GONE WITH THE WIND? REINTERPRETING THE ECONOMIC VIABILITY AND INTERREGIONAL IMPACT OF THE ANTEBELLUM SOUTHERN SLAVE SYSTEM

Marisa Kometas

Abstract

Since the 1800s, the antebellum Southern slave system has persisted as one of the most fiercely debated and chronically misunderstood topics in economic history. Economists, historians, and social theorists have long decried slave labor for being inefficient, unprofitable, and lacking in long-term viability. Widely accepted allegations that the slave system promoted unproductive utilization of labor and precipitated income inequality, have led many scholars to condemn Southern plantations as barriers to economic growth. However, these traditional assertions and beliefs arise, not from objective data analysis, but from biased opinions and erroneous assumptions. After reviewing early theorists’ contributions to the traditional interpretation of the slave system, the paper challenges the assumptions underlying their denunciation of the antebellum Southern economy. Using empirical data, the paper re-examines prevailing assertions regarding slaves’ productivity, efficiency, and rates of return relative to alternative investments, and re-evaluates the long-term viability of the slave system. To investigate slavery’s macroeconomic impact thoroughly, the paper re-interprets the role of the slave-based plantation system in promoting both regional and inter-regional growth in the United States during the antebellum period.
Introduction

For over a century, the antebellum South has been alternately romanticized and condemned. Contemporary Americans tend to envision life on a Southern plantation as either a nightmarish passage from *Uncle Tom’s Cabin* or an idyllic scene from *Gone with the Wind*. However, neither of these drastically different views captures the economic significance of a slave-based production system accurately. As one of the best-documented examples of slavery, the antebellum Southern economy offers invaluable insights into the efficiency and long-term viability of a large-scale system of forced labor.\(^1\) Therefore, since the eve of the Civil War, abolitionists, historians, and economists have fiercely debated the profitability of slavery, and how it affected the South’s economic development. Until recent decades, most academics decried this unique economic system as inefficient and unprofitable. Critics long alleged that, by promoting the unproductive utilization of agricultural labor, and by precipitating income inequality, the slave system precluded the expansion of manufacturing and industry.\(^2\)

This paper reevaluates these long-established assertions and reinterprets economic growth in the antebellum South. To examine the traditional economic assessment of the Southern economy, the paper presents antebellum perspectives regarding the slave system’s productivity and regional impact. The paper demonstrates how antebellum observations and data caused Ulrich Phillips to reject the sustainability of the slave system and inspired Eugene Genovese to explain its entrenchment using Veblen’s theory of conspicuous consumption.

After reconstructing the historical foundation of traditional interpretations of the slave system, the paper challenges these twentieth-century historians’ underlying assumptions. By

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exploring the productivity gains derived from the slave system’s inherent economies of scale, and by dissecting empirical data, the paper firmly establishes slaves’ relative efficiency. Moreover, by examining both the relative rates of return on slave investments and the economic characteristics of the planter class, the paper simultaneously shatters Philips’ assertions of slavery’s unsustainability and Genovese’s application of conspicuous consumption to Southern planters.

To reevaluate slavery’s macroeconomic impact, the paper analyzes how the slave-based plantation system affected Southern economic growth. Using empirical data, the paper refutes antebellum critics’ contentions that slavery stagnated the Southern economy by retarding industrialization. After rebutting inaccurate claims regarding the South’s regional economic growth, the paper analyzes its role in national economic development. The paper revises Douglas North’s antebellum interregional growth hypothesis to emphasize the significance of slave labor more forcefully, and concludes that, by facilitating the rise of Southern cotton cultivation, the slave system became the most significant determinant of U.S. economic development during the antebellum period.

Background

Early Economic Perspectives on Southern Slavery

_Nineteenth Century American Arguments: the Inferiority and Inefficiency of Slave Labor_

Throughout the decades approaching the Civil War, slavery’s opponents exacerbated interregional tensions. In 1843, Kentucky-native Cassius Marcellus Clay, rallied support for the anti-slavery movement by publishing an inflammatory editorial in the New York _Tribune_.³ Claiming that slaves were less skilled, less driven, and more indolent than whites, Clay insists

³ Fogel and Engerman, _Time on the Cross_, 160.
that investing in slaves is “a dead loss.” He further argues that diverting funds to sustain the slave institution retards economic growth by impoverishing the soil, by hindering the development of manufacturing, and by “degrading” agricultural labor for “poor” white Southerners. Clay emotively describes “numerous farm-houses, once the abode of industrious and intelligent freemen, now occupied by slaves… fields, once fertile, now unfenced, abandoned” as “‘one only master’ grasps the whole domain that once furnished happy homes for a dozen white families.” However, he provides no evidence to prove that the Southern economy “exhibits the painful signs of senility and decay.”

During the 1850s, independent publications from Hinton Rowan Helper and Frederick Law Olmsted appeared to substantiate Clay’s claims. Although the son of a small slaveholder, Helper became one of slavery’s fiercest critics and aspired to empirically support Clay’s arguments. Helper used macroeconomic data from the federal census of 1850 to compare the growth of New York and Virginia between 1790 and 1850. Comparing two other pairs of Northern and Southern states, Massachusetts and North Carolina, and Pennsylvania and South Carolina, yielded similar trends in economic development.

The analytical results had grim for implications for economic growth under the slave institution. While Virginia had twice the population of New York in 1790, its population was less than half that of New York by 1850. Differences in the states’ volume of trade proved even more alarming. In 1790, Virginia and New York sustained roughly the same number of imports and Virginia exported slightly more than its northern counterpart (Helper 31). However,

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4 Ibid.
5 Ibid.
7 Ibid.
8 Fogel and Engerman, Time on the Cross, 162.
9 Helper, Compendium of the Impending Crisis, 35.
in 1850 the value of New York’s imports and exports surpassed those of Virginia by $175,546,342 and $84,759,799 respectively.\textsuperscript{11} As New York significantly expanded its trade network during this period, Virginia’s imports changed little, and its exports actually fell by $406,208.\textsuperscript{12} The growth of Northern trade paralleled the rise of Northern manufacturing.\textsuperscript{13} By 1850, the value of New York manufacturing was $237,597,249 while the value of Virginia manufacturing was merely $29,705,387.\textsuperscript{14}

Helper identifies the relative weaknesses in trade and manufacturing as the most salient flaws of the South’s slave-based agricultural economy.\textsuperscript{15} Citing the North as “the Mecca” of Southern merchants, he argues that the South’s limited trading networks “compelled” Southerners “to go to the North for almost every article of utility and adornment.”\textsuperscript{16} Moreover, while “almost everything produced in the North meets with ready sale,” Helper claims that in the South “there is almost no demand, even among its own citizens” for manufactured goods.\textsuperscript{17} He attributes this supposed lack of demand to the “diabolical institution” of slavery.\textsuperscript{18} Recalling experiences on his father’s small subsistence farm, Helper argues that “the proceeds arising from” cash crops “are all absorbed in the purchase of meat and bread for home consumption” with little left over for investment in other economic sectors.\textsuperscript{19} Insisting that “there is something… socially, politically and morally wrong” with Southern slavery, Helper states that “its pestilential atmosphere” precludes Southern progress and prosperity.\textsuperscript{20}

While traveling through the South during the 1850s, the landscape architect Frederick

\textsuperscript{11} Ibid.
\textsuperscript{12} Ibid.
\textsuperscript{13} Ibid.
\textsuperscript{14} Ibid.
\textsuperscript{15} Ibid.
\textsuperscript{16} Ibid.
\textsuperscript{17} Ibid.
\textsuperscript{18} Helper, \textit{Compendium of the Impending Crisis}, 40.
\textsuperscript{19} Ibid.
\textsuperscript{20} Ibid.
Law Olmstead drew analogous conclusions. Although Olmsted did not present empirical data, his vivid observations of plantation life became the basis of microeconomic assumptions for generations. Examining Southern slavery with marked Northern bias, Olmsted explains that slavery made the Southern states “inefficient” and “economically backward.”

Olmsted estimates that slaves take four times longer to complete a task than Northern farm workers, and argues that “the natural resources of the land were strangely unused” since “the proportion of men improving their condition was much less than in any Northern community.” He further contends that the profits of antebellum slavery were confined to a few large plantations while the rest of Southern whites remained mired in poverty. Observing that “nearly all planters carry a heavy load of debt from year to year,” Olmsted reasons that “the value of the labor of slaves does not… justify the price paid for it.”

Views from Abroad: The Analysis of John Elliot Cairnes, 1863

In 1863, the British economist John Elliot Cairnes published The Slave Power. Inspired by Helper and Olmsted’s observations, Cairnes advised the British government to refuse to support the Confederacy during the American Civil War.

For his analysis, Cairnes derives two assumptions from Olmsted’s observations: that slave labor was less efficient than Northern white labor, and that land worked by slaves steadily and rapidly declined. Basing his argument on the relative inferiority and inefficiency of slave

22 Ibid, 17.
23 Ibid.
25 Fogel and Engermal, Time on the Cross, 188.
26 Ibid.
labor, Cairnes contends that employing slaves results in land degradation. He attributes Southern planters’ tendency to “employ their negroes exclusively in the cultivation of one crop” on the reluctant and unskilled nature of slaves. Cairnes claims that cultivating a single cash crop precludes the crop rotation necessary to maintain land fertility. With thinly-veiled disgust, he describes how the “land-killing” planter “abandons the ground which he… rendered worthless… to seek new soil.”

From Helper’s empirical data, Cairnes determines that slavery decreased the South’s “gross revenue” and stifled the development of commerce and manufacturing. He explains that the crude and unskilled nature of slave labor prevented it from being used efficiently “in the difficult and delicate operations which most manufacturing and mechanical processes involve,” and that lack of “enterprise” handicapped commerce in Southern communities. By strangling both manufacturing and commerce, Cairnes argues that slavery misallocated capital and kept the South “stuck” in agricultural pursuits. Moreover, by stigmatizing fieldwork, Caines asserts that the institution reduced Southern whites’ agricultural productivity and thereby “impaired the quality of Southern entrepreneurship.” He further contends that by encouraging extreme income inequality, the slave system precluded the development of a Southern market large enough to sustain Southern manufacturing.

Unlike Clay, Helper, and Olmsted, Cairnes does not argue that slavery was unprofitable

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29 Ibid.
30 Ibid.
31 Ibid, 150.
32 Ibid.
34 Ibid.
in the American South. Rather, he explains that slavery became established in the South because economies of large scale, ease of production supervision in cash crop cultivation, and fertile lands made slave labor profitable. However, he sharply critiques the inefficiency of this source of agricultural labor and notes that planters in the Old South had to participate heavily in interregional slave trade to maintain the slave system’s viability on their nutrient-depleted land. By degrading the soil, Cairnes concludes that the slave system “generates tendency toward its own destruction.”

Early Perspectives on the Economic Viability of the Slave System

Ulrich Phillips’ Assertions: Slavery as an Unprofitable and Inviable Institution

For much of the twentieth century, Southern historian Ulrich Phillips’ views on the unprofitability of the slave system dominated academics’ interpretation of the antebellum South. Phillips argues that slavery can only generate profits if slaves are less expensive and more easily obtained than free laborers, and if slaves can perform simple routines under strict supervision. He reasons that the scarcity and relative expensiveness of free labor during the Colonial Period facilitated the rise of the slave-operated Southern plantation system.

However, Phillips argues that by the eve of the Civil War, the slave system was in decline. Unlike Cairnes, Phillips does not base this argument on the deterioration of land fertility. Rather, he contends that the “erosion” or world markets for American tobacco, rice and indigo following the Treaty of Paris in 1783 seriously threatened the Southern slave system. Although the development of Eli Whitney’s cotton gin in 1794 revived Southern plantations by

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36 Ibid.
37 Ibid.
38 Ibid.
39 Ibid.
42 Ibid, 117.
making cotton production profitable, Philips argues that this innovation could only temporarily maintain the slave system.\textsuperscript{43} He illustrates this point by comparing slave prices and cotton prices between 1805 and 1860.\textsuperscript{44} During this period, slave prices increased six times more greatly than did cotton prices.\textsuperscript{45} By the 1850s, Phillips insists that slave prices were too high for an investor to earn a normal rate of profit.\textsuperscript{46} Even if the Civil War had not precipitated the end of slave-operated agriculture, Philips reasons that antebellum plantations lacked long-term viability.\textsuperscript{47}

\textit{Explaining the Entrenchment of Slavery: Genovese's Theory of Conspicuous Consumption}

Intrigued by Phillips’ conclusion that investing in slaves proved unprofitable for most planters, the historian Eugene Genovese sought to explain the perpetuation of slavery in the antebellum South.\textsuperscript{48} Convinced that slavery allocated resources inefficiently, exhausted the soil, and restricted manufacturing, Genovese assumes that economic profitability could not explain the entrenchment of Southern slavery.\textsuperscript{49} Inspired by Thorstein Veblen’s theory of conspicuous consumption, Genovese asserts that planters were willing to forego the high profits derived from industrial manufacturing to maintain their high societal position as slaveholders.\textsuperscript{50} As “precapitalist,” “antibourgeois” aristocrats, he contends that planters invested in slaves despite their relatively low rates of return.\textsuperscript{51} While Northerners “followed the lure of business and

\begin{footnotes}
\footnote{Ibid, 118.}
\footnote{Ibid, 127.}
\footnote{Ibid.}
\footnote{Ibid, 142.}
\footnote{Ibid, 150.}
\footnote{Eugene D. Genovese, \textit{The Political Economy of Slavery: Studies in the Economy and Society of the Slave South} (Middleton: Wesleyan UP, 1989), 64.}
\footnote{Genovese, \textit{Political Economy of Slavery}, 64.}
\footnote{Ibid, 65.}
\footnote{Ibid.}
\end{footnotes}
money for their own sake,” Genovese argues that Southerners pursued “specific forms of property that carried the badges of honor, prestige and power.”

Analysis
Dissecting the Economic Advantages Derived from Slave Labor

Reexamining the “Inferiority” of Slave Labor

Many early opponents of the slave system founded their arguments against slavery upon the racist conjecture that blacks were “inferior to whites both as laborers and as human beings.” Clay writes that “Negroes lack self-reliance” and “were made for the sun and the banana,” Helper claims that “every feature of the Negro… whether physical or mental or moral, loses in comparison with the white,” and Olmsted describes “the African race” as having “greater vanity… less exact or analytic minds, and a nature… less defined” than whites.

Historical data strongly opposes these prejudiced views. Southern historian, Lewis Gray conjectures that slaves were more efficient than free labor in producing staple commodities since they worked harder and more responsibly. Many Southern planters viewed slaves as “the only reliable laborers” since “you never could depend on white men, and couldn’t drive any; they wouldn’t stand it.” Gray further determines that, rather than discouraging slaves from working as hard as northern white workers, “the rewards and punishments of the slave system were more powerful stimuli than the rewards of industry would have been… under a system of free labor.”

Many masters offered slaves incentives to promote hard work. Most significantly, planters gave especially productive slaves the opportunity to become gang foremen and

52 Ibid.
54 Ibid, 188.
57 Ibid, 47.
overseers. As overseers, slaves could direct other workers and schedule field operations. Slaves eagerly took advantage of these incentives. By 1860, only thirty percent of plantations with over one hundred slaves employed white overseers, and the proportion was even lower on smaller plantations. Although owners made marketing and purchasing decisions, slave overseers determined the success or failure of production operations. Consequently, many slaves became interested in plantation affairs and “took pride in the master’s wealth and prosperity.”

**Labor Gains Derived from Plantation Organization and Management**

Employing every slave capable of working enabled the labor force participation rate on slave-operated plantations to exceed that of Northern white communities by 33%. Unlike their northern counterparts who could do housework or attend school, slave women and children labored on plantations. To derive the maximum return on their investments, planters matched slaves with tasks that optimally suited their abilities. Elderly or disabled slaves who could no longer labor in the fields could perform less physically taxing tasks, such as weaving or caring for young children. By working slaves throughout their lives, planters derived positive average net earnings from even their oldest slaves.

Southern plantations also tapped their workers’ labor potential more effectively than did Northern industries. Paradoxically, slaves did not attain greater productivity by working more hours per day or more days per week than free Northern farmers. Both sectors of labor averaged

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59 Ibid.
60 Ibid.
61 Ibid.
63 Fogel and Engerman, *Time on the Cross*, 205.
64 Fogel and Engerman, *Time on the Cross*, 205.
65 Ibid.
66 Ibid.
70-75 hours of work per week annually. Rather, planters’ maximized their workers productivity by designing organizational techniques that promoted greater labor intensity.67

Most cotton plantations incorporated the “gang method” to create a specialized, well-coordinated labor force.68 Under the “gang system,” five or six types of hands followed one another in a strict procession.69 Overseers ensured that slaves maintained a rapid work pace by assigning the strongest, most capable hands to lead the procession, and by threatening any slaves that lagged behind.70 Gang members’ interdependence further encouraged slaves to maintain a steady and intense rate of production since each worker felt pressured to keep up with the others.

Economists Fogel and Engerman argue that large plantations organized by the gang system resembled the modern assembly line more closely than did most early antebellum factories.71 On a cotton plantation, plowmen led and ridged the unbroken earth. They were followed seamlessly by harrowers, who broke up clods; by drillers, who created holes to receive the seeds; by droppers, who placed seeds in the holes; and by rakers, who covered the holes with earth.72 By specializing labor and coordinating teamwork, the gang system markedly increased slaves’ productivity. Moreover, repeatedly performing a specialized task rather than doing multiple jobs allowed each slave to attain mastery and efficiency in an aspect of the planting process.

*The Relative Efficiency of Slave Agriculture*

During the 1960s, Fogel and Engerman used the “geometric index of total factor productivity” to estimate the relative efficiency of Southern and Northern agriculture in 1860.

67 Ibid.
68 Ibid.
70 Fogel and Engerman, *Time on the Cross*, 205.
Their empirical comparisons challenged all prior claims of slavery’s inefficiency. Fogel and Engerman estimated that, on average, a Southern farm could produce 35% more output than could a Northern farm utilizing the same quantities of land, labor, and capital.\(^{73}\) By examining Southern slave farms and Southern free farms separately, they determined that Southern slave farms were 28% more efficient than were Southern free farms.\(^{74}\) While Southern free farms were 9% more efficient than their Northern counterparts, Southern slave farms were 40% more efficient.\(^{75}\) Additional calculations reveal that the South was 9% more productive in agriculture than was the North, and this estimate increases to 39% after partially adjusting the index.\(^{76}\)

These estimates shatter Olmstead and Cairnes’ claims of the North’s superior agricultural productivity empirically, and prove that the South utilized its agricultural resources with relative efficiency. Although even free Southern farms operated more efficiently than did Northern farms, most of the South’s efficiency arose from economies of scale derived from the slave-based plantation system. Since supervision costs did not increase in proportion to the number of slaves employed, per unit production costs fell as plantations increased in size.\(^{77}\) Dividing high fixed costs of land and machinery by higher numbers of workers further decreased per unit production costs.\(^{78}\) Therefore, a large plantation using the same quantity of inputs as a group of small farms could yield far greater levels of output.

As plantations increased in size, so did the role of economies of scale. While economies of scale contributed only 6% to the efficiency of small plantations employing 15 slaves, they resulted in a 15% increase in the efficiency of intermediate-sized plantations employing between

\(^{74}\) Fogel and Engerman, “Relative Efficiency of Slavery.”
\(^{75}\) Ibid.
\(^{76}\) Ibid.
\(^{77}\) Gray, *History of Agriculture*, 479.
\(^{78}\) Ibid.
sixteen and fifty slaves. On large plantations employing over fifty slaves, economies of scale increased efficiency by over 23%. Greater productivity and higher profits accompanied the development of economies of scale. Indeed, while plantations with fewer than ten slaves sporadically prospered, only larger plantations earned economic profits.

Without the slave system, economies of scale could not have developed on Southern plantations. Planters could not have afforded to hire the high number of free workers required for economies of scale to manifest. Although slaves were expensive to purchase, planters paid very low subsistence costs to maintain them. Furthermore, in many cases, employing the slaves born on their plantations removed the initial cost of purchase. Even if a planter purchased, he more than compensated for this expensive investment by exacting lifetime’s worth of labor. During the postbellum period, free laborers’ high wages proved too expensive for planters to hire sufficient numbers of workers. For this reason, after the Civil War ended slavery, no large scale farms based on free labor materialized in the South.

Other Advantages Associated with Operating a Large Plantation

Although efficiency gains served as planters’ primary incentives for investing in large quantities of land and slaves, the profits derived from economies of scale endowed them with less obvious, but equally significant advantages. As Olmsted observes, “large planters obtained… the best land on which to apply their labor… the best brute force, the best tools, and the best machinery for ginning and pressing, all superintended by the best class of overseers.”

79 Fogel and Engerman, “Relative Efficiency of Slavery.”
80 Ibid.
81 Gray, History of Agriculture, 479.
82 Fogel and Engerman, “Relative Efficiency of Slavery.”
83 Gray, History of Agriculture, 479.
84 Gray, History of Agriculture, 479.
85 Ibid, 481.
86 Ibid, 479.
87 Olmsted, Journeys and Explorations, 23.
By reinvesting a portion of their cotton profits into acquiring more land and slaves, large planters maintained fertile land and the workers necessary to cultivate it.\textsuperscript{88} Investments in expensive capital, such as mules and machinery, further increased their slaves’ productivity.\textsuperscript{89} Small Southern farmers were at a competitive disadvantage relative to Southern planters. They could seldom afford to purchase slaves and were often obligated to rent crop-processing capital from large planters at high prices.\textsuperscript{90}

Plantation owners sustained even greater advantages when marketing their products. Due to their plantations’ high cotton yield, owners could negotiate with cotton exporters and merchants directly.\textsuperscript{91} Superior market connections enabled large planters to maximize profits by shipping their cotton at the lowest possible freight rates and by selling it at the highest possible prices.\textsuperscript{92} Large planters’ market power augmented the slave system’s profitability while encouraging its perpetuation and spread.

Reevaluating the Economic Profitability of the Slave System

\textit{Reconsidering the Profitability of Slavery: Examining Rates of Return on Slave Investments}

During the latter half of the twentieth century, ground-breaking research challenged Philips’ conclusions regarding the profitability and viability of the slave system. Instead of determining the profit margins of large plantations, Phillips focuses on the prices of slaves and cotton.\textsuperscript{93} However, during the 1950s, Alfred Conrad and John Meyer more directly modeled the gender-specific returns of male and female slaves. Their calculations involved subtracting the

\begin{thebibliography}{99}
  \bibitem{88} Gray, \textit{History of Agriculture}, 479.
  \bibitem{89} Ibid.
  \bibitem{90} Ibid.
  \bibitem{91} Gray, \textit{History of Agriculture}, 480.
  \bibitem{92} Ibid, 479.
  \bibitem{93} Phillips, \textit{The Slave Economy}, 127.
\end{thebibliography}
acquisition, maintenance, and supervisory cost of slaves from the gross earnings derived from slave labor. The highest rates of returns of 10% to 13% were derived from male slaves employed on the most fertile Southwestern plantations. However, on average, male and female slaves earned approximately the same rate of return, between 5% and 8% on the initial investment. While males often proved more productive than female slaves in the fields, females’ ability to carry offspring compensated for their relatively lower returns in cash crop cultivation.

In the Upper South, slave breeding became especially important. The exhausted land of the Upper South could not compete with fertile land of the Lower South in terms of productivity, and planters in Virginia, North Carolina, and Tennessee often attained only a 4-5% rate of return on their male fieldworkers. By selling slave offspring to Southwestern plantations, these planters earned rates of return of 7-8% on their female slaves. However, although greater profits could be derived from slave breeding than from exclusively practicing agriculture in the Old South, Cairnes was incorrect to conclude that the interregional slave trade alone maintained the slave system in the northernmost Southern regions. Although Southern regions differed in the magnitude of the returns derived from slave-operated agriculture, slaves generated positive net earnings above maintenance costs throughout the antebellum South.

Conrad and Meyer further examined slaves’ net earnings according to age. They

96 Ibid.
99 Ibid.
100 Ibid, 95.
determined that, on average, slaves’ net earnings were negative prior to age eight. \textsuperscript{101} However, from age nine until the late seventies, most slaves sustained positive net earnings. \textsuperscript{102} Although these net earnings typically peaked at age thirty-five, slaves in their sixties often generated returns as high as those generated by slaves in their teens. \textsuperscript{103} By assigning tasks based upon ability, large plantations ensured that their slaves generated net positive earnings even in old age. When no longer able to labor in the fields, elderly women could care for slave children, nurse the sick, spin cotton, or make clothing. \textsuperscript{104} Similarly, elderly men retired from the fields could tend to livestock, garden, or manage household tasks. \textsuperscript{105} While some elderly and physically handicapped slaves indubitably generated a net loss, able-bodied slaves compensated for any loss in revenue. \textsuperscript{106}

Following Conrad and Meyer’s initial publication, a wave of controversy swirled around their calculations. \textsuperscript{107} Critics noted that Conrad and Meyer overestimated the life expectancies of slaves and the number of slave offspring while underestimating the amount of capital equipment and the cost of maintenance required for each slave. \textsuperscript{108} Most significantly, they underestimated the peak productivities of both male and female slaves. \textsuperscript{109} After correcting for many of these errors, Fogel and Engerman found that Conrad and Meyer underestimated the rates of return derived from slave investments. On average, planters earned 10% returns on the market price of their slaves. \textsuperscript{110} Moreover, these high returns did not significantly differ between either male and

\begin{itemize}
  \item \textsuperscript{101} Ibid, 101.
  \item \textsuperscript{102} Ibid, 102.
  \item \textsuperscript{103} Ibid, 103.
  \item \textsuperscript{104} Fogel and Engerman, \textit{Time on the Cross}, 68.
  \item \textsuperscript{105} Ibid.
  \item \textsuperscript{106} Fogel and Engerman, \textit{Time on the Cross}, 69.
  \item \textsuperscript{107} Ibid, 71.
  \item \textsuperscript{108} Ibid.
  \item \textsuperscript{109} Ibid.
  \item \textsuperscript{110} Ibid, 73.
\end{itemize}
female slaves or between regions.\textsuperscript{111}

When performing his analysis, Philips assumes that the increase in the ratio of slave prices to cotton prices arose from Congress’ ban on slave imports in 1808.\textsuperscript{112} With the slave market “cornered,” Phillips reasons that “it was unavoidable that the price should be bid up to the point of overvaluation.”\textsuperscript{113} However, Phillips fails to consider that the birthrates of Southern slaves approached the biological maximum as early as the mid-1700s.\textsuperscript{114} By the 1680s, long before Congress closed the international slave trade, native born African Americans overwhelmingly dominated Southern slave populations.\textsuperscript{115} As previously discussed, lucrative slave breeding displaced agriculture as the main focus of many plantations in the Upper South, and increased the availability of slaves for purchase.\textsuperscript{116}

Even more erroneously, Phillips assumes that slave productivity did not increase between the years 1800 and 1860.\textsuperscript{117} He explains that a slave in 1800 had the same willingness and “capacity for work” as did his counterpart in 1860.\textsuperscript{118} Although slave motivation for work likely did not change during these years, Fogel and Engerman empirically prove that slave efficiency markedly increased. The Southern migration opened highly fertile land in the Southwest that was optimally suited for cotton cultivation.\textsuperscript{119} Simultaneously, the introduction of new cotton varieties and the implementation of improved agricultural machinery and managerial techniques substantially increased slave productivity.\textsuperscript{120}

Clearly, the increase in slave prices stemmed from the significant increase in slave

\textsuperscript{111} Ibid.
\textsuperscript{112} Phillips, \textit{The Slave Economy}, 128.
\textsuperscript{113} Ibid.
\textsuperscript{114} Fogel and Engerman, \textit{Time on the Cross}, 21.
\textsuperscript{115} Ibid.
\textsuperscript{116} Conrad and Meyer, “Economics of Slavery,” 98.
\textsuperscript{117} Phillips, \textit{The Slave Economy}, 142.
\textsuperscript{118} Ibid.
\textsuperscript{119} Fogel and Engerman, “Relative Efficiency of Slavery.”
\textsuperscript{120} Ibid.
productivity rather than from limitations on slave supply. Productivity gains gave rise to higher returns and greater profits, which increased planters’ incentives to invest in additional land and slaves. Due to their “superior credit,” large planters could offer prices for land and slaves far higher than those that a small farmer could afford to pay. Therefore, slave prices were determined by the optimal levels of slave productivity, by the returns derived from slaves employed “on the best land, with the best equipment, and under large-scale organization.” Although the consequent increase in cotton production reduced cotton prices, the returns on slaves remained sufficiently high to maintain the viability of the slave system.

*Rebutting Conspicuous Consumption: The Southern Planter as an Entrepreneur*

After comparing the Fogel and Engerman’s adjusted rates of return on slave investments to the average rates of return on alternative investments, it becomes clear that Southern planters acted with economic rationality. If slave investments offered lower rates of return than those generated by investments in other physical capital, the data would support Genovese’s claim that conspicuous consumption fueled Southern investment. Instead, the average rates of return on slave investments either equal or surpass those obtained from non-agricultural investments.

With an average 10% return, slave investments compared favorably to the average 10.1% return earned by the nine most successful New England textile firms between 1844 and 1853. Slaveholding proved even more lucrative relative to railroad investments. Between 1850 and 1860, Southern railroads averaged an 8.5% return, a value far lower than the average return

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121 Gray, History of Agriculture, 480.
122 Ibid.
124 Fogel and Engerman, *Time on the Cross*, 75.
125 Ibid.
126 Ibid.
derived from investing in slaves. Although conspicuous consumption may have motivated some planters to pay high prices for slaves or to hold excessive numbers, Genovese is wrong to conclude that the entrenchment of slavery had no economic basis. Moreover, if aggregate demand had increased the market price too far above that based upon slaves’ productivity value, high returns on slave investments could not have been generated.

Investigation of planters’ managerial habits and business decisions further challenges Genovese’s theory. Contrary to Cairnes’ allegations, Southern planters were aware that heavy rainfalls and a sandy consistency made their soils vulnerable to nutrient depletion. Consequently, they implemented the best fertilizers, plowing methods, and crop rotation techniques to maintain their soils’ fertility. They read contemporary scientific agricultural literature and formed agricultural societies. Furthermore, planters experimented with strategies of labor management to create a highly disciplined and specialized work force that maximized agricultural yield. Rather than complacently pursuing leisure activities, most planters operated their businesses as entrepreneurs who took advantage of the latest agricultural innovations.

Reinterpreting Southern Economic Growth

Reevaluating the South’s “Stagnant” Economy

Clay, Helper, Olmsted, and Cairnes all base their criticism of the slave system upon the South’s “stagnant” and “backward” economy. They argue that investing in slave-operated plantations drained resources from industrial manufacturing and regional improvements, such as railroads. At first glance, data from 1840 and from 1860 support these contentions of

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127 Ibid.
128 Ibid.
130 Ibid.
131 Fogel and Engerman, *Time on the Cross*, 75.
Southern economic inferiority. In 1840, the South’s average income was only 69% of that of the North. The South’s average income increased between 1840 and 1860, but remained only 73% of the North’s average income in 1860.\footnote{Ibid, 247.}

However, examining the Northeast and the North Central states separately reveals that the South was not poorer than all of the North. During the antebellum period, the North Central states’ per capita income was 50% less than that of the Northeast and 14% less than that of the South.\footnote{Ibid, 249.} Ironically, many historians view the North Central states as examples of rapid and prosperous growth while characterizing the South as “sluggish” and “backward.”\footnote{Ibid.}

When assessing growth, economic historians usually consider an economy’s ability to shift labor and resources between sectors and regions.\footnote{Fogel and Engerman, Time on the Cross, 252.} In the Northeast, the transition of labor and resources from agriculture to manufacturing fueled 16% of the region’s growth between 1840 and 1860.\footnote{Ibid.} However, the redistribution of the Southern population from older Southern States to new Southern States and territories resulted in equally remarkable growth. By 1860, the South’s fertile West Central sub-region generated even higher per capita income than did the Northeast.\footnote{Ibid.}

Examining the South’s per capita income relative to that of other antebellum nations further questions its supposed poverty. In 1860, the South’s per capita income surpassed that of all nations except England and Australia.\footnote{Ibid, 249.} Inflating 1860 U.S. currency to 1973 dollars reveals that this level of income also compares favorably to that of contemporary nations.\footnote{Ibid.} In fact,
Italy did not attain the South’s level of per capita income until almost 1940. Moreover, during the antebellum period the South’s per capita income grew at a rate of 1.7% per year. This growth rate was 30% faster than that observed in the North, and has been equaled by few modern nations.

Analysis of the South’s physical capital formation precipitates similar conclusions. In regard to physical capital formation, the North significantly surpassed the South only in manufacturing. However, in terms of cotton manufacturing, the South surpassed most regions other than the North and England. More importantly, limited Southern manufacturing did not impair the South’s ability to apply machinery to farming. The seven leading cotton producing states’ expenditures on agricultural equipment surpassed that of other U.S. regions by over 25%.

Contrary to Clay and Helper’s claims, the South heavily financed railroad construction. By 1860, over 31% of the nation’s railroad mileage was located in the South, and per capita mileage was only slightly below the national average. Although the track to area ratio of the North exceeded that of the South, this resulted from the South’s abundant navigable rivers and streams rather than from its economic weakness.

Fogel and Engerman suggest that allegations of the South’s relative poverty and lack of development arose from sectional rivalries rather than from empirical data. As free states entered the Union, Southerners became increasingly afraid of becoming a Congressional

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140 Ibid.
141 Ibid, 250.
142 Ibid.
143 Ibid, 254.
144 Fogel and Engerman, *Time on the Cross*, 255.
145 Ibid, 255.
146 Helper, *Compendium of the Impending Crisis*, 41.
147 Fogel and Engerman, *Time on the Cross*, 255.
148 Ibid, 255.
149 Ibid, 250.
minority, and feared that federal policies gave the North an economic advantage. These sectional tensions led Southern politicians and journalists to emphasize the North’s economic achievements at the expense of the South.\textsuperscript{150} Critics of the slave system, such as Clay and Helper, lamented that the South had become relegated to “colonial dependent” upon the North’s manufactured goods.\textsuperscript{151} Although the South did purchase large quantities of manufactured goods from the North, the North itself purchased significant numbers of rails from England.\textsuperscript{152} Moreover, true antebellum colonies, such as Britain, and Mexico, generated less than 10% of the South’s per capita income in 1860.\textsuperscript{153} The myth of the South’s economic stagnancy arose, not because of a sluggish growth rate and low per capita income, but because it industrialized less rapidly than the Northeast.\textsuperscript{154}

Challenging the Allegation that Income Inequality Precluded the Development of Southern Manufacturing

Antebellum data also challenges critics’ contention that the Southern slave system gave rise to extreme income inequality. Cairnes alleges that, while planters enjoyed high profits, 70% of non-slaveholding Southern whites struggled to subsist. However, his allegations have no empirical support.\textsuperscript{155} While wealth was distributed less equally among Southern planters than among northern farmers, Southern income inequality did not exceed the level observed in Northern cities.\textsuperscript{156} Since a high proportion of the Northern population lived in urban areas, the North and South had roughly equal wealth distribution.\textsuperscript{157}

This observation challenges Cairnes’ contention that an extreme income gap made the

\begin{itemize}
  \item\textsuperscript{150} Ibid.
  \item\textsuperscript{151} Helper, *Compendium of the Impending Crisis*, 31.
  \item\textsuperscript{152} Fogel and Engerman, *Time on the Cross*, 251.
  \item\textsuperscript{153} Fogel and Engerman, *Time on the Cross*, 251.
  \item\textsuperscript{154} Ibid.
  \item\textsuperscript{155} Cairnes, *The Slave Power*, 170.
  \item\textsuperscript{156} Fogel and Engerman, *Time on the Cross*, 250.
  \item\textsuperscript{157} Ibid.
\end{itemize}
Southern market too small to support large-scale manufacturing. However, if income inequality precluded the development of manufacturing, then the North too would have been barred from industrialization. Clearly, an unequal distribution of wealth did not prevent the North from generating sufficient demand for manufacturing. Contrary to Cairnes’ claims, Southerners had high demand for agricultural technology and for consumer goods. Instead of depressing demand by promoting income inequality, the slave system increased demand for Northern manufactured goods. Helper’s allegation that Southerners did not demand manufactured goods lacks factual support. Planters purchased large quantities of clothing, shoes, and tools to equip their slaves, and this gave rise to a large market for Northern manufactured goods. The products ordered by plantation owners were much more standardized than were products ordered by individual farmers. This level of standardization encouraged mass production. Therefore, income inequality derived from the slave system cannot explain why the South lagged far behind the North in manufacturing.

The South’s lack of manufacturing growth arose from differential regional resource endowments rather than from low consumer demand. Large quantities of timber, iron ore, and coal, gave the North a comparative advantage in manufacturing, while rocky terrain and cold weather made commercial agriculture difficult. In contrast, the South possessed the fertile soil and excellent weather required for lucrative cash crop cultivation, but meager supplies of iron ore and coal. Successful implementation of the slave system gave rise to economies of scale that markedly increased the productivity of Southern agriculture. While the profitability of

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158 Ibid, 254.
159 Helper, Compendium of the Impending Crisis, 40.
160 Fogel and Engerman, Time on the Cross, 254.
162 Ibid.
163 Ibid, 270.
slave-operated plantations increased Southerners’ incentives to pursue agriculture, regional differences in comparative advantage, rather than slavery, precluded the development of Southern manufacturing during the antebellum period.

Reinterpreting the South’s Role in National Economic Development: Douglas North’s Antebellum Interregional Growth Hypothesis

Douglas North’s landmark “Antebellum Interregional Growth Hypothesis,” further refutes assertions that the Southern economy was undeveloped and uninfluential in national growth. After carefully examining the U.S. economy between 1815 and 1860, North concludes that Southern cotton constituted “the major expansive force” in national development between 1815 and 1839.164 Following the end of the Napoleonic Wars in 1815, the great European powers relaxed trade restrictions and increased factor mobility to facilitate industrial expansion.165 Throughout the antebellum period, European manufacturers, especially the owners of English textile mills, increasingly demanded Southern cotton.166 Consequently, Southern planters specialized in cotton production, and the highly efficient and productive slave-based plantation system enabled them to meet the high international demand. For much of the antebellum period, cotton comprised over half the value of exports, and income generated from its sale gave rise to extensive interregional trade.167

Since the South pursued its comparative advantage in cash crop cultivation, it lacked food supplies, consumer goods, manufactured equipment, and marketing services. To supply their demand for these goods and services, Southerners spent much of the income derived from

165 North, Economic Growth of the United States, 68.
166 Ibid, 69.
167 Ibid.
cotton sales on imports.\textsuperscript{168} Income derived from cotton exports that flowed to Northeastern merchants and manufacturers, fueled the region’s industrialization and urbanization.\textsuperscript{169} Analogously, purchasing Western foodstuffs to feed its population and slaves accelerated Westward migration and expansion.\textsuperscript{170}

North underscores the significance of cotton by analyzing the correlation between the speculative expansions and declines in the cotton market with U.S. growth during the early antebellum period.\textsuperscript{171} Due to geographic mountain barriers between the Northeast and the West, both regions became highly dependent upon trade with the South during the early antebellum period.\textsuperscript{172} Therefore, periods of increased cotton profitability coincided with the expansion of markets in both the Northeast and the West.\textsuperscript{173} For example, during the cotton boom of the 1830s, the income generated by cotton exports rapidly increased the income of Northern textile mills from $25 million to $70 million.\textsuperscript{174}

Although cotton’s role in U.S. growth diminished after 1839, the expansion of Western agriculture and Northeastern manufacturing that occurred between 1843 and 1860 could not have occurred without the capital conditions generated by cotton expansion during the 1830s.\textsuperscript{175} By promoting specialization based on regional comparative advantages, the slave-based production of cotton facilitated the development of self-sufficient national markets.\textsuperscript{176} As railroads increasingly linked the Northeast and the West, and as transportation costs decreased, both

\begin{itemize}
\item\textsuperscript{168} Ibid.
\item\textsuperscript{169} Ibid, 70.
\item\textsuperscript{170} Ibid.
\item\textsuperscript{171} Ibid, 69.
\item\textsuperscript{172} Ibid, 69.
\item\textsuperscript{173} Ibid.
\item\textsuperscript{174} Ibid, 71.
\item\textsuperscript{175} Ibid, 71.
\item\textsuperscript{176} Ibid, 69.
\end{itemize}
regions became less dependent upon the South.\footnote{Ibid, 71.} However, even during this latter phase of economic growth, cotton endured as the Southern “king.”\footnote{Ibid.} The income derived from cotton exports increased throughout the 1850s,\footnote{Ibid.} and the enticingly high rates of return on slave investment promoted the entrenchment and perpetuation of slave-manned cotton plantations.\footnote{Ibid.}

**Conclusion**

Misguided by false assertions of slavery’s unprofitability, Genovese mistakenly applied Veblen’s theory of conspicuous consumption to explain plantation owners’ acquisition of slaves. Upon closer examination, the relative profitability of slave investments provided planters with a more direct incentive to acquire land and slaves. If conspicuous consumption occurred, it neither inflated the price of slaves beyond their market value nor significantly diminished slave returns.\footnote{Fogel and Engerman, *Time on the Cross*, 75.}

Investing in slaves generated 10% returns comparable to those generated by the most productive New England textile firms, and far greater than those derived from Southern railroads.\footnote{Ibid.} Although the soil of the Old South was unprofitable relative to that of the New South, the average returns on slave investments were roughly equal between the two regions.\footnote{Ibid.} By shifting their focus from cotton cultivation to slave breeding, planters compensated for their fields relatively inferior productivity.\footnote{Stampp, “Profit and Loss,” 66.} Therefore, contrary to Cairnes’ contentions,\footnote{Cairnes, *The Slave Power*, 184.} an indomitable pursuit of profits rather than “land-killing” tendencies drove the Southern migration to fertile lands in the Southwest.

Other characteristics of large Southern planters reinforce their status as entrepreneurs.

\footnote{Ibid, 71.} \footnote{Ibid.} \footnote{Ibid.} \footnote{Fogel and Engerman, *Time on the Cross*, 75.} \footnote{Ibid.} \footnote{Ibid.} \footnote{Ibid.} \footnote{Stampp, “Profit and Loss,” 66.} \footnote{Cairnes, *The Slave Power*, 184.}
Rather than pursue lives of luxury and leisure, plantation owners sought to maximize their slaves’ productivity by investing in new technology. 185 These men constantly innovated new cultivation and managerial techniques. 186 In many ways, large planters in the antebellum South resembled postbellum monopolists. As the main suppliers of cotton, the owners of large plantations had far greater market power than did small farmers. 187 Channeling this power allowed them to minimize transportation costs and maximize profits by negotiating directly with shippers and merchants. 188 More monopolistically, they could outcompete smaller farmers by exceeding their bids to purchase additional land and slaves. 189

Large planters further increased their profits by implementing the gang system. The divided, specialized labor force derived from this managerial technique maximized labor productivity and efficiency. 190 Similar to the postbellum assembly line, this organizational technique invariably reduced per unit costs as the volume of output increased. 191 Labor gains from economies of scale enabled Southern slave farms to be 40% more efficient than Northern free farms. 192 In contrast, Southern free farms, which were operated by too few laborers to demonstrate economies of scale, proved only 9% more efficient than Northern free farms. 193

The failure of large scale plantations manned by free workers to develop during the postbellum period underscores the inextricable relationship between cultivation efficiency and slave labor. 194 Free workers’ wages significantly exceeded slaves’ subsistence maintenance

185 Gray, History of Agriculture, 300.
186 Fogel and Engerman, Time on the Cross, 75.
187 Gray, History of Agriculture, 479.
188 Ibid.
189 Ibid.
190 Fogel and Engerman, Time on the Cross, 205.
191 Ibid.
192 Fogel and Engerman, “Relative Efficiency of Slavery.”
193 Ibid.
194 Gray, History of Agriculture, 479.
costs, and planters could not afford to hire sufficient free laborers to yield economies of scale.\textsuperscript{195} In addition, free workers proved more difficult to manage and drive than slaves.\textsuperscript{196} Early contentions that slave workers were less motivated to work productively than free workers, and that slaves provided inferior labor, stemmed from racial biases rather than fact. On Southern plantations, the work force participation rate exceeded that of the North by 33\%.\textsuperscript{197} Opportunities of advancement encouraged slaves to work hard and promoted their interest in plantation affairs.\textsuperscript{198} Providing these incentives and matching workers to the tasks that optimally suited their abilities enabled planters to derive positive net earnings from even their oldest slaves.\textsuperscript{199}

Contrary to Phillips’ contentions, the slave-based plantation system demonstrated strong economic sustainability. Although Phillips correctly noted that the ratio of slave prices to cotton prices increased over time,\textsuperscript{200} he incorrectly inferred that this arose from the decreasing profitability of slave investments. Assuming that antebellum slave prices increased due to a fixed labor supply rather than due to greater labor productivity caused Phillips to draw inaccurate conclusions. In reality, supply did not significantly affect slave prices relative to labor productivity. Even though the Transatlantic slave trade remained open until 1808, most Southern slaves were native born as early as 1680.\textsuperscript{201} By 1700, slave birthrates reached, and remained at their biological maximum.\textsuperscript{202} Moreover, by increasingly engaging in slave breeding to maximize profits, farmers of the Upper South continuously supplied the market with slaves.\textsuperscript{203}

\textsuperscript{195} Ibid.
\textsuperscript{196} Ibid.
\textsuperscript{197} Fogel and Engerman, \textit{Time on the Cross}, 205.
\textsuperscript{198} Gray, \textit{History of Agriculture}, 47.
\textsuperscript{199} Conrad and Meyer, “The Economics of Slavery,” 102.
\textsuperscript{200} Phillips, \textit{The Slave Economy}, 127.
\textsuperscript{201} Fogel and Engerman, \textit{Time on the Cross}, 21.
\textsuperscript{202} Ibid, 21.
\textsuperscript{203} Conrad and Meyer, “The Economics of Slavery,” 98.
The increase in slave prices between 1800 and 1860 reflected improvements in labor productivity rather than limitations in slave supply. While Phillips logically assumes that slaves had little incentive to work harder in 1800 than in 1860, he incorrectly infers that slave productivity remained constant during this period. Cotton production could not have increased so drastically if this had been the case. In assuming that slave productivity remained fixed, Phillips ignores critical improvements in technology, soil fertility, and plantation management. Since the wealthiest operators of the most efficient plantations most significantly determined slave prices, the market prices for slaves increased in proportion to their productivity.

After correcting Phillips assumptions and reconsidering the relative profitability of slave investments, it becomes clear that the antebellum slave system demonstrated strong economic viability. Had the Civil War not irrevocably altered the South’s political and economic atmosphere, the slave system could have endured indefinitely. However, traditionalists err to view the maintenance of this system as economically destructive. Regardless of its social and moral detriments, the highly profitable slave-operated plantation fueled economic growth in the antebellum South. Empirical evidence shatters the prevailing myths characterizing the Southern economy as undeveloped and unproductive.

By narrowly focusing on the Northeast’s obvious superiority in manufacturing, early critics failed to consider the South in the broader context of the global economy. Although the South incontrovertibly lagged behind Northeastern manufacturing, it fared well in every other measurement of financial and physical capital. Contrary to popular belief, the South was neither poor nor backward. With the exception of Australia and England,

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205 Fogel and Engerman, “Relative Efficiency of Slavery.”
207 Fogel and Engerman, *Time on the Cross*, 249.
208 Ibid.
Southern per capita income exceeded that of any other nation in the world.\textsuperscript{209} While Northern per capita income surpassed that of the South, it did so only in the Northeast.\textsuperscript{210} In the North Central region, an area considered to be exemplary of rapid growth, per capita income remained far below Southern levels.\textsuperscript{211} Moreover, the South’s annual 1.7\% increase in per capita income proved 30\% higher than the Northeast’s rate of increase, and has been equaled by few contemporary nations.\textsuperscript{212} Antebellum critics also grossly exaggerated the degree of Southern income inequality. While the income gap between small Southern farmers and large plantation owners exceeded that present in Northern farming communities, it equaled that present in Northern cities.\textsuperscript{213} This finding invalidates Cairnes’ contentions that the slave system precipitated extreme income inequality, and that income inequality prevented the South from developing sufficient demand to sustain industrial manufacturing.\textsuperscript{214} Had this been the case, the urban Northeast would have been at an equal disadvantage. Rather than crippling Southerners’ demand from manufactured goods, concentrating wealth in large plantations intensified it. Constantly in need of clothing, shoes, and tools to equip their slaves, the owners of large plantations demanded large quantities of manufactured products and consumer goods.\textsuperscript{215} Since plantation owners did not require differentiated products, their demand more effectively supported mass production than would small farmers’ demand for less standardized goods.\textsuperscript{216}

Therefore, income inequality cannot explain the South’s lack of manufacturing. Rather, manufacturing failed to develop in the antebellum South for the same reason that mass cultivation of cash crops did not dominate the Northeast. In each of these

\begin{itemize}
\item \textsuperscript{209} Ibid, 248.
\item \textsuperscript{210} Ibid, 249.
\item \textsuperscript{211} Fogel and Engerman, \textit{Time on the Cross}, 249.
\item \textsuperscript{212} Ibid.
\item \textsuperscript{213} Ibid, 250.
\item \textsuperscript{214} Cairnes, \textit{The Slave Power}, 170.
\item \textsuperscript{215} Fogel and Engerman, \textit{Time on the Cross}, 254.
\item \textsuperscript{216} Ibid.
\end{itemize}
regions, the form of economic development followed regional comparative advantages rather than consumer demand. The Northeast’s rich deposits of iron ore, timber, and coal, gave the region an early advantage in shipping and industry. Although almost devoid of mineral and energy resources, the South could, and did, exploit its comparative advantage in harvesting lucrative cash crops. However, although the South did not pursue manufacturing, it would be a mistake to conclude that the region failed to implement technological developments. Profit-conscious Southern planters incorporated the latest agricultural technology to maximize their slaves’ productivity. Furthermore, Southerners heavily invested in railroad construction to keep pace with their Northern rivals. While the North’s track to area ratio surpassed that of the South, this did not arise from the South’s lack of technological progress. Rather, an abundance of navigable rivers and streams reduced the need for railroads, and decreased the returns on railroad investments. At the eve of the Civil War, over 31% of national railroad mileage was located in the South, and the South’s per capita mileage fell just short of the national average. Reevaluating the strength of the Southern economy confirms that antebellum condemnation of the slave-manned plantation arose from political and social biases rather than from facts. Relegating the South to a position of inferiority, long prevented scholars from recognizing its paramount role in national development. However, North’s insightful antebellum interregional growth hypothesis finally credited Southern cotton as the driving force of U.S. growth between 1815 and 1839. North carefully dissects the relationship between Southerners’ demand and the cotton market to support

218 Ibid.
219 Ibid, 300.
221 Ibid, 254.
222 Ibid.
223 Ibid.
his conclusions, but his analysis remains slightly flawed. He effectively explains how the growth of Southern cotton drove national growth. However, North loses sight of the inextricable linkage between high cotton productivity and the underlying system of slave labor. It is true that by focusing on cotton production to meet European demand, and by spending their income on Western foodstuffs and Northeastern products, Southern planters promoted regional specialization.\textsuperscript{225} Yet, antebellum cotton production did not occur exogenously. The efficient and profitable exploitation of slave labor made cotton cultivation possible. By facilitating large-scale cotton production, the slave-operated plantation system became the most significant determinant of U.S. expansion during the antebellum period.

\textsuperscript{225} North, \textit{Economic Growth of the United States}, 69.
Bibliography


