

# Southern Economic History Project Working Paper Series


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VIII

TENANCY, FARM SIZE, SELF-SUFFICIENCY, AND RACISM:

FOUR PROBLEMS IN THE ECONOMIC HISTORY OF SOUTHERN AGRICULTURE

1865-1880

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SOUTHERN ECONOMIC HISTORY PROJECT

Working Paper Number 8

TENANCY, FARM SIZE, SELF-SUFFICIENCY, AND RACISM:

FOUR PROBLEMS IN THE ECONOMIC HISTORY OF SOUTHERN AGRICULTURE

1865-1880\*

by

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A major question in American history which has not been extensively studied by economic historians is the nature of the transformation which occurred in the Southern States following the Civil War. This oversight is surprising since the importance of this period in the social, political, and economic development of the country has long been recognized by conventional historians. There is a voluminous collection of literature dealing with the Reconstruction period and the rise of the "New South."<sup>1</sup> However, despite the considerable effort devoted to the study of this period, very little quantitative work has been produced to ascertain the nature of the changes in agriculture and the economy which swept through the South in the two decades following the War.<sup>2</sup> The economic historians who have looked at this period have concentrated their attention on the economic impact of the Civil War in the Northern States and the rise to power of Northern industrial capitalism.<sup>3</sup>

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<sup>1</sup>The historiography of post-bellum Southern history is a fascinating story in itself. For an example of the "orthodox" treatment of the period Coulter [20] is as good as any. Since the 1930's, the interpretation of the Reconstruction period has been undergoing substantial revision. A good summary of these developments is in Stamp [82]. A more formal review of the literature is presented in the essays by Wharton and Gaston in Link and Patrick [52].

<sup>2</sup>Thus, the standard reference on the transition from slave to free labor is still Ziechner's 1939 article on the subject [115]. This is based largely on contemporary accounts not on statistical evidence relating to production or employment. Other excellent general treatments of this economic adjustment are: Taylor [87] and Salutos [72]. For a study of Georgia, see Banks [5]; for Mississippi see Wharton [108]. For a more complete bibliography see Taylor [87], footnote 3.

<sup>3</sup>A useful collection of essays on these issues is contained in Andreano [2]. A review of the literature is in Engerman [26]. The lack of attention on the post-bellum South is in sharp contrast to the attention paid to the prewar era. During this period the South was considered a

The failure of economic historians to apply quantitative techniques to the analysis of the Reconstruction period is all the more surprising inasmuch as a great wealth of data on this period has survived. Particularly important are the returns of the 1880 Census. The census of that year provides the first really comprehensive and reliable data on a county basis dealing with agricultural production, land ownership, land tenure, farm size, and manufacturing as well as the usual demographic data.<sup>4</sup> In addition, there is a two-volume study of cotton production which accompanied the tenth Census (Hilgard [42]). These volumes not only provide extensive statistical data on cotton production and the organization of agriculture, but also contain a great deal of descriptive material discussing prevailing farm practices, and attitudes toward husbandry, farm management, and race relations.

Where the aggregations presented in the published census volumes do not fit the needs of a study of this period, the historian can consult the manuscript schedules of the Censuses of Population, Agriculture, Manufacturing, and Social Statistics. These manuscripts are generally intact and available on microfilm from the National Archives and state and university libraries.

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major factor in the economic development of the country as a whole (North [56]); and the issues surrounding slavery have generated a considerable literature (see Engerman [27] for a review of these studies).

<sup>4</sup>The first census after the War, in 1870, proved to be deficient in its coverage and consistency of series, especially in the Southern areas. See the remarks of F. Walker, director of the tenth census, on the defects of the previous decade's data (Walker and Seaton [106]).



In addition to the census reports, publications of the U.S. Department of Agriculture and various state agricultural departments provide information of a more detailed nature on such variables as crop yields, prices, and transportation facilities. Finally, there is a wide variety of data contained in miscellaneous government and private records.

In recent years, however, a new interest in the economic history of the South during this period has emerged. It is becoming clear that the roots of the racial problem in America today lie there. Moreover, the experience of the South in shaking itself loose from a stagnating system of tenant agriculture is interesting to development economists who are having to grapple with surprisingly similar economic systems in under-developed countries today.

For the past eight months we have been engaged in an examination of the major economic problems facing the South after the Civil War.<sup>5</sup> This paper is an attempt to summarize the present results of our efforts in tackling several issues which arise in an examination of the Southern economy after 1865. Our conclusions, however, are still tentative and much of the data we have collected remains to be analyzed before a final report can be made. In this paper we attempt to explain the increased number of small farms in the South after emancipation and the accompanying rise of farm tenancy. We also examine the disappearance of self-sufficiency and the impact of racist attitudes on the economic adjustments. Before discussing these issues, however, it will help to place them in

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<sup>5</sup> This effort has received financial support from the National Science Foundation.

perspective by briefly reviewing the sequence of events immediately following the defeat of the Confederate States.<sup>6</sup>

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<sup>6</sup>The following account draws heavily from our fuller treatment in Ransom and Sutch [68].



## A HISTORICAL OVERVIEW

The immediate problem confronting the South right after the Civil War was the organization of the labor force. New institutions had to be developed to employ the four million newly freed Negroes. All but a few of these Blacks were part of the agricultural work force before the War, and clearly they would have to remain in Southern agriculture after the War, since other areas of the economy could provide only limited alternatives.<sup>7</sup>

Perhaps even more important than the dearth of alternatives for the Negro after the War was the overwhelming commitment of the South to staple agriculture. Clearly the South's comparative advantage before the War was in the production of cotton, tobacco, sugar, and rice. Emancipation of the Negro would not have destroyed the resources upon which this comparative advantage was based. Southerners quite naturally contemplated no other future than a return to staple production. The real question facing the South was not what to do with the Negro, but how to employ him as a free laborer in the production of cotton. This was not a trivial problem. The freedman had inherited virtually nothing from his slave past which might be put to use in this transition from slave to free labor. He owned no assets. He had little or no formal education, with the result that he was not only illiterate, but ignorant of commercial

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<sup>7</sup> Manufacturing in the North or the South was not a feasible choice. In 1870 Southern manufacturing accounted for only 2.9% of the employment; while ten years earlier the figure was 3.1%. Northern employment remained a remote possibility for Southern Negroes for the remainder of the century. Computed from data published in the Eighth and Ninth Censuses [94], [95], [98], [99].

practices and the market environment. Literally, his only resource was his practical experience as a field hand in the ante-bellum plantation system.

Even a cursory glance at contemporary reports dispels the myth that the Negroes were happier under slavery than with freedom. This rejection of slavery is clearly manifested in the freedman's desire for "independence" as he sought to find employment after the War. Surrounded by an agricultural society, the freedman quite naturally felt his economic independence required the acquisition of a farm.

There were several abortive attempts to distribute the lands of property owners who had joined the Rebellion to the Blacks. The first of these, the Freedman's Bureau Act in 1865, was emasculated by the general amnesty from confiscation ordered by President Johnson. The second attempt was a bill introduced in 1867 by Thaddeus Stevens which was defeated in the House.<sup>8</sup> Since the Negro did not obtain farms through land reform, his only chance of becoming a land owner was through purchase. While it appears that substantial amounts of land were placed on the market immediately after the War, few Negroes had sufficient capital to purchase even a modest farm. The complete collapse of the credit market accompanied by the reluctance of those with land for sale to grant the Negro credit denied the rest an opportunity to invest in land. Moreover, even those Negroes who were able to acquire the financial means found that the Southerner generally refused to sell his land to Blacks. Several

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<sup>8</sup>These attempts at land reform have been extensively treated by historians. See Randall [66], Cox [21], Abbott [1], and Fleming [29].



state governments passed as part of the infamous "Black Codes" a prohibition of Negro landownership. The fact that Congress in 1867 set aside these codes did not remove the sentiment behind them.

Denied the means to establish himself and his family on his own farm, the Negro reluctantly entered the market for farmhands. The planters, inspired by the high prices of cotton induced by the wartime shortage, were anxious to hire their former slaves as free laborers. The planters turned to the wage system despite the fact that they had little experience in dealing with free labor. They could, however, draw upon an established technology. The plantation system had utilized "gangs" of hands working in the fields. The method had worked well with slaves, and it is hardly surprising that the planter attempted to restore the system after 1865. Money wages were offered to induce the freedman to work, and housing was provided in the slave quarters of the old plantations.

From all indications, the wage payment system was universally attempted.<sup>9</sup> Almost immediately, however, planters began to express their dissatisfaction with the system. They complained that shortages of both labor and credit effectively prevented efficient operation. The complaints of labor shortages were most frequently expressed in assertions that the free Negro was lazy and unwilling to work without physical compulsion.

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<sup>9</sup>See the Freedman's Bureau Report of 1866 [43]. Also see the reports of the Assistant Commissioners of the Bureau [91] and the testimony before the Joint Committee on Reconstruction [100]. Travelers in the South such as the journalists Whitelaw Reid, whose visit in the South extended from May 1865 to May 1866, and John Trowbridge, who was there from August 1865 to February 1866, also report that the wage system was the nearly unanimous choice of the landowners (Reid [70], p. 572; Trowbridge [89], pp. 195 and 204).

Although couched in racist terms, these arguments probably reflected a rather natural economic phenomenon. Under slavery Blacks were compelled to work and could not consider any of their time as their own. Once free, they chose to consume a portion of their time in leisure. This demand expressed itself in many ways. Women and children, who before the War were used as labor in the fields, now opted to remain at home.<sup>10</sup> The men who offered their labor for wages also expressed a preference for leisure which exhibited itself in an unwillingness to work on Sundays and occasionally Saturdays as well, along with a desire for shorter hours than was customary under slavery (Loring and Atkinson [53], pp. 8-9). The major explanation for the shortage of labor is simply that the planter was unable (or unwilling) to offer wages sufficiently high to bring forth a comparable labor supply as compulsion created under slavery.<sup>11</sup>

Contributing to the shortage of labor in the eyes of the planter was migration to towns by freedmen who sought to escape agriculture altogether. However, the census statistics for 1870 and 1880 do not

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<sup>10</sup>While quantitative estimates are not available, the unanimity with which observers note fewer women working after the War compared with slavery indicated that the drop in labor force participation must have been substantial. See Loring and Atkinson [53], particularly pp. 13, 15, 20, 22-23, and 110; "Southerner" [81], pp. 330 and 333-335; Somers [80], p. 59; and Peter [61], pp. 9 and 21.

<sup>11</sup>It should be pointed out that to some extent this demand for leisure could imply a flexibility in labor supply which would favor the planter, inasmuch as it allows a far greater range of marginal adjustments than with the slave system. Under slavery the cost of labor was a fixed sum; after the War, by offering a higher price at the peak season, the planter could obtain the labor needed at harvest, while paying a lower average wage throughout the season when demand is slack.



indicate a substantial increase in the proportion of the urban population which was Black.<sup>12</sup>

A final factor which probably caused many landowners to believe there was a shortage of labor was the reluctance of many Negroes to enter into contracts under the wage system. They found that the wage system as it was practiced after the War bore an uneasy resemblance to the slave system. The work gangs, the old slave quarters, the overseers, and the use of corporal punishment led to the feeling that little had been gained with his freedom.

Another problem in the immediate postwar period which led to frequent complaints on the part of landowners attempting the wage system was the almost total lack of credit facilities. The Southern banking structure and the elaborate system of credit arrangements provided through cotton factors were destroyed by the War. Unable to obtain credit, the planter could not meet his monthly payroll and was forced to postpone payment until the crop was harvested. The failure on the part of the landlord to fulfill his side of the wage contract made the freedmen--already distrustful of the planter class--even more reluctant to renew wage agreements at the end of the first year.<sup>13</sup>

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<sup>12</sup>Data on the population, White and Black, in cities and towns are contained in the census reports [95], [97], [98]. The confusion and dislocation produced by the War also led many to suggest that large numbers of Negroes had died during and immediately after the War (Loring and Atkinson [53], p. 8).

<sup>13</sup>The complaints about the shortage of credit and the inability to operate with the wage system are numerous. For example, see the reports by Peter [61]; Somers [80], pp. 184, 209-211, 241-243; Dodge [23], p. 131; Vason [105]; and Reid [70], pp. 481-482.

These problems with credit and the shortage of labor compounded with several other problems of the immediate postwar period contributed to a rapid abandonment of the wage system. Chief among these other difficulties was the disappointed expectations of many farmers who made extravagant plans for production in 1865-66 under the encouragement of the high cotton prices.<sup>14</sup> When the cotton stocks hoarded during the War reached market, prices collapsed and many farmers found themselves unable to meet their commitments at the end of the season.<sup>15</sup> In some localities, this problem was aggravated by poor harvests.

Another difficulty that was encountered with the wage system was that the planter frequently found he was unable to secure labor for the entire year. The contemporary reports are full of complaints about Negroes leaving the farm--temporarily or permanently--before the crop was harvested. The landowners' reaction was to seek protection through the passage of laws which restricted the mobility of the Negro. Vagrancy laws were passed requiring that Negroes obtain permission in order to travel away from their place of employment. Some effort was made to impose penalties for bidding labor away from plantations through offers

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<sup>14</sup> Reid [70], pp. 414-416, and Hammond [37], pp. 121-125 note the high expectations of farmers immediately after the War.

<sup>15</sup> Prices fell dramatically. The following data come from Hammond [37], Appendix I, p. 359:

<u>Year</u>	<u>Price/lb.</u>
1864	\$1.015
1865	.834
1866	.432
1867	.316
1868	.249



of higher wages.<sup>16</sup> In addition, the laws enforcing contracts were strengthened. All of these laws only increased the Negro's unwillingness to enter into labor contracts. Whitelaw Reid noted their effect was: ". . . like the patent rat-trap. Nobody could make a safer contrivance. Rats couldn't possibly get out of it. The only difficulty was they declined to go in" ([70], p. 291).

Even more striking than the pre-eminence of the wage system in 1865-66 is the rapidity with which various forms of tenancy replaced it.<sup>17</sup> It appears as though by 1869 payment of wages, while still in use quite generally throughout the South, was less prevalent than tenant farming.

The freedman was eager to enter into tenancy arrangements, primarily because they provided him with more independence as a farmer. Tenancy also solved two of the basic problems which confronted the planter under the wage system. The farm laborer was much more likely to stay on a tenant farm throughout the entire year and to urge his family members to

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<sup>16</sup>For a treatment of the vagrancy laws and other restrictions, see Ziechner [113]. Additional examples can be found in Schurz [75], pp. 92-99, and Wharton [108], Chapter V.

<sup>17</sup>The beginnings of this dramatic change are recorded in the Freedman's Bureau Report for 1867 [44]. The reports from the states of South Carolina, Florida, Mississippi, and Texas all mention the growing prevalence of the tenant-farming system. In the same year the Federal Commissioner of Agriculture, discussing conditions in the South, stated that "[t]he most prevalent and popular mode of contracting proprietors and laborers is *Working upon Shares*" (Capron [14], p. 417). The Freedman's Bureau Report for 1868 indicates an increasing tendency to adopt the share system and to abandon the wage system [43]. The report from Georgia, for example, stated that "[m]ost of the contracts were for a share of the crop" (p. 1004). Loring and Atkinson, in their 1869 survey, found that about 80 percent of the land in their survey was sharecropped ([53], p. 33).

add their labor to the enterprise during harvest season. Moreover, since the tenant arrangement required a payment to the landlord only at the end of the year, the need to obtain seasonal credit was no longer the planter's responsibility.

The appearance of tenancy took two fundamentally different forms. The first, which we shall refer to as renting, involved leasing a parcel of land for some period in return for a fixed rent. The second, which we shall call sharecropping, involved an arrangement where the tenant received a share of the output produced.<sup>18</sup>

Between these two systems, the Negro preferred to rent, since this system afforded him a maximum amount of independence. For the same reason, the landowner preferred sharecropping, which gave him more control over the labor.<sup>19</sup>

There are no comprehensive data indicating the extent to which the wage system was abandoned in favor of tenancy, or to what extent renting was chosen in preference to sharecropping in the period immediately following the War. The first comprehensive data of this type were collected with the 1880 census. We have displayed in Table 1 the distribution of farms by form of tenure, based on the census returns for the major cotton

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<sup>18</sup>We recognize that this simple division oversimplifies the complexities of agricultural tenancy in the South. At least three forms of sharecropping and two forms of renting were common, and they varied in regard to the controls and risks involved to both parties. This will be taken up in detail in the section on tenure below.

<sup>19</sup>In addition to the differences in the degree of control over labor afforded by the two systems to the landlord, sharecropping and renting involved a different distribution of the risk between landlord and tenant, and this factor was of some importance in the choice of tenure. See the discussion in the section on tenure below.

Table 1. Distribution of farms by form of land tenure, 1880.

State	Owners	Renters	Sharecroppers	Total
South Carolina				
Number	46,645	21,974	25,245	93,864
Percentage	49.7	23.4	26.9	100.0
Georgia				
Number	76,451	18,557	43,618	138,626
Percentage	55.1	13.4	31.5	100.0
Alabama				
Number	72,215	22,888	40,761	135,864
Percentage	53.2	16.8	30.0	100.0
Mississippi				
Number	57,214	17,440	27,118	101,772
Percentage	56.2	17.1	26.6	100.0
Louisiana				
Number	31,286	6,669	10,337	48,292
Percentage	64.8	13.8	21.4	100.0
Total, five states				
Number	283,811	87,528	147,079	518,418
Percentage	554.7	16.9	28.4	100.0

Source: U. S. Census [96], pp. 28-29.



growing states of the South. As the table indicates, sharecropping was more prevalent than renting, and the two forms of tenancy combined accounted for nearly half the farms in the South. The remaining category, owner-operated farms, in reality consisted of two distinct types of farms. Approximately thirty percent of this group were family-operated farms, while the remainder continued to employ wage labor on large plantations. That these plantations continued to employ a large share of the labor force in agriculture is demonstrated in Table 2, which constructs estimates of the number of wage laborers in 1870 and 1880 in the same five Southern states. According to these rough calculations the proportion of agricultural labor working for wages was about 40 percent in 1870 and 18 percent in 1880.

A major implication of the shift away from the plantation system to tenant farming was a dramatic change in the size distribution of farms. No longer was cotton production characterized by the large plantation; it was now the product predominantly of small, single-family farms. Table 3, presenting statistics on the average size of farms from the 1860, 1870, and 1880 censuses, illustrates the extent of this fall in farm size.

It is certainly not accurate to suggest--as some writers have done--that this decrease in farm size represented a widening distribution of land ownership. For the fall in farm size was undoubtedly related to the rise in tenancy.<sup>20</sup>

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<sup>20</sup>These issues are discussed in more detail in the section on farm size below.

Table 2. Computation of the approximate number of wage workers in South Carolina, Georgia, Alabama, Mississippi, and Louisiana for 1870 and 1880.

Occupation	1870	1880
	(Thousands)	
(1) Farmers, Planters, Overseers, and Foremen	315.4 <sup>a</sup>	563.9 <sup>b</sup>
(2) Agricultural Laborers	916.3 <sup>a</sup>	1,079.2 <sup>b</sup>
(3) Estimated Number of Home-Farm Workers <sup>c</sup>	428.6	777.6
(4) Approximate Number of Wage Workers <sup>d</sup>	487.7	301.6
(5) Total Population Employed in Agriculture <sup>e</sup>	1,235.1 <sup>f</sup>	1,652.7 <sup>g</sup>
(6) Wage Workers as a Percentage of All Agricultural Occupations	39.5	18.3

<sup>a</sup>Source: U.S. Census [98], pp. 674-675.

<sup>b</sup>Source: U.S. Census [97], pp. 76-761, 768.

<sup>c</sup>Estimated by multiplying the number of farms in 1870 and 1880 by 1.5. This estimate for the number of home-farm workers per farm was derived from a sample of Southern farms in 1880.

<sup>d</sup>Row (2) less row (3).

<sup>e</sup>Row (1) plus row (2) plus a residual group which includes apiarists, dairymen, florists, gardeners, nurserymen, stock-drovers, stock-herders, stock-raisers, turpentine farmers, turpentine laborers, and vinegrowers. In 1870 this group numbered 3,432 and in 1880 it numbered 9,635.

<sup>f</sup>Source: U.S. Census [98], pp. 670-671.

<sup>g</sup>Source: U.S. Census [97], p. 712.

Table 3. Average size of farms: 1860, 1870, and 1880.

State	Total Acres per Farm		
	1860	1870	1880
South Carolina	488	233	143
Georgia	430	338	188
Alabama	346	222	139
Mississippi	370	193	156
Louisiana	536	247	171

Source: U.S. Census [96], p. 25.



The small tenant farms which appeared throughout the South in the period following the Civil War were not, as might be expected, engaged in subsistence farming. In place of the production of food these farms concentrated on the production of staple crops, such as cotton, sugar, tobacco, and rice. These cash crops provided the only income of the farm family, which was spent primarily for food and clothing. This concentration on a marketable crop made the tenant farmer dependent upon the local merchant for his supplies.

The Southern merchant was the key to the entire system of agriculture which developed following the War. His existence not only permitted even the small farmer to concentrate on staple production, but the merchant also became the chief financial intermediary in the South.

The ante-bellum system of banking and credit was destroyed by the War, and the task of rebuilding it was hampered by the Federal banking laws. In 1864 Congress passed the National Banking Act ([73], Chapter 106, pp. 99-118) and a year later added a ten-percent tax on the note issues of state banks ([74], Chapter 78, p. 484). Though entry into banking was nominally free, the National Banking Act required, in effect, a minimum of \$50,000 capital paid in. The note issue and deposits of the banks were more stringently controlled than state banking had been in the past, and a further provision of the 1864 Act held that a National Bank could not ". . . hold possession of any real estate under mortgage, or hold the title and possession of any real estate purchased to secure any debts to it for a period longer than five years" ([73], p. 108). This prohibition of mortgage loans not only discouraged the re-emergence

of Southern banks, but it also curtailed the extension of credit to landowners by the few banks which did appear.<sup>21</sup>

Immediately after the War, the absence of banks hampered the attempts of the large cotton factors to resume their operations along the prewar pattern. Planters, unable to obtain credit from factors or from banks, had great difficulty meeting their wage payments and providing for the other costs of growing cotton. This was an important factor in the decision to abandon the wage system. With the spread of tenancy, the demand for credit came from small farmers rather than large plantations. The result was the emergence of the "merchant-banker" as an important credit intermediary in the South.<sup>22</sup>

The Southern merchant was, of course, present in the ante-bellum economy, where he often served as the principal source of supply for the many small family farms which co-existed with the slave plantations.<sup>23</sup> This system of merchandising was disrupted by the War, but quickly revived from the stimulus of high prices and shortages of provisions brought on by the War conditions. Commission merchants apparently appeared at every

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<sup>21</sup>See Sylla [86] for a persuasive argument that the restrictions of these acts effectively curtailed entry into Southern banking (pp. 659-665). Sylla also notes that the resulting monopolization of Southern banking produced higher interest rates on loans than might have existed in a competitive market (pp. 667-670). Additionally, provisions of the National Banking Act regarding reserves led to a diversion of loanable funds from the country banks to banks in one of 19 "reserve cities" (p. 666).

<sup>22</sup>For accounts of the Southern store and its credit arrangements, see Clark [18], [19]; Bull [13]; and Woodman [109].

<sup>23</sup>On the ante-bellum merchant in the South, see Atherton [4].

small town throughout the South as Northern merchants, discharged soldiers, and other entrepreneurs did not fail to recognize the opportunity.<sup>24</sup>

The large influx of entrants brought about by the profits of wartime shortages did not appear after the scarcity subsided.<sup>25</sup> They were able to find a new source of demand arising from the newly created family farms produced by the widespread adoption of tenancy. In dealing with this clientele, the postwar merchant found that he possessed a unique advantage; he had an established relationship with the Northern credit market. The wholesale suppliers in the North were willing to send goods on commission, allowing him, in turn, to grant credit to the local populace. The merchants, of course, charged a price for this service. The most widespread practice involved the use of higher prices for those items bought on credit than for those purchased with cash (Clark [18], Bull [13]).

As security for the credit advanced, the merchant demanded a mortgage on either livestock, land, or the growing crop. In the case of the sharecropper, who had no claim to land or other assets, he could only pledge his crop. This development was fostered--and indeed made possible--by the enactment of crop-lien laws which permitted the merchant to enforce such contracts. The lien gave the merchant legal title to the

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<sup>24</sup>See the remarks of Reid [70], pp. 481-482; Somers [80], pp. 70, 214-243; and Clark [18].

<sup>25</sup>The impressions of travelers are in this case supported by data from the census, which show a marked rise in merchants and related trades in the occupations for Southern states in 1870 and 1880. U.S. Census [95], [97], [98].



farmer's future crop.<sup>26</sup> This gave the merchant considerable control over the farmer.

The lien took away the freedom of the farmer to dispose of his crop in the most advantageous manner, as well as the option of shopping around for supplies. Having only one crop to offer as collateral, he was effectively committed to engage in all transactions--buying and selling his output--with the merchant holding the lien on his crop.

This drastic reorganization of the Southern financial system accompanied the changes in the size distribution of farms, the form of tenure, and the pattern of agricultural production. In this paper we shall discuss a few of the issues raised by the history of the readjustment to free labor. In particular, we have chosen the following topics:

- I. The change in the size distribution of farms and the implications for agricultural efficiency.
- II. Factors leading to the spread of tenancy.
- III. The connection between the merchant-banker and the disappearance of self-sufficiency.
- IV. The impact of racism on agricultural organization.

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<sup>26</sup>On the early passage of lien laws, see Zeichner [113]; Banks [5], Chapter III; Hammond [37], Chapter V; and Brooks [10], Chapter III. There can be but little doubt that the lien system was widespread. See the remarks by Hemphill [41] regarding South Carolina; by Janes [48] regarding Georgia; and by Hammond [37], Chapter V; and "Southerner" [81] regarding the South in general.

## A SAMPLE OF SOUTHERN FARMS IN 1880

To investigate these issues, we found that we required data on tenure, race, and agricultural production which were not immediately available from published sources. These data are contained in the manuscript schedules of the Tenth Census of Population and Agriculture, taken in 1880.<sup>27</sup> These manuscripts list separately every individual and every farm enumerated in the census. By combining the information on the farm operator and his family from the population schedules with the characteristics of each farm from the agricultural schedules, we were able to obtain a cross section of Southern agriculture in 1880.<sup>28</sup>

Because of the limitations imposed by a shortage of both time and funds, it was clearly impossible to collect the data from the manuscript returns for every farm in 1880. The obvious solution, which we employed, was to collect a sample of the total farms. For the purposes of our study, we divided the eleven former Confederate States into sixty-one

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<sup>27</sup>It was decided not to attempt an extensive analysis of the 1870 returns for two reasons. First, that Census suffered from a number of deficiencies, particularly affecting the Southern states and the Negro population. A second disadvantage of that Census from our point of view, was the failure of the Agricultural Census to record the tenure of the farm operator. Since a major concern of our work is the question of land tenure, the 1870 returns are much less useful than those of 1880, which did report this information. The manuscript schedules for both population and agriculture from the Census of 1890 were destroyed by fire (Davidson and Ashby [22]).

<sup>28</sup>The manuscript reports of population have been retained by the National Archives and are available on microfilm from the General Services Administration. For details see Davidson and Ashby [22]. The manuscript schedules for agriculture were returned to the states in 1918-19. Fortunately, the documents for fifteen Southern states have been collected and microfilmed. These microfilms are available from the University of North Carolina. For details of this collection, see Boone [8].

regions which reflected homogeneous economic characteristics. We then selected one or more counties from each of these regions to include in our sample. From each of these key counties we drew a sample of at least ten percent of the farms enumerated by the Census.<sup>29</sup> The final sample will include close to 12,000 farms. Since each farm operator selected for the sample from the agricultural schedule must be located in the population schedule, the process of collecting the sample is a tedious one and is not yet complete. The results of this paper are based on the preliminary findings from 14 of our sample counties. We have selected these counties from the three major cotton growing regions in the South: the central cotton belt of South Carolina and Georgia; the black belt of Alabama and Mississippi; and the Yazoo-Mississippi Delta region of Mississippi and Louisiana. We have also included counties from three regions which have distinctly poorer lands. Table 4 lists the counties for which results have been examined. A map showing the 14 counties and the boundaries of the regions they represent follows the table.

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<sup>29</sup>For a discussion of the sampling procedure, see Ransom, Sutch and Boutin [69], and Ransom and Sutch [67] and [85].



Table 4. Counties chosen to represent the cotton-growing area of the South in 1880.

Area	State	County	No. of farms sampled	
Central Cotton Belt	South Carolina	Barnwell	161	
	Georgia	Twiggs	88	
		Terrell	<u>81</u>	330
Black Belt	Alabama	Lowndes	369	
		Dallas	241	
	Mississippi	Clay	<u>204</u>	814
Alluvial Basin of the Yazoo and Mississippi Rivers	Mississippi	Tunica	73	
		Washington	47	
	Louisiana	Madison	31	
		Concordia	<u>163</u>	314
Other Regions				
S.W. Georgia and N.W. Florida	Georgia	Thomas	83	
	Florida	Gadsden	<u>87</u>	170
Tuskegee Region	Alabama	Russell	<u>281</u>	281
Gravelly Hills	Alabama	Bibb	<u>114</u>	<u>114</u>
				2,023

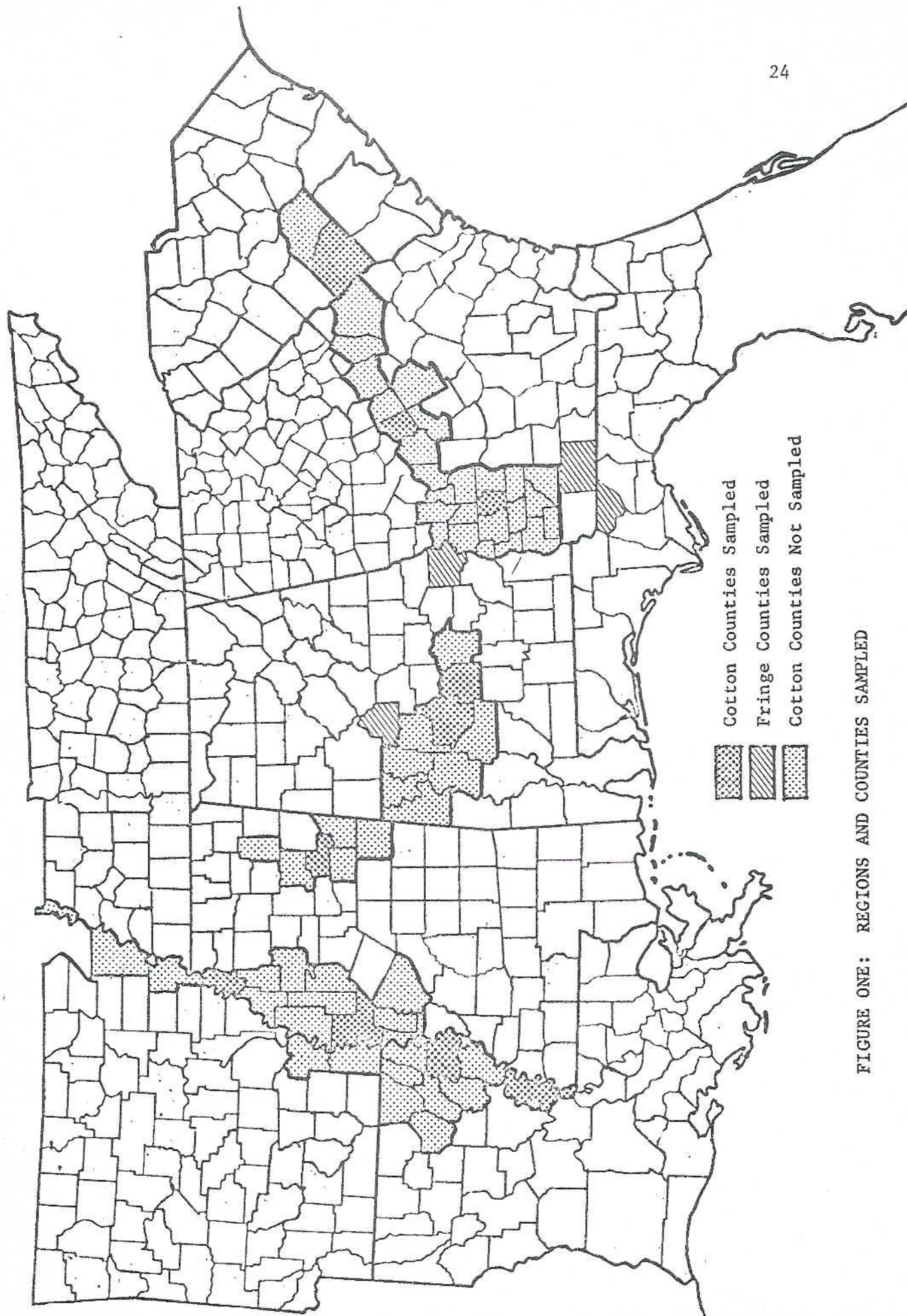


FIGURE ONE: REGIONS AND COUNTIES SAMPLED

## CHANGE IN SIZE DISTRIBUTION OF SOUTHERN FARMS

One of the most dramatic changes accompanying the reconstruction after the Civil War was the decline in the average size of Southern farms. We have already displayed in Table 3 the extent of this shift. In only four regions of the South did large-scale farming persist after the War. Two of these, the northern Piedmont, western valleys region of Virginia, and the Louisiana sugar region, were not cotton-growing areas. One of the other two was the alluvial delta of the Yazoo and Mississippi Rivers; the remaining region was the central cotton belt of Georgia.<sup>30</sup> However, even these regions saw considerable erosion in use of the plantation system.

The size distribution of farming units in five cotton-growing states is compared in Figure 2 for the years 1860 and 1870.<sup>31</sup> The number of units with less than 100 acres increased remarkably while the number of units 100 or more acres fell substantially.

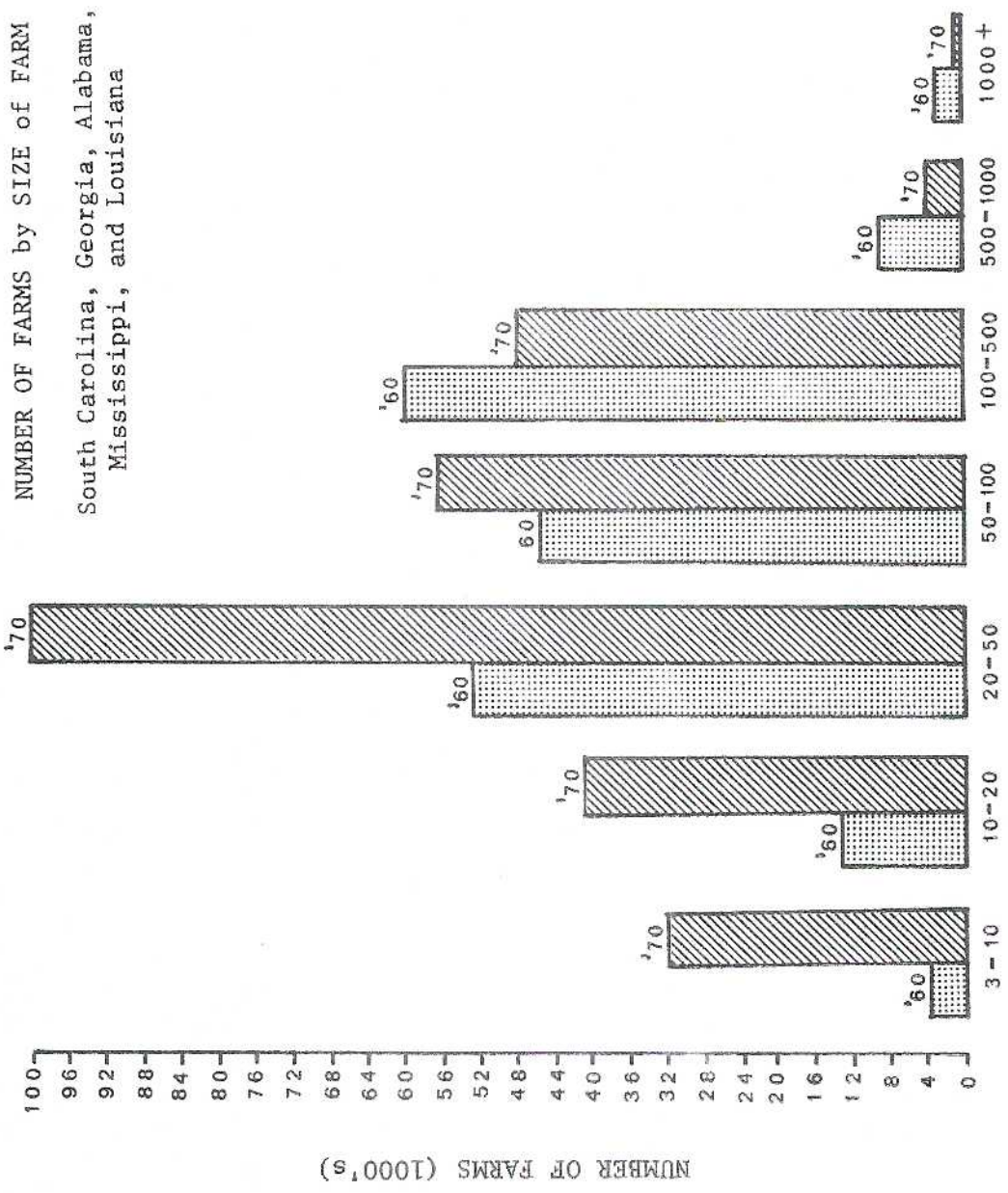
Many writers have maintained that this shift towards smaller farming units represented the rise of a new class of small-farm owners.

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<sup>30</sup>In 1880, there were only 31 counties of the total of 870 in the eleven Confederate States (excluding western Texas and southern Florida) where the average number of tilled acres per farm exceeded 100 acres. Seven of these counties were in Virginia; eight more were in the Louisiana sugar area; seven were in the Mississippi River alluvial basin; and seven were in southwestern Georgia. Of the remaining two, one was in western Louisiana and the other was in southern Mississippi; both sparsely settled areas. Computed from data in U.S. Census [96].

<sup>31</sup>The distribution for 1880 could not be included in the comparison because the figures published for that census distributed the farms by total acres rather than improved acreage as was done in the previous censuses. Source for Figure 2: U.S. Census [96].





100  
96  
92  
88  
84  
80  
76  
72  
68  
64  
60  
56  
52  
48  
44  
40  
36  
32  
28  
24  
20  
16  
12  
8  
4  
0

This idea appears to have originated with an article by Henry Grady published in 1881 ([33], pp. 721-723). Grady was cited by M. B. Hammond who buttressed the argument by citing census statistics similar to those displayed in Table 3 ([39], pp. 457-458; [38], pp. 127-130). Hammond in turn was the principal reference of the leading Southern historians.<sup>32</sup>

Despite its popularity, this interpretation is certainly incorrect. R. W. Shugg, using Louisiana tax records, has demonstrated that the size distribution of land ownership did not shift towards equality after the War.<sup>33</sup> In fact, the data presented by Shugg show an increase in the concentration of land ownership after the War ([77], pp. 238-241).<sup>34</sup> While this evidence is restricted to Louisiana, statistics on landownership compiled in the census taken in 1900 strongly confirm the impression that plantations were not broken into individually-owned farms after the Civil War (Powers [65], pp. 310-317).<sup>35</sup> In Table 5 the concentration of

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<sup>32</sup>For example, see P. A. Bruce [11], p. 59; [12], p. 19; and E. Q. Hawk [39], p. 429. This interpretation also spread to such general history texts as Beard and Beard [6], p. 269; and Morison and Commager [55], p. 627.

<sup>33</sup>The argument that the spread of land ownership accounted for the fall in farm size was earlier challenged by Stone [84]. This point has also been discussed by Taylor, who noted that Stone's criticism helped convince the Census Bureau to change its means of classifying farms ([88], pp. 141-142). Also see Brooks [10], pp. 41-45.

<sup>34</sup>"Between 1860 and 1880 there was nearly a threefold increase in the number of plantations while the number of farms actually decreased. The tendency of the larger properties to outstrip the smaller was strong between 1860 and 1873, and was only partially counteracted in the later years of reconstruction" ([77], p. 241). Also see Shugg [78].

<sup>35</sup>The censuses prior to 1900 took the Census of Agriculture by farm operator and did not record the farm owner. Hence neither the published nor manuscript data can be used to determine the ownership of tenant farms prior to this date.

Table 5. Percentage of all farms which were tenant farms held by landowners with more than one tenant, for five Southern states, 1900.

	Percentage held by owners of more than:				19 tenant farms	Tenant farms as % of all farms	Average number of tenants <sup>a</sup> per owner
	1 tenant farm	4 tenant farms	9 tenant farms	19 tenant farms			
South Carolina	19.6	11.3	7.1	5.0	43.0	4.2	
Georgia	21.7	10.3	5.8	3.6	41.3	3.5	
Alabama	15.5	9.7	7.5	8.3	41.1	5.0	
Mississippi	15.3	9.9	8.3	12.6	46.1	5.3	
Louisiana	13.3	8.4	7.8	14.2	43.6	5.3	
Total	17.3	10.0	7.3	8.4	42.9	4.6	

<sup>a</sup>Includes only farms held by landlords with more than one tenant.

Source: Computed from data in Powers, U.S. Census [65], pp. 312 and 688.



ownership is illustrated by the fact that over 15 percent of all farms in the five cotton states were tenant farms owned by landlords having ten or more tenants in 1900. Over 40 percent of the farms were owned by landowners with at least two tenants. That the plantation system was retained as the form of organizing agriculture is further shown by a more detailed study of plantation farming in the South accompanying the 1910 Census [90]. This report enumerated a sample of tenant plantations which included five or more tenant families.<sup>36</sup> Over 39,000 such plantations were recorded, containing just over 398,000 tenant farms. These farms represented 42.1 percent of all farms and 39.0 percent of tilled land in the five states of Table 5.<sup>37</sup>

The manuscript data can help shed additional light on this question. The censuses for 1860 and 1870 asked for estimated value of real estate for each individual. From this, a rough distribution of landed wealth can be constructed.<sup>38</sup> If the above arguments are valid, the distribution of real estate in 1860 and 1870 should be relatively unchanged. We have constructed a distribution of real estate by landowners for Dallas

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<sup>36</sup>The 1900 data did not indicate whether or not the tenant farms were a single operating unit. The 1910 study defined a tenant plantation as: "considerable area under general supervision or control of a single individual or firm . . ." ([90], p. 878). Data for the 1910 study were collected for 347 counties in the South.

<sup>37</sup>Computed from [90], p. 889.

<sup>38</sup>The reliability of the wealth data of the two censuses remains open to some doubt. At the time of the 1870 Census the data were questioned on the grounds that persons were unwilling to respond to the question, and that they tended to under-report real estate due to fear of increased property taxation. For these reasons the 1870 data were not published, and the questions were omitted in 1880. See Walker and Seaton [106].

County, Alabama which is displayed in Table 6. There is very little change, although the 1870 distribution is slightly more equal. Such a difference can be explained in large part by the reporting problems which tended to understate large holdings.<sup>39</sup> The distributions are not dissimilar enough to warrant a conclusion of marked equalization in landownership during the decade.

While none of this evidence is as comprehensive or definitive as could be desired, it appears to be adequate to reject the argument that the change in the size distribution represented a fragmentation of land ownership. What appears to have happened, rather, was that the ante-bellum plantation was subdivided after the War into many small tenant farms. Evidence for this interpretation is given in Tables 7 and 8. Eighty-seven percent of the farms 100 acres or less were either rented or sharecropped. Moreover, seventy-nine percent of the farms under 50 acres were operated by tenants.

It is commonly argued that the large-scale plantation before the War enjoyed substantial economies of scale.<sup>40</sup> The question then arises whether the decline in farm size after the War had a significant impact on agricultural efficiency. Unfortunately, we cannot employ aggregate data to approach this question, for an observed decline in efficiency

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<sup>39</sup>The total value of reported real estate in Dallas County in 1860 was \$15.7 million, reported by 1,070 individuals. In 1870 the total value was \$6.03 million, reported by 1,109 individuals. The absence of individuals reporting very large holdings of real estate in 1870 is quite pronounced: in 1860 fifty people reported \$50,000 or more; in 1870 only seven did so.

<sup>40</sup>This position is best summarized by the discussion in Gray, who draws upon a wide variety of sources to document the case in support of scale economies in the production of staple crops ([35], pp. 478-480).

Table 6. Distribution of real estate by landowners in Dallas County, Alabama, 1860 and 1870.

Percent of landowners ranked by value of real estate	Percent of real estate held in 1860	Percent of real estate held in 1870
Lowest 10%	0.2	0.3
Lowest 20%	0.9	1.2
Lowest 30%	2.1	2.3
Lowest 40%	3.7	4.2
Lowest 50%	6.2	7.0
Lowest 60%	9.9	11.3
Lowest 70%	15.7	17.3
Lowest 80%	24.9	27.0
Lowest 90%	39.6	43.0
Lowest 95%	52.8	56.9
100%	100.0	100.0

Source: Compiled from the manuscript Population Census returns for Dallas County, Alabama, 1860 and 1870.



Table 7. The number of small and large farms by improved acres, 1860 and 1870.

State	Under 100 acres <sup>a</sup>		500 acres and over	
	1860	1870	1860	1870
South Carolina	15,246	43,995	1,841	594
Georgia	31,482	50,541	3,594	1,925
Alabama	33,897	54,163	2,712	1,500
Mississippi	23,250	57,999	2,349	1,086
Louisiana	10,794	23,251	1,532	792
Total, five states	114,669	229,949	12,028	5,897

<sup>a</sup>Includes only farms tilling three acres and over.

Source: U. S. Census [96], p. 27.

Table 8. The distribution of farms in South Carolina, Georgia, Alabama, Mississippi, and Louisiana by size and tenure of farm operator, 1880.

Size and tenure class	Number	Percentage of size class in specified tenure	Percentage of tenure class of specified size
Under 50 acres			
Owners	46,037	21.2	16.2
Renters	61,807	28.5	70.6
Sharecroppers	108,898	50.2	74.0
Total	216,742	100.0	41.8
50 to 100 acres			
Owners	59,245	63.1	20.9
Renters	12,970	13.8	14.8
Sharecroppers	21,717	23.1	14.8
Total	93,932	100.0	18.1
100 to 500 acres			
Owners	149,851	85.1	52.8
Renters	11,102	6.3	12.7
Sharecroppers	15,195	8.6	10.3
Total	176,148	100.0	34.0
Over 500 acres			
Owners	28,678	90.8	10.1
Renters	1,649	5.2	1.9
Sharecroppers	1,269	4.0	0.9
Total	31,596	100.0	6.1
All sizes			
Owners	283,811	54.7	100.0
Renters	87,528	16.9	100.0
Sharecroppers	147,079	28.4	100.0
Total	518,418	100.0	100.0

Source: U. S. Census [96], pp. 26, 28, 29.

might easily be accounted for by the supposed inefficiencies of share-cropping, by monopoly in the credit market, or a host of other simultaneous phenomena accompanying emancipation and reconstruction. Nevertheless, by investigating the possible sources of the economies associated with large-scale operation before 1860, we can hope to assess the extent to which these factors would operate after the change in agricultural organization.

In contrast with the dearth of literature on the efficiency of Southern agriculture after the Civil War, there exists a substantial body of work on the slave plantation. Since Lewis Gray stated the case for the existence of significant economies of scale in his monumental study of Southern ante-bellum agriculture ([35], pp. 478-480), various writers have taken issue with one or more of the points he raised.<sup>41</sup>

Perhaps the most obvious advantage of large scale was the gain from spreading the fixed cost of capital expenditures over larger units. Most writers concede the importance of capital indivisibilities in rice (where levies and irrigation are significant costs) and sugar (with the need for refining equipment on the plantation).<sup>42</sup> However, even Gray

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<sup>41</sup> Among contemporaries of Gray, Robert Russel [71] was a leading critic. More recently Gaven Wright [112], in an unpublished Ph.D. dissertation, takes issue with the notion of efficiencies associated with large-scale operation.

<sup>42</sup> See Russel [71], p. 114; Gray [35], p. 479; and Reid [70], p. 472. It is interesting to note in this regard that the sugar and rice parishes of Louisiana did not show a fragmentation of farm size after the War. It might be suggested that economies of scale in sugar cultivation and refining provided an economic incentive to resist the creation of small tenant farms in the sugar and rice districts. In the rice districts of South Carolina and Georgia, however, the economies of scale did not prevent a shift to tenancy.



([35], p. 479) recognizes that the case for cotton was less clear cut. Very little machinery was required to grow cotton. Beyond teams, plows and hoes, the only significant fixed capital outlay would be for the cotton gin and press. However, Russel insists that this equipment was available for a fee to all producers either from a large planter in the region or from a public gin house ([71], p. 115).

Indivisibilities in the capital costs upon the farm do not appear to be significantly great beyond farms of twenty acres. In Table 9 the value of implements per reported acre are distributed by size of farm for our sample counties. Except for the size class 0-19 reported acres, there appears to be no significant difference as farm size increases.<sup>43</sup> It would appear from these data that the small farm did not operate under a disadvantage arising from capital indivisibilities. It was not until the early decades of this century that mechanization of cotton production became a possibility and produced an economic advantage to consolidation.

Several of the advantages of large-scale operation supposed to operate in the ante-bellum South were associated with slavery. Of primary importance was the argument that considerable economies of scale could be achieved in the management of slave labor. As Olmsted put it: "A man can compel the uninterrupted labor of a gang of fifty cotton-hoers almost as absolutely as he can that of a gang of five" ([57], p. 226). That this should be so, argues Phillips, is because of the division of

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<sup>43</sup>The test of significance applied was the standard test for the difference of means from two sample populations.

Table 9. Value of farm implements per reported acre, sample counties, 1880.

Region	Size of farm: reported acres				
	0-19	20-49	50-99	100-499	500+
Central Cotton Belt	\$1.26	\$ .58	\$ .79	\$ .80	-- <sup>a</sup>
Black Belt	1.32	.93	.71	.78	-- <sup>a</sup>
Alluvial Region	2.32	1.86	1.43	2.59	2.96

<sup>a</sup>Less than five farms reporting.

Source: Computed from the Manuscript Census of Agriculture, 1880.

labor and the simple nature of the task to be performed.<sup>44</sup>

On the other hand, Russel has argued that the division of labor was as much a difficulty as a boon ([71], p. 115). He pointed out that the routinization of tasks lead to a boredom which reduced efficiency, and that the division of labor led to an inflexibility which prevented its efficient redirection. " . . . [T]here would have been a moral difficulty about sending a dignified coachman to plow or 'chop'" ([71], p. 115). It has also been suggested that the Olmsted quote might exaggerate the economies of scale associated with overseeing.<sup>45</sup> To the extent that economies of this sort derive from the fact that the labor being managed was coerced, rather than free labor, emancipation would have removed these advantages. On the other hand, if the economies

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<sup>44</sup>" . . . the great characteristic feature and the strength of the plantation method was in its division of labor and above all in its arrangement for the performance by the Negroes of a labor nearly always of a routine character. The routine system was the only system by which the unintelligent, involuntary Negro labor could be employed to a distinct advantage; and, other things being equal, the most successful planter was always he who arranged the most thorough and effective routine. . . . [The] plantation system was probably the most efficient method ever devised for the use of stupid labor in agriculture on a large scale" (Phillips [63], pp. 804-805). Gray also accepts this argument, although he eschews the racist overtones ([35], p. 479). Stampp supports this view, citing the same quote from Olmsted as in the text (Stampp [83], pp. 412-413).

<sup>45</sup> Stampp, for example, seems to suggest that with a few slaves labor management could be handled easily through direct personal relationships while the overseer with many slaves under his direction found it difficult to give individual attention to each worker (Stampp [83], p. 54). Russel also suggests that the number of slaves which could be efficiently supervised by an overseer was small; however, his assertion was based primarily on tobacco rather than cotton culture (Russel [71], pp. 115-116). It should be pointed out that Gray cites evidence that the typical overseer had fifty to one hundred hands under his direction (Gray [35], p. 546).



associated with large-scale overseeing were primarily derived from the advantage of the work-gang system, they might still be available after the War. It is also possible that the scale advantages attributed to the overseeing function represented the spreading of the high cost of good managerial skills over more acres.<sup>46</sup> However, if this were the case, there need be no loss of efficiency in breaking up the large plantation into many small units. The landowner could still exercise control over the sharecropper and hence realize the gains of his entrepreneurial ability.<sup>47</sup>

The only remaining source of technical efficiency of the large slave plantation mentioned by Gray was the ability of the large planter to mobilize a larger labor force during the peak labor demand at harvest (Gray [35], p. 479). The large planter could call upon the domestic servants, the blacksmiths, the coachmen, etc., to help harvest, while the small planter, not addicted to conspicuous consumption, did not have this added labor available. It is not at all clear why this effect operated as an economy of scale; it implies that the large planter should be able to find more productive work for his slaves during the slack season than the small farmer. Whatever validity this point has, it seems to be more an advantage of slave over free labor than a gain to large-scale farming. As such, these advantages would disappear after emancipation.

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<sup>46</sup>Gray seems to suggest that this is the case ([35], p. 479). On the other hand, Wright seems skeptical that managerial skills are an important factor in ante-bellum agriculture ([112], pp. 54-55, 122, 231).

<sup>47</sup>This point has been mentioned by Taylor [88], p. 143.

It would appear from the foregoing discussion that the case for technological economies of scale in the ante-bellum economy is weak. Moreover, those factors which favored scale were generally associated with the existence of slavery or are connected with the distribution of entrepreneurial talent and therefore become irrelevant in the postwar period.

Recently Gaven Wright used a sample of Southern farms drawn from the 1860 manuscript schedules of the Census of Agriculture to test for the existence of economies of scale ([112], Chapter IV). Wright employed a regression technique to test whether output per hand was associated with the scale of the plantation after correcting for the influences of diversification, land quality, and capital intensity. He concluded that, with the exception of the alluvial regions along the Mississippi River, "economies of scale were limited, and that there is much evidence of decreasing returns" ([112], p. 147; italics in original). On alluvial soil he found no evidence of decreasing returns to scale. This finding suggests that the persistence of large-scale farming after the War on alluvial soil along the Mississippi River north of Natchez can be accounted for by the presence of economies of scale.<sup>48</sup>

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<sup>48</sup>It should be pointed out, however, that several of the alluvial counties did not retain large-scale farming in 1880. Concordia Parish, Louisiana, is a particularly noteworthy example. Although it had some of the best cotton land in the South, the average size of farm in 1880 was just over 30 tilled acres. This compares with Issaquena County, across the river in Mississippi, which had an average of 389 tilled acres per farm. It is also interesting to note that by 1890, small farms were much more common in the alluvial area than ten years earlier.

It leaves open, however, the explanation for the large size of farm in the central cotton area of postwar Georgia. It is possible that Wright failed to uncover similar economies of scale here because he aggregated this region into a much larger one, which he designated the "central plain," extending from North Carolina to Mississippi.

Wright also concludes on the basis of this work that it does not ". . . appear that the large plantations achieved their size by virtue of more efficient methods, managerial skills, or capital-intensive technology" ([112], p. 231). He does not deny, however, that substantial financial advantages to scale might have existed. The large farmer was better able to obtain credit in the market; able to bargain more advantageously for supplies; able to obtain lower rates for transportation, and higher prices for output.<sup>49</sup> Wright concludes that these factors were the likely explanation for the existence of large plantations ([112], pp. 147-148). Unfortunately, very little evidence has been uncovered which would indicate the magnitude of such gains. To the extent that they represent a substantial effect, they might provide part of the explanation for the continued dominance of large landholdings in the South after the War. The large landholder could continue to get these marketing advantages

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<sup>49</sup>The factors are noted by Gray [35], pp. 479-480. Gray also mentions an advantage from self-insurance against slave death. ". . . the possibility of loss by death was a considerable element in the risks of the individual planter. The risk was greater for small than for large planters, and this fact, accentuated by the rising price of slaves, appears to have been one of the reasons for the concentration of slave ownership which occurred just before the Civil War" (Gray [34], p. 39). This latter argument, of course, is without force for the post-bellum period.



by acting as agent for his tenants despite the fragmentation of production.<sup>50</sup>

It would seem, therefore, that, with the exception of the alluvial areas of the Mississippi River Basin and perhaps the central cotton area of Georgia, the economies of scale did not present an impediment to the introduction of small-scale farming in cotton production. Admittedly, the evidence we have presented is largely argumentative, and a further examination of the manuscript census data from the postwar period paralleling Wright's ante-bellum analysis is required before we can reach firm conclusions.<sup>51</sup> However, we can tentatively accept the conclusion that the rise of the small farmer did not by itself imply a loss of efficiency.

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<sup>50</sup> Additionally, as we noted above, the large landowner might also recoup rents which accrue to him as a result of his scarce entrepreneurial skills.

<sup>51</sup> There are several difficulties in employing the 1880 data for this purpose that were not encountered by Wright with the 1860 data. The information on labor inputs in 1880 is probably less reliable than that available to Wright. Nevertheless, we feel that significant results can be obtained from the data available. We are presently examining these questions using our 1880 sample of farms.

## THE RISE OF TENANCY

It appears that before the Civil War most Southern farms were operated by owners or their managers. There exist no data on tenure before 1880; however the scarcity of references to renting or sharecropping before the War has generally been used as evidence of their absence.<sup>52</sup> Owsley [59], [60] and others [17], [10], [16] have used the manuscript census data on real estate ownership to determine the percentage of families engaged in agriculture who owned real estate. This technique will provide a lower-bound estimate of the number of owner-operated farms since it includes families who did not operate farms, and excludes those farms which were manager-operated or whose owners for one reason or another refused to answer the question on real estate. Despite these imperfections, the statistics presented by these authors are uniformly high; generally in the neighborhood of eighty percent.<sup>53</sup> In contrast, barely half of all farms after the War were operated by their owners, and better than a quarter of the farms employed a form of tenure almost unheard of before the War: Sharecropping.<sup>54</sup>

While historians who have dealt with the period of Reconstruction have always noted the rise of tenancy, and many considered it an unfortunate occurrence, very few of these historians made an effort to

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<sup>52</sup>For example, Gray [35], pp. 646-647.

<sup>53</sup>Owsley [59], Chapter 5; Owsley and Owsley [60]; Weaver [107], pp. 63-67; Coles [16]; and Clark [17], p. 28.

<sup>54</sup>As we noted in our description of events, the proportion of farms being sharecropped immediately after the War (1867-69) was almost certainly much higher.

disentangle the various factors at work in producing the rise of tenancy.<sup>55</sup> The obvious suggestion that the rise of tenancy was associated with a definite economic advantage for tenancy is undermined by the fact that different forms of tenure existed side by side in the South for many years.<sup>56</sup> The contemporary literature reveals that the superiority of various tenure arrangements was hotly debated, and that no general agreement was reached. A survey of "experienced and intelligent agriculturalists" taken in 1874 in Georgia indicated that 66 percent favored wage payments, 23 percent favored sharecropping, and 11 percent favored renting. The same men reported that they were actually farming in the ratio: 21 percent wages, 49 percent sharecropping, and 30 percent renting (Janes [48], pp. 87-88). Both the survey conducted by Loring and Atkinson in 1869 [53], and that conducted by the Census Office in 1880 [42] also produced numerous conflicting opinions. Some farmers reported using several systems simultaneously.

This diversity of both opinion and practice has suggested to some that there were no significant differences in efficiency between tenure arrangements (Bray [9]). To others, it has been taken as evidence that non-economic frictions or obstructions prevented the optimal choice of tenure (Banks [5], p. 97). There exists an extensive literature on the

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<sup>55</sup> See, for example, the treatment by Shannon [76], Chapter IV.

<sup>56</sup> Of the 493 counties in 1880 which reported over 20% of their tilled land in cotton, all but one--Issaquena County, Mississippi, which reported no sharecropping--reported all three forms of tenure. Only eleven had less than five percent of the farms in sharecropping. These statistics were computed from data in the 1880 Census of Agriculture [96], pp. 30-101.



relative efficiency of sharecropping, cash renting, and owner operation.<sup>57</sup> While this debate in the literature has not yet reached a definite conclusion, we find the arguments presented by Johnson [49] that sharecropping need not result in an inefficient allocation of resources appealing when applied to the cotton South.<sup>58</sup>

Johnson demonstrates that the traditional argument for the inefficiency of sharecropping rests on the assumption that the landowner is willing to allow the tenant to determine the allocation of resources. In particular, if the tenant is free to specify the land-labor ratio, he has an incentive to combine more and more land with labor to the point where the marginal productivity of land becomes zero. Johnson points out that the landlord is unlikely to agree to such an arrangement. Johnson argues that the landlord will restrict the amount of land to each tenant family in order to prevent this wasteful use of land. He further suggests that the prevalence of the annual lease in sharecropping arrangements gives the landlord an effective means of controlling the

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<sup>57</sup> Perhaps the best study is that of Johnson [49]. The analysis dates back to Adam Smith and Alfred Marshall. Other important contributions are contained in Heady [40] and Cheung [15]. See the references in Johnson and Cheung for a more extensive bibliography.

<sup>58</sup> In a forthcoming working paper, the theoretical arguments for and against the efficiency of sharecropping will be examined in greater detail. It is our intention in this paper to use data from our sample of farms to test various theoretical propositions with empirical data. It is an interesting fact that despite the extensive theoretical debate on the efficiency of sharecropping, there are very few empirical studies on the subject. There appears to be only one such study based on Southern data prior to the mechanization of cotton farming. This is the 1913 study of the Yazoo-Mississippi Delta Region by Boeger and Goldenweiser [7]. They concluded that although sharecropping appeared to be less productive than leasing for fixed rents, the differences were associated with variations in the quality of land.

labor input of the tenant. The tenant is aware that the landlord has the option of leasing for a fixed rent and that unless the landlord's return under the sharecropping arrangement approximates that which he could receive under a fixed lease, the tenant will be unable to renew his contract in the future. Such a mechanism guarantees that sharecropping will be roughly as efficient as renting.<sup>59</sup>

If we accept the Johnson argument, that sharecropping, renting, and independent ownership were roughly equivalent at the margin, we must look to other aspects of the tenure arrangement to explain the pattern of tenure arrangements in the South. The actual alternatives facing the landlord were far more complex than the simple trilogy of owning, renting and sharecropping suggests. Moreover, since the questions of efficiency, risk, and race relations which played such an important part in the contemporary debates on the choice of land tenure depend crucially upon the contractual stipulations, it is important for us to establish the exact nature of the alternatives available.

Most sharecropping contracts were quite simple. They specified the amount of land to be tilled in each crop, the amount of capital to be supplied by the landowner, the proportion in which each of the crops was to be divided, the term of the lease, and frequently but not always a provision that the tenant should follow the landlord's advice about the

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<sup>59</sup>Johnson [49]. Johnson also presents an alternative model which has been recently revived by Chueng in which the tenant and landlord can achieve an optimal allocation of resources through negotiation of the terms of the sharecropping lease--including the rental percentage received by the landlord. Johnson rejects this model--correctly, we believe--on the basis that there is no evidence that the rental percentage was ever a subject of negotiation in the American South.

technique of production. Several generalizations about share contracts can be made. Except for the provision about the landlord's advice, the contracts did not stipulate the amount of labor or capital the tenant family would supply. The contracts were invariably drawn for one year's duration without a guarantee of renewal from either side. The crop specified was invariably cotton (or another cash crop such as tobacco or rice). Frequently additional acres would be allowed for corn and subsistence food crops. If the acreage was specified the corn output was shared but the subsistence food crops were generally not divided with the landowner.

Three distinct systems of sharecropping were employed. They varied only in the rental percentage received by the landlord and the amount of capital the landowner agreed to supply. By far the most widely practiced was the "cropping" system which stipulated a fifty-fifty split of the cotton and corn crops and required that the landowner supply the land, teams, buildings, and implements. Feed for the teams and seed were also generally supplied by the landlord, though occasionally the contracts would be silent about these items or stipulations that they be shared fifty-fifty. Costs of ginning the cotton and fertilizer (if used) were normally split fifty-fifty.

Also fairly common--although decreasingly so, was the "third and fourth" system, which derives its name from the stipulation that the landowner received one-third of the corn and one-four of the cotton. With this system the landlord supplied only the land, the tenant presumably supplied all the capital despite the silence of the contract upon the matter. The division of the corn favored the landlord more than the



division of the cotton presumably because cotton required more labor and capital inputs than corn. The third system, which was infrequently found, gave the landlord three-quarters of the crop in return for supplying all of the land and capital and in addition the board of the tenants.<sup>60</sup>

The rental share and the corresponding responsibilities of the landlord under these arrangements did not vary with the quality of the land, the relative scarcity or abundance of labor, or the year to year fluctuations in cotton prices. In fact, the evidence is quite strong that these terms were rarely departed from.<sup>61</sup>

By their nature a farm lease contract would be even more simple than a share contract. Under a lease arrangement, there is no need to specify the crops to be grown or the division of responsibility between landlord and tenant. The distinguishing feature of this form of tenancy was the specification of a rent fixed in advance. The contracts would frequently stipulate that the rent be paid in cash, or in a specified amount of cotton. A less frequently encountered form of renting involved the payment of labor services in exchange for the land. Under such an

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<sup>60</sup>The generalizations of the preceding three paragraphs are based on comments in Hilgard [42]. See especially Volume I, pp. 185, 366, 476, 526, 641, and 819; Volume II, pp. 165, 250, 438, 522, 609, and 643. For a good discussion of the fifty-fifty and the third and fourth systems, see Banks [5], pp. 79-83.

<sup>61</sup>This statement does not apply to the first two or three years of experimentation with sharecropping. There is evidence that before 1869 share contracts were made on decidedly less favorable terms to the tenant. (See Capron [14], p. 417, and Lightfoot [5]). After the system became established, however, the terms became standardized. The universality of the contract terms was noted frequently throughout the two volume report edited by Hilgard [42]. For examples, see Volume I, p. 356 and 476; Volume II, p. 165.

arrangement the laborer would work several days a week for the landlord. It would appear as though most fixed rent leases for small-family farms were annual contracts, while large plantations could be rented on a long-term basis.<sup>62</sup>

The landlord's alternative to adopting one of these forms of tenancy was to hire wage labor by the month or year. As the wage system emerged after the War, the form of the wage contract adopted was quite detailed. The contract terms stipulated the rate of pay, the duration of service, the duties expected of the laborer, provisions made for fines and penalties for absenteeism, and negligent or unsatisfactory performance. Quite generally, wages were paid monthly or quarterly and room and board were furnished by the employer. It was also a frequent practice to withhold some portion of the wage until the expiration of the contract as an insurance against the departure of the laborer prior to harvest.<sup>63</sup>

In addition to these contractual stipulations, the economic alternatives available to the landlord and tenant are relevant to their choice of tenure. In general, the laborer did not have an alternative occupation outside of agriculture before 1890. His major alternative to tenancy was to work as an agricultural wage laborer. Owning was another alternative available to the White tenant, but was not a realistic one for the Negro. The availability of an alternative employment in

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<sup>62</sup>Evidence on the duration of fixed rent leases is not as abundant as that for sharecropping contracts. General discussions can be found in: Hilgard [42] and Banks [5], pp. 86-88.

<sup>63</sup>For an extensive sampling of wage contracts right after the War, see the reports of the Freedman's Bureau [91], [47].



agriculture would limit the power of the landlord to exploit the tenant. Competition among landlords would also check the ability of any single landlord to obtain tenants at overly favorable terms. On the other side, the landowners had the alternative to contracting with a tenant of working the farm himself with wage labor or selling it to the laborer outright. These alternatives limited the willingness of the landlord to accept rents or share percentages substantially below the marginal productivity of land.<sup>64</sup>

The landowner's primary concern in choosing between the several alternative forms of tenure arrangements was in the amount of control he would execute.<sup>65</sup> In general, the more control the landowner had of the

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<sup>64</sup>It is worth mentioning that in some cases the terms of crop-lien contracts might limit the alternatives open to both the laborer and the landlord. Under these lien arrangements, a tenant who was unable to discharge his debt to the local merchant at the end of the year was required to renew his tenancy contract for the coming year. Merchants frequently required that the landlord countersign the lien note guaranteeing the debt if the tenant defaulted. Such provisions prevented the tenant from changing landlords unless he was clear of debt, and prevented landlords from discharging such tenants. The extent to which these provisions of a lien contract effectively closed off alternatives is an empirical question on which little direct evidence exists.

<sup>65</sup>Throughout this section we shall make frequent references to the preferences of landowners and laborers. For the most part these attitudes were the natural product of the two parties' economic interests when interpreted in the context of the Reconstruction period. As such they could be defended by standard economic theory. Nevertheless, we have been careful to see that every motive attributed to either party can be documented by comments of contemporary participants to the economic decisions. Rather than footnote these references repeatedly throughout the section, we shall refer here to the major sources from which we have drawn.

Testimony of planters and laborers can be found in the Freedman's Bureau Reports [43], [44], [45], [46], [47], [91], and [104]; in the Report of the Joint Committee on Reconstruction [100]; and in the surveys taken by the U.S. Census [42]; the U.S. Department of Agriculture [14], [23];



operations of the farm the better he liked the arrangement. The laborer, on the other hand, was most concerned with the degree of independence he would be allowed. Out of the resulting conflict of these two disparate views a compromise was reached, as would be expected in a bargaining process where both parties had comparable bargaining power.

The landowner emphasized control for several reasons; perhaps the most important of these was that he felt that a high level of control was required to achieve reasonable levels of efficiency. To the landowning class, prejudiced by years of experience with slavery, the Negro was viewed as an ignorant and shortsighted worker who could be employed efficiently only under the strictest supervision. Many planters and overseers were convinced that since the slave would not work without the threat and occasional application of corporal punishment, the free Negro would also prove to be an unwilling worker without the use of force.

The landowner felt that the wage system maximized the amount of control he could exercise. Not only did this system allow for strict control following the pattern established under slavery, but it also gave the landlord complete control over the use to which the land was put, which crops would be grown, how they would be cultivated, and to whom and when they would be sold. This would not have been the case with independent tenant farming. The Negro's lack of experience as a farm

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by various State Agencies [48], [50]; and by Loring and Atkinson [53]. We found particularly useful the report on "The Labor Question" delivered by W. H. Evans to the Farmer's Club of Society Hill, South Carolina, published in the Southern Cultivator in 1869 (see the lengthy extracts in Taylor [87]). Frequent comments are also found in DeBow's Review and other periodicals. We have also drawn on the reports of travelers such as Reid [70], Somers [80], Trowbridge [89], and Schurz [75].

manager was frequently cited by contemporaries as evidence that this direction from the landowner was essential. It was also frequently argued that the landowner required sufficient control to allow him to engage in an optimal pattern of investment expenditures designed to improve the farm and maintain its fertility. The tenant farmer with a short-term lease would have no incentive to engage in investments that did not provide an immediate payoff.

Efficiency arguments were not, however, one-sided in favor of the wage system. It was recognized that the laborer's incentive was impaired as a wage laborer. Tenant farming gave the worker an economic interest in the success of the crop and many farmers felt that this incentive was more powerful than the physical threat of punishment. Generally, however, it was suggested the economic incentive be used only as a substitute for strict supervision when the latter became impossible or too expensive.<sup>66</sup>

Control was also felt to be essential to maintain a working force throughout the entire season. Immediately after the Civil War there were numerous complaints on the part of landowners that they were unable to keep the laborers throughout the year. In the middle of the season they would leave one farm for another that promised higher wages or better quarters. This effect was viewed as a major disadvantage of the wage system. One contemporary view suggested that wages might lead "[t]o a

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<sup>66</sup>Evans' report before the Farmer's club suggested that share-cropping "stimulates industry by giving the laborer an interest and pride in the crop. This advantage undoubtedly exists, but not to the extent which was first anticipated. It has been found by experience that only a comparatively small part of the laborers of the country are influenced by these stimulants, but with this small class they certainly have a positive existence." Quoted in Taylor [87], p. 42.

competition for labor which may carry wages so high as to be ruinous to the farmer."<sup>67</sup>

Sharecropping and renting did not have this disadvantage. As the season wore on the marginal return to labor would rise. The tenant who left in mid-season would gain nothing for his efforts put forth at the beginning of the year. In an attempt to overcome the disadvantage of the wage system in this regard numerous modifications were attempted which would extend direct or automatic control to this aspect of labor management. Farmers withheld a portion of the wages due the workers until the completion of the harvest. Laws were passed which prohibited Negroes from leaving the farm without permission, and prohibiting one farmer from offering higher wages to the workers employed by another.<sup>68</sup>

A final aspect of the issue of control was race relations. Many Whites were reluctant to allow the Negro to attain a position of economic and social equality. These racist motivations led to a desire to see the Negro under the firm supervision of the White landowner. Independence for the Negro was considered a threat to the social superiority of the White man. The wage system gave the landowner the maximum amount of social control over the laborer, and was preferred to tenancy on that ground. Between the two forms of tenancy sharecropping was favored over renting since it entailed control by the owner. Independent farming by Negroes offered the least control and was denounced by racist commentators.<sup>69</sup>

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<sup>67</sup> Evans, as quoted in Taylor [87], p. 49.

<sup>68</sup> See Zeichner [113] for a discussion of this problem of control and the various laws passed to deal with the problem.

<sup>69</sup> See our comments on the impact of racism on Southern agricultural history in the last section of this paper.



The three aspects of control--efficiency, stability of the labor force, and racism--which concerned the landowners in the post-bellum South generally led them to prefer wages over sharecropping, sharecropping over renting, and renting over Negro ownership. Only the question of insuring adequate labor throughout the entire season led some of the landowners to favor sharecropping. The survey taken in Georgia in 1874, which we have already cited, reported that 66 percent of the farmers questioned preferred the wage system. Twenty-three percent favored sharecropping and only eleven percent favored renting. These preferences were expressed despite the fact that they were actually farming in the ratio: 21 percent wages, 49 percent sharecropping, and 30 percent renting (Janes [48], pp. 87-88).

The disparity between preference and practice undoubtedly reflects the fact that the freedman desired independence from the control which the landowner was seeking.

[Sharecropping was] regarded by the laborer as a higher form of contract, and is thereby more likely to secure labor especially in undesirable localities. It was this consideration more than any other, which at the outset led to the general adoption of the share contract. Then the colored laborer in the first flush of freedom--ignorant of the nature of his labor and of its dependence upon capital--seemed disposed to withdraw himself altogether from hire.<sup>70</sup>

The wage system was too similar to slavery to be to the liking of the Black. His first desire was to own his own farm. If this was denied him, he preferred to rent. Although sharecropping involved considerable control by the landlord and merchant the cropper at least had his own

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<sup>70</sup>Evans, quoted in Taylor [87], p. 42.

home and plot, an interest in the crop, and was not exposed to corporal punishment. He also could set his own hours for work and leisure. As a result he was often unwilling to hire out as a wage worker. As the commentator quoted above noted: the Negro "seemed disposed to withdraw himself altogether from hire." The result was that the bargain struck between landowner and laborer was a compromise for both parties. Generally, a share contract was chosen, particularly in areas with average lands and living conditions.<sup>71</sup> The landowner who held the best land was in a stronger bargaining position and was often able to hire wage laborers. It was the worst land which was rented or sold to Negroes.<sup>72</sup>

There is a second element which must also be taken into account in any attempt to explain the choice of tenure arrangements. Under each of the three major systems the risks were distributed differently. On a farm operated with wage labor the owner bore all of the risks associated with farming: the possibility of a bad crop as well as that of a fall in prices. Naturally, if conditions were abnormally good he also received the entire surplus. The wage laborer bore none of the risk. At the other extreme, if the landowner chose to rent for fixed payment he took none of the risks and the tenant bore them all. Sharecropping was a middleground where both the landowner and the tenant shared the risks.

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<sup>71</sup>The landowners' insistence on a degree of control probably explains the wider adoption of the "cropping" system than the "third and fourth" system. The latter gave very little control to the landowner compared with the alternative.

<sup>72</sup>These assertions are supported in the section on racism below.

In the years immediately following the War the price of cotton fell drastically and unexpectedly. Moreover, in many regions crop failures were produced by drought or the "Army Worm." As a result many farmers failed to make an adequate profit operating with the wage system. Coupled with the Negro's reluctance to work for wages, the attractiveness of sharing the risk with the laborer caused many farmers to switch from wages to sharecropping or renting. After the initial readjustment, the price of cotton stabilized and some farmers attempted to return to the wage system. As we have already noted there is evidence that sharecropping was at its peak in 1868 or 1869 and that it fell off somewhat in the succeeding years.<sup>73</sup>

A final element which was important in the choice of tenure was the enforcement cost involved with each type of contract. The wage contract had the disadvantage that it required continual supervision of the laborer. This supervision was expensive and was frequently mentioned as a reason for avoiding the wage system. The Farmer's Club report noted that:

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<sup>73</sup>In listing the advantages of sharecropping the Farmer's Club report mentions that:

It does not subject the farmer to loss from a failure of or decline in the value of his crop. This advantage has assumed I think an undue importance from the experience of last year [1868]. Such an extreme fluctuation in the value of our staple crop is not likely to occur again. It was the result of ignorance, both on the part of the producers and of the consumer, of the probable crop under the new system of labor. This advantage will with more propriety, be recognized by those who are planting lands subject to overflow or when from other causes the crop is extremely uncertain.

Evans, quoted in Taylor [87], p. 42.



It involves far greater labor in supervising and protecting the crop. This is a serious consideration where the landowner, I will not say farmer, has neither time or inclination to supervise closely, his interests, but ordinarily this advantage is more apparent than real. Indeed if it have the effect of compelling closer attention on the part of the proprietor, it will prove of the highest advantage. Close personal attention, is the great want, and if the wages system shall extort this from the indolent and reluctant farmer it will bring to him the highest boon. The farm will then become, not only a source of income, but a source of happiness, affording him useful and agreeable occupation.<sup>74</sup>

A share contract did not entail such heavy expenses, since the farmer could rely upon the tenants' economic interests to see that the work was performed properly. However, the share system did involve the difficulty of dividing the crop at the end of the harvest season. This problem was particularly acute if several laborers were sharecropping the same field together. The problem of insuring that each worker shared in the crop in the proportion that he shared in the work probably explains the infrequency of the "through-and-through" system, under which laborers in a field gang were paid a portion of the crop rather than money wages. This also explains why the sharecropped farm was almost invariably operated by a single tenant family. The landowner could leave the problem of providing the labor and sharing the crop between the members of the family to the head of the household.

Renting involved the least contracting and enforcement costs of all. As such it was often the choice of those landowners who were unable or unwilling to give much personal attention to the farming operation.

The rise of tenancy in the South following the Civil War can be explained as the natural outcome of a bargaining process between the

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<sup>74</sup>Evans, quoted in Taylor [87], p. 49.

landowners and the Negro freedmen. The landowners sought efficiency and race control, while the Blacks sought economic and social freedom. The result was a compromise for both sides. Share tenancy gave the landlord significant control over the farm and its occupants without the necessity of a degree of repression which the Black would refuse to accept.

The distribution of risks and returns, as well as the contracting and enforcement costs associated with each form of agricultural organization also were important in producing a willingness to accept sharecropping. These considerations also help to explain the nature of the contractual terms that were typical in the South and the range of tenure opportunities.

## THE SUPPLY OF CREDIT AND THE DISAPPEARANCE OF SELF-SUFFICIENCY

Robert Gallman has argued that ante-bellum Southern agriculture was largely self-sufficient in the provision of foodstuffs (Gallman [32]). This conclusion upset the traditional view that slave plantations specialized in cotton production to the exclusion of food crops.<sup>75</sup> Whichever view may be correct there is considerable evidence that after the War the South ceased to be self-sufficient. Table 10 presents the per capita level of corn production and the stock of hogs per capita in five Southern states at each census from 1850 to 1890. The table clearly indicates a marked decline after 1860 and that the per capita levels of these two basic foodstuffs had barely approached one half of the prewar level of production as late as 1890.<sup>76</sup>

This decline in per capita production represented more than just a failure of Southern agriculture to keep pace with the population growth. The same decline in food production is noted when computed on a rural population base. It appears that the Southern agricultural sector became dependent upon outside sources for its supply of food. All contemporary reports agree that the small farmer purchased rather than raised a

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<sup>75</sup>The alleged dependence of the prewar South on the importation of foodstuffs was used by North [56] as a basis for a model of economic growth. This view was challenged by Albert Fishlow [28] and defended by Robert Fogel [30]. Also see the rejoinders by Fishlow and Fogel and the comments of the editor in Andreano [3], part III.

<sup>76</sup>This decline cannot be explained by a shift toward production of other foodstuffs. While the Census data are incomplete on the production of miscellaneous crops, the data in [93] indicate a decline in the per capita production of wheat, oats, barley, rice, buckwheat and rye.



Table 10. Per capita production of corn and the stock of hogs for the states of South Carolina, Georgia, Alabama, Mississippi and Louisiana, 1850-1890.

State	1850	1860	1870	1880	1890
A. Per Capita Production of Corn (bushels)					
South Carolina	24.3	21.4	10.8	11.8	11.9
Georgia	33.2	29.1	14.9	15.0	15.9
Alabama	37.3	34.5	17.0	20.2	19.9
Mississippi	37.0	36.7	18.9	18.8	20.3
Louisiana	19.8	23.8	10.5	10.5	11.7
Average, five states	31.1	29.6	14.7	15.6	16.3
B. Per Capita Stock of Swine (number)					
South Carolina	1.59	1.37	0.56	0.63	0.43
Georgia	2.39	1.93	0.83	0.95	0.75
Alabama	2.47	1.81	0.72	0.99	0.94
Mississippi	2.61	1.94	0.98	1.02	0.90
Louisiana	1.15	0.90	0.47	0.67	0.51
Average, five states	2.11	1.64	0.73	0.88	0.83

Source: Computed from data in U.S. Census [93], Table 9.

considerable portion of his basic food requirements. Data presented by Hammond for the state of Georgia indicate that about 30 percent of the farmer's requirements of corn, bacon, and hay were purchased rather than produced at home ([37], p. 153). The survey of cotton planters taken in 1880 in connection with the Census indicates that this situation was common throughout the South (Hilgard [42]).

This absence of self-sufficiency made the farmer dependent upon the merchant for the day to day necessities. This gave the merchant considerable control over the small farmer's operations, and it has been argued that this power--in conjunction with that granted by the crop-lien laws--was the source of a considerable monopoly power exercised by the local merchant.

Not only did the exclusive trading provisions of most crop liens prevent effective competition, but the inadequate transportation facilities meant that each merchant could supply only a limited local market and therein was assured a virtual monopoly. Moreover, his small size made it difficult to perform his function as a retailer and supplier of credit efficiently. The result of the monopoly power, coupled with the inefficiency, was a level of interest rates which was high by any reasonable standard. The method of charging interest through price differentials makes the determination of actual rates of interest very imprecise. A careful study by Hammond found effective rates of interest ranging from 40 to 110 percent (Hammond [37], p. 153).<sup>77</sup>

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<sup>77</sup>Hammond based these estimates on surveys of credit conditions taken by the Georgia Department of Agriculture over the period 1880 to 1890 and by the Louisiana Commissioner of Agriculture between 1886 and 1896. A similar survey taken in 1887 in North Carolina [50] produced the same results. Evidence abounds that these conditions existed throughout the South (Otken [58], Chapter 11; Harry Hammond [36], p. 517).

While part of the explanation for these high credit charges is clearly attributable to inefficiencies and high risks associated with rural credit retailing, there can be little doubt that these factors fail to completely explain the abnormally high levels of interest charged to farmers in the South. It seems likely that there was some element of monopoly profit in the returns to furnishing merchants.<sup>78</sup>

Attempting to strengthen his monopoly position and to increase his volume of business in a limited local market, the merchant might have insisted that his customers concentrate upon a cash crop and purchase their food from him. By virtue of his local monopoly as a supplier of credit he could refuse to grant a crop lien on any crop other than cotton. Certainly there is evidence to support the contention that the merchant preferred a lien on a cotton crop to one on corn or other food crops.<sup>79</sup>

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<sup>78</sup>The Manuscript Census does not report the data necessary to support this assertion. However, contemporary reports seem to agree that the merchant's prominent position in the community rested in part upon his financial success. "Everywhere are men engaged in the furnishing business whose capital ranged from \$500 to \$5,000. In a period of twenty-five years, when the Southern planters were struggling with poverty, debts, and the labor system, they managed to accumulate handsome fortunes, varying from \$10,000 to \$200,000" (Otkin [58], p. 80). Grady makes much the same observation [33]. We recognize that both Otkin and Grady present only antidotal evidence supporting their claims. We hope to be able to substantiate these assertions with more comprehensive data. The original reports of the early credit rating firms such as Arthur Tappan and Company and J. M. Bradstreet and Son (later merged to form Dunn and Bradstreet, Inc.) may provide detailed evidence on Southern furnishing merchants if these records survive. See Foulke [31], pp. 334-337. Local personal property and real estate tax records may also provide valuable information on the income and wealth of nineteenth century Southern merchants.

<sup>79</sup>Crop-lien contracts were not infrequently drawn up specifying that cotton be grown in sufficient quantity to cover all charges made during the year. For example, see the crop-lien contract reproduced in "Southerner" [81], p. 338. Bull disputes the prevalence of the one-crop lien, and it is true that almost all liens extended to any crop the farmer produced. However, such provisions served merely to give added security to the debt in the case of a failure of the cotton crop (Bull [13], pp. 41-42).



Not only did he see the lack of self-sufficiency as an increase in his business, his particular preference for cotton was based upon its lower risk, lower handling costs, and greater marketability relative to food crops. The highly developed market for cotton, coupled with its lack of perishability, stabilized the cotton market from year to year from price fluctuations and the vicissitudes of local conditions in contrast with perishable food crops. Moreover, cotton's resistance to crop failure and the small farmer's familiarity with its production further reduced the risk of a cotton lien in the view of the merchant.

Contemporaries frequently voiced the complaint that the merchants would refuse to deal on any other basis than a cotton lien. A survey of both landlords and tenants taken by the North Carolina Department of Labor Statistics in 1887 produced these typical responses:

The landlord and merchants who furnish supplies on time won't let [the tenants] sow much grain--they want cotton: and having to buy on time, they have to do as the merchant or landlord says, and the result is, they do not often pay out, and when they do they have nothing left. (Jones [50], pp. 88-89.)

. . . we shall soon be swallowed up by the commission merchants and guano men. It is cotton! cotton! cotton! Buy everything and make cotton to pay for it. (Jones [50], p. 92.)

We are obliged to buy on time and pay 50 or more percent, hence are compelled to make money crops mostly to pay with: oftentimes than otherwise fail to pay out. (Jones [50], p. 129.)<sup>80</sup>

The merchant's insistence on cotton and his monopoly of credit may have prevented the smaller farmers from diversifying even if it was in

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<sup>80</sup>For similar contemporary opinions, see Otkin [58], pp. 54-64; and Smith [79], pp. 62-63, 156. Also see Hammond [37], pp. 150-152. That these practices of the merchants continued into the mid-nineties is supported by frequent testimony before the Senate Commission on Agriculture [103].

their own interest to do so. Certainly the agriculturalists of the time felt that the lack of diversification was one of the chief barriers to economic growth in the South.<sup>81</sup> The argument was that the small farmer was "locked in" to the production of staple crops by the merchants. The resulting low productivity of agriculture kept the small farmer perpetually in debt, preventing him from escaping the system. The advice which was constantly offered was for each farm to become self-sufficient in the production of food. Despite this advice, the tendency to plant more of the land in cotton and less in corn continued throughout the '70's and '80's. Figure 3 illustrates the decline of corn acreage relative to that of cotton graphically. This shift occurred despite a fall in the price of cotton relative to the price of corn over the period, and despite the fact that technological advances increased the per acreage yields of corn far more rapidly than cotton yields (see Figure 4).

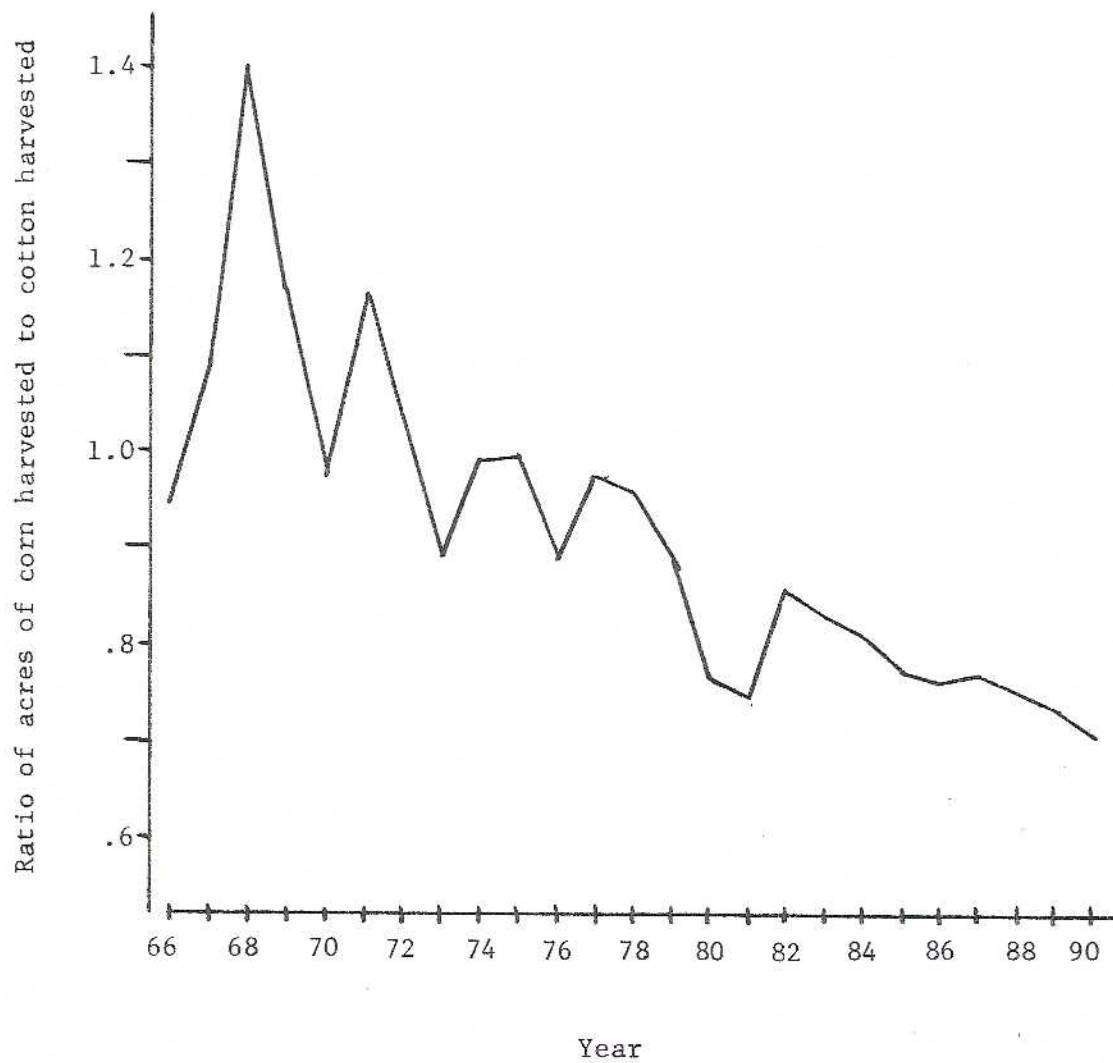
A lock-in effect is a possible explanation for the disappearance of self-sufficiency and the increased emphasis on cash crops. Data collected from our sample of the manuscript returns provide support for this interpretation. Table 11 presents the acreage planted in cotton as a percentage of the total acres reported in crops,<sup>82</sup> comparing the

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<sup>81</sup>The classic statement of this position can be found in Grady: "The first reform, however, that must be made is in the system of farming. The South must prepare to raise her own provisions, compost her own fertilizers, cure her own hay, and breed her own stock. Leaving credit and usury out of the question, no man can pay seventy-five cents a bushel for corn, thirty dollars a ton for hay, twenty dollars a barrel for pork, sixty cents for oats, and raise cotton for eight cents a pound" [33], p. 723. Also see Jones [50], pp. 76-77.

<sup>82</sup>The Census enumerated the acres harvested for each crop in 1879, while the number of tilled acres recorded were those at the date of the Census in 1880. Therefore the ratio of cotton acres to tilled acres for

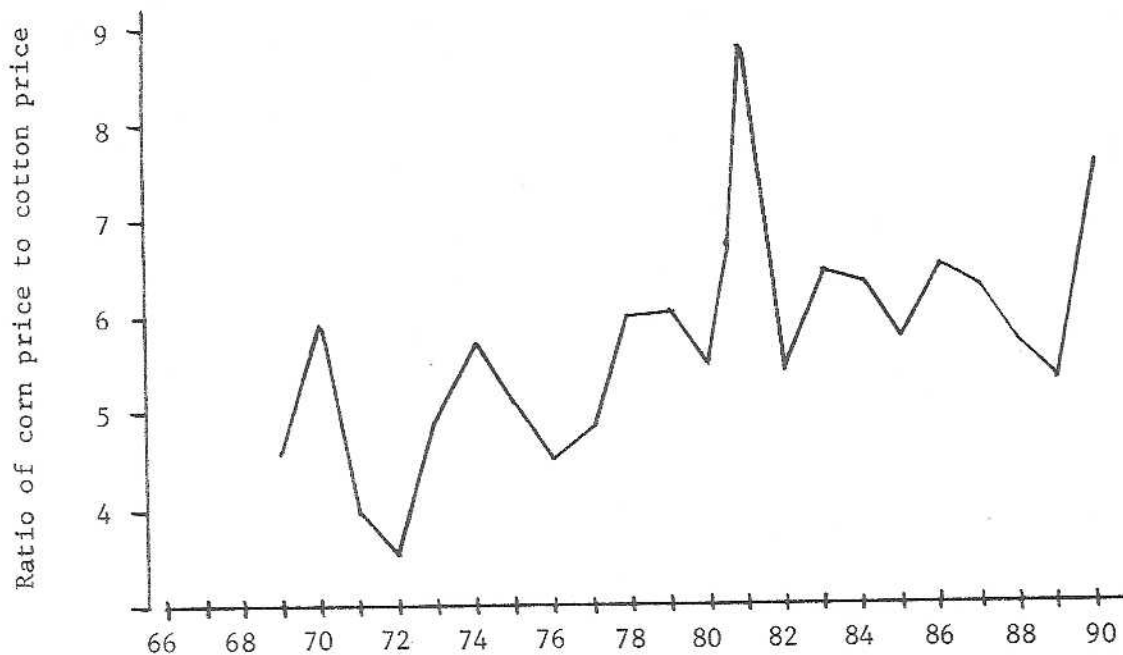
Figure 3. Decline of corn acreage relative to cotton acreage:  
South Carolina, Georgia, Alabama, Mississippi, and  
Louisiana, 1866-1890.



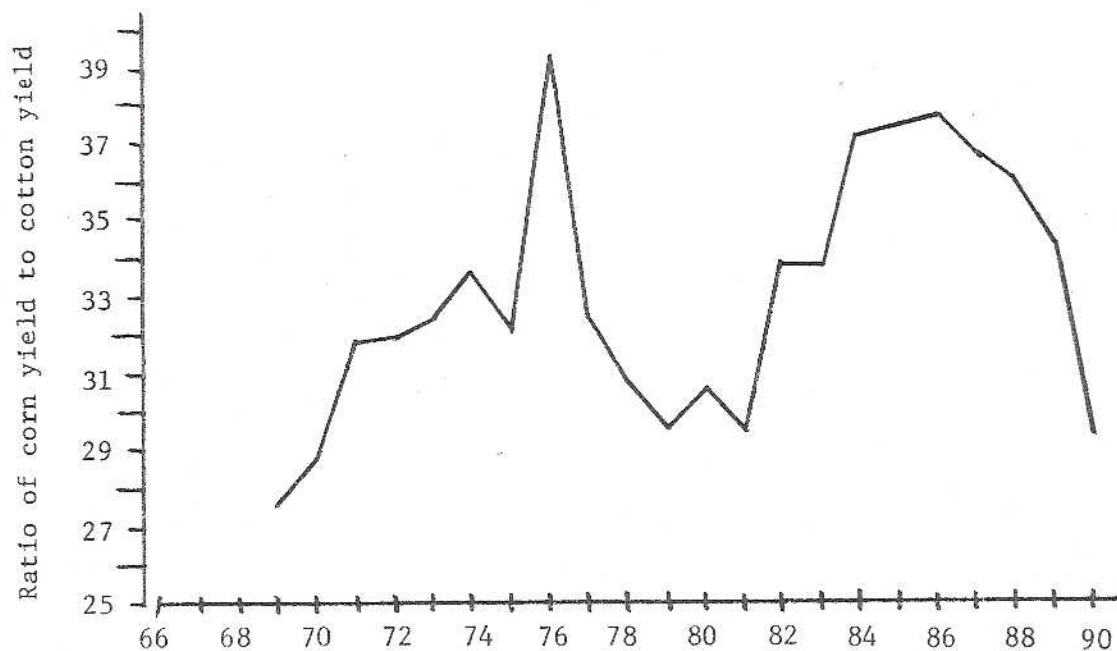
Source: Computed from data in U.S.D.A. [102], pp. 9, 10, 13, 14, 16,  
and U.S.D.A. [103], pp. 17, 18, 20-22.



Figure 4. A. Rise in the farmgate price of corn relative to cotton:  
North Carolina, South Carolina, Georgia, Alabama, Mississippi,  
Tennessee, Arkansas, Louisiana, and Texas, 1869-1900.



B. Rise in corn yields per acre relative to cotton yields:  
South Carolina, Georgia, Alabama, Mississippi, and  
Louisiana, 1869-1900.



Source: Computed from data in U.S.D.A. [102], pp. 9, 10, 13, 14, 16;  
and U.S.D.A. [103], pp. 17, 18, 20-22.

Table 11. Percentage of total reported acreage planted in cotton comparing small tenants with large owners, 1879.

Region	SMALL TENANTS				LARGE OWNERS	
	0-19 reported acres		20-49 reported acres		50-99 rep. acres	100-999 rep. acres
	Rent	Crop	Rent	Crop		
Central Cotton Belt S. Carolina, Georgia	42.8 (0.8) [5]	55.7 (0.9) [5]	49.7 (2.5) [42]	50.5 (0.9) [45]	39.5 (2.2) [53]	49.0 (1.7) [31]
Black Belt Alabama, Mississippi	75.7 (2.7) [73]	65.8 (2.4) [49]	69.0 (1.7) [161]	67.1 (1.7) [173]	51.6 (2.9) [44]	56.4 (2.1) [33]
Alluvial Region Miss., Louisiana	75.3 (2.4) [33]	88.8 (2.3) [64]	78.5 (1.5) [27]	87.8 (2.6) [71]	76.1 (3.6) [12]	81.7 (2.8) [22]
Gadsden, Florida, and Thomas, Georgia	45.1 (1.2) [5]	50.5 (0.5) [6]	45.6 (2.4) [9]	47.4 (0.9) [31]	31.8 (0.8) [17]	43.1 (1.8) [7]
Russell, Alabama	82.7 (3.9) [10]	68.7 (5.8) [12]	64.2 (1.6) [45]	67.2 (1.5) [80]	54.1 (3.4) [17]	52.3 (2.4) [17]

NOTE: All percentages are unweighted averages for the farms reporting cotton. The number in parentheses below each percentage is the variance. The number in brackets is the number of farms in the associated size-tenure class.

Source: Computed from data in the manuscript schedules of the Census of Agriculture, 1880.

small tenants with the large owner-operated farms. We would expect that the large owner, with his access to alternative sources of credit, would be able to best resist control by the merchant. It would be the small tenant farmer--if anyone--who would be most susceptible to this form of exploitation. As the table demonstrates, the small tenant farmers generally reported significantly higher percentages of cotton than the large owner-operated farms in every region except the Alluvial area of Mississippi and Louisiana. Perhaps the alluvial soil stands as an exception because of its exceptional quality. The merchant would not need to lock-in the farmer if it proved economically efficient to specialize in cotton to the exclusion of food crops. Wright has noted that self-sufficiency before the War did not extend to the very fertile Alluvial Regions (Wright [112], p. 231). It is hardly surprising that after the War the Alluvial Region continued to exhibit a pattern of cotton specialization.

It is difficult to explain the trends illustrated by Table 11 without recourse to some sort of lock-in mechanism. We would expect that the incentives towards self-sufficiency, in the absence of a credit monopoly, would be greater for the small farm than for the large. Through volume buying, the large farmer could obtain quantity discounts on the

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an individual farm would be a less reliable measure of the concentration in cotton than the measure we have chosen to use. The difficulty with using the reported acres, as we have done, is that it excludes acres harvested in crops which were not collected by the Census Marshalls. Such crops would primarily be vegetable crops other than peas and beans and potatoes. As a control against a serious bias arising from this source, the percentages were also tabulated using tilled acres as the denominator. The conclusions remained essentially unchanged.



purchase of supplies, as well as spread the transaction costs over a larger purchase. The large farmer was also able to obtain a better price for his cash crop for the purchasing agent. In addition to these cost disadvantages to small-scale commercial operation, the small farmer has traditionally been able to increase his security through home production. Self-sufficiency frees him from dependence from an outside source of supply at an uncertain price.

The results from the sample data cannot be explained as an inherent bias produced by the different forms of tenure. The sharing of risk inherent in share tenancy would favor the production of high-risk crops with this form of tenancy relative to owner-operated farms.<sup>83</sup> Since there is ample evidence that cotton production in the post-bellum South was less risky than the production of food crops,<sup>84</sup> we should expect to note higher proportions of corn grown on sharecropped farms than either owner-operated farms or farms leased for a fixed rent. The results in Table 11 exhibit exactly the opposite.

While we do not pretend that the evidence of Table 11 and the accompanying arguments conclusively establish the presence of a lock-in effect, they are at least suggestive and in our view shift the burden of proof to those who would argue the opposite. A few of the more obvious counter-arguments are worth mentioning.

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<sup>83</sup>This point has also been noted by Chueng [15], Chapter IV.

<sup>84</sup>Our sample of farms illustrates this fact for 1879. In each of the regions sampled the proportional variance in the physical yields per acre for corn were always higher than for cotton. Moreover, throughout the period, farm gate prices of corn fluctuated more sharply than did cotton prices.

It has been alleged by historians of the slave economy that there existed surplus labor in the South throughout the year with the exception of the cotton harvest.<sup>85</sup> Under these circumstances, the marginal labor cost in producing corn was quite low. Because of the flexibility inherent in the cultivation of corn, a corn crop could be planted and harvested without seriously interfering with the harvesting of the cotton crop. Since the labor supply was capitalized, any return over the marginal costs of the non-labor input was a contribution towards the fixed costs of labor. In other words, the ante-bellum South was self-sufficient primarily because of the capitalization of the labor supply.

With emancipation, it might be argued, this mechanism would disappear. The farmer could hire additional labor at harvest season to aid in the picking and operate with a reduced force during the slack season. The released labor could either find alternative employment during this period or remain idle, as might have been particularly the case with women. The disappearance of self-sufficiency then, might be attributed to the abolition of slavery.

The difficulty which we see with this argument is that it overlooks the fact that with the rise of family-operated farms, the fixed cost effect would still be felt by the family unit. The labor of the women and children were a resource of the family farm. If the returns to corn production during slack season were sufficiently high the family farm would have no incentive to allow these resources to remain idle.

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<sup>85</sup>Gray [35], p. 702; Phillips [62], p. 125; and Gallman [32], pp. 26-27.

Another argument which might be made to explain the shift away from corn production would involve increased scarcity of labor relative to land after the War. If land and labor are more readily substitutable in cotton production than in corn production, then this relative scarcity would produce an incentive to increase the acreage devoted to cotton. Such a shift, accompanied by a more land-intensive technique in cotton production, would be a rational response to an increase in the price of labor relative to land. This argument is particularly appealing because there is evidence to support both the assumption that land and labor were more substitutable in cotton than in corn and the implication that a higher land-labor ratio would emerge in cotton production.

Little leeway was left for the substitution of land for labor in corn, since the ante-bellum technique of corn production already employed an extremely high land-labor ratio. On the other hand, in cotton production a substitution could be achieved by a less intensive harvesting technique. Rather than picking each field three or four times, a one or two pass system of harvesting would economize on labor. Yields per acre would fall, but yields per hand would increase. It is noteworthy in this regard that throughout the latter half of the nineteenth century, yields per acre in corn rose more rapidly than those in cotton (see Figure 4). This phenomenon can be explained by the substitution of land for labor in the manner described rather than by a differential impact of technological progress.

Despite the appeal of such an argument, it remains almost entirely conjectural. Only after a careful investigation of the post-bellum production functions for corn and cotton would it be possible to verify



the assumptions regarding substitutability in factor inputs. Moreover, such an effect, if present, would have to overcome the relative decline in the farm gate price of cotton over the period.

## RACISM AND SOUTHERN AGRICULTURAL ADJUSTMENT

The emancipation of the Negro raised social as well as economic issues in the former slave states. In a society which was rural and agricultural, the manner in which the Negro was absorbed into agriculture inevitably became important in establishing social relationships in a larger context. Thus, for example, the division of agricultural production into small tenant farms tended to reinforce the emerging segregation of races by creating a de facto division in races which had been conspicuously absent before the Civil War.<sup>86</sup> More important for the purposes of this paper was the impact of racist views on agricultural reorganization.

It is always difficult to attempt to distill social attitudes into a few elements which can be managed for analytical purposes. Nonetheless, it does not seem excessively bold to assert that three main elements provide the base of race attitudes in the South between 1865 and 1880.<sup>87</sup>

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<sup>86</sup>Woodward has stressed the extent to which slaves and masters lived within the same environment before the War. He argues that only after the end of Reconstruction did segregation make rapid headway as a legal arrangement of racial attitudes. See [10], Chapters I-III.

<sup>87</sup>Throughout this section we shall have frequent need to refer to Negro and White attitudes during Reconstruction. Our remarks are based on a careful perusal of many contemporary sources. On the events right after the War (1865-1870) we have drawn particularly from Reid [70], Trowbridge [89], Schurz [75], Somers [80] and the volumes of testimony and reports of the Freedman's Bureau through 1868 ([43], [44], [45], [91]); the testimony before the Joint Committee on Reconstruction from December 1865 through July 1866 [100] and finally a survey conducted by the Boston firm of Loring and Atkinson regarding prospects in the South for 1869 [53]. After 1870 we have also relied heavily on contemporary writers, particularly those in journals such as the Southern Cultivator, DeBow's Review, and the Rural Carolinian. Except for those points which we feel require special attention and documentation, we shall omit detailed citation to the text when discussing the social attitudes prevailing in the South.

First is a very strong feeling of paternalistic concern for the former slaves. Second is the extent to which this paternalism was combined with a firm conviction that the Negro race was inherently inferior to the Whites. Finally, there developed among many Whites a strong antagonism towards the freedman and his newly won rights which, far from being paternalistic, led to a sentiment that the Negro must be narrowly constrained within a lower social and economic position in society.<sup>88</sup>

These views were combined in a multitude of ways to create the various attitudes of individuals in the South. To illustrate the effects of racist views on the reorganization of agriculture, we shall discuss the desirability of various tenure arrangements in terms of some stereotyped attitudes of Whites.

Immediately after the War, the sentiments of Northern radicals, former abolitionists, Union Army officers and the officials of the Freedman's Bureau influenced decisions on tenure arrangements. Many of these men insisted that the freedman must be elevated to a position of equality--or at least near equality--over a period of time. While such a position frequently retained a strong element of paternalism, there can be little doubt as to the intent of its supporters: the Negro should be given land to farm for himself. Sherman's action in distributing land

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<sup>88</sup>Theodore Salutos has provided an excellent summary of this antagonism among small White farmers:

He hated the Negro partly because he feared him as a competitor, partly because the adoption of a blatant attitude of superiority compensated him for his insecurity, and partly because he resented any rise in the political stature of the Black ([7], p. 3).



to Blacks in the Sea Islands in 1864; Steven's vigorous pressing of a bill to redistribute confiscated land in 1867 and O. O. Howard's disillusionment over the failure of President Johnson to provide land for the Freedman's Bureau in 1868 all attest to the sincerity of this conviction.<sup>89</sup>

But such schemes made little headway in Congress, and it became increasingly clear that Southerners were reluctant to allow the freedman to be an independent farmer. Recognizing the impracticality of promoting Negro ownership in 1865-67, agencies such as the Freedman's Bureau contented themselves with insuring that whatever contracts were drawn up for the Negro were fair. Wage contracts were the most common immediately after the War, and met no resistance from the Bureau agents. Sharecropping was not opposed, though care was taken to ensure that the freedman was aware of the terms of the bargain.

In general, then, the attitude of the egalitarians seems to have reflected an acceptance of the market as a device to assure the Black an equal place in society. Free labor and tenancy had worked well in the North; the hope of the Freedman's Bureau was that it would also work in the South.<sup>90</sup>

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<sup>89</sup> Sherman distributed approximately 480,000 acres of Sea Islands land to some 40,000 Negro refugees and inhabitants through his Field Order Number 15. On Stevens plans to distribute some 394,000,000 of confiscated land, see our discussion in [68]. For Howard's comments, see [45], p. 504.

<sup>90</sup> We have not touched upon other aspects of this egalitarian view--the insistence on education for the Negro and the insistence that his rights as a voter be guaranteed by the government. The decision to let these issues also be settled by local forces proved disastrous.

Apart from the Army and the Freedman's Bureau, the egalitarian sentiment found little support in the South. Less sanguine about the success of free Negro labor, those Southerners who were benevolently inclined toward the freedman tended to combine a paternalistic concern for his welfare with a strong conviction that the Negro was inferior.

Typical of a great many planters' views is the following comment from Loring and Atkinson:

I have prejudice to the negro only as a ruler. I believe them to be the best cotton laborers in the World under good laws. Teach him to be honest, and compel him to be industrious, and I want no better laborer ([53], p. 72, italics in original).

Such statements, praising the Negro's worth as an agricultural laborer while insisting on the need for constant guidance or supervision, abound in the contemporary accounts. This view would naturally favor the wage system with its careful control of labor by the planter. Sharecropping, which also provided a great deal of control, would be the next best alternative. As a compromise to Negro preferences--which, as we have seen, rejected wages as strongly as possible--sharecropping offered some promise of advancement to the Blacks through a small degree of independence.

Owning or renting to the freedman was clearly undesirable from the point of view of these White Southerners; the Negro was incapable of becoming an efficient farmer. As Thomas Janes, Georgia's Commissioner of Agriculture in 1874, put it:

The practice . . . of renting land to irresponsible freedmen, who, generally must be supplied in advance, with stock, implements, fertilizers, and food for themselves and families as well as their stock, is an anomaly in the history of business transactions. . . . It is not reasonable to suppose that men, naturally indolent, ignorant and superstitious, mere muscular

automata by habit, having been accustomed to direction even in the minutia of their work, could, by a presidential proclamation, be converted into intelligent and reliable business managers. . . . No such reckless risks are taken in any other business, nor could any long exist under such management (Janes [48], p. 133).

Planters who argued against independent farming by the freedman on grounds such as Janes' stressed the inefficiency and consequent loss to all groups--of such an arrangement. A more fundamental objection to Negro ownership was based on the social antagonism of Whites toward free Blacks, who discouraged any sign of Negro independence because of social (and in many cases economic) competition. As one writer to the Southern Cultivator put it:

It is really unpleasant to come in contact with such a class as the Freedmen, under any circumstances, but it becomes humiliating and obnoxious when he is received on the farm as a co-partner.<sup>91</sup>

The salient feature of this "negrophobia" was the prohibition against land ownership by Black farmers. Whitelaw Reid's observation regarding Mississippi seemed to apply to all of the South:

In many portions of the Mississippi Valley the feeling against any ownership of the soil by negroes is so strong that, the man who should sell small tracts to them would be in actual personal danger. Every effort will be made to prevent negroes from acquiring lands; even the renting of small tracts to them is held to be unpatriotic and unworthy of a good citizen ([70], pp. 564-565).

Here the insistence that the Negro not be a landowner largely ignored considerations of economic efficiency; nor did it concern itself with a paternalistic feeling towards the Negro's welfare. Its emphasis was

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<sup>91</sup>Quoted in Taylor [87], p. 37.



that the Negro "know his place"--and that "place" was clearly not in the mainstream of White Southern society.<sup>92</sup>

The Whites who felt this antagonism towards the freedman would not reach conclusions drastically different from the paternalistic planter regarding tenure arrangements. Ownership and renting were vehemently opposed, the natural position of the Negro was that of a laborer and wages best suited that view. Sharecropping was accepted as a compromise only when wages failed to work.

On the basis of their racist preferences, then, the ranking of tenure arrangements by White Southerners reflected a broad consensus; wages were best; sharecropping was next; followed (at a considerable distance) by renting and owning. The Negro's views are more difficult to determine, for they seldom appear in print. We have emphasized his desire for independence, commenting on the extent to which this caused him to react sharply against the wage system.

How important were these racial attitudes in determining tenure after the War? Data from our 1880 sample on tenure, farm size, and race are provided in the accompanying tables. Table 12 presents an overall summary of tenure characteristics by race of farm operator. Table 13 provides more specific information regarding the tenure status of Black operators.

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<sup>92</sup>Woodward has argued that the separatist sentiments of segregation were not formalized until late in the nineteenth century [110]. However, the presence of racial antagonism is clearly evident in the accounts of the time. See particularly the Freedman's Bureau Reports [43], [44], [91]; and the testimony of the Joint Committee on Reconstruction. As one witness told the committee: "Former slaveowners will not lease or sell land to Negroes" [100], Part III, p. 122.

Table 12. Distribution of farms by race of operator and tenure characteristics, 1880.

Region	Race	Number of farms <sup>a</sup>			Percent of all farms <sup>a</sup>				
		Own	Rent	Share	All farms	Own	Rent	Share	All farms
Central Cotton Belt	Black	20	56	56	132	6.1	17.0	17.0	40.0
	White	153	20	24	198	46.3	6.1	7.3	60.0
	All farms	173	76	80	330	52.4	23.0	24.2	100.0
Black Belt	Black	53	258	254	574	6.5	31.6	31.2	70.5
	White	149	47	39	239	18.3	5.8	4.8	29.4
	All farms	202	306	293	814	24.8	37.6	36.0	100.0
Alluvial Region	Black	22	54	157	234	7.0	17.2	50.0	74.5
	White	49	25	4	79	15.6	8.0	1.3	29.4
	All farms	72	79	161	314	22.9	25.2	51.3	100.0
Russell County, Alabama	Black	20	55	114	189	7.1	19.6	40.6	67.3
	White	53	13	26	92	18.9	4.6	9.3	32.7
	All farms	73	68	140	281	26.0	24.2	49.8	100.0
Gadsden, Fla. and Thomas, Ga.	Black	28	16	35	79	16.5	9.4	20.6	46.5
	White	76	5	9	90	18.9	4.6	9.3	32.7
	All farms	104	21	45	170	61.2	12.3	26.5	100.0
Bibb, Alabama	Black	8	1	9	18	7.0	0.9	7.9	15.8
	White	78	0	18	96	68.4	0.0	15.8	84.2
	All farms	86	1	27	114	75.4	0.9	23.7	100.0

<sup>a</sup>Total for all farms may not add due to rounding. "All farms" also includes farms when race or tenure was not given in the manuscript census.

Source: Sample of farms from the Manuscript Census Returns, 1880.

Table 13. Tenure characteristics of Black farms in 1880.

Region	% Negro in pop.	% specified tenure which is Black				% Black operators in specified tenure			
		Own	Rent	Share	All <sup>a</sup> farms	Own	Rent	Share	All <sup>a</sup> farms
Central Cotton Belt	64.6	11.6	73.7	70.0	40.0	15.1	42.4	42.4	100.0
Black Belt	80.1	26.2	84.3	86.7	70.5	9.2	44.9	44.3	100.0
Alluvial	88.3	30.1	68.4	97.5	74.5	9.4	23.1	67.1	100.0
Russell, Alabama	75.1	27.4	80.9	81.4	67.3	10.6	29.1	60.3	100.0
Gadsden, Florida and Thomas, Georgia	61.9	26.9	76.9	77.8	46.4	35.4	20.2	44.3	100.0
Bibb, Alabama	37.1	9.3	100.0	33.3	15.7	44.4	5.6	50.0	100.0

<sup>a</sup>Includes farms where tenure or race was not specified.

Source: Sample of farms from the Manuscript Census Returns, 1880.



To begin with, we can note that the proportion of farm operators who are Black is substantially below the proportion of Blacks in the population in each of the regions of Table 13. This strongly suggests that Blacks were denied the opportunity to farm independently.

The data convincingly show the effectiveness of the sanctions against Negro ownership of land. In none of the three major cotton regions did Black owners account for more than 7 percent of all farm operators (Table 12). In the Alluvial and Black belts, where they constituted over 80 percent of the population, fewer than 10 percent of the Black operators owned their own farms (Table 13). Moreover, where they did obtain land ownership, the Negro farmed much smaller units than White owners. In Table 14 the size-distribution of owner-operated farms is presented for the sample. Negro-owned farms larger than 50 acres were unusual even in the areas where large farms were most common.

The 1880 data, fifteen years after emancipation, probably reflect an increase in Negro ownership. DuBois, in a study of Georgia, found that Negro ownership increased from barely one percent of all land in 1874 to slightly over 2.5 percent in 1880.<sup>93</sup> Our manuscript data on Dallas County, Alabama in 1870 show that of the 1,109 owners reporting real estate, 98 (8.8%) were colored, and they accounted for much less than one percent of the total value of real estate reported.

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<sup>93</sup>DuBois [25], p. 665. DuBois' figures are taken from tax records and tend to overstate the number of acres cultivated by Negroes since they include land not under cultivation and land owned by Negroes but cultivated by a farmer other than the landowner.

Table 14. The distribution of owner-operated farms by number of acres reported in crops and race of owner, 1880.

Region	Race	0-19 acres	20-49 acres	50-99 acres	100-499 acres	500+ acres	Average number of acres re- ported in crops
Central Cotton Belt	Black	4 (20.0)	8 (40.0)	7 (35.0)	1 (5.0)	0	47.4
	White	16 (10.5)	57 (37.3)	47 (30.7)	30 (19.6)	3 (2.0)	84.1
Black Belt	Black	15 (28.3)	30 (56.6)	7 (13.2)	1 (1.9)	0	39.2
	White	15 (10.1)	63 (42.3)	37 (24.8)	32 (21.5)	2 (13.4)	86.7
Alluvial Region	Black	12 (54.5)	8 (36.4)	1 (4.5)	1 (4.5)	0	31.2
	White	7 (14.3)	6 (12.2)	11 (22.4)	20 (40.8)	5 (10.2)	155.8
Russell County, Ala.	Black	8 (40.0)	8 (40.0)	4 (20.0)	0	0	35.5
	White	6 (11.3)	17 (32.1)	13 (24.5)	17 (32.1)	0	82.9
Thomas County, Ga. and Gadsden County, Fla.	Black	16 (57.1)	9 (28.1)	2 (7.1)	1 (3.6)	0	29.1
	White	18 (23.7)	37 (48.7)	15 (19.7)	6 (7.9)	0	44.3
Bibb County, Ala.	Black	4 (50.0)	4 (50.0)	0	0	0	16.6
	White	21 (26.9)	34 (43.6)	18 (23.1)	4 (5.1)	1 (1.3)	46.2

NOTE: The figure in parentheses is the percentage of all owner-operated farms of the specified race in the sample.

Source: Sample of farms from the 1880 manuscript census returns.

The inescapable conclusion is that, despite the possibility of some small gains over the decade 1870 to 1880, Negroes in 1880 were still largely excluded from land ownership.

The effect of racist attitudes in the choice of tenancy in 1880 is less clear. Both renters and sharecroppers were predominantly colored. In every region the percentage of Black operators in these tenure classes is well above the percentage of Black operators as a whole (Table 13). The arguments we have given would suggest a concentration of Negro tenants in sharecropping. Such an effect is evident in the Alluvial counties and in the poorer land regions but the two forms of tenancy are evenly split in the Central Cotton Belt and the Black Belt.

Table 15 presents the average size of both rented and sharecropped farms by the race of the operator. The table demonstrates the unwillingness of White landowners to rent a substantial sized farm to Blacks. In both the Central Cotton Belt and the Alluvial Region the average size of Black operators who rented for a fixed payment was less than half the size for White renters. In the Black Belt the difference is somewhat less though still substantial. Inasmuch as there is no economic reason why Black tenants should consistently rent much smaller farms, this evidence adds further documentation to our conclusion that racist attitudes played an important role in establishing the economic position of the Negro farmer.<sup>94</sup>

Another way in which racist attitudes influenced the agricultural adjustment was in determining the quality of the land which Negroes were

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<sup>94</sup>A size differential is also present in a comparison of White and Black sharecroppers in the Central Cotton Belt and the Alluvial Region.



Table 15. Average size of tenant farms by race of operator, 1880.

Region	Average number of reported acres			
	Renters		Sharecroppers	
	White	Black	White	Black
Central Cotton Belt	78.8	38.1	47.4	39.8
Black Belt	44.1	30.2	32.2	35.6
Alluvial Region	104.3	23.7	51.3	26.5
Thomas, Ga. and Gadsden, Fla.	64.3	28.7	34.3	33.1
Russell, Alabama	101.1	32.2	47.1	42.8

Source: Sample of farms from the 1880 Manuscript Census of Agriculture.

allowed to purchase or rent. While the Agricultural Census did not record the land quality directly, it is still possible to obtain a rough indication of the quality of land on any farm from the data which were collected. There are basically two approaches. The quality of the land could be ascertained from its productivity as recorded in the Census. After correcting for the quantity and quality of non-land inputs, differences between farms in the quantity of output per acre could be attributed to the inherent differences in the quality of the land. This approach has a major drawback in that it requires information on the quantity and quality of non-land inputs applied to each crop. While the Census does provide limited information on these variables for the entire farm, it does not allocate them to the various crops. Even the aggregate data are quite crude, particularly in the measure of labor quality.

An alternative approach is to use the market value of the farm as an indication of the quality of the land. Other things equal, better land will sell for a higher price on the open market. The Census recorded the farm operator's evaluation of the farm, including permanent improvements such as buildings and fences, but excluding the value of livestock, equipment and the growing crops. The quality of these estimates is questionable. Some owners fearing increases in their property tax liability might have intentionally underestimated the value of the property. Farmers who were leasing their farms may not have had an accurate idea of its market value. Some respondents may have misunderstood the question and reported the assessed valuation of the property rather than its true market value. Many of the farmers did not report this information to the Census Marshalls at all. In the Alluvial Region only

49 percent of the farms in our sample reported the value of the farm. In the Black Belt 58 percent reported. The sample from the Central Cotton Belt had an 85 percent response rate.<sup>95</sup>

Despite these factors which would tend to dilute the quality of the data, there are several reasons why it is probably of usable quality. In the first place, the Marshalls were instructed to use their own knowledge of the local market for land to aid the farmer in his estimate (Wright and Hunt [111], p. 169). Moreover, the Census of 1880 immediately followed a period during which many changes of land ownership took place. Therefore, the farm operator and the Census Marshall both would have had opportunities to observe the market price of land in the neighborhood.

Finally, we should note that there is a reasonable consistency in the reports from any given region and that these valuations agree reasonably well with independent evidence on the value of farm land in the county.

The major difficulty encountered in using the farm value statistics to derive an estimate of the quality of the farm land is the correction for the permanent improvements. Undoubtedly the major improvement of this type was land clearing. To correct for this factor we have taken account of the proportion of the total acreage which was improved. The specific hypothesis employed was to assume that the price per acre of

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<sup>95</sup>As would be expected, owners had a substantially higher response rate for this question than did renters or croppers. In the Alluvial Region, 93 percent of the owners responded, compared with 46 percent of the cash renters and 30 percent of the share tenants. In the Black Belt the percentages were: owners, 96 percent; renters, 52 percent; and sharecroppers, 40 percent. In the Central Cotton Belt the response rates were: owners, 98 percent; renters, 68 percent; and sharecroppers, 72 percent.



improved land differed from the price per acre of the uncleared land on each farm by a value which was constant for the county. This constant would be an estimate of the cost of clearing an acre of land.<sup>96</sup>

The average value of improved land per acre and the average cost of clearing an acre of land were obtained as the parameters of a regression equation.<sup>97</sup> The equation was run separately for three of the sample

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<sup>96</sup>An alternative model which assumed that all unimproved land in the county sold for a fixed price irrespective of its quality was also tested. However, the assumption reported in the text was consistently superior in the sense that it left less of the variance in land value per acre unexplained. It is not surprising that this alternative model did not perform well. It implies that the unimproved land was essentially unimprovable, otherwise its potential as farm land would have been recognized in its current price. However, a steady trend toward improving agricultural land is reported in each of the succeeding agricultural censuses, suggesting that, contrary to the assumption, much of the unimproved land in 1880 was capable of being improved.

<sup>97</sup>The specific model employed was:

$$(1) \quad V_i = P_i I_i + (P_i - C) U_i$$

$$(2) \quad V_i = P_i T_i - C U_i$$

$$(3) \quad V_i = \bar{P} T_i - C U_i + \epsilon_i T_i$$

$$(4) \quad \frac{V_i}{T_i} = \bar{P} - C \frac{U_i}{T_i} + \epsilon_i$$

$V_i$  is the value of the  $i$ -th farm,  $I_i$  is the number of improved acres on the  $i$ -th farm,  $U_i$  is the number of unimproved acres, and  $T_i$  is the total number of acres. The total acreage is equal to the sum of the improved and unimproved acres.  $P_i$  is the per-acre value of the improved land on the  $i$ -th farm, and  $(P_i - C)$  is, by assumption, the value of the unimproved acres.

Equation (1) can be rearranged to produce equation (2).  $P_i$  is then eliminated from equation (2) by substituting the relationship:  $P_i = \bar{P} + \epsilon_i$ , where  $\bar{P}$  is the average price of improved land in the county and  $\epsilon_i$  is the deviation of the value per acre of the  $i$ -th farm from the county average. According to the argument in the text this deviation is a measure of the quality of the land. Estimation of the parameters  $\bar{P}$  and  $C$  using equation (3) would be inappropriate because of the presence of heteroscedasticity in the residual term. Accordingly, equation (4), which is derived from equation (3) by dividing through by  $T_i$ , is used as the regression equation. The quality index is then given for each farm by the deviation from the regression line.

counties: Barnwell, South Carolina; Clay, Mississippi; and Russell, Alabama. The equations were run with a dummy variable which was equal to one if the farm operator was Black and equal to zero otherwise. The results of these three regressions are reported in Table 16. For each of the three counties the race dummy variable has the expected negative sign and is statistically significant.<sup>98</sup> The results indicate that the average value of an improved acre farmed by a White operator in Barnwell County was \$10.99 while the value for those farmed by Blacks was on average \$2.65 less. In Clay County the differential was \$1.35 and in Russell it was \$1.50. These results suggest that racism operated not only to restrict Black ownership of land but also prevented the Negro from purchasing or renting the better land available.<sup>99</sup>

The impact of racism on farm organization between 1865 and 1880 appears to have been considerable. The Black farmer was likely in 1880 to be a tenant; more often than not, a sharecropper. He would be farming a smaller farm than his White counterpart, and his land would be inferior to that of White farmers. These differences are not accounted for by the change in size distribution alone, nor in the switch to tenancy. They

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<sup>98</sup>The standard error of estimate for each parameter is presented in Table 16 in parentheses underneath the parameter estimate.

<sup>99</sup>The regressions were also computed dividing each county into three samples corresponding to the three forms of tenure. For owned farms the race dummy remained significantly negative except in Clay County which exhibited no significant difference between the value of land owned by Whites and Blacks. However, Clay County had only 16 Black owners out of a total of 89 who reported sufficient data to be included in the regression. In all three counties the magnitude of the race dummy remained about the same as reported in Table 16 for renters and sharecroppers, although the coefficients were not statistically significant.

Table 16. Estimates of the value of land by race of farm operator in three sample counties, 1880.

County	Average value of improved land ( $\bar{P}$ )	Average cost of clearing unimproved land (C)	Race dummy (= 1 if Black, = 0 if White)	Number of observations employed in regression
Barnwell, S.C.	\$10.99 (1.33)	8.21 (1.80)	-2.65 (1.16)	143
Clay, Miss.	11.43 (1.11)	6.98 (1.72)	-1.35 (.98)	158
Russell, Ala.	8.31 (1.06)	3.82 (1.63)	-1.50 (1.13)	131

NOTE: The figure in parentheses under each parameter estimate is the standard error of estimate.

Source: Sample of farms from the 1880 Census of Agriculture.



reflect a pervasive racial bias which consistently discriminated against the Negro as an independent farmer.

## CONCLUSIONS

At the outset of this paper we briefly described the major changes in Southern agriculture which dominated economic activity up to 1880.

These were:

1. The freeing of the slaves and the absorption of free Negroes into the labor force.
2. A significant decline in the size of farm in the South, accompanied by a sharp increase in the incidence of tenancy.
3. A collapse of the Southern credit market and the obstacles to recovery of that market in the post-bellum economy.

These changes in turn generated a large number of problems which have been widely discussed by historians. Our paper touched upon only four such issues: the effects of smaller-sized farms; the decisions on tenure arrangements; the disappearance of self-sufficiency in the South; and the impact of racism on Southern farming. We have attempted to combine the existing literature on the Reconstruction South with additional quantitative data. A major contribution in this regard is the preliminary results of a sample of farms drawn from the manuscript returns of the 1880 Census. Our findings on these issues may be briefly summarized:

First, the change in size distribution of farms in the South did not reflect a broadening of ownership to small Southern farmers. Land ownership was still concentrated in the hands of a few, and the plantation in many areas remained virtually intact as a production unit. Nor does it seem likely that the decline in farm size was accompanied by a loss in efficiency. Our analysis indicates that economies of scale which were





present in the ante-bellum period were either largely associated with the presence of slavery--and thus disappeared after 1865--or were retained through the concentration of land ownership which survived the breakup of farming units. The decision to move to small farms stemmed from the advantages of tenancy in the postwar era.

Pursuing this argument, we concluded that the choice of tenure could be largely explained as the result of a compromise between the landowner and the laborer. The landowner sought control of the labor which he felt was necessary to insure efficiency. The laborer, on the other hand, expressed a strong desire for economic independence. Also relevant to the choice of tenure were the differences in the distribution of risk and differences in enforcement costs between the various contractual arrangements.

There is no room for doubt that the production of foodstuffs declined in the South after 1865. Our analysis explored the alleged possibility that this shift of production away from food and towards "staple crops" was encouraged by the credit practices of small merchant bankers. This time, the traditional view was reinforced. Our data suggest that the small tenant farmers were "locked-in" to the production of cotton by the refusal of merchants to grant loans on other crops.

Finally, we concluded that racist views by Whites had a significant impact on the structure of agriculture and position of the Negro in Reconstruction. Racism clearly constrained Negro ownership of land. Other differences between White and Black farmers--especially the smaller farm size and inferior land quality of Negro farms--seemed to be largely attributable to racial barriers in the South.

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