

Review Essay by Thomas Weiss, Department of Economics, University of Kansas.

"It takes a licking, but keeps on ticking." John Cameron Swayze

It is a rare monograph in economic history that gets reviewed in magazines and newspapers such as *Newsweek*, *Time*, *The Atlantic Monthly*, *The New York Times*, *The Wall Street Journal* and *The Washington Post* among others; or whose authors appear on television talk shows. Robert Fogel and Stanley Engerman's *Time on the Cross* was one such book -- perhaps the only one.

Perhaps equally rare is the book that could have withstood the onslaught of unrelenting, withering criticism directed at *Time on the Cross*. The book was described as "simply shot through with egregious errors" (David, et al, 1976, p.339). It was "vulnerable not only to attack -- but to dismissal." Some thought the book should be consigned "to the outermost ring of the scholar's hell, obscurity" (Haskell, 1975, p. 35). Richard Sutch could only conclude that "*Time on the Cross* is a failure" (1975, p. 339).

Yet here it stands among those books that still attract attention, a classic in the field. And it was recognized as such by many at the time, especially in the first wave of reviews. Peter Passell, for example, said, "If a more important book about American history has been published in the last decade, I don't know about it" (1974, p. 4). Even after the first barrage of criticism appeared, Gary Walton ventured to say that "*Time on the Cross* was destined to become a classic" (1975, p. 333).

*Time on the Cross* was not the run of the mill book; neither was it that rare book which on its own would have drawn the attention it did. Of course, the subject matter of slavery was of great interest and would have generated a fair amount of attention; the 'cliometric' methodology was still somewhat new and would have elicited some additional interest; and the combination of the two, the application of quantitative methods to a morally-laden topic, would have sparked some controversy. Its popularity, however, went way beyond that, in part because the book was written and produced so as to attract an abnormally great amount of attention. As is well-known, the results and interpretation were published in one volume written for the general educated reader, and was not laden with footnotes and technical jargon. That volume, subtitled *The Economics of American Negro Slavery*, was described on the jacket cover as "a sweeping reexamination of the economic foundations of American Negro slavery." The text continued in that bold and provocative style. As indicated above, it got the attention it sought. And, it was a topic of conversation at faculty cocktail parties where economic theorists would seek out economic historians and solicit their opinion: what do economic historians make of the book? Did Fogel and Engerman really argue that slavery was profitable? It became clear quickly that most of them had read the reviews and not the book, but still for a brief moment they had noticed what was going on in the field.

All the painstaking details of scholarship were relegated to a second volume, subtitled *Evidence and Methods*, so that anyone interested in 'checking the facts' or the methods of estimation had to go through a process of cross-referencing. That cross-referencing could be done only after one made sense of the condensed presentation in volume II, which itself relied on extensive cross-referencing. Consider the following simple example from Volume II that supports five pages of textual presentation in volume I regarding the decrease in the slave population of cities.

"3.9 (pp. 99-102). figures 30 and 31 are computed from data in Goldin [146; cf. 148]. See 6.6. for a summary of her findings." (vol. II, p. 87).

Scholars, as you can imagine, were all too eager to plow through that material. And rightly so, for another bold claim of the book was that it would demonstrate the value and superiority of applying mathematical and statistical techniques to history. This was not only a red flag waved in front of the traditional historians, it got the attention of cliometricians as well. Anyone who has attended a cliometrics conference knows how thoroughly the audience combs through the technical details, no matter what the topic. Imagine when the topic is as popular and controversial as slavery.

The book was intended to do more than just straighten out the traditional interpretation of the economics of slavery. It aimed to "strike down the view that black Americans were without culture, without achievement, and without development for their first two hundred and fifty years on American soil" (p. 258). According to Fogel and Engerman this view derived from the traditional interpretation of the economics of slavery, beginning with the debate between the critics and defenders of slavery and continuing through the writings of historians, most especially U.B. Phillips and Stanley Elkins. Fogel and Engerman argued further that even those historians, such as Richard Hofstadter and Kenneth Stampp, who questioned one or more aspects of the traditional view did not do away with the myth of the inferiority of slave labor (pp. 227-31).

The traditional interpretation of the economics of slavery is obviously long and complex, as was brought out by Stampp in his critique of the book. That complexity has influenced the subsequent writings of Fogel and Engerman but in *Time on the Cross* they summarized it in five main propositions. "1, ...slavery was generally an unprofitable investment ...; 2, ... slavery was economically moribund; 3, ... slave labor, and agricultural production based on slave labor, was economically inefficient; 4, ... slavery caused the economy of the South to stagnate, or at least retarded its growth ...; 5, ... slavery provided extremely harsh material conditions of life for the typical slave" (p. 226).

Their chief conclusions were also neatly summarized in a list of 10 "principal corrections of the traditional characterization of the slave economy" (pp. 4-6).

1. Slavery was not a system irrationally kept in existence by owners who failed to perceive or were indifferent to their best economic interests. The purchase of a slave was generally a highly profitable investment which yielded rates of return that compared favorably with the most outstanding investment opportunities in manufacturing.
2. The slave system was not economically moribund on the eve of the Civil War. There is no evidence that economic forces alone would have soon brought slavery to an end without the necessity of a war or other form of political intervention. Quite the contrary; as the Civil War approached, slavery as an economic system was never stronger and the trend was toward even further entrenchment.
3. Slaveowners were not becoming pessimistic about the future of their system during the decade that preceded the Civil War. The rise of the secessionist movement coincided with a wave of optimism. On the eve of the Civil War, slaveholders anticipated an era of unprecedented prosperity.
4. Slave agriculture was not inefficient compared with free agriculture. Economies of large-scale operation, effective management, and intensive utilization of labor and capital made southern slave agriculture 35 percent more efficient than the northern system of family farming.
5. The typical slave field hand was not lazy, inept, and unproductive. On average he was harder-working and more efficient than his white counterpart.

6. The course of slavery in the cities does not prove that slavery was incompatible with an industrial system or that slaves were unable to cope with an industrial regimen. Slaves employed in industry compared favorably with free workers in diligence and efficiency. Far from declining, the demand for slaves was actually increasing more rapidly in urban areas than in the countryside.

7. The belief that slave-breeding, sexual exploitation, and promiscuity destroyed the black family is a myth. The family was the basic unit of social organization under slavery. It was to the economic interest of planters to encourage the stability of slave families and most of them did so. Most slave sales were either of whole families or of individuals who were at an age when it would have been normal for them to have left the family.

8. The material (not psychological) conditions of the lives of slaves compared favorably with those of free industrial workers. This is not to say that they were good by modern standards. It merely emphasizes the hard lot of all workers, free or slave, during the first half of the nineteenth century.

9. Slaves were exploited in the sense that part of the income which they produced was expropriated by their owners. However, the rate of expropriation was much lower than has generally been presumed. Over the course of his lifetime, the typical slave field hand received about 90 percent of the income he produced.

10. Far from stagnating, the economy of the antebellum South grew quite rapidly. Between 1840 and 1860, per capita income increased more rapidly in the south than in the rest of the nation. By 1860 the south attained a level of per capita income which was high by the standards of the time. Indeed, a country as advanced as Italy did not achieve the same level of per capita income until the eve of World War II.

Several of these, such as the matter of the profitability and viability of slavery or the growth of demand for slaves in cities, were already well-known conclusions at the time and were the product of other researchers (Conrad and Meyer, Stamp, Yasuba, and Goldin, among others). Fogel and Engerman may have added a bit to these sorts of issues, but their role was more that of making such results more widely known among the general public and integrating that information into their bold, new vision of the way the slave system functioned.

Other revisionist claims were provocative. Could slave agriculture possibly be more efficient than free? Was the family the basic unit of social organization under slavery? Was the material condition of slaves as favorable as that of free industrial workers? Was the rate of exploitation or expropriation really that small? Did southern per capita income increase faster than that in the rest of the nation? The slave-based, monocultural agricultural system of the South was Douglass North's archetypal example of an economy that was not going to be successful. Did he get it all wrong?

What followed was an avalanche of criticism. Criticism may be putting it mildly; the book and the authors were lambasted from every direction. There was an outpouring of research, papers, special journal issues, edited volumes, monographs, conference sessions, and indeed an entire conference -- the Rochester Conference: "*Time on the Cross: A First Appraisal*." There is no question this was a seminal work, if by that one means it was responsible for bringing forth further work. In this case it did so in abundance. In addition to the work by those who questioned many aspects of *Time on the Cross*, there was the continuing work by Fogel and Engerman and their students, much of which ultimately appeared in *Without Consent or Contract: Evidence and Methods*, and *Without Consent or Contract: Technical Papers* (2 vols.). A re-interpretation of all this work culminated in Fogel's

*Without Consent or Contract: The Rise and Fall of American Slavery* (which appeared in print long before all the supporting material).

Much of the criticism, at least that which materialized in the first wave, was brought together in two edited volumes: a special issue of *Explorations in Economic History* (October 1975) and *Reckoning With Slavery* (David, et al, 1976); and a single authored work *Slavery and the Numbers Game* (Gutman, 1975). In most cases, the articles in these volumes were also published in journals, usually in a more technical style. The *Journal of Economic History*, for example, had published a long review essay written by Paul David and Peter Temin, which became part of *Reckoning With Slavery*. Subsequently the *American Economic Review* published an important exchange between David and Temin (1979) and Fogel and Engerman (1977 and 1980) regarding the relative efficiency of slave agriculture.

Scholars argued about everything -- including what the traditional characterization of slavery was. Sutch produced a monograph questioning almost every aspect of the material treatment of slaves; Gavin Wright criticized the argument that the long run prospects of slavery were good; David and Temin, and others examined the efficiency calculation; Richard Vedder and others questioned the definition and measurement of exploitation; Herbert Gutman examined the arguments about the Protestant work ethic and family values among other things. And as expected, Fogel and Engerman, and their students, published articles that defended their findings.

Not everyone agreed on which of the conclusions was most startling, or which was more in error. On the one hand, Richard Sutch saw the "authors' claim that the physical and psychological well-being of American slaves was much greater than previously believed" as the lightning rod that attracted so much attention to the book (1975, p. 335). Thomas Haskell argued that the 'book's central argument, [was] the claim that slaves were more efficient workers than free men.' (1975, p. 36). In a sense it was the conjunction of interrelated claims, or what critics saw as the whole house of cards, that made for so much controversy.

By itself, for example, the finding that farms using slave labor were estimated to have been more efficient than farms using free workers might not have been controversial. It may have been surprising, but that was in part because no one had thought to look before. If that were an isolated finding, only those who worry about the details of estimating production functions would have cared. But it was not an isolated piece of information, it was part of a different view of the slave regime -- the centerpiece of it according to Haskell (1975, p.36). In the Fogel-Engerman scheme the efficiency of southern agriculture was the joint product of shrewd capitalistic planters and hard-working slaves. The innovative, and highly controversial point, was that slaves worked hard because they were rewarded for doing so, not because they were driven to it. Critics pointed out that there was little evidence on rewards; to a large extent this was inferred from the economic outcomes, and from the evidence on the slaves' material standard of living and the hierarchy of occupations in which they were employed, and from the evidence that whipping did not appear to be widely used to motivate the slaves.

Of course, slaves were motivated by a combination of the stick and the carrot. Fogel and Engerman may have exaggerated the role of the carrot, but a more lenient view is that they were attempting to shift the balance towards well-motivated economic behavior and a more reasonable treatment of slaves. In their summary of the traditional view they argued that Kenneth Stampff had come "remarkably close to discovering the true nature of the slave system..." but had overestimated the use

of cruelty." In Fogel and Engerman's view, force was necessary, and, although it "could, and often did, lead to cruelty" there was less of it than Stampf believed. Planters, being capitalistic businessmen "used force for exactly the same purpose as they used positive incentives -- to achieve the largest product at the lowest cost. Like everything else, they strove to use force not cruelly, but optimally" (p. 232).

In the opinion of Fogel and Engerman, it was the traditional view in which slaves were lazy and not well motivated that gave rise to the false stereotype of black labor that still plagues blacks today (p. 215). In their revised view slaves were hard working; slave labor was of superior quality. Indeed, this helps explain why large slave plantations were much more efficient than free southern farms. "This advantage was not due to some special way in which land or machinery was used, but to the special quality of plantation labor" (p. 209). Ordinary slaves were "... imbued like their masters with a Protestant ethic" (p. 231). They could not exercise that work ethic in whichever direction they wished, but within the confines of the slave system they could, and to a large extent did, strive hard. This revised view, as you can see, shifts attention away from the effect of slavery on the conditions and behavior of blacks today, and puts it back on the conditions of black life that took place after the Civil War (p. 260). And one can imagine this revised view would have bearing on the question of black reparations.

Critics addressed as well the question of the proper role of quantitative methods in history. Could cliometrics make a contribution to our understanding of history in general and slavery in particular? Or is it the case that some of the issues related to slavery are not amenable to quantification or economic analysis?

One calculation from *Time on the Cross*, for example, that got a lot of attention, perhaps more than any other, was the attempt to measure the extent to which slaves were whipped. It may seem like this point was belabored by critics, but it was an important piece of information in the Fogel-Engerman edifice. Whipping was an example of the methods used to socialize and motivate slaves; the less important these incentives of the 'stick' variety, the more believable would be the argument about the incentive effect of carrots. According to Fogel and Engerman, whipping was not common; there were only "an average of 0.7 whippings per hand per year." The quantification alone was an affront to some, while the interpretation bothered many more. The criticism of this one point suggests the extent to which scholars were examining the book's methodology. Gutman (1975) took the matter up in great detail, pointing out that their argument rested on evidence from a single plantation and one not likely to be representative of the plantation economy. Moreover, they were careless in their use of those limited statistics; they used an "inaccurate count of the number of whippings, [a] greatly exaggerated estimate of the number of hands, and their erroneous measurement of the length of time covered," to arrive at their estimate. Gutman argues that it is more relevant to ask how often the whip was used, and using the same evidence calculated that "A slave -- on average -- was whipped every 4.56 days." Moreover, the precision as to the number of whippings is not as important as the impact, and that depended on the external effects of whipping. Slaves who witnessed the whipping may have altered their behavior.

Historians were all too eager to think that cliometric techniques had led Fogel and Engerman to what historians saw as outlandish conclusions. Perhaps for this reason, cliometricians felt some duty to defend the cliometric methodology and came down harder on the authors, questioning the quality of Fogel and Engerman's data, analysis and interpretation. Sutch's work on the material treatment of

slaves, was a detailed attempt to replicate the results of Fogel and Engerman and he "found so many errors of computation or citation, data so selective or weak, and the presentation of the results so distorted that I have been forced to conclude that *Time on the Cross* is a failure" (1975, p. 339) But it was not a failure of the cliometric methodology; "the fault must lie with the authors." In Sutch's view, "quantitative methods can help in producing a more accurate and complete portrayal of slavery" (1975, p. 429).

Somehow *Time on the Cross* has survived all this firepower. Its conclusions are not all intact, but neither have they been completely dismantled. Despite all the criticisms of the calculation of the relative efficiency of southern agriculture, for example, the leading cliometrics textbook says "The bottom line of the debate is that Fogel and Engerman's measure of relative efficiency seems to be robust, although many scholars remain troubled by quite how to interpret the estimates. [And] The sources of productivity differences remain a mystery" (Atack and Passell, 1994, p. 316). And although slaves are not seen as having been imbued with the Protestant work ethic, there is little question that they were motivated in part by positive incentives and not just by force and cruelty.

The material conditions of slaves were not as good as Fogel and Engerman made them out to be, but they were better than many had imagined. Fogel and Engerman in effect forced others to confront the issue and look more carefully at the variation in treatment across space, time and size of slave holding. Much research was produced as a result of this, and much of it was produced by students of, and under the direction of, Fogel and Engerman. Thomas Haskell thought that *Time on the Cross* would probably survive in part because "there were dozens of graduate research assistants who are now fiercely loyal to their company and its product" (1975, p. 39). He envisioned that these assistants would work to shore up the various parts of the structure laid out in the book, and it is unlikely he imagined the sort of work on the stature and nutrition of slaves that was carried out by Richard Steckel, Robert Margo and others. That evidence, the quantitative sort that Fogel and Engerman desired and paid attention to, ran heavily against *Time on the Cross*, and has clearly influenced Fogel and Engerman's views. According to *Time on the Cross*, "Slave health care was at its best for pregnant women. 'Pregnant women,' wrote one planter, 'must be treated with great tenderness, worked near home and lightly'" (p.122). In the "Afterword" of the re-issued Norton edition of the book they put it this way: "It now appears that children rather than adults were the principal victims of malnutrition. [and] Much of the new story turns on the overwork of pregnant women" (1989, p. 285). In *Without Consent or Contract*, Fogel puts it this way "Masters were not generally guilty of working field hands to death, but they were guilty of so overworking pregnant women that infant death rates were pushed to extraordinary levels" (p. 153).

And despite the pronouncements by some historians that the book was a "flash in the pan, a bold but now discredited work" (Kolchin, 1992, p. 492), it remains in publication and on the reading lists in economics as well as history courses. Of course one cannot tell from the reading list what use is made of the book in each course, and it may be that historians use it as an example of methodology that should not be tried. Nevertheless, it is still in use and still being paid attention to. Moreover, many economic historians, in both economics and history departments, agree with the major conclusions put forth by Fogel and Engerman. Robert Whaples (1995) surveyed members of the Economic History Association in order to find out where there is consensus on a broad range of issues, and included four hypotheses taken straight out of *Time on the Cross*. As one might expect, two of the propositions that were not very controversial in 1974 -- those having to do with the profitability and viability of slavery

-- were still uncontroversial and agreed to by nearly 100 percent of both economists and historians. More surprising is that most economists and historians accept Fogel and Engerman's proposition that slave agriculture was efficient compared with free labor. Some of those who agreed did so with unspecified provisos, but only 28 percent of economists and 35 percent of historians disagreed. Their proposition about the material standard of living has not fared as well, 58 percent of historians and 42 percent of economists disagreed with the proposition that the material condition of slaves compared favorably with those of free industrial workers. This, I would think should not be too surprising in light of the work cited above on the treatment of slave children and pregnant women. Many of Fogel and Engerman's students might have disagreed with this claim, and even Fogel and Engerman have backed off somewhat on this claim (1989, p. 285).

Clearly the book had an impact. At the time it seemed that the attention of the field was devoted entirely to this subject; Fogel and Engerman must have been consumed by it. Its impact, however, even if not all of its conclusions, was longer lasting. It led to a large volume of subsequent research, the compilation of data sets, and helped as well to foster new areas of work, such as that on stature and the standard of living. Whether its conclusions are right or wrong, it is a book that has not been ignored.

References Cited: