



**The Politics of Selective Default: The Foreign Debts of the
Confederate States of America**

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Abstract

The Confederate States of America floated two small bond issues in Europe during the American Civil War; cotton bonds that traded primarily in England and junk bonds in Amsterdam. The Confederacy serviced the cotton bonds for the duration of the war and defaulted on the junk bond issue. Evidently the South believed that the cotton bonds provided a financial incentive for England to intervene or give military support. This policy of selective default suggests that reputation spillovers across markets may be smaller than indicated in theoretical models of debt repayment (Cole and Kehoe, 1994).

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I. Introduction

During the American Civil War, the Southern Confederacy obtained only one percent of its revenues from international capital markets (Grossman and Han, 1996). Foreign debt issues took the form of two small loans; cotton bonds that traded primarily in England and junk bonds in Amsterdam. The distinguishing feature of these debt obligations was the terms of issue. The cotton bonds were unique in that they were convertible into cotton on demand, paid interest in sterling, and contained a sinking-fund. The Confederacy honored these provisions for the duration of the war to protect investors from war and default risk. The junk bonds, on the other hand, contained a default clause that allowed the Confederacy to postpone interest payments until after the war. Indeed, the South never serviced the junk bonds, and consciously pursued a debt management policy of selective default. The rationale for this policy was apparently political. The South believed that selling war debt in England and France provided a financial incentive for intervention or military support. The policy of selective default suggests that reputation spillovers across markets might not be as large as indicated in some theoretical models of sovereign debt (cf. Cole and Kehoe, 1994).¹

Perhaps the Confederacy was aware that many influential British subjects planned to purchase cotton bonds. Several Members of Parliament, in addition to one member of the British cabinet allegedly owned shares in the Southern security valued at par in excess of a thousand pounds sterling. These bondholders tried unsuccessfully to secure recognition of the Southern Confederacy in Parliament following the issue of the cotton bonds.

The Confederacy segmented default risk across different classes of creditors to protect holders of the cotton bonds (Calomiris, 1991). The South's senior war debt, cotton bonds, retained a large premium to junk bond prices for the duration of the war. An empirical analysis of daily Southern debt prices in Europe indicates that war shocks had a much larger impact on junk bond prices than cotton bond prices *ceteris paribus*. The Confederacy's experience in international capital markets provides evidence that governments can undertake debt management policies that protect senior creditors even under the most extreme macroeconomic conditions.

The paper opens with a discussion of the terms of the Confederacy's two European debt issues. This is followed by a review of prominent holders of the cotton bonds. Then the behavior of Confederate debt prices after the war is considered. The last section concludes with a discussion of the implications of the results.

III. The Foreign Debts of the Confederate States of America

The Southern Confederacy initially financed the war exclusively through domestic sources. The government floated 2 major loans during the first two years of the war, the 15 million-dollar loan of 1861 and the 100 million-dollar loan of 1862. The Confederacy originally pledged to service these issues in specie, but ultimately reneged, making interest payments in depreciated Grayback notes. The South's inability to service their domestic debt stems from a states' rights minded Congress and a central government that refused to levy taxes. Taxes accounted for only 10 percent of revenues, forcing the Confederacy to rely on the inflation tax (Ball, 1992; Burdekin and Weidenmier, 2000).

As indicated in Figure 1, real Confederate revenues derived from money, debt, and taxes peaked in October 1862, only to fall for the remainder of the war, as the South's take from the inflation tax plummeted with skyrocketing prices. The Confederacy lacked the resources to fight a total war.²

European capital markets potentially offered the Confederacy a large market for war finance. However, several factors precluded this possibility. Early in the war, the Confederate government imposed a cotton embargo in hopes of crippling the British economy and inciting British intervention. Unfortunately for the South, the policy not only failed to bring England into the war, it also prevented the South from using cotton as collateral to secure foreign loans. Although the Confederacy ultimately abandoned this strategy, the United States increasingly tightened its hold on Southern ports with a naval blockade. By the end of the war, European capital markets became an unlikely source of war finance since debt issues could not easily be converted into goods and services to fight the United States (McPherson, 1988).

Another possible factor for the small amount of Confederate overseas borrowing is that European financial houses viewed the fledgling nation as a bad credit risk. Lebergott (1983), for example, argues that foreign markets charged the Confederacy high interest rates because of several risk factors, in addition to war. The Confederacy lacked a bond market reputation because they elected a President who openly advocated the repudiation of state debts while a member of the U. S. Senate. Davis twice supported default of state bonds issued by Mississippi and Arkansas (Walker, 1864). Europeans held many of these bonds and Northern officials made sure that foreign investors were aware of this fact by publishing a pamphlet of the former Senator's speeches supporting

repudiation (Walker, 1864). The United States government even placed a representative in Europe, Robert Walker, to disseminate information about Davis' views on repudiation to European financial houses.³ Lebergott (1983) also notes that the South's inability to sell bonds within its own borders because of a small tax base was a signal for European investors to stay away. All of these factors apparently contributed to the South's inability to secure adequate war finance from international capital markets.

Given the preceding considerations, it is not surprising that the Confederacy operated at a considerable disadvantage when negotiating terms for a foreign loan. After discussions with several firms, the South finally agreed to float a 20-year, 3 million pound sterling bond issue with the French firm, Emile Erlanger and Company. Originally, Erlanger offered to float a much larger issue, but the Confederacy declined because they viewed the terms of the loan as unfavorable. Although the funds from the cotton bond issue were used to purchase goods and services for the Confederacy, political advantages -foreign aid, military support, etc. - appear to be the primary reason the Confederacy issued the cotton bonds. Judah Benjamin, the Confederate Secretary of War, alluded to the possible financial and political incentives of the cotton bonds in the following correspondence with James Slidell, the Southern diplomat in Europe entrusted with negotiating the cotton loan.

"Your intimation of political advantages likely to be derived from the [cotton] loan possessed great weight, though not as much as if you had felt at liberty to express yourself more definitely. *We finally agreed, in view of that intimation, to make a sacrifice...*"⁴ (Emphasis added) (Benjamin to Slidell, January 15, 1863, also quoted in Ball (1992, p. 76)

The terms of the Erlanger Loan suggest that the Confederate government intended to service the issue. The twenty-year security was denominated in sterling and also paid

interest in sterling, 7 percent per annum, to minimize currency risk. The war bonds contained a sinking-fund provision that retired one-fortieth of the principal semiannually through a lottery drawing. The underwriting firm agreed to sell the bonds at 90% face value and collect an 18% brokerage fee. As a result, the South received only 2,160,000 (72%) of the 3 million pound issue (*Economist*, March 21, 1863, p. 1).

Investors had the option to convert the war bonds into cotton certificates on demand. Investors could buy New Orleans middling class cotton for 6 pence a pound from the government and return to England and sell the fiber at the market price. The bonds offered investors a potentially high return considering that New Orleans middling cotton sold for approximately 24 pence a pound on the Liverpool exchange. To undertake the transaction, the bondholder first had to exchange the debt issue for cotton certificates with the Confederate European representative. The investor then ran the blockade, took possession of the cotton in the South, and returned to Europe running the blockade a second time.⁵ To facilitate the exchange, the Confederate government agreed to transport the cotton within ten miles of a navigable river or port (*The Economist*, March 21, 1863, p. 1). Investors waiting until after the war were given six months following the ratification of a peace treaty to convert their bonds into cotton.

The ability to convert the war bonds into cotton may have been a ploy by the Confederacy to entice Britain to break the Union blockade of Southern ports with its navy. There was precedence for this action. Several months earlier, Benjamin instructed Slidell to offer the French Emperor a \$12.5 million dollar "subsidy" to break the Union blockade (Ball, 1992). In turn, Slidell promised the shipment of vast quantities of cotton to France to mitigate the effects of the American Civil War on European economies.

Although the French declined the bribe, it is quite possible that the convertibility feature of the war bonds was designed, in part, to encourage foreign intervention.

The Confederacy serviced the cotton bonds for the duration of the Civil War, despite a deteriorating military and financial situation. As noted by Weidenmier (2000), the war bonds were exchanged for cotton in accordance with the terms of the loan. Moreover, the South continued to make scheduled interest payments in sterling as late as March 1865, a month before the fall of Richmond. It appears that the Confederacy remained committed to servicing their war debt in hopes that their British "ally" might provide foreign aid or military support.⁶

In addition to the widely studied cotton bonds, the Confederate government also sold domestic bonds in Amsterdam during the summer of 1863 and early 1864 (cf. *Amsterdamsch Effectenblad*, 1863-1865). The junk bonds have been largely ignored in the annals of financial history. Christopher Memminger, the Confederate Secretary of the Treasury forgot about the issue and failed to mention them in his Treasury reports and memoirs (Ball, 1992). The Confederate government shipped between 3 and 10 million pounds sterling of domestic debt to Europe. Although the precise number of bonds sold is unknown, the issue traded daily on the Amsterdam stock exchange and had smaller bid-ask spreads than the cotton bonds. The debt obligation was also officially endorsed by the Amsterdam Stock Exchange. The Confederate government apparently used the funds from the loan to finance the building of commerce raiders in Europe and for military supplies. Initially the bonds sold at 50 percent of par (par=100 pounds sterling) in sizes of 50, 100, 500, and 1000 pounds sterling. The thirty-year security contained an 8 percent coupon that paid interest in sterling on January 10 and July 10th of each year

(Bosch, 1948). However, the junk bonds contained a "default" clause that allowed the Confederacy to postpone debt service until after the war.

"Eight percent Confederate Loan of the Confederate States of America, authorized by the Act of Congress C. S. A. of February 2nd, 1863,..., upon the Express condition that said Confederate States may from time to time extend the payment for any period not exceeding thirty years from this date, at the same rate of interest upon the surrender of the bond." (Bosch, 1948, p. 133)

The *Amsterdamsch Effectenblad* did not report interest payments on the security during 1864 or 1865, indicating that the Confederate government invoked the default clause (*Amsterdamsch Effectenblad*, 1863-1864; Bosch, 1948). The terms of the junk bond issue and the South's failure to service the obligation suggests that the Confederacy believed that default in the Amsterdam market would not have large negative spillovers for their bond market reputation in London (cf. Cole and Kehoe, 1994).

IV. Holders of Confederate Cotton Bonds

The Confederate government apparently believed that England might intervene, provide economic aid, or impose sanctions to secure repayment of the cotton bonds. Perhaps the Confederacy knew that many prominent British subjects planned to purchase cotton bonds. Table 1 reports an incomplete list of prominent cotton bondholders published in the *New York Times* over eight months after the war, December 9, 1865.⁷ The article listed the title and occupations of important investors, in addition to the number of bonds held by each holder. Unfortunately, the article did not designate whether the bond(s) possessed by a given holder were of the 100, 250, 500, or 1,000 pound sterling variety. Nevertheless, the minimum par value of holdings for each cotton

bondholder can be calculated by assuming each bond equaled the smallest denomination, 100 pounds sterling. Table 1 indicates that some prominent British owned cotton bonds valued at more than 10,000 pounds sterling at par. The editor of the *Times*, John T. Delane, owned 100 cotton bonds while several Members of Parliament (MPs) including W. S. Lindsay, W. Sholefield, and W. H. Gregory had holdings in the thousands of pounds sterling. Allegedly the most notable bondholder on the list was William Gladstone, a member of the British cabinet and Chancellor of the Exchequer. A W. H. Gladstone apparently owned 20 cotton bonds although whether this was really the Chancellor has been the subject of much dispute (Bigelow, 1905).

Several MPs listed in Table 1 tried to persuade Parliament into recognizing the Southern Confederacy as a sovereign nation. The leading proponent of Confederate recognition in Parliament was W. S. Lindsay, the largest cotton bond investor in Table 1. Lindsay made several speeches in favor of recognition of the Southern Confederacy. Incidentally, *Hansard's Parliamentary Debates* does not record a serious discussion of "recognition" until after the cotton bonds came to market in March 1863. Presumably, MPs with shares in cotton bonds had more than just a passing interest in the Southern Confederacy. MPs had an incentive to end the war through diplomacy/intervention so that they could cash in their war bonds for cotton and make a large profit.

"The question now before the House is one of far greater importance: it affects the peace and happiness of ten millions people: and as I hold the opinion, that if the word "recognition" was pronounced by England in concert with the Emperor of France and other European powers, that word would go forth as a harbinger of peace, and would restore peace with all the blessings that attend it..." (W. S. Lindsay, *Parliamentary Debates*, July 10, 1863, p. 560)

Lindsay was not alone in his outspoken support for the South. Other prominent cotton bondholders, including Lord Robert Cecil, Chancellor Gladstone, G. E. Peacocks, and W. S. Gregory expressed views in favor of recognizing the Confederacy during Parliamentary debates (see *Parliamentary Debates*, July 10, 1863). The debate remained lively until news of Confederate defeats at Gettysburg and Vicksburg in late July 1863 silenced Confederate sympathizers in Parliament. Although Gladstone and MPs ultimately failed to persuade Parliament on behalf of the Confederacy, the Southern government may have thought otherwise.

V. Empirical Evidence

Anecdotal evidence and the terms of the two debt issues suggests that the Confederacy's preferred debt, the cotton bonds, should have traded at a sizable premium to their Dutch and German obligations. Figure 2 plots daily cotton bond prices (BOND) taken from Liverpool dailies versus all available junk bond prices, JUNK, trading in Amsterdam. The cotton bonds began trading in Europe in late March 1863, while the *Amsterdamsch Effectenblad* did not begin quoting junk bond prices until late August 1863. The cotton bonds initially fluctuated around their offer price of 90 pounds sterling partially as a consequence of the Confederacy's repurchase of nearly half of the float in the Spring of 1863 to buoy war debt prices (Gentry, 1970; Weidenmier, 2000). Debt prices fluctuated in response to battles that changed investors' expectations of the South's ability to win the war and service their debt. Although prices for both issues fell precipitously after news of critical Confederate defeats at Gettysburg and Vicksburg in

July 1863 and Atlanta in September 1864, cotton bond prices retained a considerable premium to junk bond prices throughout the war.

The largest discrepancy between cotton bond and junk bond prices occurred during 1864. Cotton bond prices increased from their December 1863 low of 34.5 pounds sterling to over 80 pounds sterling in early September 1864, before news of the fall of Atlanta sent the cotton bonds tumbling (Brown and Burdekin, 2000). The junk bonds, in contrast, declined in price during 1864 as Confederate victory prospects waned. The junk bonds lost nearly 50 percent of their value during the first nine months of 1864, falling from a high of 22.5 pounds sterling in January to 12 pounds sterling in September.

Weidenmier (2000) examined the determinants of Confederate cotton bond prices using a vector autoregression of cotton bond prices, cotton prices, Confederate money prices, and British Consol prices. A variance decomposition of war debt prices indicated that cotton prices could explain approximately 33 percent of the movements in cotton bond prices. The analysis shows that an increase in cotton prices can explain the large upward movement in cotton bond prices during 1864. War news, proxied by Confederate money prices, could account for only 15 percent of the movements in cotton bond prices.

The sizable divergence between cotton bond and junk bond prices also suggests that the Confederacy segmented default risk across different classes of creditors (Calomiris, 1991). The South protected their senior war debt, cotton bonds, while defaulting on their domestic and foreign debt obligations. This implies that war shocks should have had a smaller impact on cotton bond prices than junk bond prices *ceteris paribus*. Junk bond prices, on the other hand, should mirror Southern fortunes on the

battlefield given that the debt issue was essentially a lottery bond whose value directly depended on Confederate military success.

A four variable vector autoregression containing cotton bond prices, BOND, junk bond prices in Amsterdam, JUNK, New Orleans middling class cotton prices, COTTON, and British Consol prices, CONSOL, is estimated to examine the relationship between Confederate junior and senior war debt prices in Europe. Cotton prices are included in the system to control for the effects of innovations in cotton prices on cotton bond prices. British Consol prices are used to capture the impact of general bond market conditions and business cycle effects on war debt prices.

Each times series is tested for a unit root using the Augmented Dickey-Fuller unit root test. The null hypothesis of a unit root can not be rejected at the five or ten percent level for each series except for British Consol prices. A VAR is then estimated for the period January 31, 1864, to April 29, 1865 using daily prices for a total of 343 observations for each fundamental. Although both the Akaike Information Criteria (AIC) and Schwarz Information Criteria (SIC) selected a lag length of 1 for the VAR, two additional lags were included to purge the system of serial correlation in the residuals. The system can be written as follows:

$$\text{BOND}_{1,t} = a_{1,0} + \sum_{i=1}^3 a_{1,i} \text{BOND}_{t-i} + \sum_{i=1}^3 b_{1,i} \text{JUNK}_{t-i} + \sum_{i=1}^3 c_{1,i} \text{COTTON}_{t-i} + \sum_{i=1}^3 d_{1,i} \text{CONSOL}_{t-i} + u_{1,t}$$

$$\text{JUNK}_{2,t} = a_{2,0} + \sum_{i=1}^3 a_{2,i} \text{BOND}_{t-i} + \sum_{i=1}^3 b_{2,i} \text{JUNK}_{t-i} + \sum_{i=1}^3 c_{2,i} \text{COTTON}_{t-i} + \sum_{i=1}^3 d_{2,i} \text{CONSOL}_{t-i} + u_{2,t}$$

$$\text{COTTON}_{3,t} = a_{3,0} + \sum_{i=1}^3 a_{3,i} \text{BOND}_{t-i} + \sum_{i=1}^3 b_{3,i} \text{JUNK}_{t-i} + \sum_{i=1}^3 c_{3,i} \text{COTTON}_{t-i} + \sum_{i=1}^3 d_{3,i} \text{CONSOL}_{t-i} + u_{3,t}$$

$$\text{CONSOL}_{4,t} = a_{4,0} + \sum_{i=1}^3 a_{4,i} \text{BOND}_{t-i} + \sum_{i=1}^3 b_{4,i} \text{JUNK}_{t-i} + \sum_{i=1}^3 c_{4,i} \text{COTTON}_{t-i} + \sum_{i=1}^3 d_{4,i} \text{CONSOL}_{t-i} + u_{4,t}$$

(1a, b, c, d)

The system is tested for cointegration using the Johansen Maximum Likelihood Procedure. The results appear in Table 3. The λ_{\max} test statistic rejects the null hypothesis of no cointegration at the 5 percent level of significance. The λ_{trace} statistic rejects the null hypothesis of no cointegration against a general alternative at the 5 percent level. Both cointegration test statistics indicate the presence of two cointegrating relationships in the system. One cointegrating relationship can be attributed to the inclusion of a stationary variable, British Consol prices.

The system is normalized with respect to cotton bond prices. This yields the following long-run equilibrium relationship:

$$\text{BOND} = .111\text{JUNK} + .726\text{COTTON} - 25.749\text{CONSOLS} \quad (2)$$

Cotton bond prices rose in response to positive war news, but the relationship was not one-to-one. The small coefficient on junk bond prices, .111, indicates that war news had a muted impact on the South's senior debt obligation. As predicted, increases in cotton prices are associated with a rise in cotton bond prices. The large coefficient on Consol prices suggests that Confederate war bonds were very risky and sensitive to small movements in the risk-free debt instrument.

The long-run equilibrium relationship can also be used to formally test the hypothesis that war shocks had a smaller impact on cotton bond prices than junk bond

prices *ceteris paribus*. The restriction that war news had an equal impact on cotton bond prices and junk bond prices is imposed in Equation (2). A likelihood ratio test rejects this restriction at the 5 and 10 percent levels of significance. The Confederacy successfully segmented war risk, protecting their senior debt holders while defaulting on all other government obligations. Overall, the econometrics buttress the historical and graphical analysis that the Confederacy protected their preferred British creditors by backing their British debt with cotton and making interest payments in sterling.

VI. Confederate Bonds in the Aftermath of the American Civil War

Confederate bonds in Europe continued to trade at a positive price even after the war. The cotton bonds traded for 6 pounds sterling as late as July 1865, three months after Lee's surrender in mid-April. Shortly thereafter, the market for cotton bonds became inactive. Liverpool newspapers continued to post cotton bond prices daily for the next couple of years, but reported only 3 trades (at 6 pounds sterling) between July 1865 and December 1866 (*Liverpool Daily Post* and *Liverpool Mercury*, 1865-1866).

Evidently, Europeans attached some small probability that the United States or individual states would assume Confederate war debts even in the event of Southern defeat. Investors may have been encouraged by discussions in Parliament concerning the fate of Confederate war debts. W. S. Gregory, an M. P. and a large holder of cotton bonds (see Table 1), inquired about the status of the cotton bonds just prior to the fall of Richmond in 1865. Gregory wanted to know if her Majesty's government had taken steps to protect British citizens' claims on cotton in the United States, specifically in the South.

The Speaker of the House replied that United States did not plan to service Confederate war debts, but that British citizens with claims on property in the US should keep legal documentation *Parliamentary Debates*, March 1865). Perhaps the possibility of intervention by Parliament on behalf of investors explains the small positive price for the cotton bonds after the war.

The Confederacy's Dutch obligation continued to trade actively on the Amsterdam exchange until May 1866. Daily junk bond prices, plotted in Figure 3, increased from one-half pound sterling in May 1865 to nearly 5 pounds sterling in the days leading up to the semiannual coupon payment date July 10, 1865. Junk bond prices stabilized around 2 pounds sterling in early 1866, and traded around this level for the next several years. Apparently the firm underwriting the war bonds offered investors a bonus to exchange the defaulted debt for "good" bonds.

"It is desired that the [8% Confederate bonds] bonds be exchanged for other officially stamped and available bonds. The bonus (*bonificatie*) demanded for them will be readily granted. Holders of the above mentioned bonds who are so inclined should direct themselves to inquire at the Booksellers Ipenhuur and Van Seldam, Damrak, Nr. 160." (*Amsterdamsch Effectenblad*, July 18, 1865)

This ploy was obviously designed to help Ipenhuur and Van Seldam restore their reputation as a broker of government debt that was probably tarnished by their connection with Confederate war bonds. The firm may have felt compelled to offer the bonus because the Amsterdam Stock Exchange officially endorsed the Confederate security. A secondary market for Confederate bonds persisted as investors probably arbitrated differences between the market and repurchase price offered by Ipenhuur and Van Seldam.

VII. Conclusion

The Confederate States of America pursued a policy of selective default with respect to their war bonds in Europe for political advantages. The Confederacy floated cotton bonds to the world's strongest economic and military power of the time, Great Britain, and one to militarily weaker countries, Germany and the Netherlands. The Confederacy serviced their cotton bonds for the duration of the war because they believed that the cotton bonds provided a financial incentive for England to intervene on behalf of the Confederacy. The ability to convert the war bonds into cotton by running the blockade might have been an enticement to British authorities to break the Union stranglehold on Southern ports. In contrast, the Confederacy failed to service their sterling bonds that traded primarily in Amsterdam, invoking the default clause outlined in the terms of the issue. The Confederacy possibly believed that the Netherlands and Germany were unlikely to step in and impose sanctions on the more powerful United States. The Confederate experience suggests that reputation spillovers across markets might be smaller than suggested in the theoretical literature.

Generally speaking, Confederate debt management policy suggests that during a time of war, a country might borrow from a militarily stronger country and service their debt in an attempt to encourage foreign intervention. Although the Confederacy failed in this endeavor, they successfully segmented default risk across different classes of creditors throughout the war. Overall, the results indicate that governments can largely protect senior debt holders from negative shocks even under the most extreme macroeconomic circumstances.

Endnotes

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1. Garber (1991) examines U. S. war debt during the American Revolution and also finds that reputation spillovers might be smaller than suggested in theoretical models of sovereign debt.

2. In a recent article, Grossman and Han (1996) argue that the South did not need to borrow from international capital markets at the beginning of war because they had a large amount of mobilizable resources relative to their expected post-war endowment. They note that critical military defeats at Gettysburg and Vicksburg made it infeasible for the Confederacy to undertake additional borrowing. They calibrate a theoretical model of moral hazard that indicates foreign markets charged the Confederacy a sufficiently high interest rate such that the South did not undertake additional foreign borrowing. Grossman and Han's argument is historically inaccurate. As noted in the text, the time path of real revenues indicates that the South needed foreign aid -in large amounts- by the fall of 1862. The Confederacy also floated domestic debt in Amsterdam after issuing the cotton bonds. Grossman and Han's analysis assumes that the cotton bonds were the only debt obligation sold in Europe by the Confederacy.

3. There is some debate about Walker's success in thwarting European financial houses from loaning to the Confederacy. A letter to the Editor of the *Times* dismissed claims that Jeff Davis' support of state defaults in Mississippi and Arkansas tarnished Confederate war debt. The letter noted that "Virginia, Georgia, and other honorable states (sic) were also part of the Confederacy," could pay off Confederate debts in the event of Southern defeat (*The Times*, March 19, 1863). The author would like to thank William English for bringing this evidence to the attention of the author.

4. The Confederacy's senior diplomats in Europe, James Mason and James Slidell, also discussed the possible political advantages derived from selling bonds collateralized by cotton in Europe. Mason commented on the political advantages of the Erlanger Loan, "These terms, although vastly better than the outline of the contract made in Paris were considered by us so onerous that we were unwilling to take the whole amount offered, and would have declined it altogether but for the political considerations indicated by Slidell." (*Official Records*, p. 650). Confederate leaders obviously believed that the cotton bonds provided a financial incentive for England and/or France to enter the war.

5. Weidenmier (2000) provides historical evidence that a few cotton bondholders exercised the option, picked up the cotton in the Confederacy, and sold the staple at the high prices prevailing in Liverpool.

6. One might argue that the possibility of British sanctions or interventions induced the

Confederacy to service the cotton bonds, as predicted in gunboat models of sovereign repayment (see Bulow and Rogoff, 1989a, 1989b). Although the gunboat model may explain Confederate debt management policy during the war, there is no way to verify whether the South intended to service the cotton bonds after the war. We do not know if the Confederacy feared trade sanctions or gunboat diplomacy from Britain. The Confederate experience therefore does not provide clear evidence in favor of the gunboat model of sovereign repayment.

7. Unfortunately, an examination of Amsterdam and New York dailies did not yield a similar list of bondholders for the Confederacy's gold bonds trading in Amsterdam and Frankfurt. It seems unlikely that many important British subjects held large stakes in the gold bonds given the apparent lack of references to the debt obligation in the *Economist* and *The Times*.

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Table 1**Some Prominent Holders of Confederate Cotton Bonds**

Name	Title	Number of Bonds	Min. Value (par)
Hon. Evelyn Ashley	Private Secretary of Lord Palmerston	10	1,000
Lord Eustice Cecil	M. P.	13	1,300
Lord Robert Cecil	M. P.	15	1,500
Lord Campbell	Son of Lord Chancellor Campbell	10	1,000
R. W. Crawford	M. P.	12	1,200
John T. Delane	Editor of <i>The Times</i>	100	10,000
Earl of Fitzhardinge	Privy Councillor For the Queen	50	5,000
Rt. Hon. George C. W. Forester	M. P./Privy Councillor	5	500
W. H. Gladstone?	Chancellor of the Exchequer	20	2,000
W. H. Gregory	M. P.	30	3,000
W. S. Lindsay	M. P.	150	15,000
Lawrence Oliphant	M. P.	4	400
G. E. Peacocks	M. P.	50	5,000
Sir Frederick Pollock	Lord Chief Baron of the Court Exchequer and Privy Councillor	100	10,000
W. Scholefield	M. P.	100	10,000
D. M. Solomons	M. P., former Lord Mayor of London	6	600

Notes to Table 1

M. P. denotes a Member of Parliament

Privy Councillor - advisor

Chancellor of the Exchequer - member of the British cabinet in charge of public income and expenditures

Source: *New York Times*, December 9, 1865.

Table 2

Augmented Dickey-Fuller Unit Root Tests

Series	T-test(lags)
BOND	4.506(0)
JUNK	-0.850(1)
COTTON	1.371(0)
CONSOL	-18.294(0)***

*denotes significance at the 10 percent level.

**denotes significance at the 5 percent level.

***denotes significance at the 1 percent level.

For critical values of Dickey-Fuller unit root tests see Hamilton (1996).

Table 3**Johansen Maximum Likelihood Tests of Cointegration**

Null Hypothesis	Alternative Hypothesis	Test Statistic	95% Critical Value
λ_{TRACE} tests		λ_{TRACE} value	
$r = 0$	$r > 0$	140.91***	47.181
$r = 1$	$r > 1$	36.48**	29.509
$r = 2$	$r > 2$	7.04	15.197
λ_{MAX} tests		λ_{MAX} value	
$r = 0$	$r = 1$	104.43***	27.169
$r = 1$	$r = 2$	29.44**	20.778
$r = 2$	$r = 3$	5.12	14.036

lag length of VAR = 3

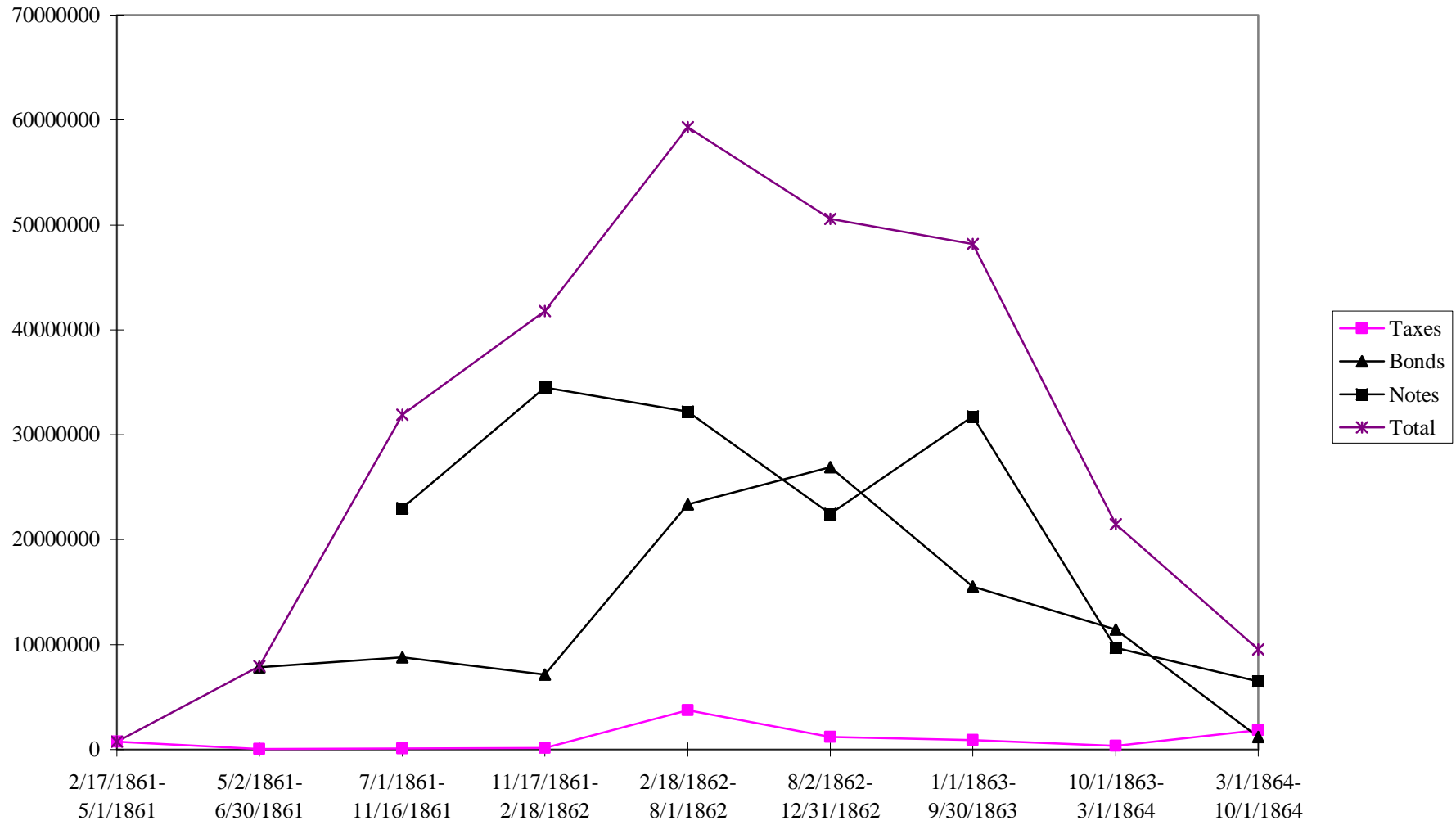
Tests for Autocorrelation

Test(lags)	Test Statistic
Ljung-Box(95)	1316.955
LM(1)	8.017
LM(4)	21.196

*denotes significance at the 10 percent level.
 **denotes significance at the 5 percent level.
 ***denotes significance at the 1 percent level.

Critical values for the cointegration tests are taken from Osterwald-Lenum (1992).

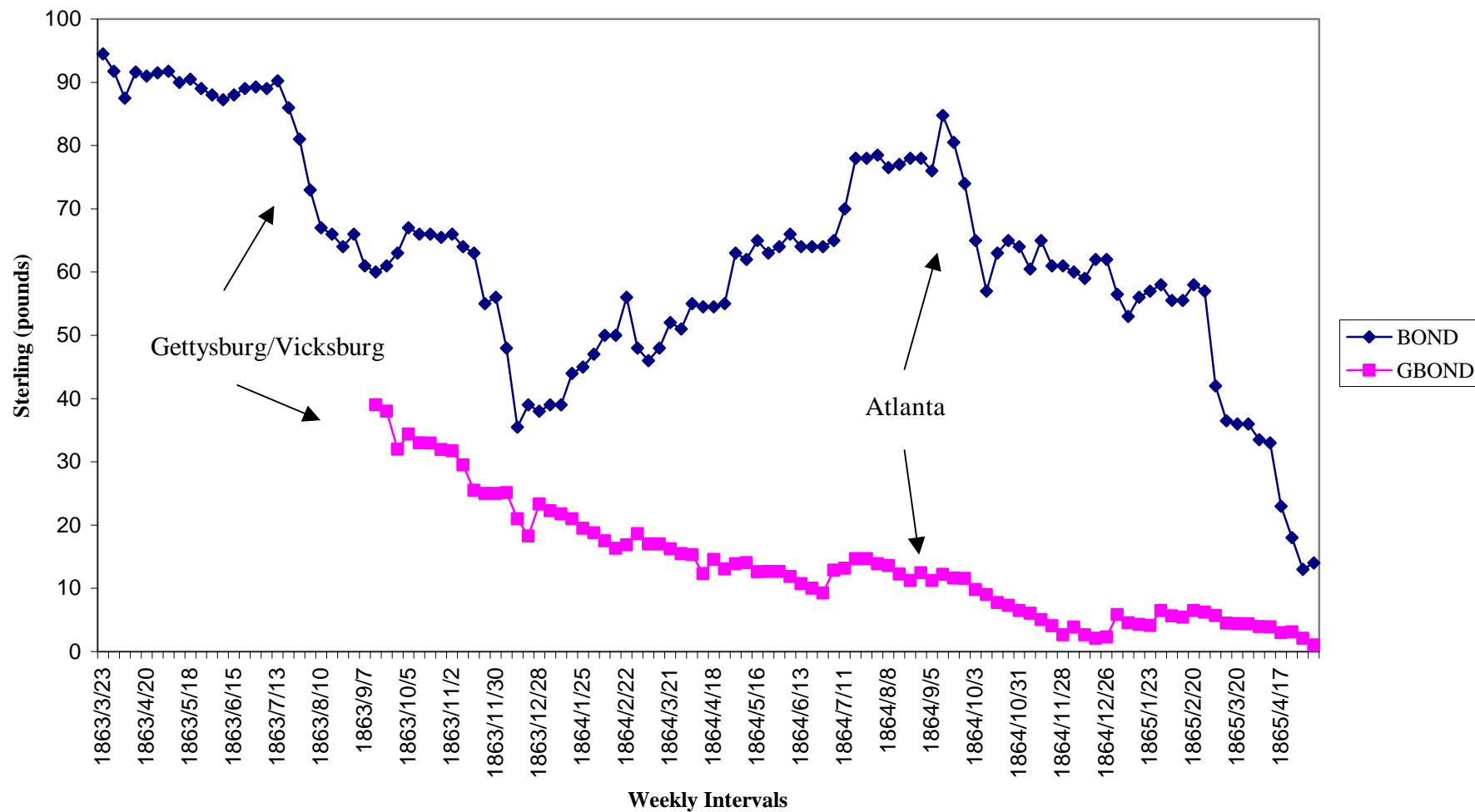
Figure 1
Real Confederate Revenues



Source: Burdekin and Langdana
(1992)

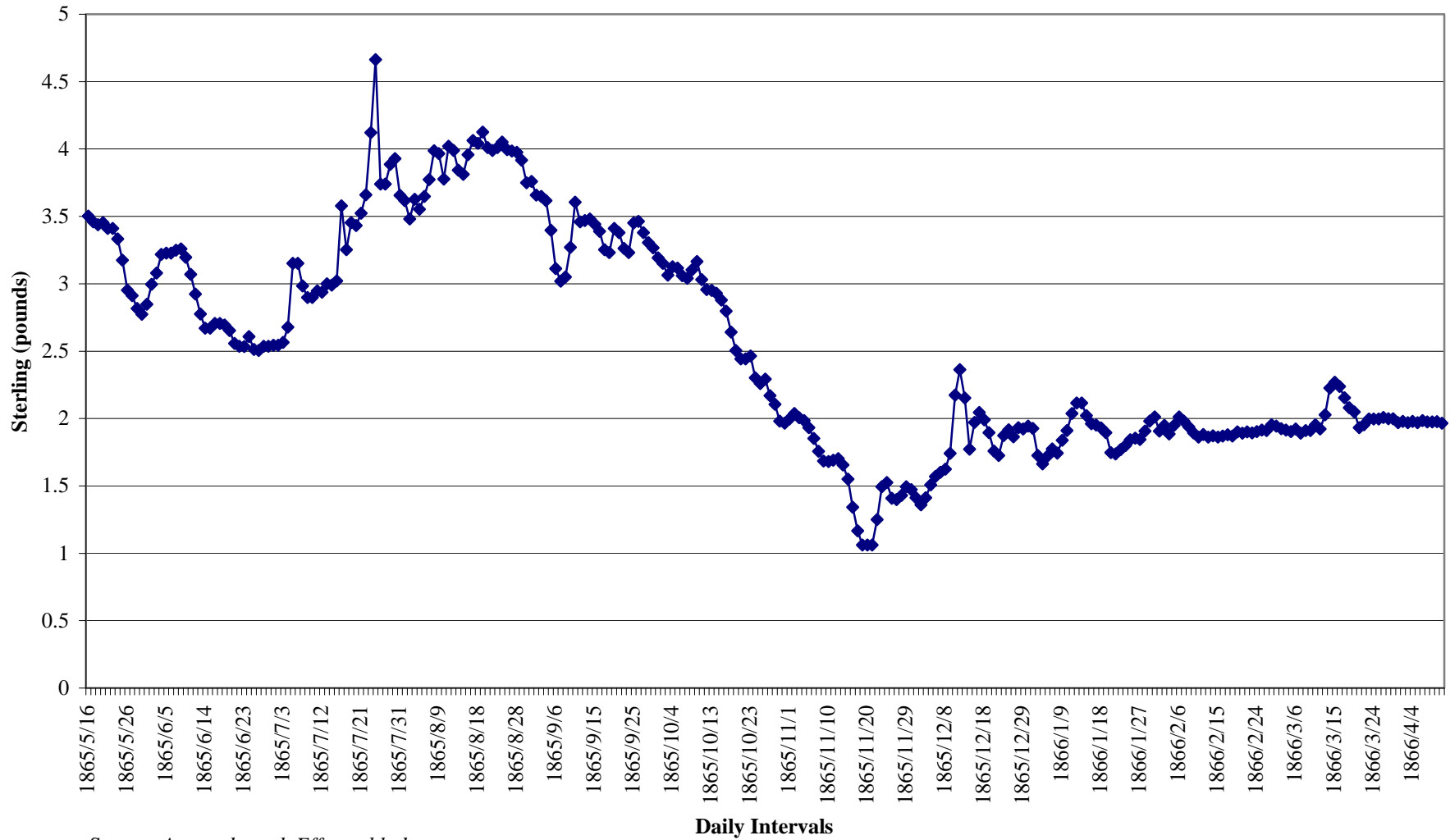
Reporting Period

Figure 2
Confederate Cotton Bond Prices vs. Gold Bond Prices in Amsterdam



Sources: *Economist* and *Amsterdamsch Effectenblad*

Figure 3
Confederate Sterling Bond Prices in Amsterdam May 1865 - April 1866



Source: *Amsterdamsch Effectenblad*