

# DID THE BLACK-WHITE INCOME GAP CLOSE DURING THE LATE NINETEENTH CENTURY?

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There is a striking difference of opinion among researchers over whether African Americans made significant economic progress during the 40 or 50 years following the end of slavery. Robert Higgs is perhaps most prominent among those economic historians who have argued that, despite the burden of racial discrimination, African Americans were able to make significant economic progress. Following Gary Becker, Higgs has argued that market forces can undermine the economic effects of racial discrimination by imposing costs on those who discriminate, even when discrimination takes the virulent form practiced in the South during the nineteenth century. Higgs has buttressed his argument with estimates of black income for the late 1860s and for 1900 that indicate that the ratio of black per capita income to white per capita income increased significantly during those years.<sup>1</sup> Other economic historians (and the overwhelming majority of noneconomic his-

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torians) have taken the more pessimistic view that African Americans made very little economic progress during the late nineteenth century.<sup>2</sup> On the face of it, the stylized facts of African-American life in 1900 would appear more consistent with the pessimistic view: most African Americans still lived in the rural South at that date, relatively few African-American farmers owned the land they cultivated, African Americans were still largely excluded from skilled occupations, and so forth. In addition, there are reasons to be skeptical of the accuracy of Higgs's estimate of black income in the late 1860s. Hence, another look at whether black income rose significantly relative to white income during the late nineteenth century seems merited.

Whereas Higgs's estimate of black income in 1900 seems reasonably solid and is based on a variety of evidence, he builds his estimate of black income in the late 1860s on a single underlying piece of information: the value for agricultural wages in the South published in the *Report of the Commissioner of Agriculture for the Year 1867*. Unfortunately, as is discussed below, Higgs appears to have misinterpreted what these agricultural wages were meant to represent, thereby seriously undermining the accuracy of his estimate. (His estimate is also flawed by his assumption that 50 percent of African-American rural household heads operated their own farms in the late 1860s, when in fact probably fewer than 10 percent did.<sup>3</sup>) After substituting a new income estimate for Higgs's, I will end up concluding that blacks made only very limited progress toward closing the income gap with whites during the late nineteenth century.

In order not to overlook any period of black income gains in the postslavery period, I begin the analysis in 1860, rather than in 1867–1868 as Higgs did. This makes it possible to capture in the estimates the immediate gains to emancipation. In addition, starting in 1860 also makes it possible to ground the comparison in what is for any attempt to estimate a measure of aggregate income in the nineteenth century the best source of data: the decennial census.

The new estimate of black income in 1860, taken together with Higgs's estimate of black income in 1900, allows for an assessment of changes in the black-white income gap during that 40-year period. As will be discussed at length, the paucity of data available on the incomes of free blacks in 1860 necessitates making a number of critical assumptions in order to construct the estimate. I have tried to make sure that

where a choice among equally plausible assumptions needed to be made, the choice resulted in a lower estimate of black income in 1860, thereby making it more likely that Higgs's finding of significant black progress would be confirmed. Or, to put the matter another way, if even after starting the comparison in 1860, rather than 1867–1868, and after making assumptions that tend to bias downward the estimate of black income in 1860 we still find that the black-white income gap closed little between 1860 and 1900, then we can reasonably consider this to be a robust result.

In 1860, 89 percent of the black population of the United States was enslaved. Hence, an attempt to estimate black income in that year requires estimating both the income of slaves and the income of free blacks. Several attempts have been made to estimate the “income” of slaves (that is, the value of the goods and services provided to slaves by their owners plus the value of any goods and services slaves produced and were allowed to sell) and these estimates will be discussed later in the paper. I turn first to estimating the income of free blacks, which has not previously been done.<sup>4</sup>

Direct evidence on the incomes of free blacks in 1860 is quite scarce. An estimate of free black income can be constructed, however, from information on wages in occupations that employed the great majority of free blacks, from estimates of the labor force participation rates of free blacks, and from census information on the age structure of the free black population. Although information on the differences between white and black wages is only infrequently available, the widely accepted view is that, whereas blacks in 1860 were rigidly excluded from many occupations, they were not typically paid less than whites in those occupations to which they were admitted.<sup>5</sup> This is almost certainly true of agriculture, where about two-thirds of free black labor was employed in 1860.

## THE DATA ON AGRICULTURAL WAGES

Several contemporary estimates of agricultural wages in 1860 are available. The census of 1860 contains data for each state and territory on average monthly wages received by farm hands who also received board from their employers (the definition of board is not perfectly clear, as is discussed further; wages for workers not receiving board were not collected in the 1860 census). These data are not broken down

**Table 1.** Estimates of the Annual Incomes of Agricultural Workers in the South, 1860

State	Commissioner of Agr. (Male wages only)	Census of 1860 (with board)	Young (with board)	Young (without board)
Alabama	\$138	\$148.92	\$111.04	\$152.00
Arkansas	170	171.00	122.64	196.00
Florida	139	171.48	n.a.	n.a.
Georgia	124	143.40	105.60	151.96
Louisiana	171	204.00	118.60	172.00
Mississippi	166	199.92	128.00	232.00
North Carolina	110	124.44	82.00	110.64
South Carolina	103	136.44	76.68	127.36
Tennessee	121	143.28	107.48	153.20
Texas	166	192.24	122.60	205.28
Virginia	105	137.16	92.40	147.24

**Sources:** U.S. Commissioner of Agriculture (1868, p. 416); U.S. Bureau of the Census (1866, p. 512); Young (1970, p. 742).

by age or sex. The *Report of the Commissioner of Agriculture for the Year 1867* presents data on annual wages of farm hands in the southern states for 1860. Separate wages are reported for men, women, and youths ("children of both sexes of not less than fourteen years"). Edward Young, chief of the United States Bureau of Statistics, published a study in 1874 comparing wages in Europe and the United States. The supplementary tables to this study contain monthly wage data for 1860 for farm laborers for most states and territories. Young's data are particularly interesting because they are given both for workers receiving board and for workers not receiving board, thereby providing a possible means of estimating the dollar value of board. Table 1 compares the data from these sources.

The reasons for the substantial differences among these data series are not perfectly evident, in large part because essentially no documentation has survived elaborating on how these three series were originally compiled. There are several considerations, though, that appear relevant in assessing the differences among these series. First, the data from the commissioner of agriculture are categorized by sex and age. The data in the first column of Table 1 are those for adult males. The census data do not give age and sex breakdowns. It is possible that they represent implicit averages of wages for men, women, and youths. However, it seems more likely that the marshals would have been gathering data on representative wage rates. In that case, given that the bulk

of agricultural wage laborers were adult men, the census data are most likely to represent wages received by adult males. The Young data are also not broken down by age and sex, but it also appears likely that they were meant to represent wages received by adult males.

Second, the census and Young data were originally presented on a monthly rather than an annual basis. I computed the annual figures given in the census column by multiplying the published monthly figures by 12. This might not be appropriate because agricultural workers were not always employed year round and the census marshals may have been reporting only the average wages for months when the workers were employed. A 1867 U.S. Department of Agriculture (USDA) report calculated annual farm income by multiplying by 11 a monthly wage figure obtained by survey.<sup>6</sup> Jeremy Attack and Fred Bateman estimate that during the 1860s in the North the norm was "seven to eight months annual employment for agricultural labor...."<sup>7</sup> Attack and Bateman appear to have concluded that agricultural workers would have been receiving no money income (at least as wage laborers in agriculture) during the remaining four or five months. If the monthly wage figures reported in the census were typically only received for seven or eight months, multiplying them by 12 would obviously overstate annual income. On the other hand, yearly wage contracts were fairly common, in which case the census marshals would mostly likely have divided the yearly wage figure by 12 (the predominance of annual wage contracts in the South may also explain why the data reported by the commissioner of agriculture are on an annual basis).<sup>8</sup> In addition, some agricultural workers received summer wages during part of the year and lower winter wages during the remainder of the year. In this case the census figures may be averages of these wages.<sup>9</sup> The instructions given to the census marshals throw no light on the issue because they do not elaborate on how the monthly wage figures were to have been compiled.<sup>10</sup> While the evidence is somewhat ambiguous, I will proceed under the assumption that multiplying the monthly census data by 12 will give a reasonable estimate of annual money wages received by agricultural workers.

The estimates from Edward Young given in the table were computed from data he published in 1874 on monthly agricultural wages, reported separately for the summer and winter months. Following Stanley Lebergott's analysis of these data, I converted Young's data to an annual

basis by giving the summer wage rates a weight of two-thirds and the winter wage rates a weight of one-third.<sup>11</sup>

Third, there is little doubt that agricultural workers in the nineteenth century received some portion of their compensation in kind. The data from the census are labeled "Av. monthly wages to a farm hand with board." It is conceivable that the dollar figures given were meant to represent the sum of the money wages paid plus the value of the board provided. It is more likely, however, that, as with many subsequent USDA reports, the figures represent the value of the money wages paid to those workers who also received board as part of their compensation. The interpretation of the commissioner of agriculture's data is more difficult. The data are set out in a table that also includes values for 1867 and 1868. The table is preceded by the statement: "In the following table of wages per annum, rations and clothing are included with the money in 1860, rations without clothing in 1867" (U.S. Commissioner of Agriculture 1868, p. 416). This would seem to mean that the dollar values given are sums of the money wages paid and the dollar value of the food and clothing provided. Robert Higgs has interpreted these data in this way; in *Competition and Coercion* he presents a table containing the values for 1867 and 1868 with the label: "Money wages (\$) plus value of rations..." (Higgs 1980, p. 44). George Holmes in a 1912 USDA bulletin takes the position that these data represent only the value of money wages paid.<sup>12</sup> Although a literal reading of the original commissioner of agriculture's *Report* would seem to favor Higgs's interpretation, the paucity of other examples from the nineteenth century of agricultural wages being quoted as the sum of cash and in-kind payments makes it likely that the data represent only cash payments.<sup>13</sup> If so, then the description of the data in the commissioner of agriculture's *Report* might be taken to mean that in 1860 in addition to money wages both rations and clothes were typically provided to agricultural workers, whereas in 1867 and 1868 only rations were.

In short, there is good reason to conclude that the commissioner of agriculture's series, the census series, and the Young series were all intended to measure the same thing: typical money wages received by male agricultural workers. The question then is which of the series is likely to be the most reliable. The census data were gathered by the census marshals as part of their regular census canvas and as such are presumably based on a very extensive number of individual reports. The commissioner of agriculture's series for 1860 was first published in

**Table 2.** Comparison of Monthly Census Data to Young's Data for Summer Months

State	Census	Young
Alabama	\$12.41	\$9.68
Arkansas	14.25	11.00
Florida	14.29	n.a.
Georgia	11.95	9.50
Louisiana	17.00	9.68
Mississippi	16.66	11.00
North Carolina	10.37	7.00
South Carolina	11.37	6.67
Tennessee	11.94	9.20
Texas	16.02	10.68
Virginia	11.43	8.04

Sources: See Table 1.

1868 along with data for 1867 and 1868. The data for the later years were described as having been gathered by "our regular corps of reporters, and agricultural editors and planters distinguished in their vocation." The data for 1860 were not published contemporaneously, and no information is available on how they may have been collected.<sup>14</sup> The profound impact of the Civil War on southern agriculture raises the likelihood that the 1860 data were gathered by different persons, and perhaps by different methods, than the 1867 and 1868 data. In any event, it is unlikely that the commissioner of agriculture's series is based on information as reliable or as comprehensive as that underlying the census series. While the reliability of the commissioner of agriculture's data cannot be entirely dismissed, it seems a reasonable presumption that the census data are to be preferred.

There is also no documentation available as to how Edward Young may have compiled his wage data. Lebergott offers the opinion that the data were probably developed "from information secured by the assistant assessors of Internal Revenue in the various states" (Lebergott 1964, p. 263). Young would presumably have had access to such data in his position as chief of the United States Bureau of Statistics in the Treasury Department (p. 263). The Young data as I have compiled them in Table 1 (by averaging his data for wages received during summer months with his data for wages received during winter months) are uniformly below the corresponding state values from the census data. Because summer wages were higher than winter wages and because the census data were collected, for the most part, during the month of June,

the possibility arises that the census data are summer wages, in which case multiplying by 12 would clearly lead to an overstatement of annual wages. Set against this possibility is the fact that the enumerators were explicitly asked to provide data on average wages, rather than on wages prevailing during the month of enumeration. Table 2 allows for a further assessment of the possibility that the census data represent summer wages by presenting the census data on a monthly basis for each state, along with the Young data for summer months.

As can be seen, even Young's data for summer months are below the corresponding census values. Moreover, the correlation between the Young data on an annual basis (computed, once again, by averaging his data for summer wages and winter wages) and the census data on an annual basis is higher (.84) than is the correlation between the Young summer wage data and the monthly census data (.76). Hence, the divergence between the annual census data and the annual Young data is not attributable to the former being based on summer wages.

Table 2 also provides some additional basis for assessing how comprehensive the information Young's data are based on is likely to have been. In addition to presenting no value for Florida, Young presents values for four states that are either whole dollar or half-dollar amounts. This raises the strong possibility that for at least some states he relied on a relatively few observations.

Whereas the Young data are clearly inferior to the census data, should they be dismissed altogether as entirely unreliable? This would be unfortunate because, since Young presents wage series both with and without board, his data make it possible to compute estimates of the dollar value of board. Without such estimates, calculation of the income of black agricultural laborers is difficult. Against the apparent shortcomings of the Young data, and in the absence of any information on how the data were compiled, we can only set the man's reputation as, in Lebergott's words, "a competent statistician, who was experienced in data evaluation and presentation and who had worked under David A. Wells..." (1964, p. 263). Lacking a better alternative, I have used the Young data as the best estimates available of the value of board. So, in the end I calculated the value of money wages plus the value of board by adding the difference between the annual income of agricultural workers with and without board (from the data given in Young) to the monthly values of wages paid to farm hands given in the 1860 census multiplied by 12.<sup>15</sup>



## THE VALUE OF NON-BOARD, IN-KIND PAYMENTS

Agricultural laborers in the nineteenth century received non-board, in-kind payments from their employers. Estimating the income of agricultural laborers requires estimating the value of these payments. Lee Alston and T. J. Hatton (1991, p. 86) have recently established that in-kind payments were very important in American agriculture during the 1920s and 1930s. Drawing on USDA studies carried out in 1925 and 1945 they estimate that in-kind payments made up a third or more of total agricultural earnings during the years between 1925 and 1941. For the late 1860s Higgs offers a similarly high estimate; he believes that in-kind payments, exclusive of rations, were roughly on the order of one-quarter of the value of money wages plus rations, although he provides no sources for this estimate (Higgs 1980, p. 101).

There is no doubt that the variety of in-kind payments received by agricultural workers could be extensive. Writing in the early twentieth century, George Holmes (1912) listed the noncash payments sometimes received by farm laborers:

He may receive, without any money reckoning as to value, the use of dwelling and garden, stable for cow and horse; feed for cow, horse, swine, or poultry; pasture for cow, horse, or swine; butter, eggs, milk, fruit, vegetables for family use; firewood for his dwelling and the use of a team to haul it; the occasional use of a team for hauling purposes; the laborer may receive in addition to his rate of wages one meal a day, or laundry service, or occasional use of horse and buggy (p. 49).

It seems likely that the most common in-kind payment received by agricultural laborers was board. Nineteenth-century census and USDA surveys invariably distinguish between wages with and without board. Wages with and without other in-kind payments are rarely reported. There is, though, the question of what nineteenth-century farmers meant by "board." In some cases it appears to have been used to refer only to the provision of food, although at times a distinction was made between rations and board, with the latter being used to refer to all in-kind payments. Writing in the early 1930s, Josiah Folsom (1931, p. 1) observed that: "Board is often considered to include not only table board, but sleeping quarters, and sometimes laundry work."

Some of the ambiguities involved are illustrated by the results of a study of cotton agriculture published as part of the 1880 census. In each cotton-producing state a survey was carried out that included several dozen questions about cotton cultivation in the state. Several questions

**Table 3.** Census Survey of Labor Practices in the South, 1880

<i>State</i>	<i>Wages Quoted as with Board and without Board?</i>	<i>Non-Board In-Kind Payments Mentioned?</i>
Alabama	No	No
Arkansas	Yes	No
Florida	Yes	No
Georgia	Yes	Report from Twiggs County: "They have free use of land, team and implements on Saturday (a day they claim and will have) for raising crops of their own."
Louisiana	Yes	No
Mississippi	Yes	"A horse and sometimes rations are also given to the yearly laborer."
Missouri	Yes	No
North Carolina	Yes	"In a majority of the counties of the state laborers receive from \$8 to \$10 per month, and from \$80 to \$100 per year, with rations, house, and fuel...."
South Carolina	Yes	Extensive mention; see text below
Tennessee	Yes	No
Texas	Yes	No
Virginia	Yes	No

**Source:** Department of the Interior, Census Office (1884).

pertained to agricultural labor. Although the surveys differed somewhat in each state, every survey contained a question asking how wages were paid and at what rates. Table 3 summarizes the results.

Most of the printed responses to the survey are fairly brief and the majority of them make no mention of non-board, in-kind payments. The North Carolina responses indicate that laborers in that state typically received a house and fuel in addition to rations. The printed responses for South Carolina are by far the most extensive. The labor conditions of each region in the state are discussed in turn. In the opening discussion of the coastal region the statement is made that on James Island laborers are paid: "...\$10 per month with board, the latter being a ration of 3 pounds of bacon and 1 peck of grits per week, with shelter and fuel." This is a clear instance of the use of the word board to include more than food. It may well be that the author intended the reader to interpret subsequent references to wages with board to also include the provision of shelter and fuel. This would be consistent with the response from North Carolina quoted in the table above.

**Table 4.** Percentage of Total Remuneration of Farm Laborers in the United States and in Southern Census Regions by Type of Payment, 1925

Type of Payment	South Atlantic	East South Central	West South Central	United States
Board <sup>a</sup>	14.2%	13.8%	17.8%	20.7%
Shelter <sup>b</sup>	9.6	7.3	6.8	5.8
Food <sup>c</sup>	6.5	5.7	3.8	4.7
Feed for laborers' livestock	2.7	3.2	2.8	2.0
Pasture or range or laborers' livestock	2.5	3.8	2.2	1.0
Use of employers' horses or mules	3.5	4.8	3.9	1.8
Use of employers' tools or vehicles	4.2	4.1	4.8	2.3
Miscellaneous	1.9	1.6	1.4	1.2
Wages	54.9	55.7	56.5	60.5

**Notes:** <sup>a</sup> Includes meals, sleeping quarters, and laundry services

<sup>b</sup> Includes house and fuel

<sup>c</sup> Not including meals provided as board

**Source:** Folsom (1931, pp. 17-18, Table 15).

In 1925 the USDA undertook a detailed study of in-kind payments to agricultural workers. Some of the results of this study are presented in Table 4.

Wages, board, and shelter together made up about 80 percent of the remuneration of the typical agricultural laborer in the South in 1925 and about 90 percent outside the South. It is impossible to know how well the results in this table would represent conditions in the South in 1860, but, nevertheless, they do represent the only detailed breakdown available for in-kind payments to agricultural laborers. On the basis of this information I assume that the values for the annual income (including board) of agricultural workers calculated from the census and Young data, as described earlier, understate the actual incomes of agricultural workers by about 10 to 20 percent. Because the provision of shelter may often not have been included in the definition of board used by the census enumerators or by respondents to the census, 10 to 20 percent is probably a conservative estimate of the understatement.

## THE PER CAPITA INCOME OF THE FREE BLACK POPULATION IN 1860

To arrive at an estimate of the per capita income of the free black population in 1860 I did the following: Using published census data I divided up the free black population of each state by sex, by age (less

than 10 years old, 10 to 19 years old, and greater than 19 years old), and by location (whether or not resident of a town with population greater than 5,000). I assumed that adult men, adult women, and youths between the ages of 10 and 19 who were in the labor force were agricultural workers if they resided in towns with populations less than 5,000. I assumed that men residing in towns with populations greater than 5,000 who were in the labor force were common laborers. I assumed that women residing in towns with populations greater than 5,000 who were in the labor force were domestic servants.<sup>16</sup> This last assumption is based on the fact that, as late as 1890, 82 percent of black women wage earners outside of agriculture were domestic servants (or laundresses) and the fact that in many southern cities more than 90 percent of black women wage earners were domestic servants well into the twentieth century (Katzman 1978, p. 292, Table A-11, and p. 313). I have no direct information on the wages of youths residing in towns with populations greater than 5,000. So I assumed that those youths who were in the labor force were employed in occupations whose wages were in the same ratio to the wages of domestic servants as the wages of youths employed in agriculture were to the wages of women employed in agriculture.

I assumed that free blacks in agriculture in 1860 had labor force participation rates equal to those estimated by Roger Ransom and Richard Sutch for free blacks in southern agriculture in the late 1870s.<sup>17</sup> I assumed that adult black men living in towns in 1860 had the same labor force participation rate as the labor force participation rate of black males in the sample of cities examined by Leonard Curry using the manuscript census for 1850.<sup>18</sup> I assumed that adult women and youths living in towns had labor force participation rates that were in the same ratio to adult male labor force participation rates as was true for agriculture. The implied labor force participation rate for adult women is 55.4 percent. This may seem high given that the labor force participation rate for nonwhite women in 1890—the earliest year for which a reliable rate is available—was 39.7 percent. However, Claudia Goldin has persuasively argued that the labor force participation rate for women actually declined during much of the nineteenth century.<sup>19</sup> The labor force participation rate for *white* women in Philadelphia in 1860 was about 40 percent (1986, p. 389, Table 2). Given that the labor force participation rate for nonwhite women in 1890 was more twice that for

**Table 5.** Estimates of the Annual Incomes of Common Laborers in the South, 1860

State	Census of 1860			Young		
	With board	Without board	Board	With board	Without board	Board
Alabama	\$168.00	\$230.40	\$62.40	\$170.04	\$224.04	\$54.00
Arkansas	187.20	249.60	62.40	152.04	220.80	68.76
Florida	182.40	278.40	96.00	n.a.	n.a.	n.a.
Georgia	151.20	213.60	62.40	159.96	231.96	72.00
Louisiana	232.80	333.60	100.80	174.00	267.00	95.00
Mississippi	204.00	302.40	98.40	156.00	228.00	72.00
North Carolina	129.60	184.80	55.20	100.08	144.00	43.92
South Carolina	141.60	196.80	55.20	123.96	170.04	46.08
Tennessee	141.60	201.60	60.00	120.00	181.56	61.56
Texas	216.00	300.00	84.00	120.00	204.00	84.00
Virginia	146.40	194.40	48.00	121.80	183.84	62.04

Sources: U.S. Bureau of the Census (1866, p. 512); Young (1970, p. 744).

white women, an estimate of a labor force participation rate for black women in 1860 of greater than 50 percent is not implausible.

To calculate the annual income of adult male agricultural workers I multiplied by 12 the 1860 census values for monthly wages including board, added the estimate of board derived from Edward Young's data, and divided the resulting figure by .8 for southern states and by .9 for non-southern states, to allow for non-board, in-kind payments, as described above.<sup>20</sup> For southern states I assumed that the annual wages of adult women and youths working in agriculture (which were not reported in the 1860 census) were in the same ratio to male wages as was true of the wage data given in the *Report of the Commissioner of Agriculture*. For non-southern states I assumed that the ratios of wages paid to adult women and wages paid to youths relative to wages paid to adult men was the same as the average of these ratios for southern states. I assumed that women in agriculture received half the board payments received by men and that they received no non-board, in-kind payments. I assumed that youths in agriculture received no board or other in-kind payments.

To compute the annual income of common laborers I used Edward Young's estimates of monthly wages paid without board. The 1860 census reported daily wages for common labor with and without board. To make use of the census data it is necessary to estimate the number of days worked per year. On the basis of data on black wage earners in

1896, Higgs (1980, p. 97) argues that 240 days per year is a reasonable estimate. This estimate was used in Table 5 to convert the census values to an annual basis.

The table shows that the two estimates of the value of board are fairly similar. Given the uncertainty about the average number of days in a work year and given that payments of board may have differed on the basis of whether work was contracted for on a daily (and perhaps casual) basis as opposed to a monthly basis, I have used Young's data in calculating the annual income of urban black men in 1860. To calculate the annual income of urban black women, I used Young's data on the monthly wages of domestic servants with board, to which I added the estimate of the value of board generated by subtracting the annual value of common labor wages with board from the annual value of common labor wages without board (as in Table 5).<sup>21</sup> I assume that youths employed in urban areas did not receive board.

Given that relatively few free blacks held skilled or professional jobs in 1860, I did not attempt to include estimates of the incomes obtained from these occupations. I also did not attempt to estimate the additional income that would have been earned by the small number of free blacks who owned farms. Hence, some small downward bias is imparted to my estimate of free black per capita income in 1860.

Using these assumptions I estimate that the total income of free blacks in 1860 was \$37,563,961. The census enumerated 488,070 free blacks in the United States in 1860. Therefore, the per capita income of free blacks in 1860 would have been about \$76.96.

### **THE RATIO OF BLACK TO WHITE INCOME AND THE INCOME OF FREE BLACKS BY REGION IN 1860**

The estimate of free black per capita income can be combined with an estimate of the per capita income of slaves to yield an estimate of total black per capita income in 1860.<sup>22</sup> This estimate can then be used to calculate the ratio of black to white per capita income in that year. Fogel and Engerman (1974, pp. 117, 159) have estimated that the per capita income of slaves was \$42.99. Ransom and Sutch (1978, p. 211, Table A.5) have offered an alternative estimate of \$28.95. I have argued elsewhere that Fogel and Engerman's estimate is too high, primarily because they have overestimated the value of the food provided to slaves, overestimated the value of the housing services provided to

**Table 6.** Black and White per capita Income, 1860 and 1900

	Free Black	Slave	Total Black	White	Ratio of Free Black to White	Ratio of Total Black to White
1860	\$77	\$39	\$43	\$142	.54	.30
1900			73	208		.35

**Sources:** For 1860, see text; for 1900, see Higgs (1980, p. 146).

slaves, and overestimated the “extra income” generated by slaves cultivating their own patches of land. I have argued that Ransom and Sutch’s estimate is too low, primarily because they have underestimated the value of the food provided to slaves and underestimated the “extra income” of slaves. My revised estimate of the per capita income of slaves is \$38.75 (O’Brien 1998). Using my estimate of slave income and weighting the free black and slave per capita income estimates by the population shares of the two groups yields an estimate of overall black per capita income in 1860 of \$42.95. Relying on earlier work by Robert Gallman and Richard Easterlin, Fogel and Engerman have calculated that total per capita income in the United States in 1860 was \$128. Given the estimate of black per capita income given here, white per capita would, then, have been \$142.28.

Therefore, free black income was about 54 percent of white income, while overall black income was about 30 percent of white income. Robert Higgs (1980, p. 146) has estimated that black per capita income in 1900 was about 35 percent of white per capita income (see Table 6).

Hence, if the estimates presented here are correct, black income rose only modestly relative to white income during the last 40 years of the nineteenth century, if the value for overall black per capita income is used for the comparison, and actually declined substantially, if the value for the free black population is used. In fact, the per capita income of the black population in 1900 may have been lower than the per capita income of free blacks in 1860.<sup>23</sup>

The estimates of black income presented here are based on what I believe to be the best available data, interpreted in an intentionally conservative way. But the best available data are still quite sketchy. If we allow for the shortcomings in the data by assuming a range of error of plus or minus 20 percent around the free black per capita income estimate, then free black income in 1860 would have been between \$61.57 and \$92.35. Even the low estimate of \$61.57 yields a ratio of free black income to white income of 43 percent and a ratio of overall black

**Table 7.** Per Capita Income of Free Blacks and Whites in 1860, by Region

	<i>Free Blacks</i>	<i>Whites</i>	<i>Ratio of Free Black to White</i>
United States	\$77	\$142	.54
North			
Northeast	\$91	\$182	.50
North Central	\$82	\$90	.91
South			
South Atlantic	\$58	\$111	.52
East South Central	\$80	\$115	.70
West South Central	\$94	\$268	.35
West			
Mountain	\$382	n.a.	
Pacific	\$352	n.a.	

**Notes:** White per capita income was calculated for each region using the following identity (where all values except those for white per capita income are known):

total per capita income = (share of whites in total population)(white per capita income) + (share of free blacks in total population)(free black per capita income) + (share of slaves in total population)(slave per capita income)

Data on total per capita income by region are from Fogel and Engerman (1971, p. 335, Table 8); Fogel and Engerman do not present estimates of total per capita income for the Mountain and Pacific regions. I assume that the estimate of slave per capita income of \$38.75 did not vary by region.

**Source:** See text.

income to white income of 29 percent in 1860. So, even if the best estimate of the per capita income of free blacks in 1860 of \$77 is substantially overstated, the conclusion would still stand that the economic gains of blacks relative to whites during the late nineteenth century were disappointingly small.<sup>24</sup>

Finally, given that the estimate of free black per capita income was computed state by state, it is possible to compare the per capita income of blacks and whites on a regional basis. The per capita income of free blacks is compared with that of whites by region in Table 7.

The regional estimates yield some surprises. In the north central region the gap between white and free black incomes is remarkably small. On reflection, this result is not implausible. Large parts of this region were still only recently settled in 1860 and most workers still held jobs in agriculture or as unskilled workers in urban areas. If the assumption built into the estimates that blacks and whites received the



same wages in these occupations is accurate, then it is unsurprising that black and white incomes in this region were not greatly different. In the northeast, free black income was lower relative to white income than might have been expected. The failure to include an estimate of the incomes for skilled workers and professionals in New England's fairly small free-black community may in part be responsible. More important, New England was a high-income region, with substantial incomes being generated in occupations from which blacks were excluded.

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## NOTES

1. Becker (1977); Higgs (1980, esp. chap. 1); Higgs's income estimates are presented on pp. 102, 144–146 and indicate that black per capita income rose from 24 percent of white per capita income in the late 1860s to 35 percent in 1900.

2. For criticisms of Higgs's conclusions by economic historians see Shlomowitz (1983) and Ransom and Sutch (1981).

3. Higgs (1980, p. 101); for further discussion of this point see, Shlomowitz (1983), MacKenzie (1994, pp. 158–159), Irwin (1990), and Irwin and O'Brien (1998).

4. Although Howard Bodenhorn (no date) has recently assessed some aspects of the well-being of free blacks in Virginia.

5. For a brief discussion of the point, see Wright (1986, pp. 181–183). Some years ago Higgs and Charles Roberts had an exchange in *Agricultural History* on the question of whether blacks and whites received the same wages (inclusive of in-kind payments) in late nineteenth-century southern agriculture. Higgs's arguments that they did seem to me to be convincing (see Higgs 1972; Roberts and Higgs 1975).

6. USDA, *Monthly Report* (January 1867, p. 16): "The American farm laborer, as has been shown, gets \$28 dollars per month, or, counting eleven months' work each year, \$308 per annum."

7. Atack and Bateman (1987, p. 242). Donald Adams (1982, p. 910), believes the typical agricultural worker in Pennsylvania worked a nine-month year.

8. Many yearly wage contracts are cited in the two-volume census study of cotton agriculture published in 1880 (Department of the Interior 1884).

9. For a specific example of a Tennessee planter paying his workers all 12 months see Watkins (1899, p. 47).

10. The data on wages were gathered on a census schedule devoted to "social statistics" (used only for the 1850, 1860, and 1870 censuses). The instructions to the census marshals for gathering the information on wages consisted only of the following sentence: "The information called for in the six columns relating to wages is so simple, and so plainly set forth in the headings thereof, that it is deemed unnecessary to add thereto" (see Wright 1900, pp. 646–652).

11. See Lebergott (1964, p. 264, fn. 36). I used Young's data for ordinary farm hands rather than for experienced farm hands.

12. Holmes (1912). In this bulletin the data are reproduced with a brief discussion that includes the statement (p. 22): "For 1860 rations and clothing were supplied in addition to the money rate...."

13. The fact that the only wage data Higgs employed in constructing his estimate of black per capita income in the late 1860s were these data from the commissioner of agriculture (see Higgs 1980, p. 101) calls into question the accuracy of that estimate.

14. The *Report of the Commissioner of Agriculture* did not exist under that name in the early 1860s. The corresponding publication was the agricultural volume of the *Report of the Commissioner of Patents*. The 1860 data on farm wages reproduced in Table 1 do not appear in U.S. Commissioner of Patents (1861) or U.S. Commissioner of Patents (1862).

15. Donald Adams (1982, p. 909) estimates that the average value of the board received by agricultural workers in the Brandywine River Valley region of Pennsylvania in 1860 was \$9.00 per month or \$108 per year. My estimate, based on the data in Young, for the average annual value of board in Pennsylvania is \$93.00; given the nature of the data, these values are fairly close.

16. For a similar characterization of the black occupational structure, see Rabinowitz (1978, p. 62).

17. Ransom and Sutch (1977, p. 233, Table C.1); I used the midpoint of the estimates given in the first line of this table.

18. Professor Curry (1981) kindly provided me with the manuscript census data underlying his results.

19. Goldin (1990, esp. chap. 2); the labor force participation rates for 1890 are given in Table 2.1, p. 17.

20. For this purpose, Maryland, Delaware, and Kentucky were considered Southern states.

21. During these years nearly all domestic servants lived in the homes of their employers.

22. There is, of course, the question of whether it makes sense to even discuss slave "income." We are generally interested in income measures largely because we think of income as being at least a rough measure of well-being. There are problems in using the income of slaves as a measure of their well-being. The first problem is that slaves received the bulk of their income as in-kind payments; the welfare of the slaves would have been higher if, as was true with many, but not all, free people of the period, they had received their income in cash and had been able to choose what food, clothing, and so forth to purchase. The second problem is the obvious one that a free person will be at an incalculably higher level of well-being than a slave with the same income. This second problem is probably impossible to reduce to quantitative terms. And it is certainly reasonable to argue that no meaningful comparisons are possible between the

well-being of a slave population before and after its emancipation. Nevertheless, I think it is still of some interest to attempt to assess the material standard of living of slaves as represented by the money value of the goods and services they consumed.

The first problem, that slaves received the bulk of their income in-kind, is less troublesome than it appears. Slave income was not greatly above subsistence. Hence, even if slaves had been given all of their income in cash and allowed to make their own decisions on purchasing food, clothing, and housing, their decisions could not have been very much different than those made for them by their masters. Moreover, it was not uncommon for free agricultural workers of the time to be obliged to accept partial payment of their wages in goods or scrip redeemable at a local store, thereby circumscribing to some extent their choices. This situation was also faced by many black agricultural workers in the postbellum South and perhaps represents the most realistic alternative to slavery in the antebellum period. Overall, while it is certainly true that, given the choice, slaves might have opted for a somewhat more varied diet and, perhaps, somewhat different clothing, it is unlikely the constraints on the goods slaves consumed reduced their welfare by more than a moderate amount—say, 10 to 20 percent—compared to what it would have been if they had received their income in cash and had been free to spend it as they chose.

23. What happened to the price level between 1860 and 1900 (and, hence, to real per capita income) is not clear. The various attempts at constructing a consumer price index for these years reproduced in U.S. Bureau of the Census (1975, pp. 211–213) yield contradictory results. Moreover, the relevance of these price indexes—or of others constructed more recently—to the experience of the black population, concentrated as it was in the rural South, does not appear to be great.

24. Of course, the gains to being free rather than enslaved are incalculable and per capita income is not the only measure of economic well-being. Nevertheless, the results presented here are an indicator of the very slow economic progress of blacks relative to whites in the late nineteenth century.

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