THE MONEY WAR

An Interpretation of Democracy, Depreciation, and Taxes in the U.S. Civil War[1]

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Abstract

Both sides in the U.S. Civil War financed military spending by issuing new fiat currencies. The Union "greenback" underwent moderate inflation (by wartime standards), but the Confederate "grayback" suffered hyperinflation. Existing explanations for these price movements typically treat only one of the two cases and adopt either a quantity-theory or rational-expectations approach. We compare Union and Confederate policies directly and highlight the importance of taxation for assuring the value of inconvertible money. Combining monetary and fiscal history literatures, we find that tax policies were determined by long-term development of democratic governing institutions. Higher levels of democracy in the North, as compared to the slaveholding South, meant greater tax policy legitimacy and administrative competence. The Union drew on this legacy to back its money effectively, while the Confederacy failed to do so. We contribute to the theory of chartalist money by drawing attention to the political determinants of effective fiscal policy.

Keywords: inflation, hyperinflation, taxation, fiat currency, Confederate States of America, U.S. Civil War, chartalism

In the spring of 1864, the U.S. Civil War still had a year of hard fighting to come, but the outcome already seemed clear to some observers. A political cartoon that appeared in March summed up the basic situation (figure 1). Abraham Lincoln and his Confederate counterpart, Jefferson Davis, are shown slugging it out with sacks of cash. Lincoln's is much the bigger. "Better give in Jeff," he boasts, "you haven't a chance! don't you see I've the LONGEST PURSE." At the feet of the combatants lie piled boxes, the ones beside Lincoln marked "gold bars," the ones beside Davis, "uncurrent money." The caption declares a "Final Issue of the War"—a witty double entendre that evokes both Union victory and the last emission of worthless Confederate paper. But the cartoon goes awry in suggesting that the health of the Union's treasury notes rested on its gold inventories. In fact, both sides had abandoned gold-backed currencies early in the conflict. Something else, then, supported the Union's monetary superiority, which enabled it to convert a substantial advantage in raw economic capacity at the start of the war into the much larger edge in the mobilization of real resources needed to conquer the vast geographic expanse of Confederate America.

The Union and the Confederacy each issued huge quantities of inconvertible paper money to pay for unprecedented wartime expenses. Both experienced price changes, but in completely different proportions (figures 2 and 3). Whether measured in gold, wholesale or consumer indices, Union prices rose by roughly a factor of two over the course of the war. This was a rate of inflation similar to the American experience in the First and Second World Wars and one wholly adequate to sustaining a relatively booming wartime economy (McPherson, 1988, p. 447; David and Solar, 1977, pp. 16-17; Warren and Pearson 1932, pp. 6-10, Mitchell 1908, p. 279). The Confederacy, however, suffered hyperinflation, with both wholesale and gold prices rising nearly ninetyfold by the start of 1865, a situation that left its economy in chaos (Lerner, 1955, p. 24; Todd, 1954, p. 189). If the cartoon is wrong to suggest that gold accounted for the difference, what did?

Most scholars attribute Civil War price movements either to the amount of money issued (the quantity theory, or QT) or to rational expectations regarding money's future value (RE). For the Confederate case, Lerner (1954, 1955, 1956) emphasizes the rise in the stock and velocity of money, as well as the southern economy's declining output. Godfrey (1978) similarly highlights the importance of changes in the money supply. By contrast, several scholars adopt the rational-expectations approach and correlate price movements with news items. Burkedin and Langdana (1993), McCadless (1996), and Weidenmier (2002) each adopt the rational expectations approach and show that price movements tracked news about military, fiscal and monetary events.[2]

The Union's price history is also typically explained within the QT and RE traditions. For Friedman and Schwartz (1963, p. 59, ft. 1964), and Studenski and Krooss (1963, p. 147), the determining factor was the quantity of money in circulation. They argue that inflation would have been limited if a greater part of the war had been funded with taxes rather than money issuances. Alternatively, Calomiris (1988b) demonstrates that the Union's price level was not determined by the current money supply but rather by rational expectations about its future supply, which, in turn, depended on fiscal news.[3] For Calomiris, any policy concerning the political will to resume specie payments in the future was a form of fiscal news.

Two other approaches of note, though distinct, can be grouped together as especially concerned with historically specific interactions between policies and institutions. Wray (1998, pp. 65-69) deploys modern monetary theory (MMT) to attribute the Confederacy's hyperinflation to insufficient taxation, which caused a shortfall of demand for its note issues. From an older institutionalist perspective, Mitchell (1903, p. 198) argues that the value of the greenbacks "depended upon the credit of the issuer," which refers to the confidence that holders of greenbacks accorded to the "government's ability to ultimately redeem its notes." Confidence in the government's ability depended on both structural and contingent factors, including the quantity of paper money issued (the more money, the more difficult the repayment) and the occurrence of "financial, military, political, and diplomatic events" (p. 201), such as reports from the Secretary of the Treasury and news about the government's ability to borrow or the military's battlefield advances and reverses.

Each of these accounts has its merits, yet while all accord fiscal policy a prominent role in controlling either the current or expected money supply, none consider how fiscal policy was actually made and implemented. Nor do any of these accounts attempt a consistent comparison of the Union and Confederate cases. We aim to remedy these deficiencies by arguing for systemic differences between Union and Confederate fiscal capacities that resulted from larger historical divergences in governing philosophy and practice. We differ from QT and RE scholars not only in method but in what we seek to explain. Rather than examine precise price movements, we ask why the Union currency succeeded where the Confederate currency failed. It is surely instructive to ascertain the reasons for short-term price changes, but it is at least as important to understand why one policy achieved its basic aims—facilitating a winning war strategy—while the other did not. Our approach is closer to Mitchell's and Wray's, each of which regards state action as decisive. Yet we pay far more attention to the actual taxation measures that in one case reinforced monetary design and in the other case undermined it.

A comparative investigation of Union and Confederate money creation requires a theoretical framework that can account for the political and administrative capacities of the state. We begin with Christine Desan's "constitutional approach to money." Contrary to the standard economic interpretation of money that sees it as the spontaneous result of private exchange, Desan regards money as a "governance project" (Desan 2014, p. 1, 7, 12; see also Desan, 2017). Money, in her view, is a product of institutions and state designs that make it possible for certain materialized practices—the coining of silver, the printing of paper notes, the coding of magnetic strips mounted on plastic cards—to take on the attributes of money. The successful implementation of such projects depends on the state's fiscal actions and legal norms. The state creates money, in the first instance, by making purchases with designated tokens that it will subsequently accept for the discharge of the tax obligations it imposes. This "fiat loop," by which the state issues payments and takes them back, confers on money what Desan calls "fiscal value." In other words, tax obligations generate the demand for state monies that endow them with worth. The state can also make its designated tokens transferable among private parties by agreeing to accept them from anyone (not just the original payee) and by enforcing a legal order that recognizes money as lawful clearance of private contractual obligations (legal tender). Monetary tokens' resulting general acceptance—"the capacity to travel from hand to hand as carriers of value recognized by all participants"—adds what Desan calls a "cash premium," enhancing their value further.[4] These basic criteria can be operationalized in many ways, each with its own social and political implications.

The constitutional approach to money is particularly apposite for comparing the Union and the Confederate monetary experiences because the most important difference lay in the two sides' diverging tax capacities: the Union was able to implement an operative taxing system, while the Confederacy largely failed to do so. In Desan's terms, the Confederacy failed to close the fiat loop. It was therefore unable to confer fiscal value on its paper emissions, nor a cash premium, leaving its citizens without adequate means to carry on ordinary business transactions. The result was a badly malfunctioning economy even in the vast areas of the South where Union armies remained distant and the slave system continued to function relatively undisturbed.

As a practical matter, it is easier for governments to put money out than to call it back in (e.g. Rockoff, 2015, p. 8). The taxing part of Desan's equation requires not only a willingness to impose obligations but an ability to collect on them. This ability cannot be realized overnight because, at one level, there is the administrative challenge of setting up a competent taxing authority, and, at a deeper level, there is the political challenge of fostering a reasonable degree of popular compliance. Because, therefore, designing a sound monetary system in theory is not the same thing as implementing a functional one in reality, we argue that Union and Confederate monetary experiences were strongly conditioned by their respective prior taxing capacities. The Union's antebellum legacy allowed it to massively scale up and significantly transform its revenue system; the Confederacy's did not. It is here that the constitutional approach proves its relevance, because it expands the study of price movements to encompass the underlying monetary architecture within which QT and RE factors took shape.

This draws our attention to the long-term institutional trajectories revealed by Einhorn's (2006) comparative study of northern and southern tax regimes from the colonial era to the antebellum periods. Einhorn's conception of taxing capacity can be decomposed into two distinct but correlated competencies: skilled tax administration and deliberative tax politics. This means that, at least in the United States, more democracy has tended to generate better taxation for public purposes desired by the electorate.[5] Conversely, slaveholders' distrust of democratic institutions—engendered by their philosophical commitment to social hierarchy and their pragmatic fear that ordinary voters might want to tax slavery out of existence—led to colonial and state governments that were "more aristocratic, weaker, and less competent where slavery was a major institution in the economy and society," as compared to their freer northern peers (Einhorn 2006, p. 7).[6]

Taking the joint perspective of Desan and Einhorn, Civil War monetary and tax policies appear intrinsically linked, forming distinctive Union and Confederate fiscal regimes fundamentally reflective of their respective state-making projects. These fiscal regimes profoundly structured the manner in which the state made claims on its society and even on how society's members made binding claims upon one another in their private interactions. It is little surprise, then, that a slave society should differ substantially, perhaps inevitably, from a relatively free and democratic one even in its money.

Because the Civil War split a polity and society that shared many things in common—such as an English Protestant cultural heritage, common law and constitutionalist legal tradition, capitalist and settler-colonial ethos, and more—it offers something like a natural experiment able to contribute broader insights to the chartalist theory of money. We stress the long-run significance of state formation and the institutional history of taxing capacity. While it is often useful and appropriate to make analytical distinctions between the legal, political and economic spheres, in the case of chartalist money such categorical boundaries are artificial and misleading. For the chartalist approach, money is tax-driven, and thus inextricably bound up with the historically determined capacities of the state. Even if day-to-day money creation can be devolved to private financial intermediaries or an independent central bank and thereby partially depoliticized, it is nearly impossible to similarly insulate taxation (and the broader structure of state-imposed obligations) from political contestation. Consequently, it is necessary to account for the capacities and debilities of the fiscal authority, that is, the historically durable determinants of fiscal policy horizons, if one is to give a convincing account of transformation in the monetary architecture, such as occurred during the US Civil War.

In this paper, we sketch our proposed argument by way of a synthesis and critique of the existing literatures on American fiscal and monetary regimes before and during the Civil War. Our approach is necessarily narrative in order to capture the essential dynamics of the problem. In future, we may subject elements of the argument to more rigorous testing with additional archival research and empirical detail.

The Colonial and Revolutionary Legacies

The Union's policy of paper money issuance coupled with robust tax increases harked back to the "currency finance" practices of the British North American colonies during the seventeenth and eighteenth centuries (Spaulding, 1869, pp. 39-40). In these earlier episodes, colonial governments financed wartime expenditures by issuing paper money on a temporary basis and simultaneously passing commensurate tax increases that would eventually call the notes back. This combination endowed the notes with fiscal value, giving the government purchasing power that effectively anticipated future tax receipts. Given the chronic scarcity of specie associated with the colonies' structural trade deficits, the public also tended to demand notes for ordinary business transactions. Desan's two key elements, fiscal value and the cash premium, were thus firmly in place (Ferguson, 1961; Perkins, 1997; Newell, 1998; Grubb, 2006; Goldberg, 2014).

At the outbreak of the Civil War, both northern and southern policymakers proposed something similar. Interestingly, their primary point of reference seems not to have been the colonial legacy but rather the British use of inconvertible bills of credit during the French Revolutionary and Napoleonic Wars (Spaulding, 1869, pp. 39-40). The reason for this amnesia was probably the disastrous experience with paper note issues, known as "continentals," during the American Revolution. The continentals' rapid depreciation resulted from the national state's inability to tax. Under the Articles of Confederation, the Continental Congress lacked this crucial fiscal power, but even had it been granted such a power, it could scarcely have executed it in practice, because the creation of a continental taxing authority was beyond both the political and administrative capacities of a nascent postcolonial state (Einhorn, 2008, pp. 127-28). Consequently, there was no mechanism to generate demand for the continentals or to retire them (Calomiris, 1988a; Grubb, 2006, pp. 46-47; Goldberg, 2014, p. 481). Instead of taxing directly, Congress depended on the individual states to do so in compliance with requests for funds, known as requisitions. But the states preferred to save revenues for their own needs, including support for their own paper issues, which nevertheless suffered depreciation because of wartime disruptions to their fiscal apparatuses. The general fiasco led subsequent US officials to repudiate the policy of currency finance and virtually to erase it from public memory.[7]

The Revolutionary story underscores the fact that successful implementation of currency finance depended not only on calibrating money issues to tax increases, but also on executing tax collections. In the Civil War, the Union was able to do both while the Confederacy was able to do neither. Although most of the fighting occurred on southern soil and the Union's naval blockade prevented the Confederacy from receiving significant customs duties, the slaveholders' problem was not fundamentally about wartime disruptions. Union armies did not penetrate the enormous southern interior until late in the war and large areas remained undisturbed when hostilities concluded (Downs, 2015). Moreover, the Confederacy inherited the existing federal governmental presence in the South, including buildings and personnel, virtually intact. The American revolutionaries, by contrast, comprised a tenuous alliance of colonial legislatures and ad hoc committees that struggled to govern their backcountry populations and take hold of administrative functions previously handled by royal governors. The difference between Union and Confederate taxing policies is therefore best understood as an outgrowth of long-term institutional developments that bequeathed to the northern free states robust taxing capacity absent from the southern slave states.

Here we turn to Einhorn's comparative study of northern and southern taxing traditions stretching back to the colonial period. Einhorn's finding that taxing capacity in early America was closely related to democratic institutions—that more democracy meant more taxing power—might seem counterintuitive. The relationship is often thought to be the reverse. People dislike taxes, the thinking goes, so if they obtain a voice in government they will seek to reduce their burdens as much as possible. Was not the American Revolution, after all, a great tax revolt? Not exactly. The revolutionary slogan "no taxation, without representation" did not oppose taxes *per se* but rather conditioned them on political voice. In point of fact, once Americans gained the ability to govern themselves they sometimes asked for more rather than less taxes, when they believed those taxes served a public purpose. As Lincoln famously put it, "the legitimate object of government, is to do for a community of people, whatever they need to have done, but can not do, *at all*, or can not, *so well do*, for themselves—in their separate, and individual capacities" (Lincoln, 1953, 2:220-222, emphasis in original).

There were major differences in the amount of democracy that antebellum Americans enjoyed. Gender- and race-based exclusions were national, but wherever slavery was dominant, democratic institutions suffered more. Slaveholders were powerful people schooled in what Thomas Jefferson called "the most unremitting despotism" (Jefferson, 1998, p. 168).[8] By contrast, the northern colonies and later states tended to be more egalitarian and more democratic than their southern neighbors. They also tended to tax themselves more for things like roads and schools. The disparity between North and South is instantly evident, for example, by looking at the antebellum canal network, which was built largely with state funds (Larson, 2001; Figure 4). Comparative measures of public education and scientific funding display a similar sectional skew, even when soil type and other environmental conditions were indistinguishable (Majewski, 2016; Ron, 2020). A similar pattern has been observed for the Americas generally, linking more democratic governments with greater taxation and lower inequality (Sokoloff and Zolt, 2007).

The northern free states thus had a substantially greater taxing capacity than their southern slave counterparts. This capacity can be regarded in two aspects: administration and politics. Administratively, northern states implemented more complex tax systems that addressed both revenue and equity issues. In particular, northern states had much greater ability to assess property values at market rates, to equalize values across locales lest tax officials try to under-assess their friends and neighbors, and to levy taxes in relatively fair proportion to taxpayers' means and benefits. This ability, in turn, derived from the habits of a democratic society accustomed to "local decision making" and "ongoing, everyday political negotiation between taxpayers and elected local officials" (Einhorn, 2006, p. 29; 2008, p. 202). The significance of democratic practice for state capacity was that it generated legitimacy and compliance that allowed tax administrators to do their jobs. It also tended to generate more responsive and broadly conceived economic development policies that grew the taxable pie (Brownlee, 2016, pp. 54-57). Democracy meant figurative and literal buy-in.

Taxes and Money in the Union

Union and Confederate fiscal regimes took shape when long-term institutional trajectories intersected with wartime exigencies. Both sides initially intended to rely on bond issues, as the US had done in earlier major wars (Edling, 2014). However, the scale of military needs quickly overwhelmed both governments' ability to borrow. The Confederacy never surmounted this difficulty, whereas the Union eventually created new and very successful borrowing channels. According to one conservative measure, the Confederate States financed only 21,3% of their war effort via bond issues, while the Union's corresponding figure was 64,5% (Godfrey, 1978, p. 14). In the short term, however, the Union, too, required other means. Both governments turned to emissions of paper treasury notes.

The resulting policies shared some broad similarities. Both the Union "greenbacks" and the Confederate "graybacks," as the notes came to be known, were exchangeable for interest-bearing bonds of their respective issuing governments, a policy intended to encourage lending and public acceptance of the notes.[9] Both currencies were also accompanied by promises to raise taxes in order to uphold their values.

But only the Union was able to implement new taxes effectively (Brownlee 2016, pp. 60-68; Edling, 2014, pp. 206-212; Bank *et al.*, 2008, pp. 23-47).[10] "In its financial mobilization for war," writes the tax historian, W. Elliot Brownlee, "the Union had an advantage over the Confederacy because of the extended fiscal experimentation by Northern state governments" in the antebellum era (Brownlee, 2016, p. 65). In addition to raising tariff rates, Union officials began planning for heavy internal taxation as early as July 1861 and a month later imposed the nation's first-ever income tax. They subsequently invested great effort in elaborating a system remarkable for its breadth and reach. The result, in July 1862, was a law "running hundreds of pages" that "taxed almost everything but the air northerners breathed" (Edling, 2014, p. 206; McPherson, 1988, p. 447). Additional rounds of legislation expanded the tax base and raised rates further. Yet "Republican leaders did not face significant resistance to the huge new taxes or need to rely on coercion for their collection," Brownlee (2016, p. 60) observes, thanks to their "broad electoral popularity." Max Edling (2014, p. 208) adds, in his recent study of early American war finance, that congressional debates over the first major internal revenue act are "noteworthy most of all for the willingness of the lawmakers to support the war." The London *Times* opined that "one tenth of these taxes would bring any American community to the resistance point in a month," but historians and contemporaries alike have repeatedly marveled at ordinary northerners' eagerness to bear their share of the joint burden (cited in Ball, 1991, p. 221). "I have never before seen a country where the people were clamorous for taxation," remarked one incredulous foreign observer in 1862 (Bank *et al*., 2008, p. 37).[11]

If this was a fiscal system that enjoyed democratic legitimacy, it was one that also enjoyed adroit political and administrative management. The House Ways and Means

Committee took its time drafting legislation, but Congress publicly committed itself six months earlier to raising taxes as "a statement of intent meant to reassure public creditors" (Edling, 2014, p. 205). The July 1862 law raised the rates and progressivity of the income tax and added a first-ever federal inheritance tax to balance the regressivity of stepped-up customs and excises. Congress also selectively took lessons from abroad. It adopted the British administrative innovation of tax withholding ("stoppage at the source") for collecting income taxes on corporate dividends and government employee salaries (Brownlee, 2016, p. 67). But "rather than impose high duties on a few items, like Britain did, the Ways and Means Committee opted for low duties on a wide range of manufactures" to spread the burden around (Edling, 2014, p. 206). Congress also stayed away from property taxes, leaving the states their traditional revenue base. In these ways, it addressed both the administrative and political requirements of an effective and sustainable tax regime. To be sure, there were problems. Early on, Treasury Secretary Salmon Chase took no direct action to collect income and revenue taxes (Studenski and Krooss, 1963, p. 141) and, later, evasion of liquor and income taxes was particularly significant (p. 151). Yet notwithstanding these trouble spots, the Union's taxing system benefited from a relatively high degree of legitimacy and compliance—especially when compared with the Confederacy, as we will show in the next section. Thus, by most accounts, federal tax collection proceeded remarkably smoothly and turned out a revenue juggernaut. By the end of 1863, it was providing the government with "substantial income," directly funding a third or more of spending. By 1865, internal taxes were dominating a federal revenue haul that, each *quarter*, exceeded and even doubled prewar collections for entire *years* (Edling, 2014, pp. 183, 195, 210-212; Brownlee, 2016, p. 68).

From the outset, the connection between taxation and the maintenance of a federal fiat currency was evident to all. It was repeatedly stressed in policymakers' private correspondence, on the floors of Congress, and in the press. "Now, then, put on a war tax of

$200,000,000, issue $150,0000,000 demand notes," wrote one correspondent to Elbridge Spaulding, the primary author of the greenback legislation. "The tax bill will create a general demand for the Treasury notes and keep them at or near par," wrote another. The Treasury Secretary likewise pointed out that "a judicious system of adequate taxation" would "create a demand for the notes" (Spaulding, 1869, pp. 23-25, p. 46). When, later in the war, it became necessary to issue additional notes, the *New York Times* demanded "to be taxed to a degree which shall fairly correspond with the vast amount of promissory money afloat" (cited in Bank *et al*., 2008, p. 40). Congress responded by augmenting the internal revenue system yet again.

The point here is not that such views were universal—there were plenty of greenback skeptics before, during, and after the notes were issued—but rather that the mechanism of their operation was well understood and straightforward to articulate. Spaulding presented the case fully when he spoke before the House in late January 1862 in favor of the first emissions. The new tax law was still several months away at this point, the actual revenue still further in the future, but Congress had already declared its intent and a subcommittee of Ways and Means was hard at work. Spaulding therefore asserted that his proposed treasury notes would be supported by "adequate taxation, to be imposed by new bills." He then pressed the importance of following through. "This is what the people . . . want to know," he insisted. "If they take these notes, they want to know positively whether you will enforce the claim of the Government upon the property of the country, to the full extent necessary to redeem the Treasury notes" (Spaulding, 1869, pp. 33-34). The greenbacks were thus issued on the strength of a general understanding that heavy taxes would follow. And they did. As Hugh Rockoff observes, "the Republicans were serious about taxes" (Rockoff, 2015, p. 26).

That Congress could make a credible promise "to enforce the claim of the Government upon the property of the country" nicely illustrates the utility of our "constitutional approach." At issue here was not whether taxes would be perfectly proportioned to absorb the whole quantity of greenbacks issued. Spaulding's call for a commitment "to redeem the Treasury notes" did not mean this. Indeed, Dror Goldberg points out that "a government that issues too much paper money can get away with it" for some time, "because money has a grip on everyone's daily activities" (Goldberg, 2014, p. 472). The essential question was whether the government enjoyed the legitimacy to make good on its promises to the extent necessary to retain that grip. If some inflation occurred, this was simply another form of financing within a complicated social distribution of war-related requisitions. It is even possible that "in some circumstances financing through money creation may be viewed at least in some quarters as a comparatively equitable means of finance" (Rockoff, 2015, p. 10). Effective fiscal and monetary capacity serves here as a proxy for political legitimacy and provides a measure of citizen confidence in the Union's relatively democratic "governance project." The "fiscal loop" is not, therefore, a matter of mechanically controlling the quantity of money, or even expectations about the quantity of money, but of establishing broad public confidence that can generate the "cash premium" to maintain the value of the unit of account. This was precisely where the Confederacy failed. Its monetary grip on the southern public loosened, slipped and ultimately gave way entirely.

TAXES AND MONEY IN THE CONFEDERACY

The Confederacy hoped to manage the war on the basis of loans and it put off serious taxation until it was too late. Confederate fiscal policy was a mass of incongruities, beginning with the absurdity of its plans to rely on taxing international trade in the face of a Union naval blockade. The Confederate Congress's first move, bizarrely, was to order costs reduced by "at least fifty percent" at the federal customs houses it had seized (Todd, 1954, p. 121). This meant layoffs, potentially crippling the revenue service it intended to count on. The plan seems not to have been carried through, but it hardly mattered because the tightening blockade let few cargoes in. Although the Confederate Treasury Secretary, Christopher H. Memminger, predicted in mid-1861 that customs duties would raise $25 million within a year, returns for the entire war fell short of $3.5 million. The Confederacy next looked to export taxes, apparently still unable to comprehend the effects of the blockade. Memminger believed that bond issues secured by export taxes sustained their market value better than other loans, but it is hard to imagine how this could have been the case when export tax collections were utterly marginal, totaling less than $40,000 for the war (Todd, 1954, pp. 121-127; Ball, 1991, pp. 203-10; for measures of blockade effectiveness, see Ekelund and Thornton, 2004, pp. 35-36).

The Confederate Congress next passed a "war tax" in August 1861, levying a flat half-percent rate on real and personal property. Valuing property was precisely what the southern states had little experience doing, particularly when it came to slavery. In the antebellum era, some states did move from the simpler poll-based slave taxes (a flat rate per capita) to more administratively demanding *ad valorem* taxes (based on assessed values). These moves always came in the face of immense planter resistance and the result was often not a true valuation but rather a simpler enumeration of tranches defined by age and sex, following common practice on the part of slave traders (see, e.g., Rosenthal, 2018). Consequently, during the Civil War, varying assessments of slave values in the different states generated major delays in the overall property assessment. The existing scholarship does not specify the precise problems but it is possible that incompatible slave schedules made equalization across the states difficult or contentious (Todd, 1954, p. 133; Ball, 1991, p. 220, 224).[12] At any rate, after the assessment was done, collections were left almost entirely to the states, most of which proceeded to collect no taxes and instead paid their quotas by borrowing graybacks financed with their own inconvertible paper issuances. Almost three-quarters of the $17 million raised by the end of 1862 was not really tax revenue at all (Ball, 1991, p. 136; see Table 2). According to Burkedin and Langdana (1993, p. 357) "not until 1864 did the War Tax account for even 10% of total revenue. In 1862, its first year of implementation, less than 5% of revenues were realized from this tax." The graybacks received less support than they otherwise might have gotten and the southern monetary system was made further complicated and uncertain.

Nearly two years of "disastrous inertia" followed, with no additional taxation as the currency and the government's credit deteriorated. Finally, in April 1863, the Confederate Congress passed a serious tax law that was nevertheless fundamentally inadequate on several counts. Although it included an income tax, duties on profits from trade in major commodities, numerous professional licensing fees, and a tax-in-kind on agriculture, the law omitted a "direct tax" on property, including enslaved property. Hence "slaveholders were enabled to evade contributing to a new nation established for their special benefit" (Ball, 1991, p. 227). Moreover, "numerous obstacles blocked the satisfactory operation of the tax machinery" and evasion seems to have been rampant. But the deeper problem was that the money tax was simply insufficient to meet rising expenses and spiraling prices. The tax-in-kind worked better. "In the first 9 months of 1863 . . . [it] accounted for more than half of the average monthly tax revenues," but it provoked sharp protest (Burkedin and Langdana, 1993, pp. 357-8). At ten percent of agricultural output after deductions sufficient to feed farmers' families, it "looked large and discriminatory in comparison with the 2% currency tax on salaries over $1,500" (Todd, 1954, pp. 136-148, quotations on pp. 142, 145; also see Bank *et al*., 2008, p. 33; Hurt 2015, pp. 132-134, 160). And since a tax-in-kind did not enhance the garybacks' cash premium, it made them no more desirable and inflation continued to spiral out of control.

Unable to grasp the causes of inflation, some southerners lashed out at greedy merchants and manufacturers (McPherson, 1988, p. 441; Wilson, 2002, p. 60; Rockoff, 2015, p. 8). But other well-placed Confederates understood exactly what was happening and said so. The Richmond *Enquirer* pointed out repeatedly that a fiat currency without adequate fiscal measures would suffer the same fate as the Revolutionary continentals and for the same reason: lack of taxation to uphold their value. The editor of the South's leading economic journal, J. D. B. DeBow, reiterated the warning, as did the powerful Georgia politician, Robert Toombs (cited in Phillips, 1913, pp. 622-27). No less a figure than John C. Calhoun had explained the mechanics in painstaking detail as early as the 1810s and again after the Panic of 1837 (Todd, 1954, p. 138; Ball, 1991, pp. 37-39, 50-51, 222-23).

The fundamental problem, in the words of Memminger's biographer, was simply an "aversion to internal taxation" (Capers, 1893, p. 341). According to McPherson, "the Confederate government possessed no machinery for levying internal taxes and its constituents had no tradition of paying them" (McPherson, 1988, p. 38). The most comprehensive history of the matter, Ball's aptly titled, *Financial Failure and Confederate Defeat*, stresses both the administrative and political weaknesses implied by these judgments. Ball (1991, p. 32, 42) notes that "southern colonies shunned direct taxes as much as possible, even at the cost of a lamentable level of public services," and he blames a lack of "effective democratic government" for the Confederacy's sclerotic wartime politics. "To mobilize a staff of collectors and assessors capable of appraising and levying direct taxes," he concludes, "required far more will and, to a lesser degree, more skill than the Confederacy possessed" (226). Robert Toombs apparently agreed, writing to a colleague in June 1863 that "the Yankee Congress have certainly beat us badly in finance" (cited in Phillips, 1913, pp. 619-20).

A full accounting for Confederate fiscal policy may never be possible because many of Congress's key deliberations were conducted in secret session. This, in itself, signals its democracy deficit relative to the Union. In the North, Spaulding sent the very first draft of his fiat currency measure to the *New York Tribune* for public dissemination and comment (Spaulding, 1869, p.13). In response to this and daily reporting on congressional financial deliberations in the press, he and others members of the House Ways and Means Committee fielded a range of views expressed in both in private correspondence and public print. Confederate policymakers held their cards much closer to the vest. They failed to "take the people into their confidence," in Ball's words, because they did not have much confidence in the people (Ball, 1991, 209). As Drew Faust and Stephanie McCurry have shown, the Confederate project was profoundly anti-democratic, including attempts to reintroduce property qualifications for the franchise (Faust, 1988, pp. 33-39; McCurry, 2010, pp. 11-37). Also revealing is the fact that whereas in the Confederacy it was the Treasury Secretary rather than Congress that pushed for taxes, in the Union it was the House, the most democratic element of the federal government, that advanced the conjoined money-and-tax agenda. In this case, at least, Einhorn's positive correlation between democracy and taxation seems to hold.

Confederate fiscal incapacity should not be mistaken for states' rights fanaticism or a lack of statist ambition. In fact, antebellum southern state legislatures were much more likely to charter banks and railroads as state-run enterprises and, at least in some cases, to apply the profits to expanding governmental services with the goal of establishing tax-free government (Wallenstein, 1987; Murphy, 2017, pp. 115-16; Quintana, 2018; Hall, 2019). This kind of policy was only possible because southern state governments were dominated by slave-owning planters. As long as the state invested in businesses that served the plantation economy instead of competing with it, government ownership was an attractive option. The experience was put to good effect during the war in the Confederacy's vast takeover of industry, which, among other things, allowed it to manage some remarkable feats of bootstrap industrialization (Morgan, 2005). Before the war, however, planters proved decisively uninterested in backing state investment of benefit to manufacturers, such as construction of transportation access to Virginia's coal beds (Adams, 2004; Majewski, 2000). The inability to discipline the wartime agricultural sector, which continued to devote inordinate acreage to tobacco and cotton in the face of urban food shortages, underscores the Confederacy's commitment to the planter class (e.g., Hurt, 2015, pp. 118-125; Schwab, 1901, pp. 278-279).

Without a solid fiscal base, Confederate statism proved chaotic and, to a large extent, self-cannibalizing. This must be kept in mind when comparing the Confederacy and the Union on measures of state capacity. In one of the most influential accounts of Confederate statism, Richard Franklin Bensel argues that, "measured by statutory rates, coverage, and revenues collected the Confederate internal revenue system extracted more wealth from that erected by the Union" (Bensel, 1990, pp. 170-71). The former, he shows, collected \$82 million plus \$40 million worth of in-kind goods in the first year of operation of the 1863 Act, while the latter collected \$39 million during its first year. Citing the Union's earlier start and the graybacks' depreciation, he ultimately concludes that the two sides were "approximately equivalent" in the matter of internal revenue (172). Adjusting the figures for inflation, however, shows that Bensel seriously underestimates the severity of Confederate difficulties. When the Confederate tax bill was passed in April 1863, the wholesale price index was already about 1,100 and by January 1864 it was at nearly 2,800 (as compared to a base of the first four months of 1861; Lerner, 1955, p. 24, 29). It continued to rise in the opening months of 1864, when most of the new taxes were collected (Todd, 1954, p. 145; Godfrey, 1978, p. 23; Ransom, 2001). It is reasonably conservative to suppose that the average price index during tax collections stood at about 2,500, which means that the \$82 million that Bensel highlights was only worth about \$3.3 million in real terms. By contrast, a conservative average for the Union wholesale price index in the first year of its internal tax system would be 150, meaning its \$39 million equaled \$26 million in real terms, a nearly eightfold advantage compared to the CSA. A more realistic price index of 130, per Mitchell, would raise the Union takings to $30 million (Mitchell, 1908, p. 279). Even adding the tax-in-kind to the Confederate total (at $40 million nominal = $1.7 million real), the ratio is 6:1 in favor of the Union *and a full year earlier*, when crucial battlefield operations and arms production had to be financed. In addition, the tax-in-kind did nothing to support the currency and, in fact, made the situation worse by reducing salable goods (Lerner, 1954, p. 513).

The overall situation is indicated by figure 5, which shows Union and Confederate tax revenues in each reporting period, adjusted for inflation. Irregular Confederate reporting makes this kind of visualization helpful. The magnitude of Confederate fiscal ineptitude now comes into clear view. The first three quarters of 1863 particularly stand out, a period of key battlefield turning points when the Union revenue machine was fully in gear while their opponents collected essentially nothing. It thus appears that Confederate statism lacked the fundamental attribute of a modern state: the capacity to tax in a manner compatible with waging a total war.[13]

The significance of the lengthy delay in implementing the Confederate internal tax system cannot be overstated. It testifies to the limited legitimacy of the Confederacy's governance project, which, by failing to do what was necessary, allowed inevitable wartime inflation to turn into hyperinflation, leading to a cascade of problems whose impact grew wider at each downward step. All of them stemmed from the circumstance that, having failed to calibrate note issues to tax increases in a reasonable degree, Confederate leaders had upended money's ability to distribute social claims and obligations in a manner generally perceived as fair, fatally weakening its "grip on everyone's daily activities," as Goldberg puts it. Inflation caused popular discontent that manifested most clearly in the many food riots of 1863, which were met by a combination of suppression and ineffective price controls (Hurt 2015; Cashin 2011; figure 4). In some places, hyperinflation resulted in a barter economy or the use of wheat or bullion (in Texas) in means of payment, meaning that the grayback completely lost its value (Pecquet 1987; Hurt 2015, pp. 134, 138; Carpenter, 2020, pp. 170-175). Hyperinflation also disrupted production so that when the tax system *was* finally implemented, there was less to tax. It disincentivized production, particularly because the government resorted to impressing what it needed at below-market rates (Hurt, 2015, pp. 120-127, 161-162; Schwab, 1901, pp. 203-205). "After suffering under impressment," several scholars report, "farmers simply stopped planting new crops" (Bank *et al*., 2008, pp. 29-30). Union Secretary of State William H. Seward observed privately in September1863 that "the insurgent financiers last winter adopted wheat instead of gold for the standard of values. . . . It is now reported that the farmer refuses to thresh his wheat" (Seward, 1863). Confederate delay further hurt fiscal capacity by losing the opportunity to tax in areas that would be occupied by Union armies. In short, it is difficult to see how Confederate revenue policy can possibly be put on a par with the Union's as a measure of state capacity.

It is potentially misleading, in this context, to speak of "extracting" taxes, a locution that comes from the "bellicist" or "fiscal-military model" of state development.[14] Bensel's view is perhaps closest to Charles Tilly's generalized version of the model, which regards state power as crucially dependent not only on raw fiscal capacity but on the level of economic development of the society from which it draws (Tilly, 1992). The problem with such a formulation is that it distinguishes too sharply between the state and society/economy, so that the former seems entirely outside the latter and therefore engaged in a perpetual effort to "extract" wealth. But if, as Desan argues, an economy operating on the basis of money does not simply emerge spontaneously from market exchanges, but is rather a form of governance implemented by state officials, then one would have to acknowledge that money and taxes are ways in which the state cultivates the economy rather than merely extracts from it—that, in fact, state and economy are significantly endogenous to one another and cannot be easily disentangled even for analytic purposes.

CONCLUSION

For political leaders charged with managing a war—or any existential threat requiring near total social mobilization—the standards by which to judge financial policy are narrowed to the stark options of success or failure. The actual mix of fiscal and monetary policies require a careful "balancing act," as Rockoff puts it, attuned to both political and economic implications. Institutional endowments will make a big difference in deciding how such a balancing act can be managed and what it can achieve.

This, at least, is the lesson we draw from our comparison of Union and Confederate financial mobilizations during the US Civil War. Synthesizing the existing scholarship with the help of Desan's and Einhorn's insights, we show that differential taxing policies explain differential currency outcomes. Whereas the Union greenbacks experienced only moderate and manageable inflation, the Confederate graybacks suffered catastrophic hyperinflation. In 1864 the Confederate government was even obliged to partially repudiate its own paper money. We further show that taxing policies were determined by institutional capacities resulting from long-run historical developments. In particular, we highlight the way that democratic governance enhanced two essential facets of taxing capacity: political legitimacy and administrative competence.

Our analysis suggests that historical state capacity must form an integral part of any chartalist theory of money. It is not at all obvious that a government will be able to effectively sustain a currency via the "fiat loop," even if its officials understand the mechanism perfectly clearly. This may also imply that a successful fiat loop is contingent on people's broader range of commitments to the state's "governance project." Although we have highlighted the importance of relatively democratic governance in the northern colonies of British North America and, later, the free states of the United States, it is likely that other arrangements can function effectively so long as they link the state with key classes of social actors. In other words, both money and taxes, which together establish a pervasive structure for ordering social claims and obligations, depend on a still broader set of governing arrangements and practices.

The Confederacy's commitment to the personal sovereignty of the slaveholder in the era of powerful national states put it on the horns of a dilemma (Tilly 1992; Maier 2014). Fighting a total war with an economically advanced nation-state able to recruit a very substantial portion of its own society's resources, Confederate officials and southern planters balked from taking necessary measures to sustain the material basis of armed force. The result was economic disorder and defeat.

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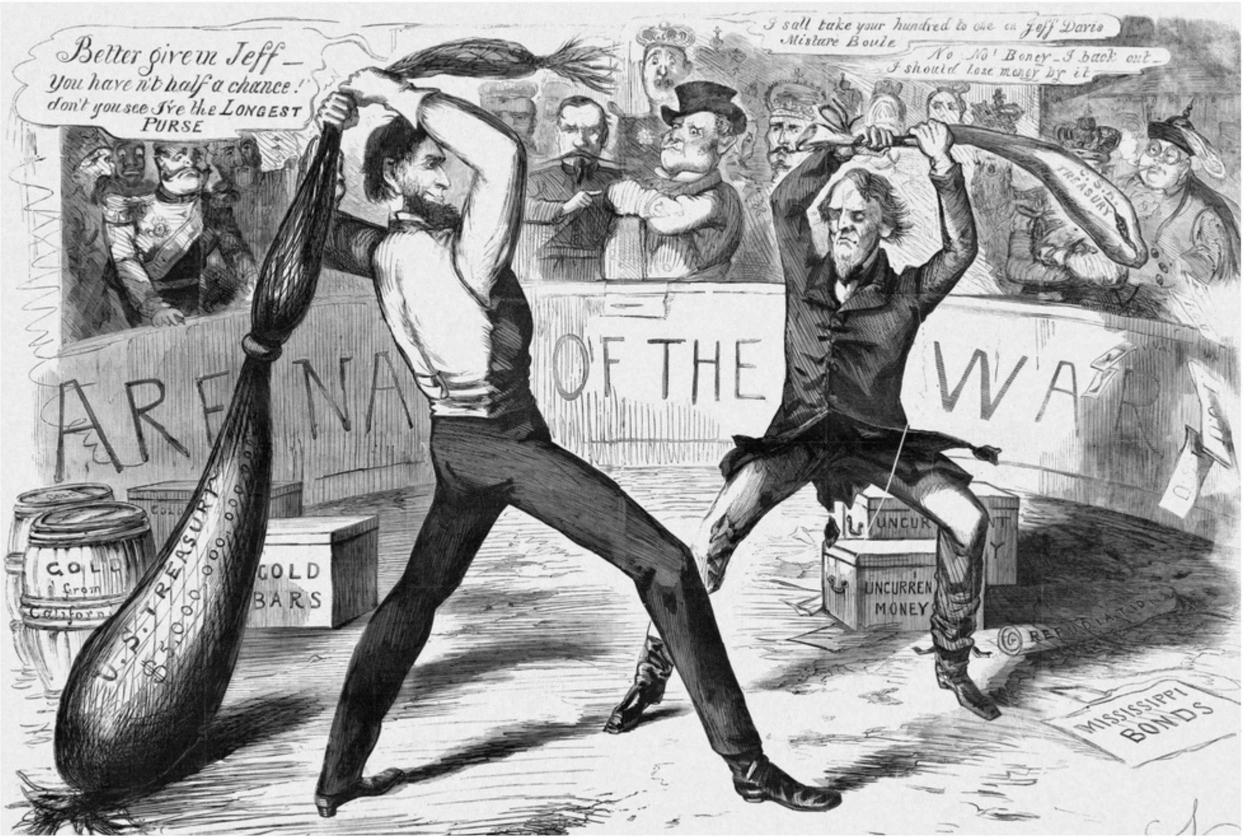
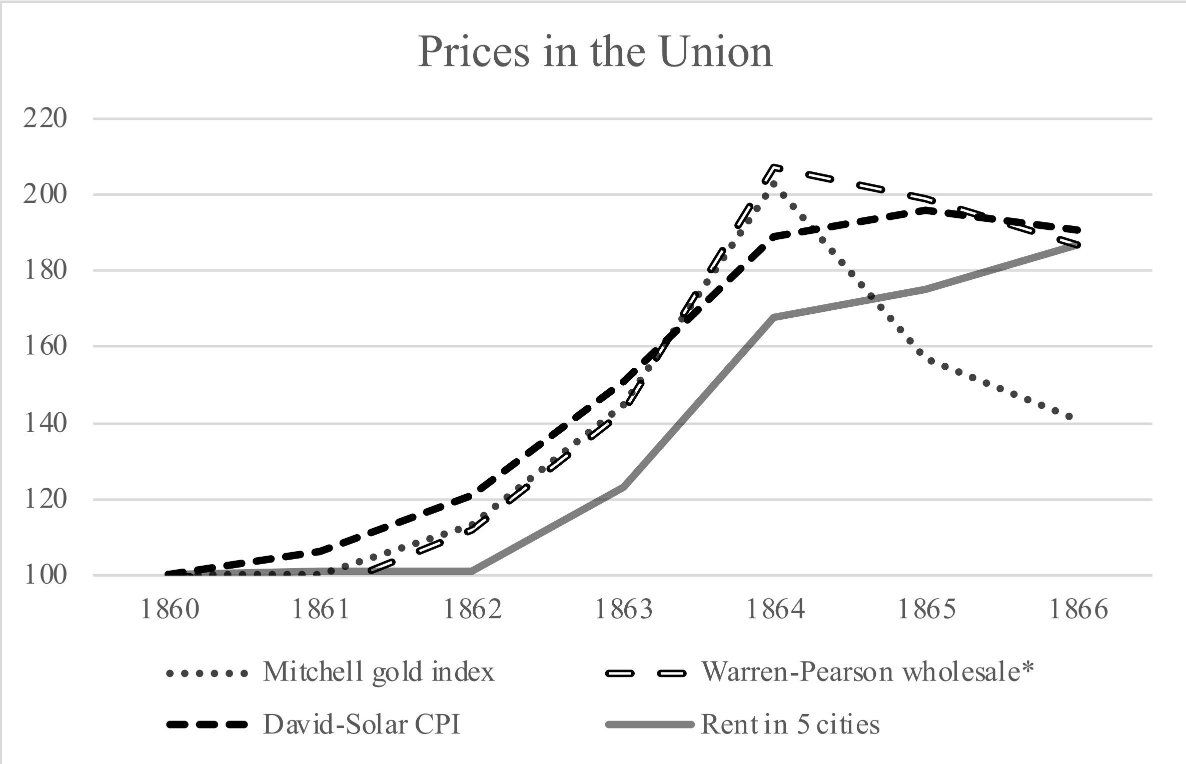
TABLES AND FIGURES

Figure 1



Source: “Final Issue of the War – the Longest Purse Wins,” *Frank Leslie’s Budget of Fun*, March 01, 1864, http://www.abrahamlincolncartoons.info/SubPages/Cartoon.php?UniqueID=27

Figure 2



Sources: Mitchell, 1908, p. 278; Lindert, Peter H., and Richard Sutch, "Consumer price indexes, for all items: 1774–2003," Table Cc1-2; Hanes, Christopher, "Wholesale price indexes, by commodity group: 1749–1890 [Warren and Pearson]," Table Cc113-124;
Margo, Robert A., "Rent indexes for dwelling units in five large cities: 1860–1880," Table Cc60 in *Historical Statistics of the United States, Earliest Times to the Present: Millennial Edition,* edited by Susan B. Carter, Scott Sigmund Gartner, Michael R. Haines, Alan L. Olmstead, Richard Sutch, and Gavin Wright. New York: Cambridge University Press, 2006.
* Warren-Pearson series has been rescaled to 1860 base year

Figure 3

Source: Ransom, Roger L. , "Prices and wage indexes for the eastern Confederacy: 1861–1865," Table Eh128-130, and "Monthly index of Richmond wholesale commodity prices: 1861–1865," Table Eh131 in *Historical Statistics of the United States, Earliest Times to the Present: Millennial Edition,* edited by Susan B. Carter, Scott Sigmund Gartner, Michael R. Haines, Alan L. Olmstead, Richard Sutch, and Gavin Wright. New York: Cambridge University Press, 2006.

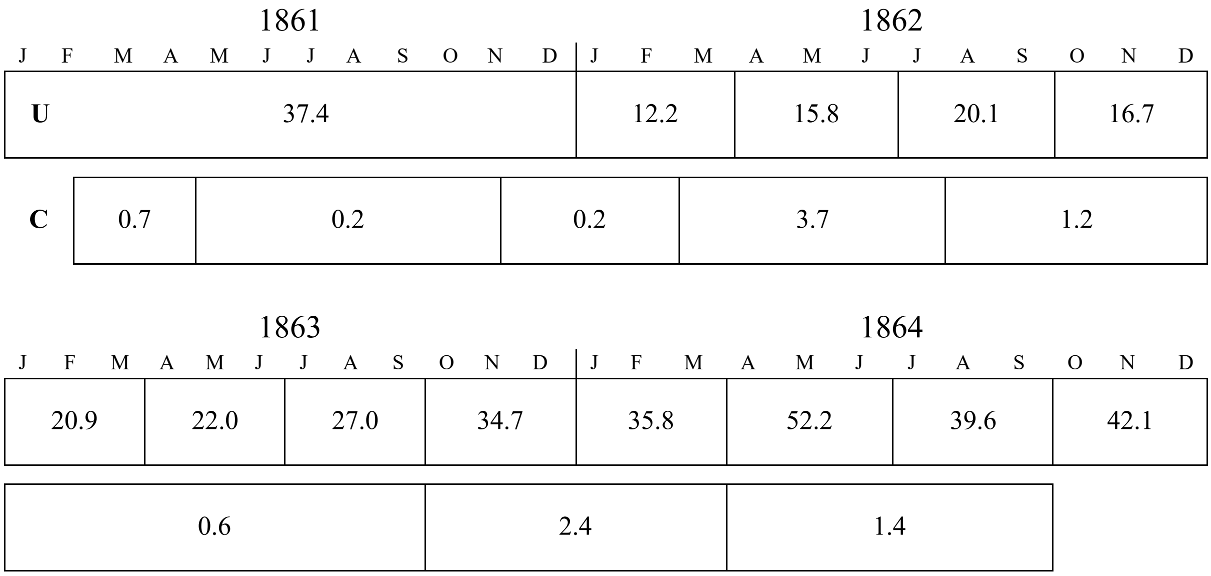
Figure 4

The U.S. canal network in 1850

Source: Jeremy Atack, "Historical Geographic Information Systems (GIS) database of Nineteenth Century U.S. Canals." (March 2017)

Figure 5

Union (U) and Confederate (C) tax revenues per period, adjusted for inflation (in $ mil.)



Sources: For nominal revenues, see tables 1 and 2; for inflation indices, see figures 2 and 3. Union revenues for the whole year of1861 are from Studenski and Kroos; remaining periods are quarters computed from Edling (2014). These are deflated by the David-Solar consumer price index with a base year of 1860. Confederate revenues are from Burdekin and Langdana (1993). Each irregular revenue period is deflated by an average of the general price index (Lerner, 1955) for the appropriate span of months, with a base of the first four months of 1861. It should be noted that the Confederate tax-in-kind is not included here. Although this measure did significantly augment Confederate resources, it served no purpose with respect to the currency.

Table 1

Union revenues (in thousands of dollars)

	Studenski and Krooss (1963) figures				*Edling (2014) figures*			
Year	*Customs*	*Direct tax*	*Internal revenue and income tax*	*Total*	*Customs*	*Internal revenue*	*Misc.*	*Total*
1861	39,600			39,600				
1862	49,100	1,800		50,900	68,900	7,500	2,000	78,400
1863	69,100	1,500	37,600	108,200	78,400	75,500	4,100	158,000
1864	102,300	500	109,700	212,500	90,900	166,600	63,200	320,700
1865	84,900	1,200	209,500	295,600	136,700	286,900	51,300	474,900
*1866**					92,800	130,100	30,300	253,200
Total	345,000	5,000	356,800	706,800	467,700	666,600	150,900	1,285,200

Source: Studenski and Krooss, 1963, p. 152; Edling, 2014, pp. 195, 199, 212.
* First six months of 1866 only

Table 2

Confederate Revenues (in thousands of dollars)

	Customs	*War tax*	*Tax on notes*	*Export duty*	*Other taxes*	*Seques-tration*	*Patent fund*	*Totals**
Feb. 17, 1861-May 1, 1861	732							732
May 2, 1861- Nov. 16, 1861	217			1				218
Nov. 17, 1861 – Feb. 18, 1862	321							321
Feb. 18, 1862 – Aug. 1, 1862	117	10,540						10,656
Aug. 2, 1862 – Dec. 31, 1862	502	6,125					14	6,627
Jan. 1, 1863 – Sept. 30, 1863	935	4,129		8		1,863	11	6,945
Oct. 1, 1863 – Apr. 1, 1864	441	59,407		14	595	3,001	27	66,459
Apr. 1, 1864 – Oct. 1, 1864	59	42,294	14,441	4	939	1,239	1	58,977
*Total***	2,706	122,495	14,441	27	1,534	6,102	53	150,936

Source: Burdekin and Langdana, 1993, p. 355
* Tax in kind not included.
** Totals may not add up due to rounding

ENDNOTES

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[1]We wish to thank the participants of the 2019 European Historical Economics Society Conference, the Early American Money Symposium at Brown University, the Colorado State PhD seminar, and the H2M seminar of Paris 1 Panthéon-Sorbonne University, as well as Jeff Althouse, Ghislain Deleplace, Romain Svartzman, and Laurent Le Maux for their comments and suggestions.

[2] Burdekin and Weidenmier (2001) return to the QT approach, despite separately publishing both earlier and later papers centered on RE for the price movements throughout the Civil War. They find that the quantity of money plays in an important role for explaining the value of the CSA paper money after the 1864 Currency Reform, a reform that repudiated a part of the paper money in circulation. Pecquet, Davis and Kanago also adopt a new-classical explanation of Southern inflation (Pecquet *et al*., 2004), arguing that the Emancipation Proclamation was a turning point of the war: afterward, southerners believed that if they lost the war, CSA paper money would not be redeemed in gold. The evidence is that up to 1862 southern bank notes and CSA paper money exchanged at par, but after the Proclamation bank notes earned a premium when exchanged with CSA paper money. Also see Pecquet (1987) for the effects of the 1864 Currency Reform Act; Davis and Pecquet (1990) for the variation of southern bonds' interest rates; and Weidenmier (2000) for the determination of the Confederacy's cotton bonds placed in European markets.

[3] See also Graham (1922), Kindhal (1961), Roll (1972), and Calomiris (1992). Graham (1922) does not explain the origin of price movements, but uses the greenback experience to test and verify Taussig's international trade theory. Kindahl (1961) focuses on the economic factors that determined the return to convertibility at prewar parity in 1879. Roll (1972) relies on a capital-asset-price approach to argue that the Union's bond market was efficient and it measured the opinions of individuals. Calomiris also applies the rational expectations approach to explain the determination of the price and exchange rate of the Union's paper money via the anticipations of future resumption of gold parity (see Calomiris 1992).

[4] Edwards (2017) opts to replace "fiat loop" with a more broadly conceived "fiscal loop." The "fiat" seems apt, however, if not in the usual sense of the term when applied to money, which tends to connote a kind of capricious sovereignty throwing off commands without effect. Instead, fiscal value emerges from the state's sovereign capacity to impose exactions on its citizenry. For a review of Desan's approach from an economist's perspective, see Tymoigne (2019).

[5] Sawyer (2006) has a similar argument for the case of France's Early Third Republic. See also Tilly (2009) for analysis in a similar vein.

[6] Einhorn's (2006) approach bears some resemblance to, though it is also distinct from, Tilly's (1992, 2009) explanation for the European shift from fiscal-military to welfare states.

[7] The contentious political debates about how to handle wartime currencies after independence fundamentally shaped the writing of the U.S. Constitution and may perhaps have originated the idea that democratic governments cannot be trusted with money creation.

[8] For additional recent accounts of slaveholders' general distrust of democracy, see Huston (2015) and Brewer (2017).

[9] The possibility of converting greenbacks into interest-bearing government bonds was withdrawn by the Act of March 1863 (Studenski and Krooss, 1963, p. 145).

[10] Another important difference between the greenbacks and the graybacks was that the latter were not made legal tender. Instead, the Confederacy required southern banks to accept graybacks at par and to make interbank payments with graybacks at par (Pecquet *et al*., 2004, pp. 618-9).

[11] For similar examples see urry (1968, pp. 154–55) and Edling (2014, p. 210).

[12] For more on the relation between slavery and taxation in the south, see Woolfolk (1960, pp. 180–200), Wallenstein (1985), Einhorn (2008, p. 223, 314n38), and Thornton (2014, pp. 100–101).

[13] See Schumpeter's (1954) influential statement on the attributes of the modern "tax state."

[14] See the discussion in Gorski (2003), pp. 5–10.