NBER WORKING PAPER SERIES

WEALTH MOBILITY IN THE 1860S

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Working Paper 27968
http://www.nber.org/papers/w27968

NATIONAL BUREAU OF ECONOMIC RESEARCH
1050 Massachusetts Avenue
Cambridge, MA 02138
October 2020

Completion of this project was made possible by the efforts of three excellent undergraduate research assistants, Leah Greteman, Skyler Schneekloth, Catherine Thompson, who compiled the linked data sample. Schneekloth provided further assistance with processing and analyzing the linked data. We have also received helpful input from participants in the Iowa State University Labor-Public Economics workshop and the Western Washington University Economics discussion group. The views expressed herein are those of the authors and do not necessarily reflect the views of the National Bureau of Economic Research.

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NBER Working Paper No. 27968
October 2020
JEL No. N11,N31,N91

ABSTRACT

We offer new evidence on the regional dynamics of wealth holding in the United States over the Civil War decade based on a hand-linked random sample of wealth holders drawn from the 1860 census. Despite the wealth shock caused by emancipation, we find that patterns of wealth mobility were broadly similar for northern and southern residents in 1860. Looking at the determinants of individual wealth holding in 1870, we find that the elasticity with respect to 1860 wealth was quite low in both regions—consistent with high levels of wealth mobility.

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1. Introduction

Rising levels of income and wealth inequality in the United States and other developed economies since the 1980s have attracted renewed attention to the dynamics of wealth accumulation. Whether market economies display a tendency toward rising inequality remains an open question. There is evidence, however, that major economic dislocations such as the Great Depression and World War II – and the policies enacted during this period - temporarily reversed the trend toward increasing inequality. Piketty (2014, p. 275) showed that, "it was the chaos of war, with its attendant economic and political shocks, that reduced inequality in the twentieth century…In the twentieth century it was war, and not harmonious democratic or economic rationality, that erased the past and enabled society to begin anew with a clean slate." But there is relatively little evidence from earlier time periods that would contextualize these mid-twentieth century events.

In this paper we offer new evidence from an earlier period by examining patterns of wealth mobility in the United States over the Civil War decade. The U.S. federal censuses of 1860 and 1870 included questions about personal and real property wealth, allowing us to examine how the Civil War and the resulting emancipation of enslaved African-Americans affected property ownership.[1]

[1] Despite the fact that these property ownership data are self-reported, the general consensus has been that they are reasonably accurate. Soltow (1975, p. 6) concluded that they were "generally in line with estimates made by various authorities on wealth distribution. Growth rates are similar to those found for GNP per worker by Kuznets and commodity output per worker by Gallman." Steckel (1990) noted that it would be difficult to have concealed real estate holdings and Querubin and Snyder (2011, p. 65) have argued that there was little incentive to conceal or under report wealth holding. Where other local tax data are available, they generally line up with the census data. See Steckel (1994) for comparisons with Ohio and Massachusetts data, as well as Galenson and Pope (1992), Blocker (1994) and Bleakley and Ferrie (2016). Another concern with the Census data is that some populations were under enumerated in 1870, a point argued by Steckel (1991). Hacker (2013) and Blocker (1994), however, show that the rate of under enumeration was not exceptionally high.

In addition to contributing to the larger literature on the dynamics of wealth inequality our analysis also contributes to an historical literature that has sought to trace the effects of emancipation on the southern elite. Among early analysts of the effects of emancipation, the prevailing argument was that emancipation had been accompanied by the displacement of the pre-war elite (see, e.g., Hammond 1897). Reflective of this view, Buck (1937, p. 145) concluded that: "The small, rich landowning aristocracy in whose interest so much of Southern energy had been expended was deprived of its privileged position." Yet, by the time Buck was writing a new view based on more quantitative evidence was beginning to emerge. Reflecting this new perspective, Shugg (1937) argued that the plantation system was not destroyed by the war and that land ownership actually became more concentrated after the Civil War.

The most influential modern works on this subject are Jonathan Wiener's (1976, 1979) studies using census data for five Alabama counties. Relying on manuscript censuses from these counties, Wiener analyzed a sample of the 263 largest landholders in 1860, seeking to locate them in the 1870 census. He then compared their persistence rate over the 1860s with the persistence of a comparable group between 1850 and 1860. Finding that the rate of persistence in the 1860s (43 percent) was close to that of the 1850s (47 percent), he concluded that this supported Shugg's argument that the wealthy planter elite had been successful in retaining their position despite the disruptions of the Civil War. Ransom and Sutch (1977) concurred with Wiener that the land ownership patterns were quite stable over the decade allowing the pre-war elite to retain their political and social influence in the post-war South.[2]

[2] In addition to the sources cited in the text see also Campbell (1982) who analyzed persistence in one Texas county from 1850 to 1880, and Ransom (1989).

An important limitation of the studies by Wiener and other quantitative historians is their limited geographic scope. In the absence of comprehensive finding aids for the census, data could only be gathered on individuals who remained within a narrow geographic area. Thus, the fate of individuals who migrated out of the region of study could not be determined. Their departure might have reflected a response to downward mobility, but it was equally possible that they had moved in pursuit of new and more attractive opportunities elsewhere. As Massey (2016, p. 5) notes, matching individuals within restricted geographic areas "poses a serious threat to the representativeness of the matched sample."

In the past decade, however, advances in electronic finding aids for historical censuses combined with online access to complete census manuscripts for the entire country, has eliminated these technical constraints and enabled a new generation of scholars to trace individuals regardless of geographic mobility. In a recent article, we analyzed the top 5 percent of wealth holders in the North and South found in the IPUMS 1% sample of the 1870 census, linking them backward to the 1860 census using Ancestry.com's search function and then locating them in the 1860 wealth distribution (Dupont and Rosenbloom 2018). We found that while there was substantial persistence among the southern elite, the rate of downward (and upward) mobility was greater in the South than in the North. While 40 percent of the wealthiest northerners in 1870 had been in the top 5 percent in 1860, less than 28 percent of the richest southerners had been in the top 5 percent in 1860.

Using the complete-count digitized version of the 1860 census linked to the 1870, 1880 and 1900 censuses Ager, Boustan and Eriksson (2019) were able to trace the fortunes of southern household heads and their sons over a substantially longer period. Consistent with Dupont and Rosenbloom (2018) they found that southern slaveholders experience larger drops in wealth than

other household heads. However, they reported that by 1880 the sons of southern slave holders had rebounded, achieving a status comparable to that of their fathers before the Civil War. Because questions about wealth were included only in the 1860, 1860 and 1870 censuses, however, comparisons beyond this period must be based on the inferred status of different occupations rather than on a direct comparison of wealth.

In this paper we offer an additional perspective on the effects of the events of the 1860s through a comparison of a random sample of household heads in all regions of the country drawn from the one percent sample of the 1860 census and linked forward to the 1870 censuses. While the Ager, Boustan and Eriksson (2019) analysis focused on the differential effects of slave ownership on the fortunes of southerners, we explicitly consider inter-regional differences in wealth mobility. And in contrast to our earlier work, by using a random sample of pre-war wealth holders we are better able to analyze the factors that were associated with upward and downward mobility over the decade. With this new sample we find that overall wealth persistence was remarkably similar across regions, despite the fact that most of the effects of the Civil War were concentrated in the South. Nonetheless, we do find some evidence that emancipation did produce greater wealth mobility in the South. Specifically, we show that the correlation of personal property ownership (which included slave wealth in 1860) between 1860 and 1870 was lower in the South than in the North, but that the magnitude of this difference was too small to impact the behavior of total wealth in the decade.

2. Data

In the absence of unique and reliable identifying information that would allow individuals to be unambiguously linked between different data sources, researchers seeking to create linked

data must draw inferences about whether observations in different sources are truly the same person based on commonly available and time invariant information such as name, birth year, and birth place. In doing so, they must contend with the fact that names may change over time because Census enumerators may have misspelled them, the household respondent may have reported them incorrectly, or an individual may have changed her/his name. Age and birth year may differ across sources due to a tendency of people to round age to the nearest multiple of 5 ("age heaping"). Similarly, respondents may provide somewhat different information about birth place at different times. Digitization of the original handwritten records can introduce further errors, when the original information is difficult to read or is transcribed incorrectly (Bailey et al 2017, p. 3). Finally, mortality and emigration mean that some individuals are not available to be enumerated in subsequent data sets.

For these reasons, constructing a linked data set requires a set of subjective judgements about whether an individual located in one source is in fact the same person as the one found in another. Among the most important questions to consider are whether the names are sufficiently similar and whether the reported age is close to what it should be. As the criteria for accepting non-exact matches are loosened more matches may be made, increasing the size of the linked sample. But at the same time, the possibility of incorrect linkages (Type I errors), in which two different people are assumed to be the same person, increases, which introduces spurious matches. Stricter criteria reduce the number of incorrect linkages, but increase the likelihood of rejecting correct linkages (Type II errors). Including incorrect linkages introduces noise in the data with a resultant attenuation of estimated parameters. Rejecting true links reduces sample size and hence statistical precision. Moreover, if the rejected links are systematically selected, these Type II errors can introduce sample selection issues into the resulting data.

Bailey et al (2017) provide an excellent overview of the different approaches to record linkage that have been adopted by researchers and evaluate how well they perform on several data sets for which the ground truth is known with a high degree of certainty. Their comparisons reveal that the automated linkage methods that have been used in a number of recent studies are prone to accepting incorrect links in up to 37 percent of cases. Interestingly, many of these methods also increase the number of incorrectly rejected links. The reason for both seems to derive from phonetic name processing and other approaches to inexact name matching. Because these approaches reduce spelling variations, they result in more potential matches which increases the chance of incorrect matches and the likelihood of rejecting a true match because there are multiple matches that cannot be disambiguated.

For this paper we have hand-collected a set of 1,682 observations of household heads between the 1860 and 1870 federal censuses. To obtain these data we began by drawing a random sample of 8,400 household heads from the one percent sample of the 1860 federal population census available through IPUMS (Ruggles et al 2020; downloaded 1/3/2018). After dropping individuals younger than 16 and older than 76 in 1860, the sample is reduced to 8,321 observations. To ensure reasonable geographic representation we stratified our initial sample by census regions: we selected 4,000 observations each from the North and South, and 400 observations from the western states.[3]

Our research assistants then searched for each individual using Ancestry.com's search algorithm based on first and last name, birth year, birth location, and gender. Ancestry's search algorithm uses Soundex to produce search results for exact and similar name matches. Our

[3] For our purposes, the North consists of the New England, Mid Atlantic and East and West North Central Census Divisions, with the exception of Missouri (a slave state in 1860) which we include in our definition of the South. The South then includes Missouri and the states in the South Atlantic, and East and West South Central Census Divisions.

research assistants reviewed the search results. If there was an exact and unique match they were instructed to accept it and record data from the 1870 census manuscript. If there was no exact match, they reviewed the search results for names that appeared acceptably similar and had a birth year within 2 years of that inferred from the 1860 census. If multiple matches met these criteria they were instructed to consider place of birth to break these "ties." In cases where it was not possible to uniquely resolve the match they were instructed to treat the case as an unsuccessful link.[4]

Our linkage rate of 1,682/8,321 (20.2%) is roughly consistent with that of other researchers linking records forward from one census to a later one (Bailey et al 2017).[5] Because marital status and children are endogenous and may be correlated with other characteristics of interest, we did not use information about other household members as a criterion to select links. However, comparing data on spouses and children, when present, offers an independent assessment of the quality of the links. In 923 (about 55%) of the linked observations cases we are able to confirm that another household member present in 1860 was also present in the 1870

[4] Because our method relied on the subjective judgement of our research assistants to determine which variant names were "close enough" we assigned about 10 percent of cases to multiple research assistants and compared these cases. When the research assistants made different choices, we discussed the reasons for each choice and determined if there was a way to resolve these differences. These discussions helped both to sharpen their judgment over time and increase the uniformity of decision making as the project progressed.

[5] Census officials at the time, and some later scholars have expressed concern about the high rate of under enumeruation in the 1870 census, which could depress the rate of successful linkage. However, according to Hacker et al (1999, p.129), “the undercount estimate given in the 1890 census report was greatly exaggerated as a result of a failure to account for the magnitude of the negative demographic shock caused by the Civil War.” They point out that to arrive at the estimate of a 1.2 million person undercount, the 1890 investigators had assumed that the South experienced steady population growth between 1860 and 1880. Recent studies, however, have suggested that the Civil War substantially slowed population growth in the 1860s relative to the pace in the 1870s. Adopting a more realistic set of assumptions about the rate of population increase in the 1860s implies an undercount of about 6.6 percent, not significantly different from nonresponse rates in modern survey data (Hacker, 2013). On this basis Hacker et al, argued that the “under enumeration of southern whites and blacks in 1870 was far lower than 1890 investigators estimated. [The 1870 census] will not pose a significant problem for most analyses.”

census records for the household. This result provides an independent confirmation that these observations are indeed correctly matched.

Table 1 summarizes the results of our linkage effort, comparing a variety of demographic characteristics between the linked (column 2) and unlinked (column 1) observations. We also report the same summary statistics for those "high quality" links (column 3) in which another household member can be linked across the two census years. The fourth and fifth columns report, respectively, the t-statistics for the difference in means between the linked and unlinked observations and the p-value of this test statistic. There are a number of systematic differences between the linked and unlinked observations. Compared to the unlinked, our linked sample is about 15 months older, was more likely to report non-zero wealth in 1860 was less likely to be foreign born, less likely to be nonwhite, less likely to be living in an urban area, and more likely to have a family in 1860. The average wealth of the linked sample is also somewhat higher, although this difference is not statistically significant. In addition, it is apparent that we were more successful in linking individuals residing in the North in 1860 than those living in the South or West. Given the more pronounced effects of the Civil War on the southern economy and the greater geographic mobility of individuals in the West it is perhaps not surprising that this is the case. For the most part the occupational distribution of the linked and unlinked samples is quite similar, although farmers are over represented in the linked sample and service workers, laborers and those in the non-occupational category are under represented.

3. Wealth Mobility

One way to describe wealth mobility over the 1860s is to look at individual movement within the wealth distribution in the two years. This is the approach we took in our earlier

analysis (Dupont and Rosenbloom 2018). Before considering the data, however, it is important to note that emancipation presents an inherent challenge to these comparisons. In 1860, enslaved persons were not enumerated in the population census. In 1870, however, the formerly enslaved were included in the population count, which added to the size of the overall population, especially in the South. Because they were mostly propertyless, the added observations were concentrated in the bottom tail of the distribution. The larger population expands the size of each percentile category, thus shifting the dividing points between percentile groups. In general we would expect the lower bounds for each group to decline, producing an apparent upward mobility among the 1860 free population. Ideally, we would like to be able to track movements in the wealth distribution within a consistently defined population. The best we can do in this case, however, is to locate individuals relative to the distribution of wealth among white household heads in both 1860 and 1870.

In Table 2 we compare individuals' locations in the overall distribution of total property ownership between 1860 and 1870 based on their 1860 region of residence. To do this we first use data on all white household heads in the 1 percent samples of the 1860 and 1870 censuses to characterize the distribution of wealth in each region in each year, and use this information to locate individuals in our linked sample within the distribution for their region of residence in each year. We aggregate the bottom 55 percent of wealth holders because most of this group reported zero wealth holding and it is not possible to discern movement up or down within this group. In the table, the rows of each panel count individuals based on their position in the 1860 wealth distribution within their region of residence in 1860, while the columns count individuals based on their position in the 1870 wealth distribution in the region of residence in 1870. The cells along the diagonal of the table represent individuals who neither moved up nor down. Cells

to the right of the diagonal represent individuals who moved up in the wealth distribution, while cells to the left represent individuals whose wealth status declined over the decade. Panel (a) reports mobility for residents of the Northern states in 1860 regardless of 1870 location, while panels (b) and (c) show similar data for residents of Southern and Western states, respectively.

In all three regions there is a considerable degree of movement, both up and down the wealth distribution over the decade. In the North, for example, of 431 household heads in the bottom 55 percent of the wealth distribution in 1860, 295 (68.4 percent) remained in this category in 1870, but 38 had moved into the 55^{th}-65^{th} percentile, while 39 had moved into the next tier (65^{th}-75^{th} percentile), and 61 had moved up even futher, with 6 reaching the top 5 percent of 1870 wealth holders. A very similar movement is apparent in the South where 65.8 percent of those in the bottom tier of the wealth distribution remained in that category in 1870, but 34.2 percent had moved up.

One quick way to summarize the overall pattern of movement within regions is to count the numbers of those who moved down the distribution, remained in the same relative position or moved up. We report these figures at the bottom of the panels in Tables 2-4. Since wealth accumulates with age we would expect, other things equal, that household heads in 1860 would move up the wealth distribution over the succeeding decade as they aged and accumulated wealth. We see some evidence of this – more northern and southern heads of household moved to higher wealth categories than moved to lower ones – but there is significant stability within the wealth distribution in both regions. A plurality of households in the north and the south were in the same wealth category in 1870 as they were in 1860 whether we measure total wealth or its components. And we see a fairly large percentage of households that moved down the wealth distribution, sometimes considerably. The west is somewhat different, with the largest

percentage of those households moving down the wealth distribution, but the small number of individuals in that region should lead us to interpret those results with caution.

Because individuals reported personal and real estate wealth separately, we can also examine the evolution of wealth holding in these separate categories. Tables 3 and 4 report wealth transition tables for each of these wealth categories, respectively. There is greater stability in the wealth distribution when we look at real property wealth as compared to personal wealth. For real property wealth, the percentage of households that did not change positions in the wealth distribution were 46.2 and 44.4 percent for the north and south, respectively. But for personal wealth, those figures drop to 41 and 37 percent, respectively. In our earlier work (Dupont and Rosenbloom 2018), we found that there was more turnover among top wealth holders in the south. Our results here similarly show that the top wealth holders in the north were more likely to be non-movers; for example, 42 percent of northerners who were in the 85-95th percentile of the total wealth distribution in 1860 were in that same category in 1870 but only 32 percent of southerners were. This same pattern holds throughout the top end of the total wealth distribution. Most of these north-south differences are driven by the personal property component of total wealth, which is not surprising given that the 1860 personal property for southereners included slaves. [6]

[6] The magnitude of this regional differential is perhaps somewhat less muted than that found in our earlier analysis of top wealth holders in the South. One reason for this is that our earlier focused only on top wealth holders in 1870 and did not account for the effects of emancipation on the population enumerated in the 1870 census. Adding the formerly enslaved to the population in 1870 has a pronounced effect in the South, where it both increases total population size (thus increasing the size of each percentile category) and alters the overall distribution of wealth by increasing the size of the population with little or no property. As one illustration, if we use the entire population to calculate the wealth distribution in 1870, 47.6% of southern household heads in our linked sample moved up in the wealth distribution between 1860 and 1870 (compared to 31.6% percent using only the white population in 1870). By contrast, in the North, where there were far fewer of the formerly enslaved in 1870, the fraction moving up changes only from 28.9% (white population wealth distribution) to 29.9%.

4. The Determinants of 1870 Individual Wealth Holding

The aggregated data reported so far establish that broad patterns of wealth mobility in the North and South were similar over the 1860s, although there are noticeable differences at the top end of the wealth distribution, mostly driven by differences in the personal wealth category. There is some evidence that wealth mobility in the more sparsely settled western parts of the country behaved differently, but because of relatively small size of our linked sample from this region it is hard to draw firm conclusions about this.

Using the individual level data we have collected we can move beyond these broad patterns, however, and analyze those factors that influenced individual fortunes over the decade. In this section of the paper we take advantage of the full range of individual data available to more closely examine factors that influenced individual wealth holding at the end of the decade. In Table 5 we report results of regressing log wealth in 1870 on a quadratic function of age, log wealth in 1860, and indicators for race, nativity, and whether the individual is living in his or her state of birth in 1860.[7] To address the fact that many individuals report no wealth in one or both years we add $1 to reported wealth for all individuals. The first three columns report regressions for total wealth, the next three show personal property, and the final three show real property.

The R-squared statistics for these regressions, which are mostly in the range of 0.1 to 0.2, make clear that there is a large unexplained component to 1870 wealth. Nonetheless we find a number of economically and statistically significant systematic effects. Quite reasonably, 1870 wealth has an inverted-U relationship with age in 1860, rising until roughly the mid-40s in 1860 (mid-50s in 1870) before beginning to decline. The effects of the wealth shock caused by emancipation are evident in the coefficients on the regional indicator variables, that imply that,

[7] We adopt a log transformation because of the skewed distribution of wealth.

other things equal, individuals living in the South in 1860 had lower levels of wealth in 1870 than comparable individuals living in the North. The coefficient on the foreign-born indicator is consistently negative and relatively large in magnitude, but it is statistically significant only in the case of personal property. Individuals living outside their state of birth also appear to have lower wealth than those who had not moved outside their state of birth, but none of these effects is statistically significant. The signs on the occupational variables are consistent with what we might expect, implying higher wealth for farmers, managers and proprietors than for laborers and service workers. For the most part occupational effects are not statistically significant, but service workers in 1860, the unemployed and those giving other non-occupational responses did have significantly lower wealth in 1870.[8]

Of primary interest in these regressions is the coefficient on 1860 wealth holding, which measures the elasticity of 1870 wealth with respect to wealth 10 years earlier. For each category of wealth, we begin by imposing a constant elasticity across regions, and then allow it to differ across regions. The cross-decade wealth elasticity is greatest, indicating the most persistence, for real estate wealth, and least for personal wealth. Total wealth, which aggregates these two categories, lies somewhere in between. It is worth noting that none of these elasticities appears to be very high in absolute terms. In other words, the data suggest a considerable degree of unpredictability in wealth holding from decade to decade. When we allow the elasticity of 1860 wealth to vary by 1860 region of residence we find a strong negative effect for western residents, consistent with our earlier finding of greater downward mobility for this group.

[8] The occupation category unemployed includes the responses "at home," "no employment," "no occupation", and "without occupation;" while the non-occupational responses include many individuals who described themselves as retired from a particular occupation as well as a number of other assorted responses.

If the effects of the Civil War and emancipation reduced wealth persistence in the South relative to other regions, we would expect the wealth elasticity measure would be smaller in this region, and, we do find evidence that the estimated wealth elasticity is indeed lower for 1860 residents of the South than for northerners. This effect is largest and statistically significant, however, only for personal property. The impact on real property holding is far smaller and statistically insignificant. As we might expect the magnitude of the effect on total property lies somewhere in between these two and is not significant at standard confidence levels. These results are consistent with the conjecture that the effects of emancipation were concentrated in personal property wealth holding, which is consistent with the aggregated results we show in Table 4. Moreover, this more granular analysis suggests that in fact the wealth shock caused by the war and emancipation did result in both a reduction in overall wealth in the South and a greater degree of wealth mobility over the decade of the 1860s.

The regression results in Table 5 describe responses at the mean of the distribution. It seems possible, however, that wealth persistence varied systematically with 1860 wealth. To investigate this possibility, we estimated a series of quantile regression models. The results are reported in Tables 6 and 7.

In Table 6 we have pooled observations across regions to focus on differences in the determinants of 1870 wealth holding across different segments of the wealth distribution. All of the regressions include controls for 1860 occupation, which are suppressed to simplify the presentation. The first three columns of results show estimates at the 55^{th}, 75^{th} and 90^{th} percentiles, respectively, for total property ownership. We then report estimates for real property and personal property separately. In each case, we find that the elasticity of 1870 wealth with respect to 1860 wealth was declining across wealth percentiles. This pattern is much more

pronounced for real property than for personal property. Nonetheless it appears that across all categories of wealth there was more randomness among the top wealth strata than among those near the bottom of the wealth distribution.

In Table 7 we focus on differences in the elasticity of 1870 wealth with respect to 1860 wealth between the North and South. As in the pooled regressions, elasticities are declining as we move to higher wealth quantiles. This pattern is evident in both regions and for all three types of wealth. At the 55^{th} percentile of the wealth distribution 1860 wealth had a greater impact on 1870 wealth in the North than in the South. But at both the 75^{th} and 90^{th} quantiles the coefficients reported in Table 7 are quite similar across the two regions.

5. Conclusion

Ending slavery resulted in an historically unprecedented transfer of wealth from slave owners to the formerly enslaved. The war itself devastated large areas of the southern United States, and reconstruction resulted in significant political upheaval within the states of the Confederacy. Not surprisingly, historians have long been interested in how these multiple shocks affected southern society and southern elites. Recent interest among economists in issues of inequality and the dynamics of wealth distribution offer another reason for studying this episode.

Several recent studies have begun to exploit the ability to link data for individuals across multiple censuses to shed light on the evolution of individual fortunes. In this paper we offer additional evidence from a hand-linked sample of 1,682 household heads followed between the 1860 and 1870 censuses. Several important insights follow from our analysis. First, we find little difference in relative wealth mobility patterns between northern and southern residents in

1860. That is those at the top of the southern wealth distribution were just as likely to remain at the top in 1870 as was the case for northern residents. In 1860 western states were still relatively sparsely settled, and our sample for this region is small. Nonetheless, our data suggest that fortunes in this region were more dynamic and that downward mobility was much more likely for residents in this region. Presumably, spaces at the top were filled by new residents moving into the region.

Second, we are able to examine in some detail the determinants of individual wealth holding in 1870 as a function of exogenous personal characteristics determined at the beginning of the decade of the 1860s. Consistent with the expected effects of emancipation, war and political turmoil, we find that holding 1860 wealth and other characteristics constant southern residents held substantially (35 to 50 percent) less wealth in 1870 than did their counterparts in the North. We also find some support for the conclusion that the events of the 1860s created more mobility among southern wealth holders than in among those in the north. When we allow the elasticity of 1870 wealth with respect to 1860 wealth to vary by region of residence in 1860, our estimates imply that the effects of 1860 wealth were weaker for southern residents than for northern ones.

References

Ager, Philipp. “The Persistence of de Facto Power: Elites and Economic Development in the U.S. South, 1840-1960.” Working Paper, European Historical Economics Society, 2013.

Ager, Philipp, Leah Platt Boustan and Katherine Eriksson. "The Intergenerational Effects of a Large Wealth Shock: White Southerners after the Civil War." NBER Working Paper, 25700, March 2019.

Bailey, Martha, Connor Cole, Morgan Henderson and Catherine Massey. “How Well Do Automated Linking Methods Perform in Historical Samples? Evidence from New Ground Truth.” University of Michigan, Working Paper (July23, 2017). http://www-personal.umich.edu/~baileymj/Bailey_Cole_Henderson_Massey.pdf [Accessed 9/5/2017].

Bleakley, Hoyt and Joseph Ferrie. "Shocking Behavior: Random Wealth in Antebellum Georgia and Human Capital Across Generations." The Quarterly Journal of Economics, 2016: 1455-1495.

Blocker, J.S. "Assessing sources for analyzing wealth and income: The U.S. federal manuscript census, federal income tax assessment lists and local tax assessment lists." Social Science History Association Papers. Atlanta: SSHA, 1994.

Dupont, Brandon and Joshua L. Rosenbloom.. "The Economics Origins of the Postwar Southern Elite." Explorations in Economics History 68 (2018): 119-131.

Faust, Drew. Mothers of Invention. Chapel Hill: University of North Carolina Press, 2004.

Ferrie, Joseph P. "A New Sample of Americans Linked from the 1850 Public Use Micro Sample of the Federal Census of Population to the 1860 Federal Census Manuscript Schedules." Historical Methods 34 (1996): 141-156.

Galenson, David W. "Economic Opportunity on the Urban Frontier: Nativity, Work and Wealth in Early Chicago." The Journal of Economic History 51(1991): 581-603.

Galenson, David W., and Clayne L. Pope. "Precedence and Wealth: Evidence from Nineteenth-Century Utah." In Strategic Factors in Nineteenth Century American Economic History: A Volume to Honor Robert W. Fogel , by Claudia Goldin and Hugh Rockoff, 225-241. Chicago: University of Chicago Press, 1992.

Hacker, J. David. "A Census-Based Count of the Civil War Dead." Civil War History 57, no. 4 (2011): 307-348.

Hacker, J. David. "New Estimates of Census Coverage in the United States, 1850-1930." Social Science History, 2013: 71-101.

Hacker, J. David, Libra Hilde, and James Holland Jones. "The Effect of the Civil War on Southern Marriage Patterns." The Journal of Southern History, 2010: 39-70.

Hacker, J. David, Steven Ruggles, Andrea R. Foroughi, and Walter L. Sargent. "Public Use Microdata Samples of the 1860 and 1870 U.S. Censuses of Population." Historical Methods: A Journal of Quantitative and Interdisciplinary History 32, no. 3 (1999): 125-133.

Piketty, Thomas. Capital in the Twenty-First Century. Cambridge: Harvard University Press, 2014.

Querubin, Pablo, and James M., Jr. Snyder. "The Control of Politicians in Normal Times and Times of Crisis: Wealth Accumulation by U.S. Congressmen, 1850-1880 The Control of Politicians in Normal Times and Times of Crisis: Wealth Accumulation by U.S. Congressmen, 1850-1880." NBER Working Paper , no. 17634 (2011).

Ransom, Roger L. Conflict and Compromise: The Political Economy of Slavery, Emancipation and the American Civil War. Cambridge University Press, 1989.

Ransom, Roger L., and Richard Sutch. One Kind of Freedom: The Economic Consequences of Emancipation. Cambridge: Cambridge University Press, 1977.

Ruggles, Steven. "Linking Historical Censuses: A New Approach." International Journal of Humanities and Arts Computing 14, no. 1-2 (2008): 213-224.

Ruggles, Steven Sarah Flood, Ronald Goeken, Josiah Grover, Erin Meyer, Jose Pacas and Matthew Sobek. IPUMS USA: Version 10.0 [dataset]. Minneapolis, MN: IPUMS, 2020. https://doi.org/10.18128/D010.V10.0

Shugg, Roger. Origins of Class Struggle in Louisiana. Baton Rouge: LSU Press, 1968.

Shugg, Roger Wallace. "Survival of the Plantation System in Louisiana." The Journal of Southern History, August 1937: 311-325.

Soltow, Lee. Men and Wealth in the United States 1850-1870. New Haven: Yale University Press, 1975.

Steckel, Richard H. "Census Manuscript Schedules Matched with Property Tax Lists." Historical Methods, 1994: 71-85.

Steckel, Richard H. "Poverty and Prosperity: A Longitudinal Study of Wealth Accumulation." Review of Economics and Statistics, 1990: 275-85.

Wiener, Jonathan M. "Class Structure and Economic Development in the American South, 1865-1955." American Historical Review, 1979: 970-992.

Wiener, Jonathan M. "Planter Persistence and Social Change." The Journal of Interdisciplinary History, Autumn 1976: 235-260.

Wiener, Jonathan M. Social Origins of the New South: Alabama, 1860-1885. Baton Rouge: LSU Press, 1978.

Woodward, C. Vann. Origins of the New South. Baton Rouge: LSU Press, 1951

Table 1:
Comparison of Linked and Unlinked Observations

	(1) No Link	(2) All Links	(3) Linked Household Member	(3) t-stat	(4) p-value
N	6,639	1,682	923		
avg age in 1860	40.41	41.70	41.41	3.78	0.000
avg personal property in 1860	$1,630.3	$1,844.9	$1,595.4	1.11	0.269
avg real property in 1860	$1,825.4	$2,010.4	$2,084.6	1.15	0.250
avg total property in 1860	$3,455.7	$3,855.3	$3,680.0	1.27	0.205
% has nonzero wealth in 1860	0.8194	0.8769	0.9079	6.19	0.000
% foreign born in 1860	0.2347	0.1564	0.1040	-7.62	0.000
% nonwhite	0.0246	0.0131	0.0098	-3.41	0.001
% northern resident in 1860	0.4651	0.5184	0.5504	3.91	0.000
% southern resident in 1860	0.4837	0.4471	0.4345	-2.69	0.007
% western resident in 1860	0.0512	0.0345	0.0152	-3.21	0.001
% urban resident in 1860	0.1514	0.1136	0.0986	-4.25	0.000
% has child in 1860	0.7855	0.8276	0.9025	4.01	0.000
% has spouse in 1860	0.7876	0.8424	0.9317	5.37	0.000
% of professionals in 1860	0.0295	0.0273	0.0325	-0.48	0.628
% of farmers in 1860	0.4349	0.5012	0.5385	4.87	0.000
% of managers in 1860	0.0550	0.0505	0.0520	-0.74	0.461
% of clericals in 1860	0.0041	0.0065	0.0065	1.17	0.243
% of salesmen in 1860	0.0099	0.0119	0.0130	0.67	0.503
% of craftsmen in 1860	0.1405	0.1332	0.1528	-0.79	0.430
% of military in 1860	0.0009	0.0012	0.0011	0.31	0.756
% of operatives in 1860	0.0783	0.0779	0.0596	-0.06	0.952
% of service workers in 1860	0.0169	0.0107	0.0033	-2.08	0.038
% of laborers in 1860	0.1378	0.1130	0.0921	-2.82	0.005
% of unemployed in 1860	0.0054	0.0059	0.0033	0.25	0.802
% of other non-occ 1860	0.0868	0.0606	0.0455	-3.86	0.000

Notes and Sources: See text for description of linkage procedure.

Table 2: Transitions among total wealth percentiles, 1860-70 (using white population distribution)

(a) Northern Residents in 1860

Position in 1860 Wealth Distribution	Position in 1870 Wealth Distribution: 0-55% N	0-55% Row %	55-65% N	55-65% Row %	65-75% N	65-75% Row %	75-85% N	75-85% Row %	85-95% N	85-95% Row %	95-99% N	95-99% Row %	Top 1% N	Top 1% Row %	*Row Total*
0-55%	295	68.4%	38	8.8%	39	9.0%	29	6.7%	24	5.6%	4	0.9%	2	0.5%	*431*
55-65%	44	43.6%	20	19.8%	22	21.8%	8	7.9%	6	5.9%	1	1.0%	0	0.0%	*101*
65-75%	22	22.4%	20	20.4%	30	30.6%	11	11.2%	10	10.2%	4	4.1%	1	1.0%	*98*
75-85%	28	31.1%	4	4.4%	14	15.6%	18	20.0%	21	23.3%	4	4.4%	1	1.1%	*90*
85-95%	20	18.7%	1	0.9%	9	8.4%	11	10.3%	43	40.2%	21	19.6%	2	1.9%	*107*
95-99%	7	21.2%	0	0.0%	2	6.1%	0	0.0%	9	27.3%	11	33.3%	4	12.1%	*33*
Top 1%	4	33.3%	1	8.3%	0	0.0%	0	0.0%	0	0.0%	3	25.0%	4	33.3%	*12*
Column Total	*420*		*84*		*116*		*77*		*113*		*48*		*14*		*872*

(b) Southern Residents in 1860

Position in 1860 Wealth Distribution	Position in 1870 Wealth Distribution: 0-55% N	0-55% Row %	55-65% N	55-65% Row %	65-75% N	65-75% Row %	75-85% N	75-85% Row %	85-95% N	85-95% Row %	95-99% N	95-99% Row %	Top 1% N	Top 1% Row %	*Row Total*
0-55%	231	65.8%	41	11.7%	32	9.1%	21	6.0%	22	6.3%	3	0.9%	1	0.3%	*351*
55-65%	46	50.5%	9	9.9%	16	17.6%	15	16.5%	3	3.3%	2	2.2%	0	0.0%	*91*
65-75%	25	32.1%	8	10.3%	17	21.8%	12	15.4%	15	19.2%	1	1.3%	0	0.0%	*78*
75-85%	24	24.2%	8	8.1%	11	11.1%	23	23.2%	24	24.2%	7	7.1%	2	2.0%	*99*
85-95%	24	24.5%	4	4.1%	7	7.1%	17	17.3%	27	27.6%	13	13.3%	6	6.1%	*98*
95-99%	7	25.9%	2	7.4%	2	7.4%	3	11.1%	4	14.8%	7	25.9%	2	7.4%	*27*
Top 1%	5	62.5%	0	0.0%	0	0.0%	0	0.0%	1	12.5%	1	12.5%	1	12.5%	*8*
Column Total	*362*		*72*		*85*		*91*		*96*		*34*		*12*		*752*

(c) Western Residents in 1860

Position in 1860 Wealth Distribution	Position in 1870 Wealth Distribution: 0-55% N	0-55% Row %	55-65% N	55-65% Row %	65-75% N	65-75% Row %	75-85% N	75-85% Row %	85-95% N	85-95% Row %	95-99% N	95-99% Row %	Top 1% N	Top 1% Row %	*Row Total*
0-55%	11	52.4%	1	4.8%	3	14.3%	3	14.3%	1	4.8%	2	9.5%	0	0.0%	*21*
55-65%	5	45.5%	5	45.5%	1	9.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	*11*
65-75%	1	20.0%	0	0.0%	1	20.0%	2	40.0%	1	20.0%	0	0.0%	0	0.0%	*5*
75-85%	7	70.0%	0	0.0%	1	10.0%	0	0.0%	2	20.0%	0	0.0%	0	0.0%	*10*
85-95%	2	40.0%	0	0.0%	1	20.0%	0	0.0%	2	40.0%	0	0.0%	0	0.0%	*5*
95-99%	1	25.0%	1	25.0%	1	25.0%	0	0.0%	1	25.0%	0	0.0%	0	0.0%	*4*
Top 1%	0	0.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	1	50.0%	0	0.0%	*2*
Column Total	*27*		*7*		*8*		*6*		*7*		*3*		*0*		*58*

	North		South		West	
	Number	Percent	Number	Percent	Number	Percent
Moved down	199	22.8%	199	26.5%	23	39.7%
No change	421	48.3%	315	41.9%	19	32.8%
Moved up	252	28.9%	238	31.6%	16	27.6%

Table 3: Transitions among real wealth percentiles, 1860-70
(using white population wealth distribution)

(a) Northern Residents in 1860

Position in 1860 Wealth Distribution	Position in 1870 Wealth Distribution: 0-55% N	0-55% Row %	55-65% N	55-65% Row %	65-75% N	65-75% Row %	75-85% N	75-85% Row %	85-95% N	85-95% Row %	95-99% N	95-99% Row %	Top 1% N	Top 1% Row %	*Row Total*
0-55%	282	67.5%	40	9.6%	40	9.6%	28	6.7%	21	5.0%	5	1.2%	2	0.5%	*418*
55-65%	44	49.4%	15	16.9%	12	13.5%	10	11.2%	5	5.6%	2	2.2%	1	1.1%	*89*
65-75%	27	22.3%	27	22.3%	37	30.6%	17	14.0%	9	7.4%	4	3.3%	0	0.0%	*121*
75-85%	28	36.4%	3	3.9%	10	13.0%	16	20.8%	15	19.5%	5	6.5%	0	0.0%	*77*
85-95%	25	21.2%	6	5.1%	8	6.8%	12	10.2%	34	28.8%	31	26.3%	2	1.7%	*118*
95-99%	6	16.2%	1	2.7%	1	2.7%	1	2.7%	7	18.9%	16	43.2%	5	13.5%	*37*
Top 1%	5	41.7%	2	16.7%	0	0.0%	0	0.0%	0	0.0%	2	16.7%	3	25.0%	*12*
Column Total	*417*		*94*		*108*		*84*		*91*		*65*		*13*		*872*

(b) Southern Residents in 1860

Position in 1860 Wealth Distribution	Position in 1870 Wealth Distribution: 0-55% N	0-55% Row %	55-65% N	55-65% Row %	65-75% N	65-75% Row %	75-85% N	75-85% Row %	85-95% N	85-95% Row %	95-99% N	95-99% Row %	Top 1% N	Top 1% Row %	*Row Total*
0-55%	228	64.4%	50	14.1%	24	6.8%	23	6.5%	23	6.5%	6	1.7%	0	0.0%	*354*
55-65%	37	41.1%	18	20.0%	19	21.1%	12	13.3%	2	2.2%	1	1.1%	1	1.1%	*90*
65-75%	18	28.6%	7	11.1%	18	28.6%	12	19.0%	7	11.1%	1	1.6%	0	0.0%	*63*
75-85%	33	33.7%	10	10.2%	12	12.2%	17	17.3%	19	19.4%	5	5.1%	2	2.0%	*98*
85-95%	22	19.1%	2	1.7%	12	10.4%	18	15.7%	44	38.3%	15	13.0%	2	1.7%	*115*
95-99%	5	20.0%	1	4.0%	2	8.0%	3	12.0%	2	8.0%	8	32.0%	4	16.0%	*25*
Top 1%	4	57.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	28.6%	1	14.3%	*7*
Column Total	*347*		*88*		*87*		*85*		*97*		*38*		*10*		*752*

(c) Western Residents in 1860

Position in 1860 Wealth Distribution	Position in 1870 Wealth Distribution: 0-55% N	0-55% Row %	55-65% N	55-65% Row %	65-75% N	65-75% Row %	75-85% N	75-85% Row %	85-95% N	85-95% Row %	95-99% N	95-99% Row %	Top 1% N	Top 1% Row %	*Row Total*
0-55%	0		0		0		0		0		0		0		*0*
55-65%	0		0		0		0		0		0		0		*0*
65-75%	20	51.3%	6	15.4%	4	10.3%	4	10.3%	4	10.3%	1	2.6%	0	0.0%	*39*
75-85%	3	50.0%	0	0.0%	0	0.0%	2	33.3%	1	16.7%	0	0.0%	0	0.0%	*6*
85-95%	4	57.1%	0	0.0%	0	0.0%	1	14.3%	2	28.6%	0	0.0%	0	0.0%	*7*
95-99%	1	25.0%	0	0.0%	0	0.0%	1	25.0%	1	25.0%	1	25.0%	0	0.0%	*4*
Top 1%	1	50.0%	1	50.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	*2*
Column Total	*29*		*7*		*4*		*8*		*8*		*2*		*0*		*58*

	North Number	North Percent	South Number	South Percent	West Number	West Percent
Moved down	215	24.7%	190	25.3%	39	67.2%
No change	403	46.2%	334	44.4%	9	15.5%
Moved up	254	29.1%	228	30.3%	10	17.2%

Table 4: Transitions among personal wealth percentiles, 1860-70
(using white population wealth distribution)

(a) Northern Residents in 1860

Position in 1860 Wealth Distribution	Position in 1870 Wealth Distribution: 0-55% N	0-55% Row %	55-65% N	55-65% Row %	65-75% N	65-75% Row %	75-85% N	75-85% Row %	85-95% N	85-95% Row %	95-99% N	95-99% Row %	Top 1% N	Top 1% Row %	*Row Total*
0-55%	275	65.8%	19	4.5%	56	13.4%	36	8.6%	18	4.3%	13	3.1%	1	0.2%	*418*
55-65%	48	51.1%	6	6.4%	21	22.3%	9	9.6%	5	5.3%	4	4.3%	1	1.1%	*94*
65-75%	52	44.1%	6	5.1%	16	13.6%	24	20.3%	15	12.7%	5	4.2%	0	0.0%	*118*
75-85%	27	32.1%	7	8.3%	15	17.9%	20	23.8%	11	13.1%	3	3.6%	1	1.2%	*84*
85-95%	28	26.7%	0	0.0%	9	8.6%	17	16.2%	34	32.4%	14	13.3%	3	2.9%	*105*
95-99%	12	27.3%	2	4.5%	3	6.8%	5	11.4%	13	29.5%	8	18.2%	1	2.3%	*44*
Top 1%	3	33.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	22.2%	4	44.4%	*9*
Column Total	*445*		*40*		*120*		*111*		*96*		*49*		*11*		*872*

(b) Southern Residents in 1860

Position in 1860 Wealth Distribution	Position in 1870 Wealth Distribution: 0-55% N	0-55% Row %	55-65% N	55-65% Row %	65-75% N	65-75% Row %	75-85% N	75-85% Row %	85-95% N	85-95% Row %	95-99% N	95-99% Row %	Top 1% N	Top 1% Row %	*Row Total*
0-55%	208	63.8%	44	13.5%	24	7.4%	20	6.1%	20	6.1%	8	2.5%	2	0.6%	*326*
55-65%	35	38.9%	19	21.1%	4	4.4%	18	20.0%	13	14.4%	0	0.0%	1	1.1%	*90*
65-75%	39	35.5%	16	14.5%	11	10.0%	17	15.5%	22	20.0%	4	3.6%	1	0.9%	*110*
75-85%	25	26.3%	8	8.4%	12	12.6%	16	16.8%	23	24.2%	9	9.5%	2	2.1%	*95*
85-95%	30	33.7%	9	10.1%	10	11.2%	12	13.5%	20	22.5%	6	6.7%	2	2.2%	*89*
95-99%	8	23.5%	3	8.8%	4	11.8%	3	8.8%	9	26.5%	4	11.8%	3	8.8%	*34*
Top 1%	4	50.0%	0	0.0%	1	12.5%	0	0.0%	1	12.5%	2	25.0%	0	0.0%	*8*
Column Total	*349*		*99*		*66*		*86*		*108*		*33*		*11*		*752*

(c) Western Residents in 1860

Position in 1860 Wealth Distribution	Position in 1870 Wealth Distribution: 0-55% N	0-55% Row %	55-65% N	55-65% Row %	65-75% N	65-75% Row %	75-85% N	75-85% Row %	85-95% N	85-95% Row %	95-99% N	95-99% Row %	Top 1% N	Top 1% Row %	*Row Total*
0-55%	14	58.3%	2	8.3%	2	8.3%	3	12.5%	0	0.0%	2	8.3%	1	4.2%	*24*
55-65%	4	66.7%	1	16.7%	0	0.0%	0	0.0%	1	16.7%	0	0.0%	0	0.0%	*6*
65-75%	2	25.0%	1	12.5%	2	25.0%	2	25.0%	1	12.5%	0	0.0%	0	0.0%	*8*
75-85%	2	50.0%	0	0.0%	1	25.0%	0	0.0%	1	25.0%	0	0.0%	0	0.0%	*4*
85-95%	5	50.0%	0	0.0%	1	10.0%	1	10.0%	3	30.0%	0	0.0%	0	0.0%	*10*
95-99%	2	40.0%	0	0.0%	0	0.0%	2	40.0%	1	20.0%	0	0.0%	0	0.0%	*5*
Top 1%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	*1*
Column Total	*29*		*4*		*6*		*9*		*7*		*2*		*1*		*58*

	North		South		West	
	Number	Percent	Number	Percent	Number	Percent
Moved down	249	28.6%	231	30.7%	23	39.7%
No change	363	41.6%	278	37.0%	20	34.5%
Moved up	260	29.8%	243	32.3%	15	25.9%

Table 5

Determinants of Log(Wealth + 1) in 1870

	Total Wealth			Real Wealth			Personal Wealth		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
age in 1860	0.160***	0.157***	0.162***	0.186***	0.183***	0.185***	0.126***	0.125***	0.133***
	(3.84)	(3.79)	(3.84)	(4.10)	(4.02)	(4.04)	-3.34	-3.31	-3.47
(age in 1860)^2	-0.00194***	-0.00191***	-0.00197***	-0.00211***	-0.00208***	-0.00211***	-0.00163***	-0.00161***	-0.00169***
	(-4.18)	(-4.12)	(-4.19)	(-4.17)	(-4.11)	(-4.14)	(-3.86)	(-3.83)	(-3.94)
south	-0.697***	-0.152	-0.0551	-0.428*	-0.276	-0.124	-0.450**	0.213	0.329
	(-4.23)	(-0.38)	(-0.14)	(-2.39)	(-0.98)	(-0.45)	(-2.98)	(0.61)	(0.94)
west	-0.299	1.544	1.139	-0.0749	0.929	0.872	-0.0181	1.664*	1.286
	(-0.67)	(1.80)	(1.33)	(-0.16)	(1.46)	(1.37)	(-0.04)	(2.36)	(1.82)
white	1.209	1.362		1.217	1.287		0.891	1.022	
	(1.71)	(1.92)		(1.59)	(1.69)		(1.38)	(1.59)	
Indicator for born outside US	-0.291	-0.286		-0.296	-0.275		-0.549*	-0.549*	
	(-1.16)	(-1.13)		(-1.09)	(-1.01)		(-2.39)	(-2.39)	
Indicator for living in birth state in1860	-0.192	-0.213		-0.329	-0.335		-0.177	-0.198	
	(-1.11)	(-1.23)		(-1.74)	(-1.78)		(-1.12)	(-1.25)	

	Total Wealth			Real Wealth			Personal Wealth		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Farmers (owners; tenants and managers)	0.355	0.285		0.347	0.259		0.387	0.332	
	(0.73)	(0.58)		(0.66)	(0.49)		(0.87)	(0.75)	
Managers; official; proprietors	0.547	0.507		0.811	0.735		0.738	0.692	
	(0.93)	(0.86)		(1.27)	(1.15)		(1.38)	(1.30)	
Clerical and Kindred Workers	1.070	0.982		1.892	1.825		1.402	1.317	
	(0.99)	(0.91)		(1.62)	(1.56)		(1.43)	(1.35)	
Salesmen and sales clerks	-0.443	-0.438		-0.845	-0.935		0.180	0.213	
	(-0.52)	(-0.51)		(-0.91)	(-1.00)		(0.23)	(0.27)	
Craftsmen and kindred workers	-0.134	-0.214		-0.126	-0.234		-0.0154	-0.0682	
	(-0.26)	(-0.41)		(-0.22)	(-0.41)		(-0.03)	(-0.14)	
Military	-1.671	-2.550		-0.818	-1.410		-1.392	-2.099	
	(-0.72)	(-1.08)		(-0.32)	(-0.56)		(-0.66)	(-0.99)	
Operatives and kindred workers	-0.769	-0.883		-0.435	-0.547		-0.798	-0.912	

	Total Wealth			Real Wealth			Personal Wealth	
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
	(-1.39)	(-1.59)		(-0.72)	(-0.91)		(-1.58)	(-1.81)	
Service workers; except private household	-3.341***	-3.395***		-2.604**	-2.703**		-2.601**	-2.641**	
	(-3.74)	(-3.80)		(-2.69)	(-2.79)		(-3.20)	(-3.26)	
Laborers	-0.742	-0.789		-0.438	-0.506		-0.595	-0.627	
	(-1.39)	(-1.48)		(-0.76)	(-0.87)		(-1.22)	(-1.29)	
Unemployed	-3.799***	-3.734***		-3.330**	-3.358**		-3.551***	-3.456***	
	(-3.40)	(-3.34)		(-2.74)	(-2.77)		(-3.49)	(-3.40)	
Other non-occupational	-1.923***	-2.011***		-1.380*	-1.461*		-1.495**	-1.564**	
	(-3.35)	(-3.51)		(-2.23)	(-2.36)		(-2.86)	(-3.00)	
log_totprop1860	0.237***	0.291***	0.400***	0.314***	0.340***	0.405***	0.168***	0.247***	0.348***
	(7.25)	(6.78)	(9.85)	(11.48)	(9.54)	(12.26)	(5.34)	(5.68)	(8.23)
south # log_totprop1860		-0.0876	-0.0858		-0.0336	-0.0451		-0.125*	-0.128*
		(-1.51)	(-1.47)		(-0.71)	(-0.95)		(-2.18)	(-2.19)
west # log_totprop1860		-0.345*	-0.282*		-0.319*	-0.294*		-0.372**	-0.319*
		(-2.48)	(-2.02)		(-2.37)	(-2.18)		(-2.87)	(-2.44)

	Total Wealth			Real Wealth			Personal Wealth		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Constant	0.691	0.345	0.538	-1.327	-1.340	-0.730	1.082	0.645	0.602
	(0.56)	(0.28)	(0.59)	(-0.99)	(-0.99)	(-0.75)	(0.96)	(0.57)	(0.73)
Observations	1682	1682	1682	1682	1682	1682	1682	1682	1682
Adjusted R-squared	0.136	0.139	0.096	0.173	0.175	0.152	0.105	0.110	0.063

t statistics in parentheses

* p<.05 **p<.01 ***p<.001

Notes: The excluded region is North, and the excluded occupation is Professional, technical and kindred workers.

Table 6: Determinants of 1870 log (wealth + 1) by wealth quantile

	total Wealth			Real Wealth			Personal Wealth		
	55th	75th	90th	55th	75th	90th	55th	75th	90th
age in 1860	0.116***	0.0659*	0.0206	0.0785	0.0551	0.0436	0.0875**	0.0374	0.0329
	(3.80)	(2.20)	(0.72)	(1.69)	(1.62)	(1.20)	(3.21)	(1.50)	(0.75)
(age in 1860)^2	-0.00135***	-0.000718*	-0.000150	-0.000896	-0.000588	-0.000450	-0.00112***	-0.000529	-0.000358
	(-3.96)	(-2.10)	(-0.46)	(-1.86)	(-1.55)	(-1.14)	(-3.54)	(-1.89)	(-0.69)
south	-0.721***	-0.660***	-0.585***	-0.657***	-0.636***	-0.503***	-0.527***	-0.435***	-0.419***
	(-6.23)	(-6.48)	(-4.82)	(-4.99)	(-5.39)	(-3.49)	(-5.35)	(-5.21)	(-3.40)
west	-0.160	0.0137	0.0574	-0.154	0.111	0.125	0.0220	0.324	0.258
	(-0.42)	(0.04)	(0.14)	(-0.22)	(0.24)	(0.39)	(0.07)	(1.03)	(0.84)
white	1.059	0.223	0.403	0.397	0.776	1.111	0.627	0.690	0.0693
	(0.49)	(0.14)	(0.60)	(0.33)	(0.35)	(0.84)	(0.33)	(0.51)	(0.08)
Indicator for born outside US	-0.188	-0.0576	0.416	-0.0717	0.0702	0.161	-0.179	-0.0971	0.0921
	(-1.04)	(-0.31)	(1.78)	(-0.29)	(0.36)	(0.68)	(-0.77)	(-0.63)	(0.38)
Indicator for living in birth state in1860	-0.157	-0.0153	0.151	-0.218	-0.127	-0.0879	-0.116	-0.00394	0.143
	(-1.40)	(-0.16)	(1.19)	(-1.89)	(-1.05)	(-0.67)	(-1.36)	(-0.05)	(1.13)
log_totprop1860	2.793	0.193***	0.182***	0.760***	0.204***	0.161***	0.194***	0.146***	0.120***
	(1.27)	(7.69)	(8.03)	(4.29)	(9.93)	(7.07)	(6.08)	(5.60)	(4.96)
Constant	2.793	5.997***	7.897***	0.227	5.664*	6.546***	3.410	5.400***	7.727***
	(1.27)	(3.36)	(7.62)	(0.14)	(2.40)	(4.06)	(1.70)	(3.46)	(5.17)
Pseudo R-sq	0.102	0.083	0.079	0.150	0.09	0.076	0.071	0.061	0.071

* p<0.05 ** p<.01 *** p< .001

Notes: Bootstrapped standard errors using 300 repetitions and t-statistics in parentheses. The excluded region is North and all estimates include a full set of controls for occupational categories.

Table 7: Regional Quantile Estimates of 1870 Wealth Elasticity

	North			South		
	55th ptcl	75th pctl	90th pctl	55th ptcl	75th pctl	90th pctl
Total Property	0.382***	0.193***	0.175***	0.244***	0.194***	0.178***
	(3.54)	(4.25)	(4.93)	(4.19)	(5.26)	(4.73)
Real Property	0.825***	0.198***	0.173***	0.611**	0.188***	0.162***
	(3.80)	(6.30)	(5.11)	(3.20)	(5.85)	(4.81)
Personal Property	0.240**	0.238***	0.134**	0.147***	0.122***	0.0996**
	(3.25)	(5.87)	(3.25)	(3.93)	(4.01)	(2.81)

Notes: N obs. = 872 for North, 752 for South
All regressions include a full set of controls for individual characteristics.

t statistics in parentheses
* p<0.05 ** p<.01 *** p< .001