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Inflation Is Always and Everywhere a Monetary Phenomenon: Richmond vs. Houston in 1864

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Abstract

On April 1, 1864 the Confederate Currency Reform Act reduced the money supply in the Eastern Confederacy by one third. The delayed implementation of the reform west of the Mississippi provides a counterfactual view of what may have happened in the east had the reform not been enacted. This episode is a natural experiment illustrating the relative importance for prices of war news vs. the quantity of money in circulation. Our analysis of the major eastern and western gold markets, Richmond and Houston, strongly suggests that money matters more than war news in the post-reform period.

JEL codes: N20; N40

Keywords: Confederacy, currency reform, quantity theory

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Inflation Is Always and Everywhere a Monetary Phenomenon: Richmond vs. Houston in 1864

Milton Friedman's famous proposition tying inflation to excessive money growth seems to have been always and everywhere rejected in the latest studies of the Civil War era. Analysis of both the Northern paper "greenback" currency (Willard, Guinnane and Rosen, 1996; Smith and Smith, 1997) and the Southern "grayback" (McCandless, 1996) points to the same conclusion: currency fluctuations are not caused by changes in the quantity of money but rather by war news and, to a lesser extent, financial news. Such evidence supports Mitchell's (1903, p. 188) classic claim that "the fluctuations in the premium on gold were so much more rapid and violent than the changes in the volume of the circulating medium ..."¹ Such arguments do not apply to the 1864 Confederate experience, however. And we offer new proof that Friedman (1992, p. 202) is entirely correct in citing the 1864 Confederate Currency Reform Act as a dramatic textbook example of how a drastic change in the quantity of money led to an equally drastic change in the price level.

The Currency Reform Act of February 17, 1864 effectively repudiated approximately one-third of the existing Confederate money supply.² Lerner (1956, p. 172) assesses the impact of this Act in the Eastern Confederacy:

[Once] the currency reform took hold ... the general price index dropped ... in spite of invading Union armies, the impending military defeat, the reduction in foreign trade, the disorganized government, and the low morale of the Confederate army. Reducing the stocks of money had a more significant effect on prices than these powerful forces.³

But the only way to be sure that the price decline was really due to the money supply reduction would be to compare price movements in a Confederate economy where the reform was enacted to price movements in a Confederate economy where no such reform took place. If Lerner (1956) is right then the latter economy should, of course, not experience the same deflation. On the other hand, if only war news mattered, both economies should exhibit similar inflation rates irrespective of whether or not the reform takes place. In 1864 there were indeed two separate Confederate economies. Following the fall of Vicksburg in July 1863, the loss of communications across the Mississippi isolated the western portion of the Confederacy from

Richmond so that this Trans-Mississippi region no longer had ready access to the money being printed in the east. And while the Currency Reform Act took effect on April 1, 1864 east of the Mississippi it was *not* implemented at that time west of the Mississippi. The implementation of the Act in the Trans-Mississippi was officially delayed until July 1, 1864 and, as a practical matter, was delayed even further by extreme difficulties in getting the new currency across the enemy-occupied Mississippi. Accordingly, this episode provides a unique natural experiment with which to test the relative importance for prices of war news vs. the quantity of money in circulation.

In this paper, we present fresh evidence on the effects of this reform using new data from primary newspaper sources on the gold price of Confederate currency in both Richmond (the major eastern gold market) and Houston (the major western gold market). The Currency Reform Act, as passed on February 17, 1864, required that most Confederate notes then outstanding be either converted into bonds or else exchanged for new currency on a 3 for 2 basis. We confirm Lerner's (1956) observation that the implementation of this Act in the east is accompanied by a marked appreciation of Confederate currency in the east. Substantial depreciation continued in the west, however, where the old currency continued to circulate. In early 1864, a Confederate dollar was worth about 4-5 cents in gold whether one tried to exchange it in Richmond or in Houston. Between March and early June 1864, however, Confederate currency depreciated by approximately 100% in Houston while simultaneously *appreciating* in the east. The extent of this divergence can be seen in Figure 1 that plots the gold value of Confederate currency in Richmond and Houston. Formal testing confirms that Richmond and Houston currency values are cointegrated between September 1861 and March 1864 but that cointegration is rejected if the sample is extended through the end of 1864.

I. Money vs. War News

Classical quantity theory implies a simple one-for-one relationship between money and prices under the assumption that both the velocity of circulation and real output can be treated as constants. High inflation episodes are hardly likely to exhibit stable velocity, however. And, in war time, fluctuations in velocity can

arise from not only changing inflation expectations but also news and rumors concerning the military situation, likely duration of the conflict, and so forth. Furthermore, real output could hardly remain constant in the face of the diversion of resources to the military effort and losses incurred in battle and through Northern incursions into Confederate territory. In that sense, the wanton devastation of Sherman's "March to the Sea," for example, would enter as a negative "supply shock." There is really no definitive way to separate the influences exerted by these disparate forces on the Confederate currency depreciation that prevails from 1861 through early 1864.⁴ Military defeats, lost territory, higher actual and expected inflation, and monetary expansion surely all play some role and each of these factors points in the same direction. Evidence that statistically-determined "turning points" in the gold value of the grayback (Weidenmier, 2000), like those in the Northern greenback (Willard, Guinnane and Rosen, 1996), often coincide with major battles does, however, point to a major role played by war news over that period.

The sudden recovery of the grayback in the east during the spring of 1864 is much harder to explain on the basis of war news. For one thing the strengthening of the currency that begins in early April pre-dates the renewal of conflict in the east. Indeed, General Grant's forces did not begin their advance against General Lee until May 1864 and no major Civil War battles took place earlier in the year. The subsequent apparent stalling of the Northern offensive in Virginia and hopes that McClellan might defeat Lincoln in the polls in November may have helped underpin the gold value of the grayback during the late spring and summer of 1864 (cf, Brown and Burdekin, 2000). But any such effects surely were symmetric across the western and eastern portions of the Confederacy. As we find that currency values in Richmond and Houston continued to follow a parallel course from the summer of 1863 -- when the Confederacy was first cut in two -- until March 1864, it is hard to see why the effects of war news would suddenly become asymmetric more than six months after the separation occurred. For our purposes, war news basically drops out of the comparison between western and eastern currency values. So long as war news continued to have similar effects in both east and west, this leaves the effects of the money supply change as the sole asymmetric factor that can plausibly

account for the *divergence* between eastern and western currency values after March 1864 -- a divergence that was non-existent until the Act took effect in the east.

While this divergence does not imply that there was no role played by war news it does prove that war news cannot be the whole story. And the evident importance of the drastic change in the quantity of money certainly contradicts the more extreme view that war news was *all* that mattered. Such a perspective is adopted, for example, by McCandless (1996), who argues that Confederate currency values should depend only upon the expected date, and price, at which the Confederate currency was to become convertible into gold. This implies that, since the Confederate currency both east and west of the Mississippi was issued and redeemable by the same government, that there should not be persistent differences across the two regions and prices should converge together over time. This clearly is not the case after March 1864.⁵ Another damaging observation is that, when regular quotes for the new currency do start to become available in the west at the beginning of 1865, these quotes remain substantially different from the quoted values for the *same* new currency in the east. Once again there is a quantity-theory based explanation for the divergence, however.

The strength of the new currency in the east was clearly on the wane by November 1864. By this time, Grant had placed Richmond in a state of siege and Sherman captured Atlanta before beginning his “march to the sea.” But, even though unfavorable war news should seemingly also have depressed the value of the grayback in the west, the new issue remained strong there and depreciated only mildly in the Houston market until news of General Lee’s surrender was received in mid-April 1865 (Pecquet, 1988, p. 291). This otherwise-inexplicable second divergence seems to reflect the much greater scarcity of the new currency in the west. While monetary expansion began to accelerate again in the east in late 1864 (Godfrey, 1978, p. 119), Pecquet (1987, p. 234) points to an effective reduction in the Trans-Mississippi supply of Confederate currency from \$160 million in February 1864 to as little as \$17 million in January 1865. The new currency remained in short supply in the west until the end of the war even though it was being printed with abandon in

the east. Indeed, with Confederate currency being receivable for state taxes, its relative scarcity actually caused it to exchange at a premium to Louisiana treasury notes in the Trans-Mississippi until mid-April 1865 (Pecquet, 1988, pp. 292-93).

II. Richmond vs. Houston

In contrast to the daily data that has long been available on Northern greenback prices, published data on the gold price of Confederate currency has been of seemingly much lower quality. In order to obtain a series with better than monthly frequency past researchers have had to resort either to using a newspaper column of unknown origin pasted into the back of a library book (McCandless, 1996) or else turn to a table published in the August 4, 1896 issue of the *New York Evening Post* -- the origin of which is also unknown. This is unfortunate as much richer data can be obtained from newspapers published in Richmond, and indeed in other Southern cities, during the Civil War. With no single newspaper reporting more than a fraction of the available information on gold auctions and broker sales, data collection required scrutiny of the full range of sources listed in the Data Appendix. The resulting series on the gold value of Confederate currency in the east typically features multiple quotes per week.

The Southern gold markets generally appear to be surprisingly liquid. Not only was trading frequent but also it was not unusual for trades to exceed a thousand dollars in gold coin in the Richmond market. Such high volumes are noted both before and after the February 1864 Act. For example, the *Richmond Whig* reports trades totaling \$4,900 in gold coin on January 22, 1864, \$2,500 on March 24, 1864, \$2,000 on September 1, 1864 and \$1,150 on November 11, 1864. Trading apparently continued apace even into early 1865. According to the *Petersburg Express* (January 23, 1865):

On Monday morning last, one thousand dollars in gold were sold at sixty two and a half in Confederate money for one in specie. Two hours afterward came the news of the fall of Fort Fisher. Immediately gold rose to seventy one, and for several days continued to advance, through the combined influence of the brokers, till it reached seventy six: but here it stopped, and has since had a steady downward tendency.

The series on eastern gold prices that we derive from primary newspaper sources reveals many discrepancies in the aforementioned McCandless and *New York Evening Post* accounts. These latter series, *inter alia*, report constant prices for weeks or months even though contemporary newspapers show that there was active trading and significant fluctuations in price over the same interval. Another problem with these series is that it is unclear whether they are dealing with actual trading prices, bid prices, ask prices, or some combination of the three.

We combine our analysis of the eastern data with biweekly data on the gold price of Confederate currency in Houston. The fullest range of data is reported in the April 26, 1865 issue of the *Galveston Weekly News* and was provided by Henry Fox, a respected old merchant of the city. These data were checked for consistency with all available daily market quotes reported in the *Houston Tri-Weekly Telegraph* over the same period. The quotes are always identical or nearly identical. We also compared the Houston quotes to the limited number of quotes that exist for the Shreveport and San Antonio markets. The latter markets feature much larger bid-ask spreads than Houston's but are otherwise again in line with the *Galveston Weekly News* series.

We isolate the effect of the February 17, 1864 Confederate Currency Reform Act by comparing the fluctuations in the Confederate currency east and west of the Mississippi. We begin by examining whether eastern and western currency values move together over the full September 1861-December 1864 sample for which we can combine data on the Richmond market with trading prices of old currency in the Houston market.⁶ Based on the Augmented Dickey-Fuller test, we are unable to reject the null hypothesis that both series have a unit root.⁷ As shown in Table 1, however, when we apply Johansen maximum likelihood tests for cointegration over the full sample the results cannot reject the null hypothesis of no cointegration. The eastern and western prices do *not* converge. We then test for cointegration prior to the April 1, 1864 implementation of the currency reform in the east. Reapplying the same Johansen tests to the September 1861-March 1864 sample now does support cointegration between eastern and western markets.⁸ This

implies that the implementation of the Act coincides with a substantial change in the relationship between the eastern and western currency markets.

Clearly the reduction of the money supply in the east mattered and the break in the depreciation following the reform is evident in Figure 1. As reflected in the cointegration test results, a substantially different pattern emerges in the west where we gain some insights into what might have happened to Confederate currency values in Richmond had the reform not been applied. The cointegration effects affirm the strong link between changes in the quantity of money and the value of the fiat currency.⁹

III. Interpreting the Divergence

Communications between the western and eastern sections of the Confederacy were severely curtailed after the North gained full control of the Mississippi River in the summer of 1863. War news from the east was henceforth likely transmitted more slowly and with less accuracy to the western Confederacy. Nevertheless, neither Figure 1 nor the cointegration test results give any indication that this separation interfered significantly with the co-movement of currency values in east and west. It is only with the implementation of the reform act at the beginning of April 1864 that we see the divergent trends of appreciation in the east and renewed depreciation in the west. The period of appreciation in the east continues until July 1864 and the currency does not give back all its gains until November 1864. The renewed weakening of the Confederate currency in the east is accompanied by unfavorable war news with the fall of Atlanta in September followed by Sherman's march to the sea and the destruction of General Hood's army at Nashville in December 1864. Interestingly, the Confederate money supply also renews its upward trend at about the same time, however. Godfrey's (1978, p. 119) money supply series for the eastern Confederacy suggests a marked increase in the rate of expansion in the quarter beginning October 1864.

The accelerating depreciation of the currency in the east is thus likely attributable not only to reduced demand -- as holders seek to unload currency that will be repudiated in the increasingly likely event of a

Northern victory -- but also increased supply as the initial monetary contraction was replaced by a renewed cranking up of the printing press in late 1864. From December 31, 1864 through late January 1865 the Confederate Secretary of the Treasury, George Trenholm, resorted to gold sales in an attempt to stem the rate of currency depreciation (see Morgan, 1985, p. 119). The short-lived boost to eastern currency values arising from this market intervention can be seen in Figure 1. The spiral of currency depreciation was back underway by February 1865, however. Nevertheless, the currency reform appears to have been the basis for a strengthening of the Confederate currency in the east that persisted until near the end of 1864 even in the face of an increasingly bleak military situation.

What would have happened to the gold value of Confederate currency in Richmond if the Currency Reform Act had *not* been enacted? The depreciation of the old currency in the west gives us some insights into this otherwise counterfactual question. In mid-February 1864 the rate of exchange between the Confederate dollar and gold was about 22:1 in both Richmond and Houston. In mid-October 1864 the rate of exchange remains at about this level in the east (23:1 in the week ending October 19, 1864). In Houston, however, the rate of exchange averaged around 50:1 in October 1864, fluctuating over the month between 55:1 and 45:1. This comparison does not prove what the October 1864 gold value of Confederate currency in Richmond really would have been. Nevertheless, it certainly seems reasonable to assume that Richmond currency values would have suffered at least some of the depreciation that affected the old issue in the west. And, given that the properties of the currency series fundamentally change after the currency reform is effected, there is surely no reliable way of comparing the effects of war news before and after that date. Comparison with the west provides strong evidence that the reform mattered and that the replacement of the old currency with the new currency fundamentally altered both the properties of the eastern series and shattered its hitherto parallel relationship with western currency values.

The course of depreciation of the old currency in the west in 1864 is itself quite uneven. The depreciation is, in fact, briefly reversed in June 1864 before further depreciation sets in after the beginning of

July. Interestingly, the period of strength immediately precedes the announced July 1, 1864 date at which the reform was to take effect in the west. Figure 1 shows that in the east there was also a strengthening of the currency -- albeit on a smaller scale -- in the weeks prior to the April 1, 1864 date at which the reform was implemented in the east. In the east the gold value then strengthens further after the new currency replaces the old. In the west, however, the new currency could not replace the old on the promised July 1 date because of difficulties in transporting the new issue across the enemy-occupied Mississippi River. According to Pecquet (1987, p. 232):

As the public became aware that the new issue would never be exchanged for the old notes, it meant that the old currency would have to be exchanged for less valuable bond certificates. This led to a gradual reduction in the gold value of old currency following the July 1 funding date ... Doubts about the prospects for this funding increased the longer that the Trans-Mississippi Treasury failed to make the exchange and especially in September when General Sherman's Georgia campaign placed a second unfriendly army between the monetary source and the western Treasury depositories.

The Currency Reform Act laid down a phased repudiation for the old currency that would end with 100% repudiation by January 1, 1865. Prior to that date holders had the option of either exchanging the old notes for new currency on a 3:2 basis (3 old notes for 2 new notes) or else exchanging the old currency for bond certificates. The relative illiquidity of the bond certificates reduced their appeal meaning that, with no new currency available, the only alternative to accepting the bonds was to spend the old issue before it was fully repudiated. In the case of \$100 bills, holders had a further incentive to spend the money quickly because of an additional 10% "tax" was to be applied each month after the July 1 funding date.¹⁰ Failure to provide new currency on July 1, 1864 therefore likely added to the velocity of circulation of the old currency while also disappointing expectations that the currency exchange would reduce the stock of money in line with the experience in the east in April 1864. The failure to implement the reform as promised therefore seems to explain the very rapid depreciation in the west that sets in at the beginning of July 1864. Meanwhile, the promised July 1 funding date seems to be preceded by a trading pattern that mimics that observed in the east three months earlier.

The rapid depreciation from July-September 1864 is then followed by a period where the old issue remains relatively steady at an exchange rate for gold of a little under 50:1 between October and December 1864. In September 1864 the Trans-Mississippi Treasury began issuing “certificates of exchange” that could be redeemed for new currency when adequate supplies became available. These certificates were apparently valued more highly than the bond certificates (unlike the bond certificates they were to remain tax receivable in 1865) and their issuance may have helped quell the depreciation of the old currency in October 1864 (Pecquet, 1987, p. 233). By late 1864 quotes on new issue gold prices begin to appear in Houston and Figure 1 shows that the new issue is, as expected, valued considerably above the old issue. The near-absence of quotations for old currency after January 1, 1865 suggests that much -- if not all -- of the old currency had been exchanged by this date.¹¹

Meanwhile, the exchange rate between new currency and gold in Houston is 18:1 on January 1-3, 1865 and is still just 20:1 on February 28. Even on March 29-30, 1865 the reported rate of exchange in Houston is only 28:1. Quotes from the Richmond market in January and early February range from 35 to 55. This suggests a sizeable differential in the value of the *same* currency and this differential would likely have been wider still were it not for Trenholm’s intervention in the gold market that artificially bolstered Richmond currency values in early 1865. One possible explanation for these divergent gold values in 1865 is a military one. Richmond was being increasingly threatened not only by General Grant but also by General Sherman who was advancing north through the Carolinas. Conceivably the Trans-Mississippi was in a position to hold out longer or even make a separate peace. It seems unlikely that these considerations could fully account for the remarkable strength of the new issue in the west, however. Pecquet (1987, pp. 238-239) calculates that, owing to the much reduced supply of new issue notes that reached the Trans-Mississippi, the per capita nominal money supply in January 1865 was about 2.68 times greater in the east than in the west. The suggested greater degree of monetary scarcity in the west is reasonably in line with the higher relative gold value of the currency in the west -- implying that the differential values of the new issue are not necessarily

due to differential effects of war news. Rather, once again different currency values seem to have gone hand-in-hand with different degrees of monetary scarcity.

IV. Conclusions

Contrary to the view espoused in much recent Civil War research, we believe that Friedman (1992) is right to refer to the 1864 Confederate experience as a textbook case of drastic money supply changes causing drastic price changes. But it is more than that: the Currency Reform Act is a unique natural experiment by which one can compare the effects of applying monetary reform in the east to the effects of *not* applying monetary reform in the west. After April 1864 continued depreciation in the west runs counter to the sudden strengthening of the gold value of Confederate currency in the east. This strengthening seems largely attributable to the currency reform and the concomitant near-overnight one-third reduction in the money supply.

Our analysis implies that standard gold price series from the eastern markets cannot possibly give an accurate picture of the effects of war news in the post-reform period. The rapid depreciation of the old currency still circulating in the west in 1864 gives some insights into what the likely trend would have been in the Richmond market had the reform *not* been enacted. The measured rate of currency depreciation in eastern markets in 1864-1865 conflates the effects of war news with the artificial boost arising from the currency reform. Even if Mitchell's (1903) war-news-hypothesis fits the Northern case it manifestly is not an adequate explanation for the post-1864 Confederate experience. Money really does matter.

Footnotes

- * The authors thank Milton Friedman, Tom Mayer, Charles Calomiris, Deirdre McCloskey, Tom Willett, Richard Sutch, Kelly Bedard, Eric Helland, Bill Brown, Farrokh Langdana and Janet Smith for helpful comments and are grateful to Douglas Ball for sharing his personal insights on the Currency Reform Act.
1. Calomiris (1988) also emphasizes the importance of fiscal news in driving the greenback price of gold during the entire 1862-1878 period of greenback suspension.
 2. Detailed accounts of this quite complex Act -- and the motivations that led to its passage - - are provided by Schwab (1901), Todd (1954), Pecquet (1987) and Ball (1991).
 3. This is a truncated version of the quote given by Friedman (1992, p. 202).
 4. See Lerner (1956) and Burdekin and Langdana (1993) on the course of the currency depreciation in the eastern Confederacy.
 5. Although the funding date was different, Confederate currency both east and west of the Mississippi remained subject to identical redemption provisions. There is no sense in which currency held in the west was subordinate to the same currency issue held in the east. Indeed, the notes were identical in every way.
 6. In the east the switch from old to new currency occurs on April 1, 1864 and from that point on only new currency is quoted in eastern financial markets. Meanwhile, in the west regular quotations of the old currency continue through the end of 1864, after which new currency quotes predominate there. We restrict our empirical work to data through December 31, 1864 in order to focus on the comparison between old currency in the west and new currency in the east.

7. Details are available from the authors upon request.
8. Furthermore, the process appears to be symmetric in that we are unable to reject the restriction that there is a one-to-one linkage between the Richmond and Houston markets in the pre-reform period. The corresponding likelihood ratio test statistic ($2.22 \sim \chi^2_1$) is not significant at even the ten percent level.
9. While war news could have had uniform effects in both east and west, Milton Friedman has pointed out to us in private correspondence that “those effects were superimposed upon the effects of very different movements in the quantity of money.” At the very least, common war news cannot alone explain Confederate currency movements in the post-reform period.
10. This additional 10% tax applied only to the \$100 bills but these were a significant portion of the money supply by 1864. Meanwhile, all notes of \$5 and higher remained subject to 100% repudiation by January 1, 1865.
11. Although most old issue notes were scheduled to be fully repudiated on January 1, 1865, the Confederate Congress actually moved in late December 1864 to cancel this repudiation of the old currency (see Ball, 1991, p. 188). News of this decision could scarcely have reached the Trans-Mississippi before the end of the year, however.

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Table 1

Johansen Maximum Likelihood Tests for Cointegration

Full Sample Period: September 1861 – December 1864

Null Hypothesis	Alternative Hypothesis	Test Statistic	95% Critical Value
λ_{TRACE} tests		λ_{TRACE} value	
$r = 0$	$r > 0$	6.89	15.197
λ_{MAX} tests		λ_{MAX} value	
$r = 0$	$r = 1$	6.88	14.036

lag length of VAR = 1

Pre-Reform Sample Period: September 1861 – March 1864

Null Hypothesis	Alternative Hypothesis	Test Statistic	9 5% Critical Value
λ_{TRACE} tests		λ_{TRACE} value	
$r = 0$	$r > 0$	15.55**	15.197
λ_{MAX} tests		λ_{MAX} value	
$r = 0$	$r = 1$	15.04**	14.036

lag length of VAR = 2

**denotes significance at the 5% level.

r = number of cointegrating vectors

Note: Critical Values are obtained from Osterwald-Lenum, 1992. Lagrange Multiplier Tests for lag lengths of 1 and 4 did not indicate the presence of serial correlation at the 5 or 10 percent levels of significance.

Data Appendix

The Grayback Note Price of a Gold Dollar

<i>1861</i>	Richmond	Houston*		Richmond	Houston*	Houston**
September 1	1.12	1.00	June 20	8.50	8.00	
September 15	1.15	1.00	July 4	8.25	7.00	
September 29	1.15	1.00	July 18	10.00	9.50	
October 13	1.15	1.05	August 1	11.00	9.50	
October 27	1.20	1.05	August 15	13.00	10.00	
November 10	1.20	1.10	August 29	12.00	10.00	
November 24	1.20	1.10	September 12	13.00	11.50	
December 8	1.30	1.25	September 26	11.50	12.00	
December 22	1.35	1.50	October 10	12.50	11.00	
			October 24	12.50	11.00	
<i>1862</i>			November 7	12.50	12.00	
January 5	1.35	1.50	November 21	16.75	15.00	
January 19	1.30	1.50	December 5	17.00	16.00	
February 2	1.28	1.50	December 19	18.00	19.00	
February 16	1.40	1.75				
March 2	1.50	1.75	<i>1864</i>			
March 16	1.50	1.75	January 2	20.00	19.00	
March 30	1.75	1.75	January 16	22.00	23.75	
April 13	1.76	2.00	January 30	20.50	24.25	
April 27	1.80	2.00	February 13	22.50	22.00	
May 11	2.00	2.00	February 27	27.00	21.00	
May 25	2.00	2.00	March 12	22.00	22.00	
June 8	2.00	2.00	March 26	21.25	21.00	
June 22	2.00	2.50	April 9	23.00	26.00	
July 6	2.00	2.50	April 23	23.00	26.00	
July 20	2.00	2.50	May 7	21.25	28.00	
August 3	2.00	2.50	May 21	18.00	39.50	
August 17	2.10	2.75	June 4	17.00	43.00	
August 31	2.35	2.75	June 18	17.00	35.00	
September 14	2.40	2.75	July 2	17.00	31.00	
September 28	2.40	3.00	July 16	17.00	31.00	
October 12	2.40	3.00	July 30	19.00	36.50	
October 26	2.80	3.00	August 13	19.00	36.00	
November 9	3.30	2.75	August 27	20.00	41.00	
November 23	3.30	2.75	September 10	23.00	47.00	
December 6	3.25	3.50	September 24	25.00	54.00	
December 20	3.25	3.50	October 8	25.00	55.00	
			October 22	23.00	48.00	
<i>1863</i>			November 5	25.00	48.00	18.30
January 3	3.25	4.00	November 19	28.00	50.00	24.00
January 17	3.10	4.50	December 3	29.00	48.00	20.00
January 31	3.05	4.75	December 17	34.75	50.00	22.00
February 14	3.30	5.00	December 31	40.00	45.00	20.00
February 28	3.40	5.00				
March 14	5.50	5.00	<i>1865</i>			
March 28	5.40	4.75	January 14	50.00		25.00
April 11	5.50	5.00	January 28	35.00		26.00
April 25	5.50	5.25				
May 9	6.50	6.00	*Old Issue			
May 23	6.00	8.00	**New Issue			
June 6	7.00	8.00				

Notes on Data

Grayback/gold price quotations were taken from the following newspapers: *Richmond Dispatch*, *Richmond Examiner*, *Richmond Whig*, *Richmond Enquirer*, *Petersburg Express*, *Wilmington Daily Journal*, *Columbus Daily-Sun*, *Charleston Mercury*, *Lynchburg Virginian*, and the *Mobile Tribune*. Richmond Grayback/gold price quotations were also cross-checked against prices in the Raleigh, Augusta, and Mobile gold markets using the following newspapers: *Raleigh Weekly Register*, *Mobile Tribune*, *Mobile Advertiser and Register*, and *Augusta Daily Constitutionalist*.

The Richmond newspapers did not always report gold prices during the summer and fall of 1864. These gaps were filled in with prices from the Wilmington, NC money market. All Wilmington prices are taken from the *Wilmington Daily Journal*.

Figure 1
Confederate Money Prices in Richmond and Houston
September 1861 - February 1865

