1. Introduction

Prompted by evidence of the recent rise in income and wealth inequality in the U.S. and elsewhere, there has been a resurgence in interest in measuring inequality and documenting the factors that influence the stability or instability of the income and wealth distribution. The most well known recent example is Thomas Piketty’s bestselling book, which used data from the 18th century to the present to describe the historical evolution of wealth and inequality in the U.S. and Europe.\(^1\) Gregory Clark (2014) has also used several broad measures of economic and social status to argue that there is considerable stability in relative status over long time periods. In a similar vein Joseph Ferrie and Jason Long (2013) have used census data to document the relatively high but declining rates of occupational mobility across generations since the late 19\(^{th}\) century.

While these and other articles have focused primarily on determining how the normal working of the economic system affects economic inequality, another line of scholarship has considered the effects of shocks to the economy. Of particular interest to U.S. economic historians has been the question of how the Civil War and the end of

\(^1\) Thomas Piketty, *Capital in the Twenty-First Century*
slavery affected southern wealth holders. We explore this issue here by considering the effects of the war and emancipation on wealth mobility during the 1860s. By linking the top wealth holders in 1870 back to the 1860 census, we describe how this group fared over the course of the decade. Our preliminary results suggest that while the war had a dramatic impact on the overall value of southern wealth, a relatively large number of top wealth holders retained their position in the wealth distribution although there was considerably more upward mobility in the South during the 1860s.

We know that the Civil War had a profound impact on landholdings in the South: the number of Southern landholdings doubled according to census reports, and their average size was cut in half.\(^2\) In light of these data, the early scholarly consensus was that the wealthy planters of the antebellum South were uprooted by the war, but these conclusions have since been challenged. Using tax records for five Louisiana parishes, Roger Shugg (1937) presented the earliest challenge to the conventional view, arguing that the old plantation system was in fact preserved after the war. While Shugg’s conclusions were widely accepted, historians continued to maintain that the planter class itself had not survived, even if the plantation system had. According to C. Van Woodward’s influential analysis, the old planter class was destroyed after the war by a “revolution in land titles.”\(^3\) Since then, there have been a number of studies of select geographic regions, but most of them have focused on geographic persistence – whether members of certain occupational groups were residents of the same community in a later census year. Fewer studies have examined persistence defined as

\(^2\) See Roger W. Shugg, *Origins of Class Struggle in Louisiana*
membership in the same socioeconomic group over time, and those that have were forced to focus on narrowly defined locations. For example, in a series of papers Jonathan Wiener (1976; 1978; 1979) examined the impact of the war on a sample of planters from five counties in Alabama. In contrast to the conventional view, Wiener (1979) found that 43 percent of the 236 largest landholders in the Alabama black belt in 1860 remained among the “planter elite” in 1870; that persistence rate was quite close to the 47 percent persistence rate over the 1850 to 1860 period. In the five counties he studied, persistence seems to have depended primarily on land wealth and family structure (married men and those with sons were more persistent).\textsuperscript{4}

Another study by Randolph B. Campbell (1982) analyzed population persistence in one Texas county over the 1850 to 1880 period. He concluded that the rates of geographical persistence in that county were comparable to other areas of the country, and that persistence was fairly high among planters of all sizes: 43 percent of large planters persisted between 1860 and 1870, while poor whites were the least persistent (only 22 percent persistence rate). He also found that while the planter elite suffered considerable economic losses during the Civil War decade, they actually improved their relative position between 1860 and 1880.

Determining whether the mobility patterns described in these and other community studies is more broadly representative of the South is one objective of our study, which takes advantage of the searchable manuscript census records on Ancestry.com to dramatically broaden the scope as compared to prior studies. One advantage of this approach is that we can observe those individuals who retained their

\textsuperscript{4} This conventional view of the destruction of the planter elites began with Shugg (1937), but Woodward (1951) made notable contributions as well.
position in the wealth distribution even if they lived in another state or region in the 
two census years under consideration. We are able to avoid what Wiener (1976, pp. 
238-39) referred to as “moving and skidding” – the chance that those who do not 
appear to persist over time may have maintained their socioeconomic status 
elsewhere. To the extent that the individuals may have moved outside the localities 
examined in previous studies, those who moved and skidded would be unobserved. 
Furthermore, by linking backward from 1870 to 1860, we avoid counting those who 
died during the Civil War decade as being part of a non-persistent group.5

There is also a growing body of evidence that substantial wealth inequality, and 
its persistence over time, may lead to slower economic growth (Galor and Zeira, 1993; 
Aghion et al., 1999). One argument is that vast wealth concentrations in the hands of a 
small elite can lead to institutional arrangements that negatively impact growth 
(Engerman and Sokoloff, 1997, 2002; Acemoglu, 2008). By characterizing the nature 
of persistence in the wealth distribution after the Civil War, our work may help shed 
light on the extent to which wealthy southerners were able to use their wealth to 
maintain economic and political influence after the war (Shugg, 1937; Wiener, 1976; 
Ransom and Sutch, 2001).

2. The Impact of the Civil War on Wealth Levels and Distribution

We use IPUMS census data to characterize the top wealth holders in the north 
and south in 1860 and 1870. The IPUMS census files for these two years include the

5 Previous studies have recognized death as a factor in non-persistence and typically 
look for potential heirs, but this approach has some obvious limitations in cases where 
there were no surviving heirs. See Wiener (1976) and Campbell (1982).
only nationally representative data on personal wealth levels prior to the late-20th century and thus provide us with a unique resource for studying the distribution of wealth during that decade. While wealth levels in both census years were self-reported, (1994) showed that the 1870 values are highly correlated with local tax assessments and Steckel (1994) showed that the discrepancies that do exist are not systematically related to other socioeconomic indicators.

We use both the flat 1 percent population samples and the oversamples in the 1860 and 1870 IPUMS. The 1 percent samples are useful for overall population characteristics, but the 1870 oversample provides us with about 15% more heads of household in 1870, so we use the oversample data in most of the analysis, including the linkage across census years. 6

In total, the one percent sample from the 1870 census includes data on 373,748 individuals living in the north or south, with combined personal and real property wealth of $240.4 million. There were 66,900 household heads in that year, holding a combined wealth of $208 million - so by restricting our analysis to household heads, we include over 86.5 percent of the total wealth reported in the sample. 7 The 1 percent sample from the 1860 census includes data on 267,368 individuals (again this is restricted to those living in south or north) with total personal and real property

6 Black households were oversampled by the IPUMS because the black population size was relatively small in both census years. See Hacker et al (1999) for details on the oversampling in 1860 and 1870.
7 The 1870 IPUMS 1 percent sample includes data on a total of 75,297 heads of household with aggregate wealth of $223.1 million; however, we restrict our attention to those in Northern or Southern states who were between 25 and 75 years of age to obtain the totals reported here.
wealth of $168.3 million. Only 46,718 of those were heads of households, but they held 95.8 percent ($161.2 million) of all wealth reported in the sample.

Before the Civil War, total wealth in the southern states was considerably higher than in the north across the wealth distribution, but the differences were especially pronounced among the wealthiest households. Consider, for example, that median wealth in the north was only 41 percent of the southern level for the top 10 percent of the wealth distribution, but it was less than one-third of the southern wealth level for the top 1 percent. Since personal property in 1860 included the market value of slaves, it is not surprising that the most significant wealth reductions show up there. Ransom and Sutch (1988) estimated that southern slaves were worth over $3 billion on the eve of the Civil War, so the combination of war and emancipation clearly destroyed a massive amount of southern wealth. The median value of real property was cut in half for those at the very top of the wealth distribution, but the median personal property value for the top 1 percent of the Southern wealth distribution was by 1870 only 9.2 percent of its pre-war level. This pattern is likely due to the concentration of slaveholdings among wealthy southern households, which meant that there was at least some cushion for poorer households who were relatively less exposed to the economic consequences of emancipation. These results probably

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8 As in the 1870 IPUMS, this number is slightly lower than the total number of heads of household (273,596 with $188.5 million in total wealth) because we restrict our attention to individuals between 25 and 75 years of age, and we excluded the western region.

9 It is worth noting that the war itself was enormously costly for the nation as a whole, but disproportionately so for the South. Goldin and Lewis (1975) estimated that the war cost $75 per capita for the North and $451 for the South. The human cost was also considerably higher: 2.8 percent of the South’s population was killed in the war compared to 1.5 percent of the North’s population (Goldin, 1980, p. 938).
reflect the fact that over 80 percent of free adult males in the south did not own slaves and only 0.11 percent owned more than 100 slaves (Soltow, 1975). As Williamson and Cain (2010) put it, “The total estate for those in the upper tail of the [wealth] distribution was enormous. It should be emphasized that this is not a small elite; as a group, slave owners were sizeable and wealthy.”

One consequence of this slaveholding pattern is that the composition of total southern wealth changed dramatically by 1870. Before the war, southern wealth was concentrated in personal rather than real property, at least for the top 10 percent of wealth holders. By contrast, real property was a larger share of total wealth across the northern wealth distribution. These patterns were similar after the war for the north, but dramatically different – especially among the wealthiest – for the south. For wealthy southerners, the destruction of personal wealth wrought by the war and emancipation made real property the only significant source of wealth in 1870. Take, for instance, the top 1 percent of southern wealth holders whose wealth in real property exceeded that in personal property by a factor of four in 1870. Before the war, personal property wealth was 40 percent higher than real property wealth for this group.

There are relatively few women listed as heads of household in either region, but women represented a larger fraction of wealth holders in the South both before and after the Civil War. There was a noticeable increase in the female share of heads of household among the poorest households after the war. In 1860, 84.7 percent of households below the 55th percentile of the wealth distribution had male heads, but that number dropped to only 79.6 percent in the 1870 census. We suspect this is
driven by the presence of war widows in the south, where an estimated one out of five white men of military age died.\textsuperscript{10}

The likelihood that an individual would move outside of their birth state diminished as wealth levels increased in both the north and the south, although northerners were more likely to move than were southerners at all wealth levels in both 1860 and 1870. It would appear that the war impacted interstate migration in the south, since southerners at all wealth levels were less likely to live outside their birth state in 1870 than in 1860. With the exception of the two tail ends of the wealth distribution, northerners were most likely to have moved away from their birth state in 1870 than they were in 1860.

Rural residents comprised a considerably larger share of the southern population in both 1860 and 1870, although the share of rural residents in both regions declined by 1870, with the exception of southern households below the 55\textsuperscript{th} percentile.

For purposes of consistent comparisons across time, we use the IPUMS standardized 1950 occupational codes to evaluate the effects of the war on the occupational structure in both regions. These data indicate that farmers dominated the top of the southern wealth distribution in both 1860 and 1870, but white-collar jobs were much more important at the top of the northern wealth distribution. There were some notable changes in occupational composition across the wealth distribution over the Civil War decade; for instance, there was a considerable reduction in the share

\[\text{\textsuperscript{10} For more on southern war widows, see Hacker, Hilde, and Jones, “The Effect of the Civil War on Southern Marriage Patters,” and Drew Gilpin Faust, \textit{Mothers of Invention: Women of the Slaveholding South in the American Civil War.}}\]
of farming occupations at the top of the Southern wealth distribution between 1860 and 1870.

3. Creating a Linked Sample

There are two possible approaches to assessing the extent of wealth persistence between 1860 and 1870. The first approach begins with individuals who were among the top wealth holders in 1860 and seeks to follow them forward into the 1870 census. The second is to begin with individuals among the top wealth holders in 1870 and attempt to locate them in the 1860 census. While both approaches will help to illuminate the extent of wealth mobility, each offers a slightly different perspective on the composition and origins of the top wealth holders across the Civil War decade.

Our intention is eventually to combine the two perspectives, but because of limited resources our investigation to date has focused on linking individuals backward from the 1870 census. To construct our linked sample we began with data from the IPUMS 1.2% sample of the 1870 census. We then confined our analysis to heads of households between the ages of 25 and 75 in 1870, and further restricted the sample to include only individuals living in the Northeast, North Central, South Atlantic or South Central Regions. We then calculated total wealth for each head of household as the sum of personal and real property holding reported in the census and sorted the sample by total wealth. Within each region we generated a target population

\[\text{11 For 1860 and 1870 the IPUMS 1.2\% sample includes an oversample of households containing one or more Blacks. While non-black households are sampled to produce a 1-in-100 sample of the population, households with Black members were sampled at a rate of 1-in-50. We opted to use the larger sample in hopes that it would provide more Blacks.}\]
consisting of the top 10% of wealth holders based on total wealth. This criterion
results in a sample of 7,715 (4,728 in the North and 2,987 in the South) to be linked.

Starting with the highest wealth individuals and working downward we have so
far searched for 2,506 individuals in the 1860 census in the Ancestry.com database. To
qualify as a link, the individual located in the 1860 census had to have approximately
the same first and last names and a birth year within 2 years of that recorded in 1870.
In cases where the linkage was ambiguous because there were multiple individuals
meeting these criteria we did not record a link unless we could also match on the
individual’s place of birth.

The results of our search are summarized in Table 3. In total we were
successful in linking 1,154 individuals, yielding a success rate of 46%. Of these cases,
all but 30 were also matched on the basis of place of birth, which is a more restrictive
requirement. We did not utilize information about other household members as a
criterion for linkage, since doing so risks biasing the sample. Nonetheless we did
examine and record information about other household members and noted whether
we could also link a spouse and/or children in 1870 to the 1860 record.\footnote{In 1870 we considered the next four household members listed under the head of household, and checked for whether the names and ages of spouses and/or children matched between the two censuses.} Underscoring the quality of the matching process, in 991 cases (85% of the linked
records) we were able confirm the linkage based on the identity of other household
members between the two censuses. Our linkage rate appears to be considerably
higher than other studies that have sought to link nineteenth century census records.
Ferrie (1997), for example reports a success rate of just under 20% when linking
forward from the 1850 to the 1860 census. The relatively high rate of success in linking in our sample likely reflects the greater stability of high wealth individuals. Backward linkage also eliminates the negative effects of mortality on linkage.

In Table 3, we report a number of characteristics of the linked and unlinked individuals. The final column of the table reports differences in mean values between the linked and unlinked samples and their significance levels. It is apparent that a number of these characteristics differed significantly between the linked and unlinked individuals. Linked individuals were, on average, almost 4 years older than those we failed to link. This may be because of the difficulty of locating records for younger individuals in 1860, especially if they were living in households headed by others. They also reported higher levels of property ownership, were more likely to be living in their state of birth and less likely to be foreign born. In addition, there was a strong regional differential in the likelihood of linkage, with a higher proportion of linked records being in the north than was true for the unlinked records. In contrast to the association of a number of personal characteristics with the likelihood of linkage, the overall occupational distributions across the linked and unlinked groups was quite similar: close to 40 percent of both groups were farmers and another quarter were in clerical and managerial positions.

It is worth noting that close to seven percent of the top wealth holders we identified in 1870 were women. While the potential for name changes means that it is more difficult generally to locate women across census years, we have attempted to do so here and, as Table 3 indicates, women were only slightly less likely to be linked than men in our sample. In measuring 1860 wealth for women household heads in 1870 we
have attributed to them both any property attributed to them in 1860 and any property owned by their husband at that time.

4. Assessing Wealth Mobility in the 1860s

The decade of the 1860s was characterized by substantial economic disruptions in both northern and southern states. In the South the war resulted in substantial property destruction and ended with the emancipation of the slave population, wiping out the largest component of southern wealth. In the North, the interruption of cotton shipments substantially affected the textile industry, while the demands of raising and supplying the Union Army created opportunities for enterprising businessmen. How did these events affect wealth holders in both regions? Were the effects of wartime disruptions more concentrated in the South? Or were southern wealth holders able to hold onto their economic power despite the significant reductions in total wealth caused by emancipation?

As we have noted, during the 1860s average wealth levels decreased substantially in the South, but increased substantially in the North. So it makes the most sense to consider the question of wealth stability in relative terms within each region. Table 4 shows the origins of 1870 top-wealth holders that we have been able to locate in the 1860 census in terms of their relative wealth holding at the time of that census. The first column for each region reports totals, while the next two columns break the top wealth group into two groups: the wealthiest 1 percent, and those in the top 95-99 percent of wealth holders.
Looking at the lower panel of the table, which shows each cell as a percentage of the column total, it is apparent that there was considerably more turnover among the ranks of southern wealth holders than among northern wealth holders. While more than half of the those in the top 5 percent of northern wealth holders had been in the same group in 1860 just one-third of top southern wealth holders in 1870 had enjoyed a similar status in 1860.

In both regions roughly similar fractions (10.3 percent in the South vs. 11.6 percent in the North) had managed to move from the bottom 55% into the top tier of wealth holders, but a much larger number of those in the 55th-90th wealth percentiles in 1860 had been able to move up in the South. In 1870, nearly 40 percent of the top wealth holders were drawn from this group. In contrast, this group made up just over 20 percent of top wealth holders in the North.

One concern in interpreting the results in table 4 is that they may be influenced by differences in sample composition across regions. As noted earlier, the probability of linkage varied systematically with a number of personal characteristics, and it is possible that these differences affect differences in measured persistence across regions. To test this hypothesis we report the results of estimating a probit regression where the dependent variable takes the value 1 if the individual was in the top 10% of 1860 region wealth holders. The first specification includes only a constant and a zero-one indicator variable for 1870 region of residence. The second specification adds a quadratic in age as well as indicators for foreign born and living in 1870 outside individual’s the state of birth. In the final specification, we add indicators for whether the individual’s household includes a spouse or child.
While several of these variables are statistically significant, they have little impact on the magnitude of the 1870 region on persistence among the top wealth holders. With our without demographic controls the regression estimates imply that 1870 residence in the North increased the probability that a top wealth holder had been among the top 10% in 1860 by close to 20 percentage points.

In addition to wealth mobility, the data we have collected on top wealth holders in 1870 allow us to evaluate the geographic mobility of this elite group. Only a very few of these wealthy individuals migrated between regions in the 1860s: only 18 (5 percent) of top southern wealth holders and 9 (1.1 percent) of top northern wealth holders had lived in a different region 10 years earlier. As Table 6 shows, interstate migration was also relatively uncommon, and about equally likely within each region. Among top wealth holders in 1870 only 12.5 percent of those in the South had moved across state lines in the previous decade while the corresponding figure for the wealthiest northerners was 9.3 percent.

5. Conclusion

Our investigation of wealth mobility during the 1860s is still in progress. We are expanding our sample of top 1870 wealth holders linked to the 1860 census and gathering data needed to link top wealth holders in 1860 to the 1870 census. Nonetheless the results of our preliminary investigation are both promising and intriguing.

The 1860s were a period of pronounced economic turmoil resulting from a major war and emancipation. These political shocks created huge economic losses in
the South, but must also have offered opportunities to profit in the region for those adept enough to respond to changing conditions. Similarly, economic shocks to the northern economy should have created opportunities to profit. In the aggregate the events of the 1860s resulted in substantial declines in measured wealth in the South and large increases in wealth holding in the North.

Using the index available in Ancestry.com to link individuals between the 1860 and 1870 censuses we have found that the economic shocks of the 1860s resulted in considerably more upward mobility in the South than in the North. Close to half of the wealthiest 5% of southerners in 1870 had begun the decade outside the top 10% of wealth holders. In contrast only about one-third of the wealthiest northerners had been able to move this far up the wealth distribution.

On the other hand, it is worth noting that despite the large political and economic shocks the nation experienced over the decade one-third of the wealthiest southerners and more than half the wealthiest northerners had enjoyed a similar status in 1860. Clearly wealth provided considerable insulation from the decade’s economic shocks regardless of where one lived. Yet, in relative terms the Civil War did create considerably more turnover among top wealth holders in the South than it did in the North.

By examining the fates of those at the top of the wealth distribution in 1860 we expect in the future to be able to provide greater insight about where those who fell out of the top wealth group landed.
Bibliography


Table 1: North Relative to South (South=100) in 1860 and 1870, by percentile

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<td>120.93</td>
<td>102.16</td>
</tr>
<tr>
<td>Male</td>
<td>98.69</td>
<td>98.70</td>
</tr>
<tr>
<td>Rural Resident</td>
<td>93.07</td>
<td>93.97</td>
</tr>
<tr>
<td>Foreign Born</td>
<td>98.62</td>
<td>141.52</td>
</tr>
<tr>
<td>Living Outside Birth State</td>
<td>99.17</td>
<td>106.49</td>
</tr>
<tr>
<td>White</td>
<td>98.92</td>
<td>99.96</td>
</tr>
<tr>
<td>Professional &amp; Technical</td>
<td>103.57</td>
<td>82.91</td>
</tr>
<tr>
<td>Farming</td>
<td>91.52</td>
<td>91.46</td>
</tr>
<tr>
<td>Clerical &amp; Managerial</td>
<td>114.59</td>
<td>108.90</td>
</tr>
<tr>
<td>Sales</td>
<td>112.68</td>
<td>177.05</td>
</tr>
<tr>
<td>Craftsmen</td>
<td>85.79</td>
<td>100.10</td>
</tr>
<tr>
<td>Operatives &amp; Kindred workers</td>
<td>131.11</td>
<td>116.74</td>
</tr>
<tr>
<td>Laborers</td>
<td>91.57</td>
<td>117.90</td>
</tr>
<tr>
<td>Non-Occupational</td>
<td>100.14</td>
<td>144.45</td>
</tr>
</tbody>
</table>
Table 3: Characteristics of Backward Linked Sample

<table>
<thead>
<tr>
<th>Linked records</th>
<th>No Link</th>
<th>All Links</th>
<th>Name and Age</th>
<th>And Birthplace</th>
<th>And HH Member</th>
<th>Difference between unlinked and linked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of observations</td>
<td>1,352</td>
<td>1,154</td>
<td>30</td>
<td>133</td>
<td>991</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>47.84</td>
<td>51.95</td>
<td>55.67</td>
<td>44.98</td>
<td>52.77</td>
<td>-4.929***</td>
</tr>
<tr>
<td>Nonwhite</td>
<td>1.1%</td>
<td>0.2%</td>
<td>0.0%</td>
<td>0.8%</td>
<td>0.1%</td>
<td>0.0101***</td>
</tr>
<tr>
<td>North</td>
<td>52.1%</td>
<td>68.9%</td>
<td>60.0%</td>
<td>71.4%</td>
<td>68.8%</td>
<td>-0.167***</td>
</tr>
<tr>
<td>Urban</td>
<td>62.9%</td>
<td>64.1%</td>
<td>60.0%</td>
<td>57.9%</td>
<td>65.1%</td>
<td>-0.0222</td>
</tr>
<tr>
<td>Male</td>
<td>91.3%</td>
<td>94.3%</td>
<td>90.0%</td>
<td>88.0%</td>
<td>95.3%</td>
<td>-0.0399***</td>
</tr>
<tr>
<td>Foreign Born</td>
<td>16.1%</td>
<td>10.9%</td>
<td>3.3%</td>
<td>9.0%</td>
<td>11.4%</td>
<td>0.0472***</td>
</tr>
<tr>
<td>Real Property</td>
<td>$24,166</td>
<td>$29,037</td>
<td>$40,842</td>
<td>$30,838</td>
<td>$28,438</td>
<td>$-4272.0**</td>
</tr>
<tr>
<td>Personal Property</td>
<td>$12,285</td>
<td>$15,583</td>
<td>$34,272</td>
<td>$23,062</td>
<td>$14,014</td>
<td>$-1728.7</td>
</tr>
<tr>
<td>Has a Spouse in 1870</td>
<td>80.7%</td>
<td>86.7%</td>
<td>80.0%</td>
<td>69.9%</td>
<td>89.2%</td>
<td>-0.0851***</td>
</tr>
<tr>
<td>Has a Child/children in 1870</td>
<td>82.7%</td>
<td>89.7%</td>
<td>93.3%</td>
<td>78.9%</td>
<td>91.0%</td>
<td>-0.0833***</td>
</tr>
<tr>
<td>Living outside state of birth</td>
<td>50.3%</td>
<td>43.3%</td>
<td>40.0%</td>
<td>40.6%</td>
<td>43.8%</td>
<td>0.0650**</td>
</tr>
<tr>
<td>Professional &amp; Technical Occ.</td>
<td>7.6%</td>
<td>8.8%</td>
<td>3.3%</td>
<td>13.5%</td>
<td>8.3%</td>
<td>-0.00656</td>
</tr>
<tr>
<td>Farming</td>
<td>41.2%</td>
<td>43.8%</td>
<td>40.0%</td>
<td>30.1%</td>
<td>45.7%</td>
<td>-0.0451*</td>
</tr>
<tr>
<td>Clerical &amp; Managerial</td>
<td>28.6%</td>
<td>25.8%</td>
<td>40.0%</td>
<td>29.3%</td>
<td>24.9%</td>
<td>0.0370*</td>
</tr>
<tr>
<td>Sales</td>
<td>1.3%</td>
<td>1.7%</td>
<td>0.0%</td>
<td>2.3%</td>
<td>1.7%</td>
<td>-0.00458</td>
</tr>
<tr>
<td>Craftsmen</td>
<td>3.7%</td>
<td>5.0%</td>
<td>3.3%</td>
<td>3.8%</td>
<td>5.2%</td>
<td>-0.0155</td>
</tr>
<tr>
<td>Operatives &amp; Kindred workers</td>
<td>1.9%</td>
<td>2.8%</td>
<td>3.3%</td>
<td>2.3%</td>
<td>2.8%</td>
<td>-0.00902</td>
</tr>
<tr>
<td>Service workers</td>
<td>0.4%</td>
<td>0.3%</td>
<td>0.0%</td>
<td>0.8%</td>
<td>0.2%</td>
<td>0.00242</td>
</tr>
<tr>
<td>Laborers</td>
<td>0.9%</td>
<td>0.3%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.4%</td>
<td>0.00484</td>
</tr>
<tr>
<td>Non-Occupational</td>
<td>14.3%</td>
<td>11.5%</td>
<td>10.0%</td>
<td>18.0%</td>
<td>10.7%</td>
<td>0.0365**</td>
</tr>
</tbody>
</table>

*Statistically significant at *10% level, **5% level, and ***1% level
T-tests for difference in means calculated using Welch’s test when sample sizes and variances are unequal between groups.
Table 4: 1860 Wealth of 1870 Top 5% of Wealth Holders, by Region

<table>
<thead>
<tr>
<th>1860 Wealth</th>
<th>Top 5% of Wealth Holders in Region in 1870</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>South</td>
<td>Top 1%</td>
<td>Top 5-1%</td>
<td>North</td>
<td>Top 1%</td>
</tr>
<tr>
<td>Bottom</td>
<td>All</td>
<td>All</td>
<td>All</td>
<td>All</td>
<td>All</td>
</tr>
<tr>
<td>55%</td>
<td>37</td>
<td>8</td>
<td>29</td>
<td>92</td>
<td>36</td>
</tr>
<tr>
<td>55-90%</td>
<td>134</td>
<td>17</td>
<td>117</td>
<td>169</td>
<td>43</td>
</tr>
<tr>
<td>90-95%</td>
<td>68</td>
<td>21</td>
<td>47</td>
<td>120</td>
<td>18</td>
</tr>
<tr>
<td>95-99%</td>
<td>85</td>
<td>35</td>
<td>50</td>
<td>273</td>
<td>78</td>
</tr>
<tr>
<td>100%</td>
<td>33</td>
<td>24</td>
<td>9</td>
<td>141</td>
<td>102</td>
</tr>
<tr>
<td>Col Total</td>
<td>357</td>
<td>105</td>
<td>252</td>
<td>795</td>
<td>277</td>
</tr>
</tbody>
</table>

*Column percentages*

<table>
<thead>
<tr>
<th>Bottom</th>
<th>South</th>
<th>North</th>
</tr>
</thead>
<tbody>
<tr>
<td>55%</td>
<td>10.4%</td>
<td>11.6%</td>
</tr>
<tr>
<td>55-90%</td>
<td>37.5%</td>
<td>21.3%</td>
</tr>
<tr>
<td>90-95%</td>
<td>19.0%</td>
<td>15.1%</td>
</tr>
<tr>
<td>95-99%</td>
<td>23.8%</td>
<td>34.3%</td>
</tr>
<tr>
<td>100%</td>
<td>9.2%</td>
<td>17.7%</td>
</tr>
</tbody>
</table>

Source: authors' calculation from observations of top wealth holders in 1870 linked to the 1860 population census.
Table 5: Probit regressions for the probability that an individual in the top 5% of 1870 wealth holders was among the top 10% of wealth holders in 1860

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North 1870</td>
<td>0.501***</td>
<td>0.504***</td>
<td>0.512***</td>
</tr>
<tr>
<td></td>
<td>(5.83)</td>
<td>(5.61)</td>
<td>(5.65)</td>
</tr>
<tr>
<td>age</td>
<td>0.0524</td>
<td>0.0630</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.48)</td>
<td>(1.78)</td>
<td></td>
</tr>
<tr>
<td>agesq</td>
<td>-0.000207</td>
<td>-0.000315</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-0.62)</td>
<td>(-0.94)</td>
<td></td>
</tr>
<tr>
<td>Foreign born</td>
<td>-0.491***</td>
<td>-0.490***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-3.47)</td>
<td>(-3.43)</td>
<td></td>
</tr>
<tr>
<td>Outside state of birth</td>
<td>-0.0615</td>
<td>-0.0590</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-0.70)</td>
<td>(-0.67)</td>
<td></td>
</tr>
<tr>
<td>Spouse 1870</td>
<td></td>
<td>-0.0253</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-0.20)</td>
<td></td>
</tr>
<tr>
<td>Child 1870</td>
<td></td>
<td>-0.291*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-2.16)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-0.462***</td>
<td>-2.533**</td>
<td>-2.505**</td>
</tr>
<tr>
<td></td>
<td>(-6.32)</td>
<td>(-2.77)</td>
<td>(-2.74)</td>
</tr>
<tr>
<td>N</td>
<td>1153</td>
<td>1153</td>
<td>1153</td>
</tr>
<tr>
<td>pseudo R-sq</td>
<td>0.021</td>
<td>0.080</td>
<td>0.084</td>
</tr>
<tr>
<td>Log Likelihood</td>
<td>-68606.0</td>
<td>-64453.9</td>
<td>-64219.0</td>
</tr>
</tbody>
</table>

* p<0.05    ** p<0.01    *** p<0.001

Table 6: Geographic Mobility of 1870 Top Wealth Holders

<table>
<thead>
<tr>
<th>1860/70 Residence</th>
<th>South</th>
<th>North</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All</td>
<td>Top 1%</td>
</tr>
<tr>
<td>same state</td>
<td>314</td>
<td>90</td>
</tr>
<tr>
<td>different state</td>
<td>44</td>
<td>16</td>
</tr>
<tr>
<td>col total</td>
<td>358</td>
<td>106</td>
</tr>
</tbody>
</table>

*Column percentages*

| same state        | 84.9%          | 88.9%          | 90.7%          | 88.8%          | 91.7%           |
| different state   | 15.1%          | 11.1%          | 9.3%           | 11.2%          | 8.3%            |