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The Economics of American Negro Slavery, 1830-1860

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Introduction

THIS study is an investigation of the economics of Negro slavery by (1) estimating the rates of return earned by slave capital in the period 1830 through 1860, (2) comparing these returns with those earned by alternative forms of capital, and (3) considering whether the industry was viable in its last years. Returns to slave capital are estimated from information on slave prices, hires (rents), and death rates between 1830 and 1860. Alternative rates of return are estimated for commercial paper, railroad stocks, and railroad capital. The viability of the slave industry is assessed by considering its demand conditions relative to those typical of a declining industry.

Negro labor, not Negro slavery, was introduced into the United States in 1619 when a Dutch ship unloaded a cargo of twenty Negroes.[1] These Negroes were sold as indentured servants under contractual conditions similar to those of their white counterparts. Even though the yearly imports of Negroes were not large, the importation combined with other factors to induce a subtle change in the attitude of white settlers toward colored servants. In 1662 Virginia passed its first law referring to Negroes as slaves. It is doubtful that by 1683 any new Negroes entered Virginia except in slavery.[2] This change in legal status did not result in any large-scale importation, and it was not until 1753 that the foreign trade in slaves became very large.[3]

In 1790 the first federal census reported 697,897 slaves (Table 1). Though concentrated in the southern states, especially in the tobacco production areas of Maryland and Virginia, slaves were reported in all

NOTE: I am indebted to the Labor Workshop of the Department of Economics of the University of Chicago for financial support for this study, and to my thesis committee, Albert Rees, H. Gregg Lewis, Earl Hamilton, and Martin Bailey, for their comments and suggestions.

[1] The exact status of these Negroes is not settled fact; for a summary of the different interpretations see: Stanley M. Elkins, *Slavery*, University of Chicago Press, 1959, p. 39.

[2] E. Franklin Frazier, *The Negro in the United States*, New York, Macmillan, 1949, pp. 3-39.

[3] James D. B. DeBow, *Statistical View of the United States . . . Being a Compendium of the Seventh Census*, Washington, Beverly Tucker, 1854, p. 84.

the states except Massachusetts. By 1810, two years after the close of the foreign slave trade, the slave population had increased to almost 1.16 million, but had declined slightly as a percentage of the white population. The next fifty years witnessed a 340 per cent increase in the

TABLE 1

SLAVE POPULATION

Year	Slave, U.S. (1)	Slave, South (2)	Ratio of (2) to (1) (3)
1790	697,897	648,640	0.93
1800	893,041	850,942	0.95
1810	1,191,364	1,159,677	0.97
1820	1,538,038	1,514,468	0.98
1830	2,009,043	2,002,183	0.99
1840	2,487,455	2,483,721	1.00
1850	3,204,761	2,201,761	1.00
1860	3,953,760	3,951,798	1.00

SOURCE: The figures for 1850 and before are from DeBow, *Statistical View of the United States*, p. 85. For 1860, *Population of the United States in 1860 . . . The Eighth Census*, Washington, 1864, p. 595.

NOTE: The figures for the South include the populations, in the years in which they are included in the census, of Alabama, Arkansas, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Missouri, North Carolina, South Carolina, Tennessee, Texas, and Virginia.

slave population, a further concentration in the southern states, and a decline relative to the white population.

While the size of the southern slave population relative to the white southern population did not vary much between 1810 and 1860 (compare column 2, Table 2, with column 2, Table 1), ratios of the individual states changed a great deal as a result of the shift in the concentration of cotton production. The slave-white ratios in Mississippi, Georgia, and Virginia illustrate this movement. In 1820 the ratios of slaves to whites in these three states were approximately equal to 0.78. By 1860 the ratio had increased to 1.23 in Mississippi, remained unchanged in Georgia, and fallen to 0.47 in Virginia.

The largest southward and westward shift in the slave population took place between 1830 and 1840 and had virtually been completed by 1850 except into the southwestern states of Arkansas and Texas. The shift was accomplished by two processes, the movement of entire plantations from the relatively worn-out land of the Upper South to the richer virgin soil of the Lower South, and the sale of slaves from

TABLE 2

WHITE POPULATION

Year	White, U.S. (1)	White, South (2)	Ratio of (2) to (1) (3)
1790	3,172,464	1,225,178	0.32
1800	4,304,489	1,653,128	0.38
1810	5,862,004	2,153,424	0.36
1820	7,861,937	2,776,278	0.35
1830	10,537,378	3,603,157	0.34
1840	14,195,695	4,573,969	0.32
1850	19,553,068	6,151,247	0.32
1860	26,957,471	8,001,000	0.30

SOURCE: The figures for 1850 and before are from DeBow, *Statistical View . . .*, p. 42. For 1860, *The Eighth Census*, pp. 592-593.

NOTE: The figures for the South include the populations, in the years in which they are included in the census, of the states listed in the note to Table 1.

the plantations of the Upper South to those of the Lower South. Though estimates have been made of the relative magnitudes of these processes, none has a high degree of accuracy because of the poor quality of the available information.

The potential male slave labor force, those aged fifteen to sixty, made up about one-fourth of the slave population and about one-third of the potential southern male labor force in 1850 and 1860 (Table 3).

TABLE 3

POTENTIAL MALE LABOR FORCE IN THE SOUTH

Year	Number of Slave Males Aged 15 to 60 (1)	Number of White Males Aged 15 to 60 (2)	Ratio of (1) to (2)
1850	814,876	1,699,403	0.48
1860	1,016,425	2,180,719	0.46

SOURCE: For 1850, DeBow, *Statistical View . . .*, pp. 52-53, 56, 88-89. For 1860, *The Eighth Census*, pp. 592-595.

Because of the age distribution of the slaves imported before 1808 and the probable age distribution of white immigrants into the South, the ratios of the potential male slave labor force to the total slave population and to the potential southern male labor force were probably less in 1850 and 1860 than they were in earlier years. Unfortunately, the census age classifications in the earlier periods make it difficult to determine the number of males aged fifteen to sixty.

The majority of the actual slave labor force was engaged in agricultural work associated with the basic staple crops of cotton, hemp, rice, tobacco, and sugar cane. No precise estimates of the number of slaves employed on each type of plantation are available.[4] In addition to working as agricultural laborers, slaves found employment in most jobs requiring physical effort and minor mechanical skills. Again, no estimates of the numbers employed in these different jobs are currently available, though the 1848 census of Charleston, South Carolina, suggests a possible occupational distribution of male slaves who worked in cities (see Table 4).

This unique aspect of southern labor—slavery—elicited many contemporary comments, the informal observations of the traveler as well as the results of more formal studies on the effect of slavery on the South. A relative lack of commentary followed the Civil War, only to be followed in turn by that of twentieth century historians who reexamined slavery as a force in southern history. In the area of economics many of these students reached the conclusion that slavery was unprofitable for the owners of the slaves. In the words of Ulrich B. Phillips, the outstanding student of American slavery and a strong advocate of the hypothesis of unprofitability: ". . . By the close of the fifties it is fairly certain that no slave holders but those few whose plantations lay in the most advantageous parts of the cotton and sugar districts and whose managerial ability was exceptionally great were earning anything beyond what would cover their maintenance and carrying charges."[5] These conclusions of unprofitability have not gone unchallenged, but they have probably gained wider acceptance than has the hypothesis that slaveholding was as profitable as alternative investments in the period.

The slave industry consisted of two types of firms. One owned or rented the capital goods (slaves) and used them as factors of production to produce a marketable commodity (labor services) or combined them with other factors to produce marketable commodities (cotton,

[4] DeBow, *Statistical View of the United States*, p. 94. It is suggested that in 1850 about 400,000 slaves lived in cities and towns and that 2,500,000 slaves of all ages worked in agriculture with 1,815,000 in cotton, 350,000 in tobacco, 150,000 in cane sugar, 125,000 in rice, and 60,000 in hemp. DeBow does not indicate the basis for these estimates.

[5] Ulrich B. Phillips, *American Negro Slavery*, New York, Appleton-Century, 1936, p. 391.

TABLE 4

MANUAL OCCUPATIONS IN CHARLESTON, SOUTH CAROLINA, 1848

Occupations	Numbers of: Male Slaves	Free Negroes	White Males
Domestics	1,188	9	13
Cooks and confectioners	7	18	0
Fruiterers and peddlers	0	6	46
Gardeners	3	0	5
Coachmen	15	4	2
Draymen	67	11	13
Porters	35	5	8
Stevedores	2	1	21
Pilots and sailors	50	1	176
Fishermen	11	14	10
Carpenters	120	27	119
Masons and bricklayers	68	10	60
Painters and plasterers	16	4	18
Tinners	3	1	10
Ship's carpenters and joiners	51	6	52
Coopers	61	2	20
Coachmakers and wheelwrights	3	1	26
Cabinetmakers	8	0	26
Upholsterers	1	1	10
Gun coopers and locksmiths	2	1	16
Blacksmiths and horseshoers	40	4	51
Millwrights	0	5	4
Bootmakers and shoemakers	6	17	30
Saddle and harness makers	2	1	29
Tailors and capmakers	36	42	68
Butchers	5	1	10
Millers	0	1	14
Bakers	39	1	35
Barbers and hairdressers	4	14	0
Cigarmakers	5	1	10
Bookbinders	3	0	10
Printers	5	0	65
Other mechanics	45	2	182
Apprentices	43	14	55
Unclassed and unskilled	838	19	192
Superannuated	38	1	0
Total	3,520	245	1,406

SOURCE: J. L. Dowson and H. W. DeSaussare, *Census of Charleston for 1848*, Charleston, J. B. Nixon, 1849, pp. 31-36.

railroad services, gold, etc.). The other owned those capital goods (female slaves) which were used to produce new capital goods (slaves). Some firms, usually plantations, engaged in all three, producing labor services, agricultural products, and new slaves.

In the absence of serious market imperfections, the rate of return on slave capital will equal the market rate even though the industry is declining. Consequently, the determination of the return to slaveholding, while of interest because of the widespread uncertainty concerning its magnitude, is of little value in answering the more relevant question whether the industry was viable. The viability can be estimated by ascertaining whether it exhibited characteristics of a declining industry. Some of these are: (1) a declining demand for the unique capital employed (slaves), (2) a declining rate of production of the unique capital (slave birth rate), and (3) a declining demand for the specialized capital (female slaves) used to produce the unique capital (slaves) used in the industry.

A major error in many analyses of the American slave industry is the double counting of the cost of capital.[6] An excellent example is the following: Ralph B. Flanders[7] states that Colonel J. M. Williams of Society Hill, South Carolina, received only about 2.7 per cent from his investment in 1849.[8] The correct rate of return on Williams' investment is almost 9.7 per cent, for, before calculating the 2.7 per cent figure, a 7 per cent interest charge on $158,620 of the $161,000 invested capital was deducted from the difference between revenue and operating expenses.[9]

Other minor errors have been made, including valuing slaves at original cost rather than at market value, neglecting the depreciation of the stock of slaves because of their reproductive nature, etc. These will not be explicitly discussed, with the exception of Ulrich Phillips' error which is considered because of his stature and influence in the field of slave history. Phillips seems to have relied mainly upon the divergence late in the 1850's of the rule of thumb relationship of $100 to $0.01 between the price of prime male field hands and the price of cotton, a relationship considered appropriate by many southerners in 1850. To have used this relationship as a tool to estimate the profita-

[6] The nature of this error was recognized by some contemporaries of slavery. For a more complete discussion of it, see Thomas P. Govan, "Was Plantation Slavery Profitable?" *Journal of Southern History*, November, 1942, pp. 513-535.

[7] Ralph B. Flanders, "Planter Problems in Ante Bellum Georgia," *Georgia Historical Quarterly*, March, 1930, p. 29.

[8] Contained in an article by Solon Robinson in the *National Intelligencer* quoted in *Agricultural Section, Report of the Commissioner of Patents for 1849*, Exec. Doc. 20, H. R., 31st Cong., 1st sess., pp. 310-312.

[9] The actual rate of return was higher. These calculations are based upon a cotton price of 6 cents a pound, whereas the average price received by Williams was between 6 and 7 cents.

bility of slavery, Phillips would have been obliged to consider changes in the marginal physical productivity of the prime male field hands—a factor he neglected. A rough estimate of changes in marginal physical productivity[10] is not consistent with Phillips' implicit belief that it was roughly constant for the period 1850 through 1860.

Almost all analyses of the returns on slave capital involve use of manuscript records of actual plantations or average values of prices, production, etc., for typical plantations to estimate the return. In the absence of precise production functions, market rates of payment are estimated for the other factors, and slaves are allotted the residual income. While this type of analysis, when properly applied, yields results consistent with those I have obtained, there are strong grounds for preferring the method developed and used in this study. This method uses the net rent,[11] received by owners of slaves when they rented them out, as the estimate of the income earned by the capital good. Stated more formally, the analysis is limited to a firm with one input, a single form of capital, which produces a single output, labor services. The advantages of this method are: the income figures are estimated directly from market data rather than as residuals; and only a few variables rather than a large number need to be estimated.

The Data

The analysis of the rate of return on slave capital is an application of the simple discount formula to the capital good, slaves. To carry forward this analysis requires four types of data: (1) the net yearly income received by the owner, (2) the price of slaves, (3) the death rate of slaves at specific ages, and (4) the rates of return on alternative investments. The rate of return on an asset is equal to the ratio of net income to the price. For an asset that wears out, this rate rises

[10] Alfred H. Conrad and John R. Meyer, "The Economics of Slavery in the Ante Bellum South," *Journal of Political Economy*, April 1958, pp. 116-119. Conrad and Meyer estimate the rate of return to slaveholding in the period 1830 through 1860. They use the capital value formula with the internal interest rate equal to the discount rate. The yearly income of the capital good is estimated as a residual using an average production function and average incomes and expenses for cotton plantations.

[11] The hires are not a random sample of all hires for the class of slaves considered. The hires are all those for that class which were found in a reasonably exhaustive search of the secondary literature and the principal archive collections of the South. It is possible that hired slaves may have been superior to average slaves. This will not bias the results unless the ratio of hire to price for the hired slaves is greater than the ratio of imputed hire to price of average slaves.

each year that the asset is held. The discount formula is used to obtain an average rate for the period the asset is held and to reduce the rate indicated by the simple ratios to allow for the decline in value of the asset over the period. The death rate is incorporated into the discount formula to allow for the fact that all slaves do not live the same number of years. The alternative rate provides a standard by which to judge the rate on slaves relative to other investments.

NET INCOME

The net yearly income received by the owner of the slave is estimated by the yearly hire of slaves rented out, i.e., slaves whose employer was not their owner. There is evidence to indicate that the hiring of slaves was a reasonably common characteristic of the slave system and that the conditions of hire were generally quite standard. Many of the characteristics of hired slave employment—size of labor force, turnover, mobility, etc.—however, cannot be quantified.[12]

The supply of slaves to the hired labor force, especially in certain industries in the Upper South[13] in the latter years, appears to have been quite large. In 1857 the Virginia and Tennessee Railroad employed 643 persons of whom 435 were hired slaves, and the Richmond and Danville Railroad employed 298 persons of whom 181 were hired slaves.[14] In April of 1858, 249 hired slaves were employed in the construction of the State House in Columbia, South Carolina.[15] In July of 1848, 81 of the approximately 300 yard laborers employed at the United States Navy Shipyard at Gosport (Norfolk), Virginia, were hired slaves.[16] An analysis of the unpublished census returns for 1860 indicates that there were at least 335 hired slaves in four counties in Tennessee.[17]

[12] The size of the hired slave labor force is discussed in Clement Eaton, "Slave-Hiring in the Upper South: A Step Toward Freedom," *Mississippi Valley Historical Review*, March 1960, pp. 673-677.

[13] The term Upper South refers to North Carolina, South Carolina, and Virginia. The term Lower South refers to Alabama, Florida, Georgia, Louisiana, and Mississippi.

[14] *Annual Reports of the Railroads to the Board of Public Works of the General Assembly of Virginia for the Year Ending September 30, 1857*, G.A. No. 17, pp. 79 and 280.

[15] State House Construction Payrolls, Voucher Three, South Carolina State Archives, Columbia, April 1858.

[16] United States Navy Bureau of Yards and Docks, Payrolls of Mechanics and Laborers . . . Gosport, Virginia, National Archives, Washington, July 1848.

[17] Chase C. Mooney, *Slavery in Tennessee*, Indiana University Press, 1957, p. 33. The counties were Davidson, Fayette, Haywood, and Lincoln. All the census

Slaves who were temporarily in excess of their owner's needs were one major source of the supply of hired slaves. Slaves who were part of estates left to widows and minor children were a second source. How common it was for other groups to hold slaves solely for hire is not clear. Some examples can be cited: the Clark Plantation during the period 1847 through 1860 regularly hired out from seven to seventeen hands.[18] A newspaper of the period (quoted indirectly) indicates that holding slaves for hire was quite common. "Negroes are a kind of capital which is loaned out at a high rate, and [in Savannah] one often meets people who have no plantation, but who keep negroes to let and receive very handsome sums for them every month."[19]

The practice of yearly re-hire suggests that there may have been a high turnover rate of individual slaves among employers. Again, only examples, not statistics, can be cited. Between 1843 and 1852 the twenty-four slaves in the estate of Henry E. Canon of Mississippi worked for a minimum of seven employers, and those hired out every year seldom worked for the same employer from year to year.[20] In 1860 the president of the Raleigh and Gaston Railroad reported: "Great labor and inconvenience is experienced in hiring new laborers. Those that are obtained are often of an inferior quality, or hard to manage . . . raw recruits unacquainted with the duties assigned to them."[21] On the other side, one group of slaves employed in the shipyard at Pensacola, Florida, worked there at least for the period 1847 through 1851 and the Tredegar Iron Works in Richmond apparently had a low turnover among its hired slave force.[22]

While there was some interstate mobility, and examples of slaves owned in Virginia working in Alabama and Florida could be cited, the impression one gathers is that most slaves were hired to work in the states in which their owners lived. There is also an indication that

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marshals did not indicate hired slaves, so an exact determination of the number is not possible. There were 48,136 slaves reported in these counties of which 12,135 were males fifteen to sixty years old.

[18] Clark Plantation Book, 1825-1861, North Carolina Dept. of Archives and History, Raleigh.

[19] Frederic Bancroft, *Slave Trading in the Old South*, Baltimore, Furst, 1931, p. 146. The quotation is from *Das Ausland*, which quoted the *New York Tribune* of April 28, 1860.

[20] Charles S. Sydnor, *Slavery in Mississippi*, New York, Appleton-Century, 1933, pp. 175-178.

[21] *Tenth Annual Report of the Raleigh and Gaston Railroad*, 1860, North Carolina Dept. of Archives and History, Raleigh, pp. 9-10.

[22] Kathleen Bruce, *Virginia Iron Manufacture in the Slave Era*, New York, Century, 1931.

premium rates were paid by employers who planned to move the hired slaves across state boundaries.

Slaves were hired in three ways, (1) by personal contact between the owner and the lessee or his agent, (2) by personal contact between an agent in a major city to whom the owner had consigned his slaves and the lessee or his agent, and (3) by public auction. The first method was usually carried out by the hirer or his agent traveling through the back country picking up a few slaves at a time as he visited the various plantations. If the project involved obtaining a large number of slaves, the agent might advertise his coming and meet the owners in the local county seat. Agents in the principal cities accepted slaves on consignment and hired them out by personal contact or at public auction. Newspaper advertisements by the agents, and the payroll vouchers of the South Carolina State House construction suggest that agents were widely used. The usual charge for such services was from 6 to 8 per cent. Newspaper accounts of the practice of calling slaves at public auction, usually held on the courthouse steps around the first of January, indicate that this may have been the most popular method of hiring slaves. Its popularity may have been associated with the practice of renting out slaves belonging to estates. Of the three methods, personal contact was probably the one used in most of the cases cited in this study, with the exception of the railroads whose methods are unknown.

Slaves were employed by the day, week, month, and year. The yearly contract appears to have been the most common. The year is also the period for which one can be surest of the conditions of hire with respect to slave subsistence. Almost without exception the lessee paid for the cost of lost time (except for a runaway), paid for living quarters, food, clothing, medical care, and in many cases the taxes on the slave. Hence, the yearly hire represented a net return on the investment.[23] The following quotations illustrate these typical contract conditions:

> First, the hirer shall have twelve months credit by giving Bond with two approved Securities! They will be required to furnish each negro with three suits of clothes, two homespun cotton suits for summer and one linsey suit for winter, one new pair of shoes and stockings, each man or boy with a new wool hat and each woman and

[23] The cost of hiring out the slave is considered in the section on rate of return, below. This analysis assumes that the hired slave labor market was classical rather than Keynesian in character and involuntary unemployment is not considered.

girl with a new cloth bonnet, each single negro with one new blanket and each family of negroes with two blankets and to be returned with all their bedding and clothing to this place on the second day of January.[24]

On the 25 day of December we . . . as surity, jointly and severally promise to pay to . . . or order . . . for value received. Having hired of . . . a negro . . . slave . . . from this date until the 25th of December next, we . . . as principal and as . . . surity, jointly and severally bind ourselves that said slave shall be treated humanely, furnished with competent medical aid and medicines, when necessary, furnished with good suitable and sufficient clothing during the year, and returned with good durable and sufficient clothing at the end of the time aforesaid. The hirer to pay the city taxes on said slave. This obligation is not intended to render the hirer liable for the return of the slave in the case of death or escape, further than he is by law made responsible.[25]

If a hired slave ran away or died during the contractual period, the hire usually ceased at this time. In cases where it could be shown that the lessee had been negligent or had violated the terms of the contract in a way that led to the loss of the slave, he was usually held liable for damages equal to the fair value of the slave. In the closing years of slavery some firms advertised that they would insure the lives of all the slaves that they employed—apparently not a widespread practice. Whether the probability of death was greater for hired slaves than for slaves in general would be difficult to establish. The president of the Raleigh and Gaston Railroad stated, "The risk of brakemen, trainhands, and firemen is scarcely greater than that of other employments, none having been killed on the road."[26] In 1856, however, three firemen, four brakemen, and an assistant engineer were killed and three other employees were injured on the Mobile and Ohio Railroad.[27] Of the ten, only one of the injured was a Negro, the others being white. In 1860 there were three deaths among the 400 hired

[24] Papers of Alexander H. Torrence, 1835-1915, Duke University Library, Durham, North Carolina.

[25] Contract between I. R. Jacob and I. B. O'Bannor in Louisville, Kentucky, 1857, New York Public Library, New York, Miscellaneous Slave Papers.

[26] *Tenth Annual Report*, pp. 9-10.

[27] *Ninth Annual Report of the Mobile and Ohio Railroad, 1856*, Library of the Bureau of Railway Economics, Association of American Railroads, Washington. Table 10.

slaves of Charles Fisher, a railroad contractor in North Carolina.[28] Three deaths out of 400 are fewer than would be predicted by a mortality table for slaves aged twenty to forty.

When slaves were hired for periods other than a year, it is usually not clear what the contractual conditions were regarding subsistence. It appears that when slaves were hired by the day or week their owners paid for the subsistence. Monthly hires present a mixed situation. In some cases the monthly rates are alternative methods of expressing daily or yearly ones, and the conditions of subsistence probably followed the general patterns for those rates. Where they were true monthly rates, both patterns of subsistence payments were used. The uncertainty concerning who paid for subsistence makes daily and monthly hires more useful for illustrating movements in magnitudes over time than for estimating the net income received by the owner. A more important limitation on the use of daily and monthly figures is a lack of information on number of days or months worked per year.

Data on slave hires are scattered and usually fragmentary in character. Some can be found in most twentieth century books dealing with the general subject of southern slavery or with slavery in a specific geographical area. In addition, many books and articles which treat particular aspects of the general southern economy contain some references to them, as do court cases and periodicals of the era. It is doubtful, however, that the number of useful observations from these sources exceed 500. The major sources are manuscript records and the annual reports of southern railroads.

In order to estimate correctly the net yearly income received by owners of slaves, the following information is desirable: (1) rate of hire, (2) value of slaves, (3) age, skill, and physical condition, (4) content of jobs performed. Seldom is such detailed information available. In its absence, hires were included if the context of the source indicated that it probably represented a healthy adult male performing relatively unskilled labor.

Railroad hires present a special problem, for they are often summarized into an average rate which includes the skilled train hands and the boys who swept up around the stations. The vast majority of the slaves employed by the railroads worked as track hands, and thus the use of the average rate probably does not introduce much

[28] Papers of Charles F. Fisher, 1860, Southern Historical Collection, University of North Carolina, Chapel Hill.

error. Slave rental data were included in many contemporary newspapers, usually in the form of averages or ranges with no indication of the number employed at these rates. These have been included with a weight equal to a single hire. In cases where manuscript sources used by a secondary account could be consulted, the manuscript source was used. Tables 5, 6, and 7 summarize the available data on slave hires; details and sources are included in Appendix A.

TABLE 5

AVERAGE YEARLY RATES OF HIRE FOR SLAVES

	Upper South			*Lower South*		
Period	Number of Observations	Mean	Standard Deviation	Number of Observations	Mean	Standard Deviation
1830-35	27	$ 62.0		20	$127.0	
1836-40	62	106.0	$13.0	7		
1841-45	12	83.0		15	143.0	
1846-50	33	99.0	16.3	53	168.0	$43.8
1851-55	1,195	141.5	20.9	96	167.0	69.8
1856-60[a]	4,091	142.0	15.3	157	196.5	39.6

[a] After the analysis was completed, I discovered an additional 490 railroad hires of the Southside Railroad for 1859 and 1860. The average hire was $141.65. *Annual Reports of the Railroad Companies of the State of Virginia . . . Board of Public Works* . . . September 30, 1859, p. 397; 1860, p. 333.

TABLE 6

AVERAGE MONTHLY RATES OF HIRE FOR SLAVES

	Upper South		*Lower South*	
Period	Number of Observations	Mean	Number of Observations	Mean
1830-35	4		5	
1836-40	256	$15.0	7	$22.4
1841-45			18	14.7
1846-50	137	12.5	76	14.7
1851-55	36	13.0	84	29.5
1856-60	110	14.0	153	20.0

SLAVE PRICES

The slave market performed for the ante-bellum South some of the functions now performed by the New York Stock Exchange, i.e., it served in the eyes of the public as a sensitive reflector of current and future business prospects. As a consequence, the price of slaves, espe-

TABLE 7

AVERAGE DAILY RATES OF HIRE FOR SLAVES

	Range	
Period	Upper South	Lower South
1830-35	$0.40—0.50	
1836-40	0.50—0.75	
1841-45		
1846-50	0.75	$1.00
1851-55	0.69—0.88	1.00—1.25
1856-60	0.69—0.88	1.00—1.25

cially in other parts of the South, was often mentioned by local newspapers and by local citizens in letters and diaries, which are sources of conceptions of the general movement of slave prices. An alternative approach to a slave price series is use of actual sales recorded in bills of sale or in the accounts of planters and slave traders. The latter approach was taken by Ulrich Phillips in his studies of the prices of prime male field hands (healthy male slaves eighteen to thirty years old), which he summarized in charts of yearly slave prices for four major markets, Richmond, Charleston, mid-Georgia, and New Orleans for the years 1796 through 1860.

Phillips' estimates of slave prices are based upon more than 3,000 bills of sale which he looked at over a period of years. Bills of sale seldom list all the information desirable for constructing a price series—price, age, sex, physical condition, and skill. His method, therefore, was ". . . to select in a group of bills for any time and place such maximum quotations for males as occur with any notable degree of frequency."[29] This method is possible because the majority of slaves sold individually rather than in groups were of prime field quality. His estimates are shown in Table 8.

Since it was not possible to duplicate Phillips' coverage of price sources, it would be desirable to have more information concerning his method of estimation, sources of prices, extent of coverage of the different markets in the different years, etc. Perhaps because he believed in the illustrative use of statistics rather than in more formal statistical analysis, such information is not available. Some indication of the reliability of his estimates can be obtained from the following:

[29] Phillips, *American Negro Slavery*, p. 370.

TABLE 8

PRICES OF PRIME MALE FIELD HANDS, 1830-60

Year and Period	Richmond	Charleston	Mid-Georgia	New Orleans
1830	$ 425	$ 500	$ 700	$ 800
1831	450	500	750	850
1832	500	550	800	900
1833	550	600	850	950
1834	600	650	900	1,000
1835	650	750	1,000	1,150
1836	800	1,100	1,200	1,250
1837	1,100	1,200	1,300	1,300
1838	900	1,100	1,175	1,225
1839	1,000	1,150	1,200	1,250
1840	750	775	900	1,000
1841	600	650	775	875
1842	500	600	700	750
1843	500	550	650	750
1844	500	550	650	700
1845	550	600	650	700
1846	600	650	700	750
1847	625	700	800	850
1848	650	725	900	950
1849	675	775	950	1,025
1850	700	800	1,000	1,100
1851	725	825	1,050	1,150
1852	775	850	1,100	1,200
1853	825	950	1,200	1,250
1854	900	1,000	1,250	1,300
1855	950	1,025	1,300	1,350
1856	1,000	1,075	1,350	1,425
1857	1,025	1,100	1,450	1,500
1858	1,075	1,150	1,550	1,600
1859	1,100	1,200	1,675	1,700
1860	1,200	1,225	1,800	1,800
1830-35	$ 529	$ 592	$ 883	$ 942
1836-40	910	1,053	1,115	1,205
1841-45	530	590	685	745
1846-50	650	730	870	935
1851-55	835	930	1,180	1,250
1856-60	1,100	1,150	1,565	1,605

SOURCE: Estimated visually, to the nearest $25, from chart, "Approximate Prices of Prime Male Field Hands in Hundreds of Dollars per Head . . . ," in Ulrich B. Phillips, *Life and Labor in the Old South*, Boston, Little, Brown, 1941, p. 177.

(1) They have with one exception been accepted by other scholars.[30] (2) They are consistent with quotations in other secondary works on American slavery.[31] (3) They are, except for the Upper South 1856 through 1860, reasonably similar to observations obtained in preparing this study (Table 9). Even the Upper South 1856 through 1860, when

TABLE 9

COMPARISON OF PHILLIPS' PRICES FOR SLAVES WITH EVANS' OBSERVATIONS OF PRICES

		Evans' Prices				Evans' Prices		
Year	Phillips' Prices	Prices	Number of Observations	Standard Deviation	Phillips' Prices	Prices	Number of Observations	Standard Deviation
		RICHMOND				CHARLESTON		
1836	$ 800	$ 982	21	$105				
1846	600	580	10	111				
1860	1,200	1,478	14	120				
1833					$ 600	$ 438	31	$151
1852					850	892	31	54
1856					1,175	1,164	12	162
		MID-GEORGIA				NEW ORLEANS		
1837	$1,300	$1,210	22	$145				
1859	1,675	1,500	27	0				
1848					$ 950	$ 888	8	$84
1860					1,800	1,750	6	32

SOURCE: Phillips' prices, Table 8.

Evans' prices: Richmond: 1836, Account Book of Whitehead and Lofftus 1835-1837, Duke University Library, Durham, North Carolina; 1846, Slave Account Book of Templeman 1846-1859, New York Public Library; 1860, Omohandro Account Book 1860, Alderman Library, University of Virginia, Charlottesville.

Charleston: 1833, Account Book of I. A. Jarratt 1833-1835, Duke University Library, Durham, North Carolina; 1852, Samuel M. Derrick, *Centennial History of South Carolina Railroad*, Columbia, State Co., 1930, p. 312; 1856, Devereaux Personal Papers, Account of Slave Sales, December 2, 1856, North Carolina Department of Archives and History, Raleigh.

Mid-Georgia: 1837, Papers of Francis P. Corbin, New York Public Library; 1859, Slave Accounts of Jeremiah Morton in Morton-Halsey Papers, Slaves Sold in Mobile in 1859, Alderman Library, University of Virginia, Charlottesville.

New Orleans: 1848, "Inventory of the Estate of Nicholas N. Destrehan," *Louisiana Historical Quarterly*, April 1924, pp. 302-303; 1860, Bill of Sale for Louisiana in Miscellaneous Slave Papers, New York Public Library.

[30] Wendell H. Stephenson, *Isaac Franklin, Slave Trader and Planter of the Old South*, Louisiana State University Press, 1938, p. 84, suggests that Phillips' New Orleans prices for 1828 through 1831 may be too high.

[31] Conrad and Meyer, "The Economics of Slavery . . . ," p. 100.