax subsidies to counties • Resume full aid to highway continuation districts for road maintenance	

[47] "Progress Seen in Bond Conference", Arkansas Gazette, December 6, 1933
[48] "Refunding Session Next Week Advised", Arkansas Gazette, December 13, 1933
[49] "Hope of Refunding Road Debt Revived", Arkansas Gazette, December 19, 1933

Table A-3: Progress of the refunding bill: Act 11 of 1934.

The Table shows the evolution of the refunding legislation: Act 11 of 1934. Each column shows only the variation from the previous column.

	Bill Date		
	December 30, 1933[50]	January 10, 1934[51]	January 26, 1934 (Final)[52]
Coupon (%)	• State bonds (Series A): o First three years: 3 ½ o Next two years: 4 o Thereafter: Present contract rate (4.75 on average) o Difference between contract rate and first five year coupon rate paid with 3 ½ coupon bonds maturing no sooner than 1949 • District bonds (Series A): 3 • Certificates held by Municipal Highway Continuation (Pavement) Districts issued under Acts 8 and 85 (MHCD8-85): 3		• MHCD(all): 3
Maturity	• State bonds (Series A): All maturities extended by 10 years • District bonds (Series A): 15 years • MHCD8-85: 20 years • All bonds callable on coupon date at par		• MHCD(all): 10 years
Sinking Fund	• Surplus highway revenue share used to retire state, district bonds (shown), contractor debt and other highway claims (residual) o First two years: State bonds 25%; district bonds 68.8% o Third year: State bonds 50%; district bonds 45.8% o Thereafter: State bonds 63.3%; district bonds 33.6% • No mention of MHCD248.		
Missed Coupons on Tendered Bonds	• State bonds: 3 ½% coupon bonds that mature annually after 1950 (Series B) • District bonds: 15-year zero-coupon bonds (Series B)		
Security for the New Bonds	• Highway revenues after maintenance and new construction costs (25% of gross revenues) • The State declares the bond a 'contract' • The State covenants not to reduce taxation in the future below threshold • Old district bonds held in escrow in case the state defaults again • Any future license fee and gasoline tax increase		
Revenue Generation	• Higher license fees and an extra ½ cent of gasoline tax	• Higher license fees and an extra one cent of gasoline tax but can be reduced in the future by ½ if revenues above threshold	
Adjustments to Subsidies and Spending	• All gas tax subsidies eliminated; lower tax on tractor fuel, cuts county subsidy by 1/4 • Half of contractors claims paid with 25-year 3% coupon bonds and half in cash • No new road construction except with federal money • Highway warrants for labor, material and maintenance paid in cash	• All gas tax subsidies eliminated; tax-free tractor fuel; cuts county subsidy by ½ • Cash payment rather than refunding bonds to MHCD to cover half of the cost of paving highway continuations	• No cash payment to MHCD • Cuts county subsidy by 1/4
Governance	• Refunding Board consisting of 6 elected officials and the State Bank Commissioner in charge of the refunding process, debt retirement, revenue/expense reporting to investors		

[50] "Bond Bill Ready for Legislature", Arkansas Gazette, December 31, 1933
[51] "New Bond Measure Will Be Presented", Arkansas Gazette, January 10, 1934
[52] "Effective Bill For Refunding to Pass Today" and "Principal Provisions of Highway Refunding Bill", Arkansas Gazette, January 26, 1934