Tax Anticipation Scrip as a Form of Local Currency in the USA during the 1930s

Loren Gatch
Department of Political Science
University of Central Oklahoma
100 N. University Drive
Edmond, Oklahoma 73034, USA
lgatch@uco.edu

February 1, 2011

During the world economic crisis of the 1930s, the United States experienced widespread use of local currency or "scrip". The most significant form of scrip, both in terms of the longevity and size of the issues, was tax anticipation scrip. This paper surveys the varieties of tax anticipation scrip issued in the USA during this period, and ventures some interpretation of its significance and applicability to non-crisis circumstances. Based neither upon the good will and voluntarism of its users, nor upon the power of the state to enforce legal tender, tax anticipation scrip represents an intermediate form of monetary practice that can be calibrated to the structure and functions of the local governments that issue it.

After outlining the general experience with depression-era scrip, this paper describes the nature and origins of tax anticipation scrip as a particular form of local currency. It also surveys specific arrangements in different municipalities that affected the successful circulation of such scrip. While perhaps relevant only to the American historical experience, the jurisprudence concerning non-national currency is assessed insofar as it puts into legal context scrip issued during the 1930s.

Finally, the concept of tax-based monetary issues is not unknown in monetary theory, and this paper concludes by attempting to relate the significance of the American experience of the 1930s to neo-chartalist interpretations of the origins and functions of money.

Contours of the Scrip Phenomenon

Between 1931 and 1935 hundreds of experiments in local currency or "scrip" flourished in the United States as attempts to grapple with various aspects of the crisis.[1] Some experiments—notably the use of clearing house certificates during the bank 'holiday' of March 1933—were intentionally designed to serve only briefly until banks reopened. Similar emissions by municipalities, business groups and even private individuals also sought to provide a circulating medium in place of frozen bank deposits. Local business groups also put out issues styled as "auction scrip" or "prosperity checks" in order to generate greater local trade. Other types of scrip, such as that issued by barter and self-help groups, lasted as briefly as the groups themselves. Mostly established during1932 and early 1933, these groups failed to survive beyond the worst of the economic downturn, especially as new federal aid programs undercut their rationale for existence. Even those ideologically-motivated groups founded explicitly as alternatives to capitalist production relations proved unable to sustain themselves. To manage their own unemployment relief efforts, many communities issued scrip that was only redeemable for staple goods at selected stores or public commissaries. Useful for managing public works projects, such scrip found little circulation outside of the circuits between workers and stores. Finally, the most unusual form of local currency issued during the depression era in the USA—stamp scrip—proved notoriously ephemeral. Promoted by the economist Irving Fisher as a stimulant to monetary velocity, the myriad examples of local stamp scrip instead foundered upon the unwillingness of its users to purchase and affix the necessary stamps that would validate the scrip.

In contrast to this generally unremarkable record, one form of local currency did experience a widespread, if uneven, success: tax anticipation scrip. Issued by nearly 100 municipal governments across the USA, tax anticipation scrip functioned legally as a flexible form of short-term credit that enabled governments to meet payrolls, pay vendors, and otherwise make up for shortfalls in the tax receipts from economically-strapped communities. Such scrip gained its acceptability from the prospect of recipients being able to use the scrip to pay their obligations to the governments that issued it.

Tax anticipation scrip was certainly not the only form of local currency that articulated in some way with public authority. For example, the state of Wisconsin permitted the issue of a uniform bank scrip in early 1933; similarly, at the height of the banking crisis, New York proposed its own state scrip until it encountered opposition from the federal government. Thanks to the efforts of the monetary entrepreneur Charles Zylstra, the Iowa legislature authorized the issue of county-level stamp scrip. One early form of stamp scrip issued by the city of Evanston (Illinois) linked the scrip's funding to the purchase of the city's short-term debt. More broadly, many forms of local currency gained acceptability because they could be used under restrictive circumstances to pay certain public fees, such as utility bills.

In contrast to these examples, however, tax anticipation scrip was distinctive in that it could be used by citizens to meet the broader obligations they had toward their local governments. This is what gave such scrip its 'currency', and assured that it circulated for a far longer time—even into the early 1940s—than any other variety. While it was not even generally perceived at the time to be a monetary phenomenon, such scrip nonetheless served as a flexible adjunct to the national money supply, circulating in some places for years until normal fiscal conditions returned.

Circumstances Giving Rise to Tax Anticipation Scrip

Tax anticipation scrip emerged in the early 1930s as an outgrowth of the routine fiscal practices of American municipal governments. Local taxes, typically leveled upon various forms of property, were collected at specific points during a fiscal year; in contrast, public disbursements to meet payrolls and payments to vendors flowed continuously. As a result of this mismatch between the timing of revenue collection and expenditures, some sort of borrowing facility was necessary to manage municipal expenditures. In normal times, this could be done either by short-term financing from local banks, or in larger cities by the sale of tax anticipation notes to investors. In effect, tax anticipation financing functioned as a short-term credit instrument to solve a common problem of municipal finance.

Yet the political and legal implications of this financing were not unproblematic. Municipal governments disbursed funds using "warrants", much as individuals might write checks. If an individual had no funds in her account, then her check would not be paid. Governments, in contrast, operated under greater legal forbearance. Tax levies provided a baseline estimate of what governments had to spend; collected at specified intervals, these revenues funded the recurring obligations that governments had obligated to meet through their appropriations. Even if tax collections fell short of the estimates, governments could issue warrants in anticipation of the taxes that would redeem them. Crucially, the creation of such floating debts was not subject to the legal limitations that governed the issue of state and local debt. By the 1930s, a majority of American states imposed restrictions on the amount and type of debt that governments could incur. Moreover, nearly all state governments were forbidden from pledging the states' credit to indirectly guarantee the debts of local governments or private corporate entities (Ratchford 1941 [1966], 429-445). Yet state courts had interpreted the issue of warrants against tax levies as not giving rise to a municipal debt, even in the event that the actual revenues were insufficient to pay them. As a result, state and local governments could evade constitutional or statutory limitations on their borrowings by creating floating debts in the form of unpaid warrants. These debts did not count against existing limitations, even when they were later covered by bank loans or refunded with tax anticipation notes (*Harvard Law Review* 1932; Ratchford 1941 [1966], 468-473).

While a common financial practice, the issue of warrants or notes against anticipated taxes was frowned upon by municipal finance experts, who stressed their potential for abuse. Indeed, the economic crisis of the 1930s upended these financing relationships, and exposed the danger of using a floating debt to finance current expenditures. Although the market for corporate debt was the first to price in the economic downturn, by the end of 1931 municipal debt became increasingly difficult to place with investors as it became apparent that the magnitude of the downturn was affecting tax revenues. Characteristic of these difficulties was the stark divergence between the pricing of local, state, and federal debt, as risk-averse investors fled to the greater security of debt backed by a national tax base (*State and Municipal Compendium* 1933). Dependent as they were upon property (real estate) taxes, state and local government financing was slammed by the economic collapse. Declining property valuations that accompanied the depression eroded the tax bases of state and local governments. Unemployed citizens and bankrupt businesses increasingly lost their properties to tax foreclosures, which only reduced the tax rolls and burdened municipalities with unsalable properties. Tax arrears soared, sometimes in response to organized citizen resistance ("tax strikes") to municipal levies (Beito 1989).

The fiscal experiences of two major American cities—Chicago and Detroit—were emblematic both of the fiscal predicaments that gave rise to scrip, and of how scrip could be used well or badly. In Chicago, legal challenges to property valuations in the late 1920s created a fiscal crisis even before the depression began. When the depression hit, collapsing property values revealed incompetent and corrupt property assessment practices which only aggravated the tax shortfalls of the 1930s. As a result, Chicago was the first major city forced to pay its employees in tax anticipation warrants. Teachers were particularly hard-hit by the crisis, going for nearly two years until Fall 1933 with only occasional payments of their regular salaries (Burbank 1971).

The city of Detroit's fiscal problems also predated the worst of the economic depression. The rapid growth of the automobile industry during the 1920s (and a near tripling of the city's population between 1915 and 1930) fed a boom in municipal borrowing to finance the city's expanding infrastructure. As the automobile market shriveled after 1929, the city found it increasingly difficult to both refund this debt and borrow in the short term to make up for tax shortfalls. Between 1929 and 1933, mortgage foreclosures quintupled. By 1932-1933, tax receipts amounted to only 65% of the official levy; at the same time, the percentage of the city's budget devoted to debt service charges jumped to over 40%. The scissor blades of growing debt and declining revenues also increasingly cut Detroit off from access to any short-term financing. Beset with a heavy debt, a crumbling economy, and mounting tax delinquencies, the city government worked with groups of prominent citizens to maintain confidence in its creditworthiness. In particular, the Committee on City Finances (the "Stone Committee") sought to maintain workable relations between the city and the banks which provided it short-term financing, while the Committee of Industrialists (headed by Alfred Sloan, Jr., President of General Motors) worked to minimize the backlog of delinquent taxes (Wengert 1939; Harper 1948, 51-58).

Nationwide, the fiscal problems of municipalities were aggravated by the depression's effects upon the banking system. The steady erosion of banks' balance sheets led, by late 1932 and early 1933 to the declaration of state-level bank 'holidays' to prevent depositors' runs that would push institutions into insolvency. Culminating in the national 'holiday' declared by President Roosevelt in March 1933, these closures not only deprived municipalities of a source of financing, but cut them off from whatever funds they themselves had on deposit.

While the experiences of Chicago and Detroit were spectacular examples of the difficulties municipalities faced, the fiscal pressures were widespread. By 1933 some two thousand municipal governments had defaulted on payments of interest or principal on their debts, and only the largest cities retained at least some access to short-term financing through the nation's capital markets.[2] To relieve these pressures, a number of state legislatures authorized the use of tax anticipation financing in the form of scrip.[3] Although no state-level schemes for tax anticipation scrip were considered (for the legal reasons addressed below), state governments essentially countenanced the transformation of the existing practice of short-term borrowing into a form of local currency.[4] In addition to being labeled "scrip", these issues were designated tax anticipation notes, warrants, city bills, and even "baby bonds". By denominating these instruments in standard amounts and issuing them to "bearer", governments could pay these out to employees and vendors in place of warrants in odd amounts and payable to particular parties. While these instruments could not be redeemed immediately for standard funds, they often bore an interest rate (which enhanced the willingness of recipients to hold them) and could be used to pay off current or delinquent taxes. The funding of public schools via property taxes was an important function of local governments, and some scrip issues were explicitly labeled "school scrip", issued to pay teachers' salaries and acceptable for school taxes (De Young 1936, 367-9; Brown 1941, vol I., 45). For example, in 1931 Michigan authorized local governments to issue interest-bearing tax anticipation notes, setting up a "Loan Board" at the state capital that would approve the applications of local school boards to issue scrip. (Curto 1949, 7-8, 12-14). In New Jersey, even as the County of Atlantic issued "school scrip" on behalf of school districts in Atlantic City and Ventnor, these communities in turn put out their own separate municipal scrips that circulated concurrently (Mitchell and Shafer 1984, 149-152).

Whether specified as school scrip or paid out for other obligations, local governments created forms of local currency out of the prevailing practices of short-term municipal finance. Authorized by state legislatures, approximately one hundred municipal governments of different sorts—Counties, cities, townships, boroughs, school districts—leveraged their powers to tax in order to sustain local scrip circulations. These circulations had the simultaneous effects of increasing the purchasing power of governments (thus avoiding layoffs and further curtailment of services) and improving the rate of taxpayer compliance by giving citizens an instrument redeemable in their own civic obligations.

While there was no single formula for issuing municipal scrip, the details of Detroit's experience may be taken as illustrative of the broader phenomenon. On the verge of an agreement with a syndicate of banks to underwrite a funding of the city's projected deficit, Detroit was forced into default when the state banking holiday of February 24, 1933 deprived the city of the banks' resources. At this point, Detroit resorted to scrip as a substitute for short-term bank financing. On April 5, the legislature hurriedly passed the "Wayne County Scrip Bill" which amended the existing authority of municipalities to use tax anticipation notes so that such debt could be issued as circulating scrip. While available to all counties and municipalities in the state, the bill was intended primarily to meet the fiscal emergency in Detroit (*Commercial and Financial Chronicle* 1933). Between April 1933 and April 1934, three separate issues of scrip totaling $41.9 million funded the city's deficit. The first $18 million issue came out in April and May of 1933. Backed by the prospective receipts of the 1933-1934 tax levy, whose cash payments the City Council had explicitly appropriated to build a redemption fund for the scrip, Detroit's new currency bore a maturity date six months after the issue. It paid 5% interest, though was made callable ten days after an official notice of intent was published by the city. By city ordinance discounting of the scrip was made an offense, though this feature seemed to have no practical significance. Paid out to city employees and vendors, scrip was acceptable at par plus accrued interest for current and delinquent taxes, water utility charges, and other city fees (American Municipal Association 1934; Harper 1948, 60-61)

These features of Detroit's scrip were consistent with the guidelines laid out by the state legislation that authorized Michigan cities to issue municipal scrip. Indeed, the state law permitted maturities of up to one year, and an interest rate up to 6%. Scrip issues were limited to 85% of the amount of current taxes due, 60% of delinquent taxes, and 25% of future taxes (United States Conference of Mayors 1933; American Municipal Association 1934). In any event, the significance of a maturity date was rendered moot by how the scrip functioned. Since scrip paid out by the city quickly returned to settle tax bills, the first issue was redeemed as soon as August 1933. The maturity date amounted to a formality that simply assured its users that scrip was not some kind of unfunded debt of indefinite duration. Moreover, the legal provision that a cash fund would be built up to redeem the scrip amounted to yet another fiction, since the scrip was in fact and practice redeemed through the sheer process of paying off taxes. No cash redemption was necessary since the scrip was extinguished through the very nature of its function. A second issue of $10 million was emitted in September 1933, but improved cash collections allowed the city to call the scrip in January 1934. Circumstances required a third and final emission of $13.9 million in April 1934, though with the return of more normal financial conditions, Detroit was soon able to resume short-term borrowings from banks. Indeed, $1 million of the final scrip issue was simply sold as an investment to a bank at par plus accrued interest (Wengert 1939, 18-20).

Operating under guidelines established by the state legislature in 1931 and 1933, Detroit's experience was repeated by over forty other taxing authorities in Michigan. Most of these wound up, like Detroit's, by 1934, though some of the more financially-precarious school districts (Ferndale, Lincoln Park, and several townships in Oakland County) continued to use scrip as late as 1936 (Mitchell and Shafer 1984, 110-135). Similar laws passed by the Ohio and New Jersey legislatures set in motion substantial scrip issues in those states as well. In Ohio, the Marshall Act of April 15, 1933 authorized counties, upon application to the State Tax Commission, to issue scrip if tax receipts fell below 90% of the anticipated amount. Scrip would then be apportioned by county auditors to the municipalities that applied for it in proportion to the amounts of their tax delinquencies. The maximum amount of time scrip could remain in circulation was five years, and redemption occurred through tax payments only. New Jersey's law, passed a month earlier also extended the existing authority of counties and municipalities to issue tax anticipation notes to include small-denomination bearer scrip. As in Michigan, interest payable on New Jersey's scrip was capped at six percent (*Commercial and Financial Chronicle* 1933; American Municipal Association 1934).

By early 1933, New Jersey's finances had entered a state of crisis similar to Detroit's. Growing tax delinquencies meant that only 65% of the 1932 levy statewide was collected; cumulative delinquencies amounted to an entire year's tax revenues. Payments on municipal debts, including tax anticipation borrowings, ate up 45% of available revenues. The heavy reliance upon property taxes in a prolonged economic downturn dried up the revenue stream: not only did property owners lack the income to pay their taxes, but the market for property seized for nonpayment of taxes also disappeared. By mid-1933, 120 New Jersey municipalities, led by Atlantic City, were in default on some portion of their debts, and nearly twice that number of school districts could not pay their teachers. In these circumstances, the use of scrip in New Jersey became widespread. To maintain their operations, New Jersey municipalities developed an extensive network of scrip circulations which, by the end of 1934, encompassed 8 counties, 11 cities, 3 towns, 11 boroughs, and 10 townships, all of which together issued nearly $27 million in scrip (New Jersey Legislature 1933, 9, 40; *New York Times* 1934; Brown 1941, vol. I, 169-171).

Details from Monmouth County illustrate how New Jersey's scrip system worked. Between September 1933 and December 1934, the County's Board of Chosen Freeholders authorized 10 issues each of $200,000 in scrip, bearing 5% interest, payable at maturity in 1937. By January 1934, of $600,000 issued, some $340,000 had been paid in taxes, leaving a scrip liability of $260,000 as the year began. Six more scrip issues of $200,000 each were paid out through November 1934. On December 1, 1934, about $955,000 of this scrip had been redeemed through tax payments. By that date, outstanding scrip amounted to about $600,000 out of a total of $1,800,000 that would have otherwise been due with interest in 1937 (Wain 1934).

In this account, "County officials were not long in discovering that, automatically, every one to whom scrip was issued, whether in lieu of salaries or in payment of bills, became a tax collector of Monmouth". Other advantages became apparent. Scrip paid in before 1937 accrued no interest, so the County saved on charges that would have been owed on bank financing. Moreover, instead of accumulating delinquencies, Monmouth taxpayers not only paid off arrears but met their 1934 obligations in full. Of fifty different tax districts within the County, all accepted the County's scrip, as did utilities and outside vendors. No discounting of scrip was apparent. Within the County, local governments replicated this success. Of $150,000 issued by the city of Long Branch, only $8,500 remained unredeemed before a December 1934 maturity date. Officials in Asbury Park claimed its scrip saved the city $22,000 in interest charges which would otherwise have been due to banks. In the tiny borough of Union Beach, scrip was returned to the treasurer for taxes as rapidly as one day after its issue (Wain 1934).

With the passage of authorizing legislation in Michigan, Ohio, and New Jersey, it became apparent that, unlike other forms of depression-era local currencies, tax anticipation scrip was not a fleeting phenomenon. Unlike clearinghouse certificates, tax-based scrip was not retired with the reopening of the banks in March 1933; unlike the scrip of barter and self-help groups, it did not circulate merely on the margins of the formal economy; and, unlike stamp scrip, its method of validation did not confine its circulation to tiny rural communities. As a slight modification of long-standing financial practices, a circulating medium backed by the taxing power of local governments was both familiar and unsettling. Good financial practice accepted that governments could borrow in order to match the continuous flow of municipal payments to the clumpier receipt of tax revenues. Yet managed badly, such tax anticipation financing enabled reckless spending and accumulated deficits that violated the spirit, if not the letter, of state laws. This ambivalence made it difficult to accept the practical success of tax-backed municipal scrip. Even at the nadir of the depression in mid-1933, when such scrip was a widespread and successful reality, expert orthodoxy still condemned municipal borrowing against tax receipts; as one authority put it, "as soon as we recognize this as an unsound practice the better" (*Wall Street Journal* 1933). Some issuers even shied away from the use of the word "scrip", preferring euphemisms like "baby bonds" to accentuate the distinction between currency and debt (Brown 1941, 39). Yet the local government officials who actually implemented these programs appreciated them not only for the support they gave to municipal finances, but for the economic stimulus they provided to local communities.

Writing at the worst of the nation's banking crisis when governments were deprived of their usual sources of credit, Carl H. Chatters, a prominent municipal finance expert, saw some role for tax anticipation scrip in local finances. Skeptical of stamp scrip, Chatters nonetheless thought that tax-backed municipal scrip was "no different than a bank loan except that merchants, employees, and other citizens lend their credit to the city directly instead of through their banks". "Cities should devise at once some means of borrowing on short term small denomination notes. The security and pledge made for their payment should be ample. Small notes should be transferable by delivery and larger denominations by endorsement. It will be necessary to have new media of exchange for a short period at least, and municipalities having the confidence of their citizens should provide these media" (Chatters 1933a, 76). Indeed, Chatters saw in scrip a potential and opportunity for civic engagement: "The issuance of scrip and warrants in some form is just another way of borrowing from merchants, citizens, and others in the local communities. If every citizen in a community had a small direct interest in the financial obligations of his city, much less trouble in civic matters might be expected" (Chatters 1933b, 117).

Despite these hopes, local government officials during the 1930s were not unmindful that their scrip issues had legal implications, and the following section reviews the jurisprudence on non-national currencies insofar as it might have affected the use of municipal scrip.

The Legality of Tax Anticipation Scrip

Non-national currencies were a common feature of economic life in the United States for the first half of the 19^{th} century. The federal constitution itself imposed a basic division of monetary powers between states and the national government. The national government acquired the power to "coin money, and regulate the value thereof"; conversely, states were not only denied coinage powers, but were forbidden from issuing "bills of credit" (paper currency) or from making "any thing but gold and silver coin a tender in payment of debts" (Art. I secs 8, 10). While uninformative on whether the national government could itself issue paper currency, the constitution did permit the issue of private bank notes. Grounded upon the common law right to borrow, hundreds banks as well as non-bank corporations issued thousands of varieties of paper currency, all legally distinct from government-coined money inasmuch as paper currency merely represented *promises to pay* in gold or silver coin. In contrast, attempts by state governments to issue paper currency were held unconstitutional by the Supreme Court in *Craig v. Missouri* (1830) although an anomalous ruling in *Briscoe v. Bank of Kentucky* (1837) nonetheless granted state-owned banks circulation privileges (Nussbaum 1950, 569-581; Nussbaum 1957, chs. 2-4; Dunne 1960, 37-43).

If the antebellum period was the heyday of private currency, the financial consequences of the Civil War (1861-1865) imposed severe limits upon this form of circulating medium by centralizing both the provision and regulation of money. Along with the issuance of government “greenbacks” themselves—the nation’s first legal tender fiat currency—the founding of the National Banking System standardized both the appearance and backing of bank notes. State responsibility for the currency was correspondingly restricted. A federal statute of 1862 forbade private issues of currency in denominations below one dollar; the notes of state banks were driven out of existence by the so-called ‘death tax’ upon their circulation. The constitutionality of this tax was upheld in *Veazie Bank v. Fenno* (1869), while federal legal tender powers sustaining the greenback were progressively read back into the constitution by the *Legal Tender* cases (Dunbar 1969 [1896], 170, 198; Dunne 1960, 49-50, 67-83).

While these developments went far towards imposing unity and uniformity upon the nation’s monetary system, numerous anomalies remained. In particular, the prohibition on state-issued “bills of credit” was weakened by court rulings that narrowed the definition of bill of credit by tying it more closely to its putative monetary character. The basis for this line of interpretation was *United States v. Van Auken* (1877), which held an issue of fractional scrip to be legal under the 1862 statute as long as it stipulated payment in goods, rather than in money. *Hollister v. Zion’s Co-operative Mercantile Institution* (1884) extended this reasoning to scrip above one dollar, thus sparing it from the ‘death tax’. In both cases, redemption in goods was held to differentiate scrip from promissory notes realizable in lawful money. At issue was not the sheer fact that the scrip circulated as money. In the Court’s view, the limited negotiability of such scrip meant that it posed no competition to national currency and could not have been what Congress intended to suppress (Solomon 1996).

These rulings were important for establishing the legality of private scrip, especially that issued by coal-mining corporations which operated company stores in the communities that they dominated economically. The legal basis of such scrip was that it constituted not a negotiable instrument but a contract between master and servant. Thus, the regulation of such private monies fell not under national currency laws but under state authority; and there the sanctity of contract protected them from state suppression through the end of the 19th century (Tiedeman 1898, 31-32).

Yet the narrow definition of money adopted by these legal opinions also provided an opening for public entities to issue their own circulating media. Such reasoning permitted more than just scrip redeemable in merchandise. Thus, in *Poindexter v. Greenhow* (1885) the Supreme Court denied that Virginia's tax anticipation coupons were bills of credit, even though they were issued as redeemable in lawful money and could circulate from hand to hand. Building on *Greenhow*, the Court argued on similar grounds in *Houston and Texas Central Railroad Company v. Texas* (1900) that state treasury warrants (short-term debt) were not unconstitutional emissions of bills of credit. Ironically, both cases involved attempts by states to *avoid* accepting these instruments, which the states themselves had paid out at an earlier time, in receipt of taxes; unlike Missouri's earlier position in *Craig*, both Virginia and Texas argued that their coupons and warrants *were* bills of credit, and as such illegal means of payment which were void as a tender! In his *Houston* opinion, Justice Peckham put forth a functional view of money that made its definition a matter of degree. Of the Texas warrants, "it must not only be that they are capable of sometimes being used instead of money, but they must have a fitness for general circulation in the community as a representative and substitute for money in the common transactions of business". Much as the credit of the state of Texas might enhance their practical negotiability, Peckham wrote for the Court that “we see nothing in morals or in law which should prevent the State from recognizing and liquidating the indebtedness which was due from it and which was represented by the warrants” (177 U.S. 66, quotes at 84, 92; Solomon 1996).

By the 1930s, then, the federal government’s position was that municipal scrip did not violate constitutional prohibitions of non-national currency.[5] At the same time, the federal government did not actively support municipal scrip, for example by authorizing the Federal Reserve to rediscount tax anticipation warrants, as city mayors advocated in testimony before Congress (U.S. Senate 1933). That the currency quality of municipal warrants/scrip under the law was a matter of degree meant that officials during the 1930s had to be careful in designing their scrip emissions in order to pass constitutional muster. Indeed, not only could scrip be problematic under the federal constitution, but many state constitutions also contained limitations or outright prohibitions on the issue of promissory notes with circulating properties. Fortunately, as the American Legislative Association pointed out to its members, the federal constitution explicitly forbade only *state* bills of credit; the emissions of governmental units below the state level were not presumptively unconstitutional. In order to minimize the possibility of tax anticipation scrip being construed as money, state laws permitting scrip “should not contain any wording which might indicate a legislative intention to provide a currency”. Creating a currency that was not legally a currency required some legal creativity. Beyond the obvious admonition to not make the scrip look too much like U.S. currency, states were advised to incorporate a number of features that differentiated it from legal money. Among other things, states were advised not to make scrip a general or even a limited legal tender; in contrast, making scrip acceptable for payment of state and local taxes served arguably to facilitate the scrip’s redemption, and not to promote its circulation as money. Mandating its cancellation upon payment into municipal treasuries (rather than allowing it to be reissued) stressed its purpose as a means of paying municipal debts, rather than to function as a circulating medium. Securing scrip by with the good faith and credit of a state implied the scrip was an obligation of the state as a sovereign entity; better, states were advised, to make scrip the obligation of a specific state agency and secured by the pledge of specific revenue streams, assets or properties. Finally, making scrip interest-bearing, and specifying a date of maturity, underscored its character as an evidence of debt, and not an illegal issue of currency (Mott 1933).

Challenges and Successes of Tax Anticipation Scrip

Some of the legal scruples described above arguably rendered municipal scrip less desirable to the public, while other features might have enhanced scrip's acceptability. Legal tender qualities, unavailable to municipal scrip, clearly would have widened its usage. Making scrip an obligation of a state, rather than its municipal subunits, would similarly have tended to increase public confidence in the scrip's value. A requirement for local governments to cancel scrip upon receipt rather than pay it out anew to employees or vendors would tend to limit its usefulness as a circulating medium.[6] Finally, backing scrip with general tax revenues rather than the proceeds of a specific levy (like school taxes) would, all things being equal, have given scrip greater security. Conversely, making scrip acceptable for a wide range of delinquent taxes would make it more attractive to users than if it were valid for only a narrow range of taxes and fees. In short, those measures recommended by municipal authorities in order to make scrip look less like money in the eyes of the law would also have tended to detract from its success. Against these hypothetical drawbacks can be placed two advantageous features: making scrip interest-bearing, and specifying its redemption by a specific maturity date.

In practice, the success of municipal scrip experiments was due less to specific features of a given issue than to the overall volume of issues, relative to the commitment of stakeholders, and the economic circumstances that occasioned scrip's use. At a first approximation, the easiest measure of success was whether or not scrip traded at a discount to standard money. The largest example of an unsatisfactory experience with municipal scrip was Chicago's. Issued in a context of chronic fiscal mismanagement and crisis (a situation aggravated by tax strikes), both the recipients of the Chicago Board of Education's scrip (teachers and other employees) and the merchants who might accept it were disinclined to participate in the experiment. Unwillingness by Chicago banks to hold these warrants meant that city employees went payless if they were unable to sell their warrants at some discount to par. Lacking any firm plan by which the scrip would be later redeemed, the Board of Education paid it out on a voluntary basis to employees whose own unions objected to its use. The Cook County Bankers' Association refused to cash the scrip; major downtown department stores refused it in trade; and those merchants who did accept scrip discounted it substantially. The fewer the number of outlets for spending the scrip, the more difficult it became to spend the large denomination notes (from $10 all the way to $500) or to give change for them in legal tender funds. The local utility, which was unusually generous in accepting the scrip for small payments, found itself inundated by teachers desperate to get cash in change (Elvins 2010).

In contrast to Chicago's dismal experience, Detroit managed the single largest issue of municipal scrip in the United States without similar problems with discounting and acceptability. Despite a desperate fiscal situation comparable to Chicago's that culminated in outright default by February 1933, Detroit managed to issue and circulate over $40 million in scrip for the next year and a half. Ironically, it was the closing of Detroit's banks as a result of the state banking ‘holiday’ that made the use of scrip unavoidable: once any refunding of the city’s various debts through the banks became impossible, scrip became the only alternative. Both citizens’ groups and the banks had previously resisted scrip; yet once it was there, efforts were undertaken to make it work.

Unlike Chicago, Detroit paid employees 20% in cash and the rest in scrip, though vendors were paid entirely with the latter. Detroit issued scrip both in more conveniently lower denominations (down to $1) to facilitate retail transactions, and in higher denominations (up to $1000) to provide large holders of scrip such as retailers the opportunity of exchanging many low denomination notes for the convenience of a smaller number of the higher-denomination variety. These could be then held either as interest-bearing investments (as bonds), or used in payment of city taxes. While in the early days of the Detroit example scrip traded as low as 75 cents on the dollar, this discount soon shrank as the Committee of Industrialists set up a $1 million fund to support the scrip at par. Additionally, the establishment of exchange bureaus where retailers could exchange their scrip for cash from large taxpayers, who then used it to pay their taxes, tended also tended to minimize the discount. Interestingly, these exchanges had to take place in bureaus outside of Detroit’s city limits, since the City Council had deemed the discounting of scrip illegal! These measures, combined with a successful bond refunding in June 1933 and a brighter outlook for tax collections, returned Detroit scrip to par. Indeed, part of the last issue authorized in April 1934 was simply sold to Detroit banks as an investment, as short-term bank financing again became available to the city (*Business Week* 1933; Brown 1941, vol. 1, 40-42; Harper 1948, 58-62).

Other successful examples of municipal tax anticipation scrip, though enjoying the inherent benefit of a smaller size than Detroit’s, exhibited similar features. To sustain its issues of $880,000 in municipal and board of education scrip, Grand Rapids (Michigan) created a "Revolving Fund" of $150,000 in cash which it used to purchase scrip from sources that had accumulated excess supplies. The Fund's director canvassed the city's retail establishments to determine where these excesses were building. Although they were separate taxing authorities, the city and the board of education agreed to accept each other's scrip for city and school taxes (a similar arrangement involving the water utility prevailed in Flint, Michigan). Grand Rapids merchants and manufactures also encouraged the circulation of scrip by paying their own employees 20% of their wages in scrip. In Lorain (Ohio), industries purchased scrip for their own payrolls directly from the city. (American Municipal Association 1934; Mitchell and Shafer 1984, 200).

Mobilization of public and business support also bolstered the acceptability of scrip. In Birmingham (Michigan), the school board organized campaigns to encourage the use of school scrip as measure of support for local schools, and teachers' clubs marketed it as an investment (Curto 1949). Milwaukee's (Wisconsin) "baby bonds" overcame early problems thanks to firm leadership by the city's feisty socialist mayor, Daniel Hoan. Facing hostility by bankers and large merchants to city scrip, Hoan organized city employees to keep them from selling their scrip salaries to speculators at a discount; those retailers willing to take scrip were given public recognition and patronage by city employees, and their example pressured other retailers to cooperate with the scrip plan. Initial discounts of 88 cents on the dollar soon disappeared, and the city's interest-bearing scrip became sought after as an investment. (Chatters 1933c; *National Municipal Review* 1935a; Hoan 1936, ch. 11). Ocean City (New Jersey) promoted its scrip by accepting it at a 1% premium for timely tax payments, and stood ready to exchange $500 blocks of scrip for tax anticipation notes that paid a higher rate of interest (*New York Times* 1933).

Atlanta's scrip faced a shaky start in 1932, when the banks would not accept it, until the city's mercantile establishment, led by Walter H. Rich, President of Rich's Department Store, united around a plan to accept scrip partly in exchange for cash, partly in exchange for goods. Henceforth the merchants held an effective veto over the use of scrip in city finances, withholding for example their support for a second scrip issue in 1933, which the city government attempted even as redemption of the 1932 issue remained incomplete (Brown 1941, vol. I, 36; Roberds 1990; Elvins 2010).

In most examples, municipalities paid out less than 100% of their wages and salaries in scrip. The proportions of scrip varied—80% in Detroit, 54% in Paterson (New Jersey), 60% in Americus (Georgia), 66 2/3% in Pontiac (Michigan), 50% in Milwaukee, and 65% in Dayton (Ohio)—and seemed to be more a function of the available cash rather than any other consideration. Atlantic City (New Jersey) paid the first $10 of its employees' wages in cash; all wages above that were paid 85% in scrip. By 1935, Atlantic City reduced scrip portion of wages to 50%, and only for paydays in the second half of the month. Royal Oak (Michigan) which had a comparatively long run of scrip (1931-1936), varied the percentage of scrip issued in employee wages and salaries from 25% to 75%, depending upon the amount of cash on hand. Guilford County, North Carolina used scrip for 100% of wages, but only because local banks remained closed through most of 1933 and communities there were desperate for any kind of circulating medium. Having at least some wage payments made in cash did lessen the problem of people spending scrip simply in order to receive change in cash, and lessened the need to produce large supplies of the lowest-denomination bills (United States Conference of Mayors 1933; American Municipal Association 1934; *National Municipal Review* 1935b, 405; Hoan 1936, ch. 11; Brown 1941, vol. I, 172; Curto 1949).

Unlike scrip issued by barter and self-help groups, or scrip of the stamp variety, tax anticipation scrip issued by municipalities suffered at most relatively modest discounts against standard funds. In January 1933, before the largest municipal scrip issues occurred, Carl Chatters testified before a U.S. Senate committee that such scrip traded, or was cashed, at a 15% to 20% discount which, on top of equally-large cuts in their nominal wage rates, represented a substantial blow to the living standards of municipal employees (Chatters 1933d, 178-9). The discount on Detroit's scrip was initially large, but momentary. In his survey of 74 issues of municipal scrip, Joel Harper (1948, 124-126) found that at least 19 experienced discounts of up to 10%. While Harper gives no specific reasons for these discounts, scattered anecdotal evidence suggests some characteristic causes of discounting. Milwaukee's scrip plan was pushed through in a hostile environment (see above). In Atlantic City (New Jersey), resistance by small retailers caused the discount on scrip to widen to as much as 20%, although the larger resort hotels stepped in to exploit this discount in order to pay their own tax burdens. As the date of redemption for, and payment of interest on, Atlantic City scrip neared, its notes traded as high as $1.07 (*National Municipal Review* 1935a, 405; Brown 1941, Vol. I, 44). Paterson's (New Jersey) scrip fell to a discount after local banks refused to handle it (Noble 1978, 90-91). Although supported by its mercantile community, Atlanta's scrip did trade at a discount of at least 5% outside of the major retailers, according to oral histories (Roberds 1990). Chicago was the largest example of an unsatisfactory experience, where little thought or effort seemed to made to turn municipal warrants into a convenient medium of exchange for the long-suffering teachers. The only outright failure of tax-backed scrip seems to have occurred in Erie (Pennsylvania), where the bulk of a $300,000 issue was repudiated under uncertain circumstances (Mitchell and Shafer 1984, 227).

Lessons of Tax Anticipation Scrip

As Harper (1948) concluded in his survey of seventy-four municipal scrip experiences, whether scrip was interest-bearing, callable, or backed in a particular way was less important to its success than the credibility of its management. Apart from the sheer size of a given scrip issue relative to the ability of local retailers to absorb it, the most important factor in scrip's success was "the efficiency of arrangements for avoiding the clogging of channels in which it tended to accumulate"; in turn, "[t]he degree of cooperation in recirculating scrip…depended largely upon the confidence of merchants in the financial plans of the local government and the amount of intelligent advanced planning and publicity on the part of public officials" (126-127).

The "financial plans" Harper alluded to essentially envisaged the future retirement of scrip, as recovering tax revenues and successful debt refunding plans (as in Detroit's example) returned municipal finances to a cash basis. Given that defaults on existing debts had precipitated the turn to scrip in the early 1930s, it was understandable that future refunding of these debts would involve retiring municipal scrip as well. Thus, an agreement between Monmouth County and its bankers in July 1935 combined a refinancing of the county's maturing debt and the redemption of its outstanding scrip into a twenty-five year bond (*New York Times* 1935). The following year, Atlantic County negotiated a similar agreement with a bondholders' committee that paired the refunding of its defaulted debt with a cessation of scrip issues (*New York Times* 1936). Within Atlantic County, Atlantic City, which had experienced the largest municipal default in New Jersey, reached a separate agreement with its creditors shortly thereafter (*Wall Street Journal* 1936).

That scrip was never intended to function as a permanent element of municipal finance may have conditioned the attitude of participants towards its use. Employees who took the scrip in wages, retailers who accepted it in payment for their wares, and governments who received it back as tax payments perhaps displayed greater forbearance towards its use, knowing that scrip was a temporary expedient dictated by the economic crisis. Yet Harper noticed something that municipal officials at the time seemed reluctant to acknowledge: in some respects, scrip issues were *superior* to bank loans as a tool of municipal finance. The effective interest rate on scrip was lower than comparable bank financing (and entirely absent, if the scrip were non-interest bearing); moreover, scrip gave municipalities a flexibility that standard tax-anticipation financing lacked. Bank loans or tax notes had to be engaged in large, lump sums in advance of tax receipts. In contrast, scrip could be issued directly for wages and other expenses in amounts as needed to accommodate municipal finance needs (Harper 1948, 116-119).

For a local tax-based currency to function in noncrisis conditions as a normal feature of local government finance and local economic activity would require a widespread and public re-thinking of monetary legitimacy. Nonetheless, the scrip experiences of the depression years suggest four relevant parameters for scrip experiments based upon public taxing power:

- Scrip issues must be commensurate with the absorptive capacity of retailers, which have obligations outside the local economy denominated in national money.
- Scrip issues must be commensurate with the absorptive capacity of local governments, which have debt and other payment burdens outside the local economy denominated in national money.
- Tax obligations must be sufficiently large to create a demand for scrip for use in tax payments to local governments.

- Mechanisms must exist to redistribute scrip from those who have it to those who need it for tax payments ("avoiding the clogging of channels").

These parameters represent necessary, but not sufficient, conditions for successful tax-based scrip to the extent that community willingness to use scrip outside of the circuit of tax payments is an indispensible, albeit residual, condition for a viable tax-based scrip. In the American experience with such scrip during the 1930s, it remains unclear (beyond anecdotal evidence) to what extent scrip actually circulated via transactions unrelated to the original tax circuit. In the case of Atlanta, for instance, despite civic mobilization on behalf of its scrip, the emergency medium functioned more as a source of municipal finance than a local currency (Roberds 1990). Beyond the sheer presence or absence of a discount on standard funds, the broader acceptance of scrip for routine transactions represents a more significance measure of scrip's success *qua* local currency. At the very least, scrip's suitability as a generalized medium of local exchange would exhibit network effects—the more varied its transactional use, the more useful it would become for further transactions—subject to some minimum threshold below which scrip would be shunned as a nuisance, and a maximum threshold above which scrip would lose its transactional validity (i.e invalid outside of the prevailing tax jurisdiction, and the economic area to which the jurisdiction is relevant). The *determination* of these lower and upper thresholds would depend upon the specific articulations of the four parameters set out above; ultimately, however, what *activates* tax-based scrip is sufficient public willingness to accept scrip as a legitimate economic instrument.

As Elvins (2005, 2010) ably demonstrates, in the 1930s favorable public attitudes towards scrip had to be actively cultivated. Public acceptability of scrip was mobilized through appeals to local economic, cultural, and social values that were threatened by distant forces and interests. This rhetoric of the local was often buttressed by a folk analysis of the causes of the economic depression that accorded to scrip a meaningful role in any future economic recovery. Indeed, the depression years were a particularly fecund period for popular analyses of money, its nature, and its role in either producing or solving the economic crisis. Crank plans abounded. (Reeve 1943). Through their public-spirited examples, prominent local citizens (as in Atlanta) could rally support for scrip experiments. Conversely, the absence of such leadership (as in Chicago) could sabotage the use of scrip. For their part, municipal finance experts evinced ambivalence towards scrip, since these experiments had evolved out of short-term borrowing practices that skirted the edge of fiscal responsibility. Despite scrip's successes, its significance as a monetary medium was widely downplayed. By 1934 these experts had united around a set of 'best practices' for the use of tax anticipation scrip that defined it as a financial, rather than monetary, phenomenon which would disappear once healthier tax receipts would allow governments to return to a cash basis (Ludwig 1934; *The American City* 1934a, 1934b; Lutz 1936, 815-6). "At best," concluded two authorities, "scrip serves only as a temporary expedient to take the place of more formal borrowing" (Chatters and Hillhouse 1939, 181).

Some Brief Remarks Relating to Theory

It is a mark, perhaps, of the ideological naturalization of modern money as abstract exchange value that local currency experiments need to be defended as deviations from some impersonal logic of the market. While the vast literature on monetary theory contains scattered references to the concept of tax-backed money, the point of departure for the dominant perspective is that money emerges as a Mengerian solution to the inefficiencies of barter, and that money's fundamental nature is that of a means of exchange (Forstater 2006; Mastromatteo and Ventura 2007; but see Goldberg 2010). Even in the German chartalist tradition, of which

Knapp was the major example, the role of the state's taxing power was accorded only a minor role (Ellis 1934, 11, 38-40). The implications of tax-backed monetary issues have been explored in historical research, especially in the context of tests of the quantity theory of money (Smith 1984, 1985a, 1985b; Wicker 1985; Pecquet and Thies 2007). Geoffrey Ingham's prominent restatement of the chartalist perspective traces the origins of money to its function as a unit of account for the calculation of debts with the prevailing matrix of social inequalities mediated by state power. According to Ingham, "both the logic and the historical origins of money are to be found in the state…Monetary space is sovereign space; it does not consist simply in the symbolic representations of market transactions, as it does in orthodox economic theory" (Ingham 2004, 57; see also Wray 2004).

What the chartalist analysis illuminates about the American experience of tax anticipation scrip is difficult to specify. Ingham himself is skeptical about the potential for local currencies insofar as they "do not give rise to the creation of pure abstract value in the form of the social relation of credit-debt, and, consequently, no money in this sense is created endogenously through the extension of bank lending". At best, local currencies can function as limited purpose monies, confined to spheres of "interpersonal trust and confidence"; at worst, "they tend to marginalize the informal economy and reinforce the fragmentation and inequality of the wider economy" (Ingham 2004, 186, 187). For similar reasons Ingham is dubious about the prospects of the Euro, since its technocratic administration by an independent central bank is not matched by an equivalent European sovereign authority.

If the money-sovereignty nexus is constitutive of "monetary space", then the implied lessons of the historical experience with tax anticipation scrip will come from answers to political questions about the powers and autonomy of local governments, and not to economic questions about the putative benefits of local currencies. What are the responsibilities and proper scope of local governments? How are these to be ascertained and asserted against the powers and pretentions of the central state?

Seventy years ago, these questions were answered to the detriment of local power. Policy responses to the Great Depression in the United States (and elsewhere) had the cumulative effect of drawing power away from local communities to the states, and from states to the central government. Indeed, far from regretting this transfer of power, municipal finance experts advocated and welcomed the centralization of taxing power and the subsequent reliance of local governments on federal and state grants-in-aid (Hillhouse 1935, 1-7). For the concerns of this paper, this centralization took place both in the realms of municipal finance and in monetary practice. From the broader perspective of American monetary history, the proliferation of local currencies during the 1930s appears as an anomalous development in the progressive centralization of monetary power and authority in Washington D.C. By 1935, not only was the gold standard replaced by a fiat currency, but the basic functions of, and responsibilities for, regulating the mechanism of credit were transferred from the regional Federal Reserve banks (especially the New York branch) to the Federal Reserve Board in Washington D.C. As one legal authority wrote about tax anticipation scrip, "it is somewhat surprising that the Federal administration has not taken cognizance of this desultory infiltration of illegitimate paper money into the channels of monetary circulation" (Nussbaum 1937, 1083). Far from taking "cognizance" of this "desultory infiltration", the federal government ignored the use of tax anticipation scrip, and these experiments in local currency quickly faded from public consciousness. For us to take cognizance of the significance of local currency, and to revive public consciousness of its potential in our present day, requires us to appreciate those historical moments when local currency, despite its success, disappeared as an expression of local power.

References

American Municipal Association. 1934. *Municipal Scrip. A Report of Experience*. Report No. 90**.** Chicago, IL: American Municipal Association (May).

Beito, David. 1989. *Taxpayers in Revolt: Tax Resistance during the Great Depression*. Duke University Press.

Brown, Vernon L. 1941. "Scrip and Other Forms of Emergency Currency Issued in the United States During the Great Depression". Two Vols. Thesis, Graduate School of Business Administration, New York University.

Burbank, Lyman B. 1971. "Chicago Public Schools and the Depression Years of 1928-1937" *Journal of the Illinois State Historical Society* 64 (Winter): 365-381.

Business Week. 1933. "Scrip Problems" (July 22): 13.

Chatters, Carl H. 1933a. "Is Municipal Scrip a Panacea?" *Public Management* XV (March): 74-76.

Chatters, Carl H. 1933b. "Municipal Finance Notes" *Public Management* XV (April): 116-117.

Chatters, Carl H. 1933c. "Municipal Finance Notes" *Public Management* XV (July): 182.

Chatters, Carl H. 1933d. "Statement". U.S.Congress. Senate. Committee on Manufactures. 1933. *Federal Aid for Unemployment Relief*. 72nd Cong., 2nd sess., 5 January.

Chatters, Carl H. 1934. "Municipal Finance Notes" *Public Management* XVI (March): 87-88.

Chatters, Carl H. and Albert M. Hillhouse. 1939. *Local Government Debt Administration*. NY: Prentice-Hall.

Commercial and Financial Chronicle. 1933. "State and City Department" (April 22): 2826-7

Curto, J.J. 1949. *Michigan Depression Scrip of the 1930s.* American Numismatic Association.

De Young, Chris. 1936. *Budgeting in Public Schools*. Garden City, NY: Doubleday, Doran.

Dunbar, Charles F. 1969 [1897]. *Laws of the United States Relating to Currency, Finance, and Banking from 1789 to 1896*. NY: Augustus M. Kelley.

Dunne, Gerald T. 1960. *Monetary Decisions of the Supreme Court*. Rutgers University Press.

Ellis, Howard S. 1934. *German Monetary Theory 1905-1933*. Harvard University Press.

Elvins, Sarah. 2005. "Panacea or Dud: Retailers React to Scrip in the Great Depression" *Business and Economic History Online* 3: 1-17.

http://www.h-net.org/~business/bhcweb/publications/BEHonline/2005/elvins.pdf

Elvins, Sarah. 2010. "Scrip, Stores, and Cash-Strapped Cities: American Retailers and Alternative Currency during the Great Depression *Journal of Historical Research in Marketing* 2: 86-107.

Forstater, Mathew. 2006. "Tax-Driven Money: Additional Evidence from the History of Economic Thought, Economic History and Economic Policy", in *Complexity, Endogenous Money, and Macroeconomic Theory*, ed. Mark Setterfield. Edward Elgar: 202-220.

Gatch, Loren. 2008."Local Money in the United States During the Great Depression" *Essays in Economic and Business History* XXVI: 47-61.

Goldberg, Dror. 2010. "The Tax-Foundation Theory of Fiat Money". *Economic Theory* (September 22). http://dx.doi.org/10.1007/s00199-010-0564-8

Harper, William Canady Joel. 1948. "Scrip and Other Forms of Local Money" Ph. D. Dissertation, University of Chicago (September).

Harvard Law Review, "Tax Anticipation as a Device for the Evasion of Constitutional Restrictions on Municipal Indebtedness" 45 (February 1932): 704-710.

Hillhouse, A. M. 1935. *New Sources of Municipal Revenue*. Chicago: Municipal finance Officers' Association.

Hillhouse, A. M. 1936. *Municipal Bonds. A Century of Experience*. NY: Prentice-Hall.

Hoan, Daniel W. 1936. *City Government. The Record of the Milwaukee Experiment*. NY: Harcourt, Brace and Co.

Ingham, Geoffrey. 2004. *The Nature of Money*. Polity Press.

Ludwig, C. C. 1934. "Experience with Tax Anticipation Scrip" *Public Management* XVI (June): 174.

Lutz, Harley Leist. 1936. *Public Finance*. 3rd ed. NY: Appleton-Century Co.

Mastromatteo, Giuseppe, and Luigi Ventura. 2007."The Origin of Money: A Survey of the Contemporary Literature" *International Review of Economics* 54:194-224.

Mitchell, Ralph A. and Neil Shafer. 1984. *Standard Catalog of Depression Scrip in the United States*. Iola, WI: Krause Publications.

Mott, Rodney L. 1933. *State Scrip*. Chicago, IL: The American Legislators' Association.

National Municipal Review. 1935a. "Baby Bonds and Increased Tax Collections Save Milwaukee" Vol. XXIV, no. 1 (January): 48-9.

National Municipal Review. 1935b. "Atlantic City Scrip Still in Use" XXIV (July): 405.

New Jersey Legislature. Senate and House Committees on Taxation. 1933. *Report on a Study of the Financial and Tax Problems of Municipal Governments in New Jersey.* 57th Legislature. August 29.

New York Times. 1933. "Ocean City Issues Scrip" (March 18): 5.

New York Times. 1934. "New Jersey Taxes Yield $63,810,918. 37 Per Cent of Levy Collected, Incomplete Report for Six Months Discloses" (August 5): 18.

New York Times. 1935. "Monmouth County Plans Refinancing" (July 4): 25.

New York Times. 1936. "Atlantic County Acts on Debt Plan" (May 2): 23.

Noble, Richard A. 1978. "Paterson's Response to the Great Depression" *New Jersey History* 96 February): 87-98.

Nussbaum, Arthur. 1937. "The Law of the Dollar" *Columbia Law Review* 37 (November): 1057-1091.

Nussbaum, Arthur. 1950. *Money in the Law*. Brooklyn, NY: The Foundation Press.

Nussbaum, Arthur. 1957. *A History of the Dollar*. Columbia University Press.

Pecquet, Gary M., and Clifford F. Thies. 2007. "Texas Treasury Notes and Market Manipulation, 1837-1842" *Explorations in Economic History* 44: 81-99.

Ratchford, B.U. 1966 [1941]. *American State Debts*. NY: AMS Press.

Reeve, Joseph Edwin. 1943. *Monetary Reform Movements: A Survey of Recent Plans and Panaceas*. Washington, D.C.: American Council on Public Affairs.

Roberds, William. 1990. "Lenders of the Next-to-Last Resort: Scrip Issues in Georgia During the Great Depression" *Federal Reserve Bank of Atlanta Economic Review* (Sept.-Oct.): 16-30.

Smith, Bruce D. 1984. "Money and Inflation in Colonial Massachusetts" *Federal Reserve Bank of Minneapolis Quarterly Review* (Winter): 1-14.

Smith, Bruce D. 1985a. "Some Colonial Evidence on Two Theories of Money: Maryland and the Carolinas" *The Journal of Political Economy* 93 (December): 1178-1211.

Smith, Bruce D. 1985b. "American Colonial Monetary Regimes: The Failure of the Quantity Theory and Some Evidence in Favor of an Alternative View". *The Canadian Journal of Economics* 18 (August): 531-565.

Solomon, Lewis D. 1996. "Local Currency: A Legal and Policy Analysis" *Kansas Journal of Law and Public Policy* (Winter): 1-57.

State and Municipal Compendium. 1933. "Municipal Bond Sales in the Calendar Year 1932" 6 (June 30): 3-14.

State and Municipal Compendium. 1934. "Municipal Bond Sales in the Calendar Year 1933" 7 (June 29): 3-12.

The American City. 1934a. “Municipal Scrip Aids City Financing” XLIX (April): 79.

The American City. 1934b. “Tax-Anticipation Scrip Shows up Best” XLIX (June): 93.

Tiedeman, Christopher G. 1898. *A Treatise on the Law of Bills and Notes* St. Louis: The F. H. Thomas Law Book Co.

United States Conference of Mayors. 1933. *Municipal Notes and Warrants*. Chicago, IL. (April).

U. S. Congress. Senate. Committee on Banking and Currency. 1933. *Relief to Municipalities.* 73rd Cong., 1st sess. 3 May.

Houston and Texas Central Railroad Company v. Texas, 177 U.S. 66 (1900).

Wain, Sidney. *1934.* “Scrip Works Well in Jersey County” *New York Times.* Section IV. (December 23): 7.

Wall Street Journal. 1933. “Oppose Advance Loans on Taxes. Bankers and Officials at Chicago Review Borrowing Habits of Municipalities” (July 25): 9.

Wall Street Journal. 1936. “$21,365,000 Refunding Plan to Clear Atlantic City Bonds in Default” (August 5): 9.

Wengert, Egbert S. 1939. *Financial Problems of the City of Detroit in the Depression*. Report No. 151. Detroit Bureau of Governmental Research, Inc. (September).

Wicker, Elmus. 1985. “Monetary Standards Contrasted: Evidence from the Seven Years’ War” *The Journal of Economic History* 45 (December): 869-884.

Wray, L. Randall, ed. 2004. *Credit and State Theories of Money*. Edward Elgar.

Yale Law Journal. 1934. “The Administration of Municipal Credit” 43 (April): 924-1006.

---

[1] Early surveys of the use of scrip during the 1930s can be found in Brown (1941) and Harper (1948). Two more recent treatments of a general nature are Elvins (2005) and Gatch (2008).

[2] Excluding floating debt like tax anticipation financing, the annual total of new municipal debt issued in the United States had dropped from a high of $1.5 billion in 1927 to barely $500 million in 1933, the lowest level since 1918. By the beginning of 1934, approximately $1 billion of an outstanding $18 billion in municipal debt was in default. Symptomatic of both the poor state of the economy and of municipal finances were the facts that fully 40% of the 1933 issues were devoted to “poor relief” rather than traditional infrastructure purposes, and that net of debt retirements, total municipal debt actually shrank in 1933. See *State and Municipal Compendium* (1934).

[3] These states were: Indiana, Illinois, Michigan, New Hampshire, New Jersey, New York, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, and Texas. In addition, even if they did not authorize the actual issue of scrip, an equal number of states passed statutes allowing bonds, notes or warrants to be received for taxes. These states were: Alabama, Arkansas, Colorado, Florida, Idaho, Illinois, Iowa, Kansas, Oregon, South Dakota, Utah, Washington, and Wisconsin. (Yale Law Journal 1934, 950-953; Harper 1948, 48).

[4] In Harper’s (1948) opinion, “no basically new legal forms were developed by municipal governments for use as scrip. Existing types of credit instruments needed only to be made payable to bearer, split into small even denominations, and paid directly to creditors and employees instead of being sold to banks or investors for cash” (119).

[5] For a contemporary legal opinion from the federal government's perspective, see Herman Oliphant (General Counsel, Treasury Department) to Vernon L. Brown, January 17, 1935. A legal opinion regarding the scrip issues of the County of Hudson (New Jersey) declared them "valid, binding and general obligations of the County of Hudson, payable out of unlimited taxes on all property in the County subject to taxation". See Hawkins, Delafield & Longfellow to William F. Sullivan, September 21, 1933. Both letters are reprinted in Brown (1941, Appendix A, 162-164, 168).

[6] A counterargument to this would be that cancellation of scrip upon payment into municipal treasuries would enhance its security by discouraging potentially inflationary overissues. In the 19th century this was a virtue commonly attributed to the Bank of England's notes from a "Banking School" perspective.