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Surrounding Slavery and the Civil War**

by

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Comment: Betting on Secession:
Quantifying Political Events Surrounding Slavery and the Civil War

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Abstract: This paper argues that falling slave prices in the earliest months of the American Civil War in April 1861 indicates lack of confidence in the durability of the Confederacy. The key to this understanding is use of an asset pricing model that distinguishes between the expected outcomes of the war, whether the war was thought to be over quickly or otherwise, and whether any compensation for emancipation would be paid. This view concurs with other investigators who have examined falling gold bond and cotton bond prices and, in the very early months, rising Confederate dollar prices of gold, as well as difficulties in selling Confederate bonds to finance its war effort.

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Falling Confederate asset prices during the American Civil War have been taken as indicators of the prospects for Confederate victory. After major Confederate defeats in 1863 the prices of both Confederate gold bonds and cotton bonds traded in Europe fell sharply as expectations of repayment declined (respectively, Oosterlinck and Weidenmier, 2007, and Weidenmier, 2000). There is even a suggestion that the chances of Confederate victory was questioned in the early months of the Civil War beginning in April 1861: the sale of Confederate bonds to finance the war was slow from the very earliest days (Razaghian, 2005) and the Confederate dollar price of gold was also rising (McCandless, 1996) - signaling declining confidence in the longevity of the Confederacy rather than inflation expectations (Burdekin and Langdana (1993).

Calomiris and Pritchett (2016) investigate slave prices recorded in the New Orleans slave market finding that from the 1860 peak to August 1861, four months into the civil war, they fell sharply across all slave age-cohorts, a rate of fall that accelerated after the Civil War broke out.

Unlike with the other asset price movements they say that this price behavior was not due to markets pricing in a probability of Confederacy defeat. According to them only if the prices of child slaves fell more than the prices of adults would this be true: “political news that increased the likelihood of emancipation without compensation should have reduced the prices of children relative to those of adults” (page 19).

They model slave prices using “annual”, or, conditional probability, of default. They support this claiming that emancipation without compensation was only a “prospective concern” (Appendix A); but they also quote the *Charleston Mercury* (October 11th, 1860) to the effect that even the prospect of Lincoln’s election was a worry for slave owners.

Their conditional probability model is:

$$P_2 = \sum_{i=1}^N \frac{R_i(1 - \delta)^i}{(1 + r)^i}$$

where δ is the annual probability of default, P_2 is slave price (equal to present value), R_i is the pecuniary return on a slave in year i , N is the terminal year, and r is the discount rate.

Conditional probability is used to calculate default risk on risky bonds: an agent observes a signal and determines a probability of default over the known life of the bond. The probability of default in later years is conditional on default not having happened in a prior year. If default does not occur, the probability of default increases moving toward the maturity date, N .

Calomiris and Pritchett get their result by, in effect, treating the slave cohorts as if they were bonds with different maturity dates; child slaves are the equivalent of a very long bond and other age groups to shorter dated bonds. As with long bonds, they assume default could conceivably not occur before, say, year 27 (or, 1888 when slavery ended in the Western Hemisphere). It is rather unlikely that the Civil War could have gone for so long because the cost of financing such a war would almost certainly have been beyond the resources - financial, material and human, of

the Confederacy.¹ It can be asked if the war ended sooner than the 1880s under what circumstances would there have been emancipation without compensation after it had finished? It is hard to see why this would have been the case and no arguments are offered as to why it might have been thought by slave owners to come about. A better assumption would be that slave owners assumed a much shorter war, closer in time to what it actually was, in which case the ‘long bond’ story evaporates.

Moreover, equation (1) does not allow for the ending of the Civil War with at least some compensation for emancipation. It is simply assumed that slave owners believed there would be none. But why would they assume that if they held a belief that the Civil War might be concluded in anyway other than defeat. The no compensation assumption rather looks like a convenience to justify using equation (1).

Another uninvestigated assumption of the slave pricing model of equation (1) is risk neutrality across all slave age cohorts – i.e., the same discount rate, r , is used regardless of price, which varied widely across age cohorts. However, if representative slave owners/buyers were more cautious about risking large sums of money on expensive prime age field hands – up to five times more expensive than children, they could well have applied a higher discount rate to them. In the presence of risk aversion across age groups equation (1) again breaks down. With higher discount rates for more expensive slaves it is possible that slave prices across age cohorts would fall by similar percentage amounts despite the longer earning profiles of younger slaves.

Given that compensation for emancipation might have occurred - and not necessarily in the distant future - examination of the “recovery ratio” needs to be carried out. Thus, slave price in August 1861 should be written as:

¹ Goldin and Lewis (1975) catalogue the immense cost of the American civil war.

$$P' = \sum_{i=1}^N [P_i \cdot f_i \cdot C_i] + \sum_{i=1}^N [p_i \cdot f_i \cdot R] \quad (2)$$

where in the first part of equation (2) $P_i = (1 - \delta)^i$ and δ is the default probability; f_i is the risk free present value discount factor; and C_i is a slave owner's annual net return on a slave.²

The second part of equation (2) shows the “recovery value” of a slave in case of emancipation, where recovery value could vary between zero and full remaining present value.³ p_i is the adjusted probability of being paid the recovery value during time period i after default, and $p_i = P_{i-1} - P_i$ on the assumption that recovery value is paid immediately after emancipation. f_i is again the risk free discount factor; and R is “recovery value” paid at the emancipation date in period i .

Unlike equation (1), equation (2) allows for expectations of war length to vary from very short all the way up to the late-1880s, and it also allows compensation for emancipation to vary between zero and the full present value of each slave age cohort. For example, if slave owners on average expected a short war ending in no compensation for emancipation slave prices would fall by similar percentage amounts all slave age cohorts. This would agree with the empirical finding, and so would expectation of a short war with compensation for emancipation varying upward from zero toward, but not reaching full compensation for emancipation. However, the longer was the Civil War expected to last the more nearly would slave prices behave as Calomiris and Pritchett (2016) hypothesized. But slave market expectations on a) the expected length of the Civil War and b) the extent of compensation for emancipation are matters for

² This equation is based on Merrick (2001). Weidenmier and Oosterlinck (2007) use a similar equation to calculate the probability of Confederate victory but using a completely different data set and beginning in 1863.

³ Or, as in Merrick (2001), the recovery value of a bond in default.

historical research and cannot be simply assumed. Relevant here is that both in the South and the North a short Civil War was expected. Lincoln initially called up Union troops for just three months following the bombardment of Fort Sumter. And Catton (2004) points out “it seemed reasonable to many people to suppose that before their term of service expired they ought to win the war” (page 33); “very few men, either in the North or in the South, were ready to admit that the war would be a long one (page 33), and after Bull Run (July 1861) the South looked to a short war” (page 51).

Calomiris and Pritchett (2016), having concluded that emancipation was not affecting slave prices during 1861, offer two suggestions as to what might have been. First, there could have been an expectation of increased taxes on slave holdings to finance the war and that this would reduce the net return on slaves. However, this does not consider the fact that direct taxes accounted for only 8% of Confederate war financing, while the massive printing of money to finance expenditures imposed an ‘inflation tax’ and a rise in the price level of over 9,000% (Burdekin and Langdana, 1993). High rates of inflation tend to favor property owners because property is often an inflation hedge. For this reason it is not at all clear that slave prices should have fallen for ‘reasons of war financing’.

Secondly, falling slave prices could have been caused by falling cotton exports. However, no calculations were offered as to the extent of export depletion needed to yield the observed sharp fall in slave prices, nor, even, how long the war needed to go on to cause the fall in slave prices observed. Two other considerations are that in the early months of the Civil War, there was some expectation in the Confederacy that the main export, cotton, would hold up well - on July 11th, 1861, the Confederate Vice President in a speech in Augusta, expressed great confidence that England and France would have to continue buying Confederate cotton: “We

grow it. There is no part of the world that grows it as we do. We supply the markets of the world. They must have it” (Abbott, 1863, page 158). And as to the blockade “...it would be obliged to be raised, or there will be revolution in Europe...Our cotton is the element that will do it. (Abbott, 1863, page 158). Secondly, in August 1861 the Confederacy announced a cotton export embargo designed to bring Britain and France into the war on its side. While this can be interpreted as reducing the rate of return on slaves, it can also be interpreted as increasing the probability of Confederate victory, so stabilizing or even raising slave prices. In the latter case falling slave prices would indicate a lack of confidence in the Confederacy rather than lower just lower profits. At the very least more historical research into how the cotton export embargo was perceived is needed.

The abrupt and significant fall in slave prices from the peak in 1860 and accelerating after the Civil War broke out to August 1861 must reflect significant events. These events cannot be captured in the financial model in equation (1) because it is based on uninvestigated assumptions – that slave owners thought that slavery could conceivably continue into the 1880s, that emancipation when it came would be without compensation, and that slave owners were risk neutral across slave age cohorts from relatively inexpensive slaves to expensive prime age field hands. The financial model of equation (2) deals with the first two of these criticisms, though not the third. In doing so it allows for a fall in slave prices across all slave age cohorts by similar amounts; as does allowing for increasing risk aversion at higher slave prices. It seems extraordinary that the sharp fall in slave prices early in the Civil War was not to some extent caused by fear of emancipation with no or limited compensation. But only more thorough historical research, rather than just the financial modeling of equation (1) can determine whether this was true or not.

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