

“Restless in the Midst of Their Prosperity”: New Evidence on the Internal Migration of Americans, 1850–2000

Patricia Kelly Hall and Steven Ruggles

The quantity and character of internal migration in the American past is a contentious historiographical issue. Over a century ago, Frederick Jackson Turner pointed to westward migration as a safety valve that profoundly affected the nature of the Republic. With the closing of the frontier, Turner predicted, the population flow to the West would decline.¹ Turner’s twentieth-century critics argued that the greatest American population movement was not westward expansion, but rather urbanization, which accelerated throughout the nineteenth and twentieth centuries. Beginning in the 1960s, social historians using new quantitative approaches fleshed out the critique of Turner, arguing that high migration to and between urban areas in the nineteenth century did not result in improved economic opportunity.

This article uses new evidence to reevaluate internal migration in the American past. Our three major findings are consistent with Turner’s interpretation. First, we identify a U-shaped pattern of change: the nineteenth century had the highest overall levels of migration, followed by a decline in the first half of the twentieth century and a resurgence after World War II. Thus, by the time Turner wrote about the closing of the frontier, a dramatic decline in geographic mobility was already under way. The highest mobility in American history occurred during the first half of the nineteenth century, and there was a steady decline in interstate mobility until well into the twentieth century. Second, we show that the high levels of nineteenth-century migration resulted from long-distance westward migration to farms, whereas the high migration of the late twentieth century can be ascribed to white suburbanization and black

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¹ Frederick Jackson Turner, speech before the American Historical Association, July 12, 1893, in *Proceedings of the Forty-first Annual Meeting of the State Historical Society of Wisconsin* (Madison, 1894), 79–112.

migration to northern cities. Finally, we look briefly at the relationship between geographic mobility and social mobility and find evidence suggesting that migration may have improved economic opportunity.

Migration and American History

In *Democracy in America*, Alexis de Tocqueville devoted an entire chapter to explaining “why the Americans are so restless in the midst of their prosperity.” The high mobility of nineteenth-century Americans was widely remarked upon, and it was usually explained by the plentiful availability of land. Joseph Kennedy, superintendent of the census of 1850, regarded high migration as an “unfavorable trait in our national character.” But Kennedy predicted that the mobility would not last: once the Plains had been settled and the cheap land was gone, Americans would settle down and “the inhabitants of each state would become comparatively stationary.”²

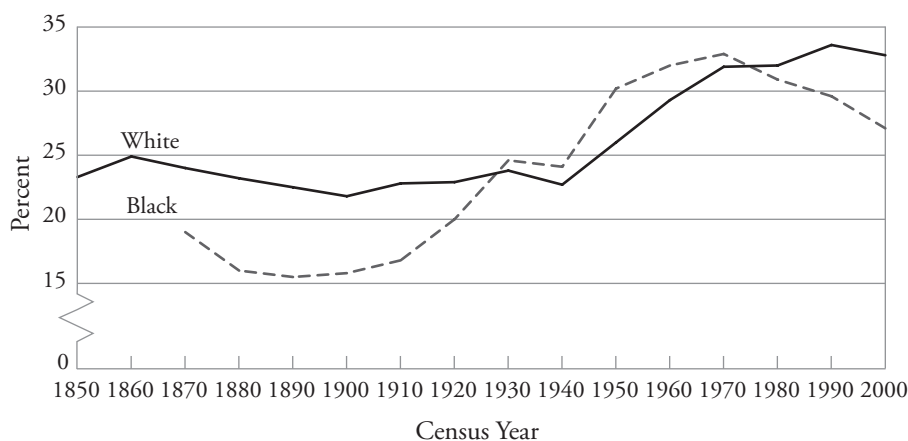
Four decades later, Frederick Jackson Turner began his famous essay by quoting another superintendent of the census. Because of the settlement of the interior of the country, the 1890 census showed for the first time that the frontier line no longer existed. Turner argued that “movement has been [the] dominant fact” of the American past, but the era of westward expansion was ending: “the frontier has gone, and with its going has closed the first period of American history.” Turner’s frontier thesis included four specific hypotheses about migration: first, the nineteenth century was the greatest period of migration in American history; second, the magnet for migration was the economic opportunity offered by the availability of agricultural land on the ever-moving western frontier; third, those agricultural opportunities provided a hopeful alternative for the surplus labor supply crowding the urban centers of the East; and finally, with the closing of the frontier, American migration would lose its force.³

Turner’s critics challenged those four hypotheses. They argued that movement to the frontier was only the first major migration stream in American history—important but neither the largest nor the most significant. Movement out of rural areas into towns and cities, already beginning in the middle of the nineteenth century, was economically more important and demographically more powerful. Soon after Turner’s dramatic pronouncement about the frontier, scholars were documenting the role of migration in the burgeoning American cities. Economic opportunity awaited in the country’s urban industrial centers. Turner’s interpretation of the West as safety valve was turned on its head: according to the new interpretation, the cities were

² Alexis de Tocqueville, *Democracy in America*, vol. II (New York, 1994), esp. 136; Joseph Kennedy, *Report of the Superintendent of the Census for December 1, 1852* (Washington, 1853), 15, quoted by Everett S. Lee, “Migration in Relation to Education, Intellect, and Social Structure,” *Population Index*, 36 (Oct.–Dec. 1970), 437–44, esp. 437.

³ Turner, speech before the American Historical Association, 112. Central to Frederick Jackson Turner’s thesis was the contrast of the socially fluid frontier with the closed social structure of the industrial East. Much of the early critique of Turner’s thesis focused on his conception of the western frontier as the locus of the democratization and individual mobility that defined the character of Americans. See Charles A. Beard, “The Frontier in American History,” *New Republic*, Feb. 16, 1921, pp. 349–50. On Turner’s early critics, see Allan G. Bogue, “Frederick Jackson Turner Reconsidered,” *History Teacher*, 27 (Feb. 1994), 195–221. For the argument that Turner was right about the central role of migration but wrong in assigning the defining power to the destination—the frontier—rather than to migration itself, see Everett S. Lee, “The Turner Thesis Reexamined,” *American Quarterly*, 13 (Spring 1961), 77–83.

Figure 1
Percentage of native-born population residing outside
state of birth by race, United States, 1850–2000



Note: Values for 1890 and 1930 are interpolated. Sources: U.S. Bureau of the Census, *Historical Statistics of the United States: Colonial Times to 1970* (Washington, 1975), part I, 89; U.S. Bureau of the Census, *1980 Census of Population: Volume 1, Chapter C, Part 1: Characteristics of the Population, General Social and Economic Characteristics, United States Summary* (Washington, 1983), table 78, pp. 1–16; U.S. Bureau of the Census, *1990 Census of Population: Social and Economic Characteristics* (Washington, 1993), tables 6 and 7, pp. 6–7; U.S. Census Bureau, *Census 2000 Summary File 4, table DP-2. Profile of Selected Social Characteristics: 2000* (Washington, 2003) <<http://factfinder.census.gov>> (May 17, 2004).

absorbing surplus farm labor.⁴ The new migration centered on urban economic opportunity, and its growth engine was cheap automobiles, not cheap land.

The available statistics seemed to support the interpretation that movement to cities was more important than westward migration. Already by 1870, eight American cities reported that out-of-state migrants constituted more than a fourth of their native-born residents (residents born in the United States). The 1900 census showed that even in the West less than half the population lived on farms. By 1920 the trend was clear; more Americans lived in cities than in rural areas.⁵

By the mid-twentieth century, the crude census statistics on interstate movement then available suggested that migration was at an all-time high.⁶ Since 1850, the census has inquired about the state of birth and state of residence of each individual in the population. For each succeeding decade, the census has published sufficient information to calculate the percentage of native-born persons who were interstate migrants. These statistics are presented in figure 1. There was a slight decline in the

⁴ One of the first works to document the massive movement of Americans into cities was Adna Ferrin Weber, *The Growth of Cities in the Nineteenth Century: A Study in Statistics* (New York, 1899). On cities as magnets for surplus farm labor, see Fred A. Shannon, "A Post-mortem on the Labor-Safety-Valve Theory," *Agricultural History*, 19 (Jan. 1945), 31–37.

⁵ C. Warren Thornthwaite, *Internal Migration in the United States* (Philadelphia, 1934), 1–4, 32; Conrad Taeuber and Irene B. Taeuber, *The Changing Population of the United States* (New York, 1958), 106–11.

⁶ In 1964 more sophisticated migration estimates broken down by age were published. Like the raw Census Bureau estimates, they showed little long-term trend in net displacement for the white population and gave no

percentage of interstate migrants from 1860 to 1900 followed by a dramatic increase over the course of the twentieth century. This pattern supported the view of those scholars who argued that twentieth-century urbanization was a more important migration stream than nineteenth-century westward expansion.

A different picture emerged when historians began to use the manuscript censuses to trace social and geographic mobility in nineteenth-century communities. Those investigators attempted to link individuals from one census to the next and found that the great majority simply disappeared from their communities. The extraordinary population turnover implied by these analyses was a core finding of the new social history. The earliest studies focused on frontier areas and generally seemed consistent with Turner's interpretation: not only did two-thirds to three-fourths of men of working age disappear in each decade from 1850 to 1880, but newcomers who stayed usually experienced upward economic mobility.⁷

In the 1960s and 1970s, historians began to apply the same techniques to urban areas, and they found similar rates of disappearance. The urban studies, however, suggested less upward social mobility than did the frontier analyses. Stephan Thernstrom, in particular, challenged Turner's interpretation that migration was a safety valve. He disputed the contention that working-class emigrants from eastern cities were drawn to better economic opportunity on the agricultural frontier. Rather, he maintained, those workers formed a "floating [labor force of] permanent transients. . . . buffeted about from city to city within the New England labor market."⁸

Was the nineteenth century a period of comparatively low migration, as suggested by the published census data on state of birth, or of very high migration, as implied

hint that migration was especially high in the nineteenth century. Those estimates have limitations: Because they measure net displacement, in-migration and out-migration cancel one another out. The measures are also highly sensitive to errors in mortality estimates and changes in the completeness of census enumerations. Our estimates of both mortality and census underenumeration have since been substantively revised. See Hope T. Eldridge and Dorothy Swaine Thomas, *Demographic Analyses and Interrelations*, vol. III of *Population Redistribution and Economic Growth: United States, 1870–1950*, ed. Simon Smith Kuznets and Dorothy Swaine Thomas (Philadelphia, 1964). On revised estimates of mortality and underenumeration, see, for example, James David Hacker, "The Human Cost of War: White Population in the United States, 1850–1880" (Ph.D. diss., University of Minnesota, 1999); and Michael R. Haines, "Estimated Life Tables for the United States, 1850–1910," *Historical Methods*, 31 (Fall 1998), 149–69.

⁷ James C. Malin, "The Turnover of Farm Population in Kansas," *Kansas Historical Quarterly*, 4 (Nov. 1935), 339–72; Merle E. Curti, *The Making of an American Community: A Case Study of Democracy in a Frontier Community* (Stanford, 1959); Mildred Throne, "A Population Study of an Iowa County in 1850," *Iowa Journal of History*, 57 (Oct. 1959), 305–30; Peter J. Coleman, "Restless Grant County: Americans on the Move," *Wisconsin Magazine of History*, 46 (Autumn 1962), 16–20; Richard Steckel, "Household Migration and Rural Settlement in the United States, 1850–1860," *Explorations in Economic History*, 26 (April 1989), 190–218; David W. Galenson and Clayne L. Pope, "Economic and Geographic Mobility on the Farming Frontier: Evidence from Appanoose County, Iowa, 1850–1870," *Journal of Economic History*, 49 (Sept. 1989), 635–56.

⁸ Stephan Thernstrom, *Poverty and Progress: Social Mobility in a Nineteenth Century City* (Cambridge, Mass., 1964), esp. 31; Stuart Blumin, "Mobility and Change in Ante-Bellum Philadelphia," in *Nineteenth-Century Cities*, ed. Stephan Thernstrom and Richard Sennett (New Haven, 1969), 165–208; Peter R. Knights, *The Plain People of Boston, 1830–1860: A Study in City Growth* (New York, 1971); John Modell, "Peopling of a Working-Class Ward: Reading, Pennsylvania, 1850," *Journal of Social History*, 5 (Fall 1971), 71–96; Stephan Thernstrom, *The Other Bostonians: Poverty and Progress in the American Metropolis, 1880–1970* (Cambridge, Mass., 1973); Howard M. Gitelman, *Workingmen of Waltham: Mobility in American Urban Industrial Development, 1850–1890* (Baltimore, 1974); Michael B. Katz, Michael J. Doucet, and Mark J. Stern, "Migration and the Social Order in Erie County, New York, 1855," *Journal of Interdisciplinary History*, 8 (Spring 1978), 669–701; Laurence Glasco, "Migration and Adjustment in the Nineteenth-Century City: Occupation, Property, and Household Structure of Native-Born

by the historical community studies? Neither approach is sufficient to answer that question. The published census estimates based on birthplace are inappropriate for long-run comparisons because they do not control for age. Because of high fertility and mortality, the mid-nineteenth-century population was very young: in 1850 half the people were 18 or younger, compared with only a quarter today. Children are less likely than adults to have migrated, simply because they have had less time in which to do so. Thus, any long-run analysis of migration that fails to account for changes in the age of the population will understate nineteenth-century migration relative to twentieth-century migration.

The historical studies that link individuals from one census to the next are equally problematic. Because such studies cannot be carried out for the recent past, long-run comparisons are impossible. Moreover, not all linkage failures are due to migration, and the community studies apparently exaggerate the extent of migration. The 1855 census of New York State included an inquiry on the number of years each individual had resided in the community, and migration estimates from that source are substantially lower than directly comparable estimates based on record linkage. Many historians have had difficulty linking even contemporaneous sources to the nineteenth-century census, probably because of census underenumeration or errors in the recording of names.⁹

Long-Run Migration Trends

We use the Integrated Public Use Microdata Series (IPUMS) to assess long-run trends in the level and characteristics of internal migration. The IPUMS is a coherent national database describing the characteristics of 70 million Americans drawn from every census taken from 1850 through 2000, except for those of 1890 and 1930. The project created large national samples of the censuses of 1850 through 1920 by entering information from microfilm copies of the original enumeration forms. The IPUMS combines those historical data with samples from 1940 to 2000 prepared by the Census Bureau. The project is now nearing completion; we lack data only for the 1890 and 1930 census years, giving us a nearly continuous record of American migration

Whites, Buffalo, New York, 1855," in *Family and Population in Nineteenth Century America*, ed. Tamara Haraven and Maris Vinovskis (Princeton, 1978), 154–78; Clyde Griffin and Sally Griffin, *Natives and Newcomers: The Ordering of Opportunity in Mid-Nineteenth Century Poughkeepsie* (Cambridge, Mass., 1978); Thomas Dublin, "Rural-Urban Migrants in Industrial New England: The Case of Lynn, Massachusetts, in the Mid-Nineteenth Century," *Journal of American History*, 73 (Dec. 1986), 623–44. Two studies have attempted national-level record linkage: Avery M. Guest, "Notes from the National Panel Study: Linkage and Migration in the Late Nineteenth Century," *Historical Methods*, 20 (Spring 1987), 63–77; and Joseph P. Ferrie, *Yankees Now: Immigrants in the Antebellum United States, 1840–1860* (New York, 1999).

⁹ See David P. Davenport, "Tracing Rural New York's Out-Migrants, 1855–1860," *Historical Methods*, 17 (Spring 1984), 59–67; and David P. Davenport, "Duration of Residence in the Census of New York State," *ibid.*, 18 (Winter 1985), 5–12. On census underenumeration and other problems with historical migration data, see John W. Adams and Alice Bee Kasakoff, "Estimates of Census Underenumeration Based on Genealogies," *Social Science History*, 15 (Winter 1991), 527–43; Peter R. Knights, "Potholes in the Road of Improvement? Estimating Census Underenumeration by Longitudinal Tracing: U.S. Censuses, 1850–1880," *ibid.*, 517–26; Stephan Thernstrom and Peter R. Knights, "Men in Motion: Some Data and Speculations about Urban Population Mobility in Nineteenth-Century America," *Journal of Interdisciplinary History*, 1 (Autumn 1970), 7–35; and Donald H. Parker, "How Mobile Were Nineteenth-Century Americans?," *Historical Methods*, 15 (Summer 1982), 99–110.

over the past 150 years.¹⁰ By putting all the samples into the same format, coding variables consistently, and carefully documenting changes in variables over time, the IPUMS makes it practical to use the census samples as a time series.

According to the definitions used by the U.S. Census Bureau, a migrant is someone who when changing residence crosses a political boundary. Since 1850 the census has recorded both state of residence and state of birth for each respondent; it is therefore straightforward to identify interstate migrants throughout the past 150 years. The census did not record the specific location of birth, so we cannot identify intrastate movers. Moreover, since we know only that migrants were living outside their states of birth at the time of the census, repeat migrants who lived in several states and return migrants who resettled in their home states cannot be identified.¹¹

Our focus is on permanent interstate migration rather than temporary migration for work or schooling. We measure the percentage of persons aged 50 to 59 who resided outside their states of birth. By focusing on a particular age group, we minimize distortion from the changing age composition of the population. Analysis of the 50–59 age group also minimizes the impact of short-run labor and educational migration, which is concentrated among persons aged 18 to 49. Moreover, by excluding persons aged 60 or more, we eliminate most retirement migration, first observed in the 1930 census but more significant in recent years.¹²

Analysis of the percentage of migrants among persons in their fifties yields very different results from previously available estimates of long-run migration trends. Figure 2 reports the standardized interstate migration estimates for persons aged 50 to 59 from 1850 to 2000.¹³ Among both whites and blacks, there was a clear U-shaped pattern of migration. Whites had the highest percentage of migrants in the earliest four census years, and the percentage of migrants dropped from 1880 to 1940. The percentage of white migrants remained low until the 1970 census and has been rising for the past three censuses. For the number of cases used in the analysis, see the appendix.

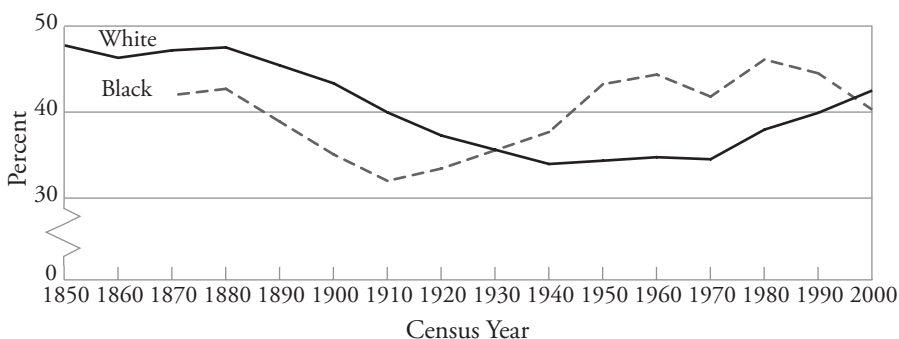
¹⁰ Steven Ruggles et al., *Integrated Public Use Microdata Series: Version 3.0*, 2004 <<http://ipums.org>> (July 12, 2004). Samuel Preston of the University of Pennsylvania created the original sample for 1910, and Halliman Winsborough of the University of Wisconsin oversaw creation of the samples for 1940 and 1950. No microdata are available for 1890 because the original enumeration sheets were lost in a fire before they could be microfilmed. The Integrated Public Use Microdata Series (IPUMS) project has nearly completed a sample for 1930.

¹¹ On the underestimation problems associated with a methodology that takes account only of state of birth and state of residence, see Everett S. Lee et al., *Methodological Considerations and Reference Tables*, vol. I of *Population Redistribution and Economic Growth*, ed. Kuznets and Thomas (Philadelphia, 1957), 58–60.

¹² Taeuber and Taeuber, *Changing Population of the United States*, 109.

¹³ The data in figures 2 and 3 are standardized to control for the changing distribution of population in states of different sizes. In 1850, the population was concentrated in the comparatively small states along the east coast; by the late twentieth century, many more people resided in the large states of the Midwest, Pacific Coast, and Southwest. The population shift from smaller to larger states means that raw statistics on the percentage of persons who had moved across state boundaries may exaggerate the extent of physical movement in the mid-nineteenth century compared with the late twentieth century. To adjust for that potential bias, we used direct standardization. We divided the states into seven size categories: under 5,000 square miles; 5,302 to 6,695; 19,912 to 23,159; 25,862 to 28,997; 30,521 to 34,040; 35,938 to 37,702; and 41,599 or over. (We combined West Virginia [15,508 square miles] and Virginia [26,091 square miles] because individuals born before 1863 in the new state of West Virginia often reported Virginia for a birthplace. Alaska and Hawaii are excluded.) We weighted the results to hold the size distribution of states constant over time. The size-standardized percentage of persons aged 50–59

Figure 2
Percentage of native-born population aged 50–59 residing outside state of birth by race, United States, 1850–2000



Note: Values for 1890 and 1930 are interpolated. The data are standardized to control for the size of birth state; see note 13. Source: Steven Ruggles et al., *Integrated Public Use Microdata Series: Version 3.0* (Minneapolis, 2004) <<http://ipums.org>> (July 12, 2004).

Blacks shared a U-shaped pattern of migration, but the timing was different. Migration data for blacks are not consistently available until the 1870 census, since the census did not gather such information for the slave population. The percentage of black interstate migrants was relatively high in the 1870 and 1880 censuses. The nadir in the percentage of black migrants occurred in 1910, thirty years before the low point for whites. In the censuses of 1950 and 1960, when white interstate migration was comparatively low, black migration was higher than at any previous census. In the past two decades, however, the percentage of black migrants has dropped significantly and is now lower than the percentage of white migrants.

When assessing the chronological pattern of migration, it is important to bear in mind that the dates show when the censuses were taken, not when the migration occurred. Census data show that the peak ages of interstate migration are the twenties and thirties, so most of the migration shown in figure 2 probably occurred several decades before the date of each census.¹⁴ For whites, therefore, migration probably began to decline around the Civil War, reached a low point from World War I

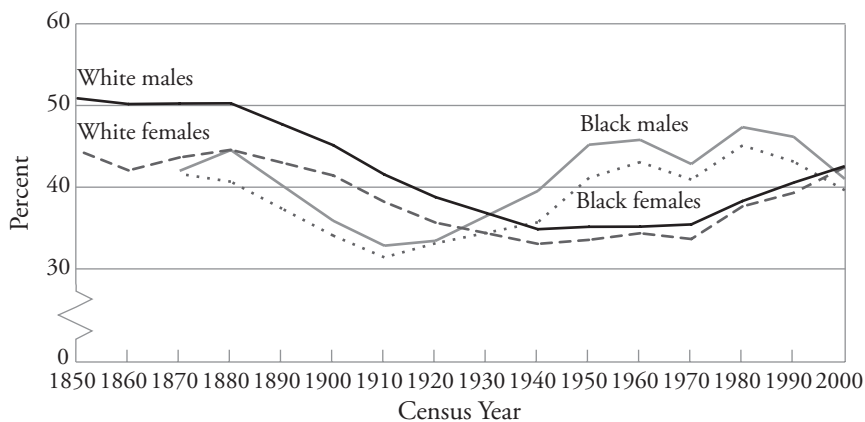
residing outside their state of birth at time t is calculated as

$$m_t = \sum_s m_{st} \cdot P_s$$

where m_{st} is the percentage of outmigrants born in states of size s at time t and P_s is the proportion of the standard population born in states of size s . The standard distribution of state sizes is the average of the size distribution of birthplaces for the native-born across all census years.

¹⁴ The concentration of young adults among those migrating is well known; see Donald J. Bogue, *Principles of Demography* (New York, 1969), 762–64; and P. Neal Ritchey, “Explanations of Migration,” *Annual Review of Sociology*, 2 (1976), 363–404. From 1940 onward, the census provides information on residence five years ago, and those data confirm that migration is most common among those in their twenties and thirties. For example, our analysis of IPUMS data shows that 60.6% of persons who migrated across state lines between 1935 and 1940 were aged 20–39. The more limited statistics available for nineteenth-century migration also show the twenties and thirties to be the ages with the highest proportion of migrants. See, for example, Curti, *Making of an American Community*; Katz, Doucet, and Stern, “Migration and the Social Order in Erie County,” 669–701; Dublin, “Rural-Urban Migrants in Industrial New England”; and Steckel, “Household Migration and Rural Settlement.”

Figure 3
 Percentage of native-born population aged 50–59 residing outside state of birth by sex and race, United States, 1850–2000



Note: Values for 1890 and 1930 are interpolated. The data are standardized to control for the size of birth state; see note 13. Source: Steven Ruggles et al., *Integrated Public Use Microdata Series: Version 3.0* (Minneapolis, 2004) <<http://ipums.org>> (July 12, 2004).

through the Great Depression, and began to rise after World War II. For blacks, the high migration reflected in the 1870 and 1880 censuses occurred mainly before the Civil War and was primarily movement of slaves, whereas the high migration of the recent period corresponds to the great northward migration of blacks between 1915 and 1970.

The data unequivocally support the contention of Thernstrom, Peter R. Knights, Michael B. Katz, and others that the nineteenth century was a period of extraordinarily high population movement. They are also consistent with Turner's prediction that the closing of the frontier would lead to a decline in mobility. Indeed, among whites aged 50 to 59, the proportion of migrants was 41 percent greater in 1850 than in 1940. By 2000, the proportion of white migrants had recovered, but it remained 12 percent lower than in the mid-nineteenth century.

Figure 3 breaks the results down by sex. As predicted by some migration theorists, among whites there was a long-run decline in the gender gap in migration: in the early censuses, males were 14 to 19 percent more likely to have migrated than were females, but this difference gradually diminished over time and virtually disappeared after 1950.¹⁵ Among blacks, however, female migration was lower than male migration in all periods, but there is no consistent chronological trend.

¹⁵ According to the theory, as the occupational choices open to women changed with industrialization and modernization, the migration differentials between men and women decreased. See Henry S. Shryock Jr. and Hope Tisdale Eldridge, "Internal Migration in Peace and War," *American Sociological Review*, 12 (Feb. 1947), 27–39; Larry A. Sjaastad, "The Costs and Returns of Human Migration," *Journal of Political Economy*, 70 (Oct. 1962), 80–93; Everett S. Lee, "A Theory of Migration," *Demography*, 3 (no. 1, 1966), 47–57; Ritchey, "Explanations of Migration"; Steven H. Sandell, "Women and the Economics of Family Migration," *Review of Economics and Statistics*, 59 (Nov. 1977), 406–14; Jacob Mincer, "Family Migration Decisions," *Journal of Political Economy*, 86 (Oct. 1978), 749–73; Dov Friedlander and Eliahu Ben Moshe, "Occupation, Migration, Sex Ratios, and Nuptiality in Nineteenth Century English Communities: A Model of Relationships," *Demography*, 23 (Feb. 1986), 1–12; and

Figure 4
Regions used in analysis of migration flows



Source: Steven Ruggles et al., *Integrated Public Use Microdata Series: Version 3.0* (Minneapolis, 2004) <<http://ipums.org>> (July 12, 2004).

Migration Flows and Destinations

It is clear that the nineteenth century was a period of extraordinary interstate migration for whites, but did the migration reflect agricultural settlement on the western frontier or movement to and between cities? To address that question, we first need to investigate migration flows. To assess flows, we calculated movements between and within each of five regions: the Northeast, Southeast, North Central, South Central, and West. The regions, a slightly modified version of those the Census Bureau uses, are identified in figure 4. Where flows were consistently small—such as West to Northeast—we aggregated them into larger groupings to make the patterns easier to interpret.

Figures 5 and 6 describe the migration flows of whites and blacks, respectively.¹⁶ These are area graphs; the width of each band in each census year reflects the percentage of persons aged 50–59 who had migrated along the indicated path. As shown in figure 5, the very high interstate migration of early-nineteenth-century whites was primarily long-distance movement westward from the East Coast states, especially

Franklin D. Wilson, "Aspects of Migration in an Advanced Industrial Society," *American Sociological Review*, 53 (Feb. 1988), 113–26.

¹⁶ The overall chronological pattern of migration is slightly different in figures 5 through 8 than in figures 2 and 3, since the statistics on migration flows have not been standardized to control for changes in the size distribution of states; see note 13.

Figure 5
 Interstate migration flows for native-born whites
 aged 50–59, United States, 1850–2000

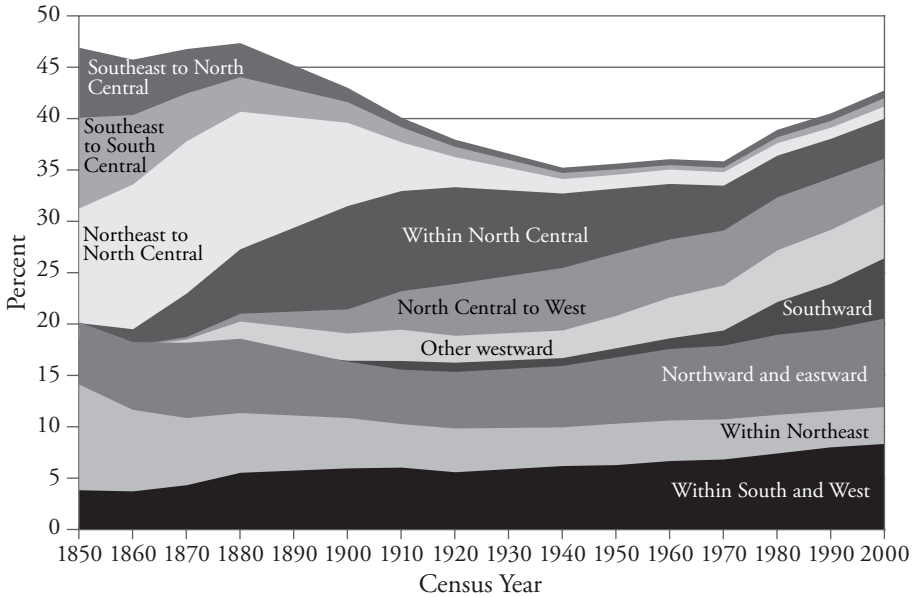
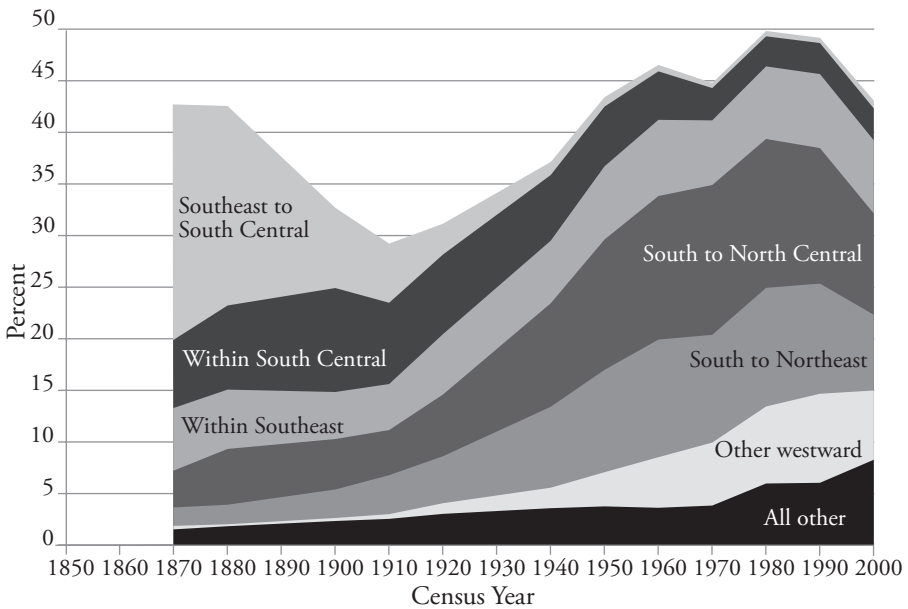


Figure 6
 Interstate migration flows for native-born blacks
 aged 50–59, United States, 1870–2000



Source for figures 5 and 6: Steven Ruggles et al., *Integrated Public Use Microdata Series: Version 3.0* (Minneapolis, 2004) <<http://ipums.org>> (July 12, 2004).

from the Northeast to the North Central region. As the eastern part of the North Central region began to fill up in the second half of the nineteenth century, there was a second wave of westward movement within the North Central region, from such states as Ohio, Michigan, and Indiana into rapidly growing farm states such as Minnesota, Wisconsin, and Iowa. Were it not for the dramatic movements to and within the Midwest, nineteenth-century migration would have been considerably lower than that of the twentieth century. The other tail of the U—the rise in white migration after World War II—was broadly based but was led by southward migration from the North Central and Northeastern regions.

Patterns of black interstate migration, shown in figure 6, differed sharply from those of whites. The high migration of the nineteenth century resulted from the transfer of slaves from the older Southeast to the new cotton-producing areas of Alabama, Mississippi, Louisiana, and East Texas in the South Central region. The second peak of black migration, seen in the censuses of 1940 through 1990, resulted from the Great Migration of blacks from the South to northern and western cities.

Migration to the central part of the country dominated interstate population movements in the mid-nineteenth century among both blacks and whites; the principal differences were that black migration in that period was usually involuntary and that its primary destination was the South Central rather than the North Central region. In the twentieth century, blacks headed for northern destinations and whites were increasingly likely to move south. Thus, the superficial similarity of the U-shaped migration trends among whites and blacks masks substantial differences in their destinations and motivations for moving.

We can also assess the character of migrants' destinations. In figures 7 and 8, destinations are classified as farms (units including a farmer or identified as a farm by the census); rural nonfarm (places of under 2,500 population); towns (places of at least 2,500 outside a metropolitan area); large cities (central places with 50,000 or more people in a metropolitan area); and suburbs (places other than central cities that are within metropolitan areas). The graphs are consistent with Turner's view of long-distance migration: in the mid-nineteenth century, more than 90 percent of white migrants and 80 percent of black migrants went to rural areas. Three-fourths of the white migrants to rural areas went to farms.¹⁷

White migration to cities increased gradually between 1850 and 1950 and remained strong through the rest of the twentieth century, but that new migration stream was overwhelmed by declining migration to farms. We should note, however, that this measure does not capture the full extent of movement to cities, since it includes only migrations that involved crossing state lines. For blacks, migration to

¹⁷ The definitions of each type of destination vary slightly across censuses; see the IPUMS variable descriptions for *farm*, *urban*, and *metro* for a full discussion of the changes: Ruggles et al., *Integrated Public Use Microdata Series*. In data from 1940 onward, not all destination types are available in all census years. Where information was not available, the destination of migrants was estimated through interpolation. As a result, the estimates for 1940–2000 should be regarded as approximations. In 1870 and 1880, more black migrants are classified in rural non-farm places than on farms, but the great majority were employed as agricultural laborers. Most of those people probably resided on plantations—often in the quarters they had occupied before abolition—but the census does not provide sufficient information to classify their places of residence as farms.

Figure 7
Interstate migration destinations for native-born whites
aged 50–59, United States, 1850–2000

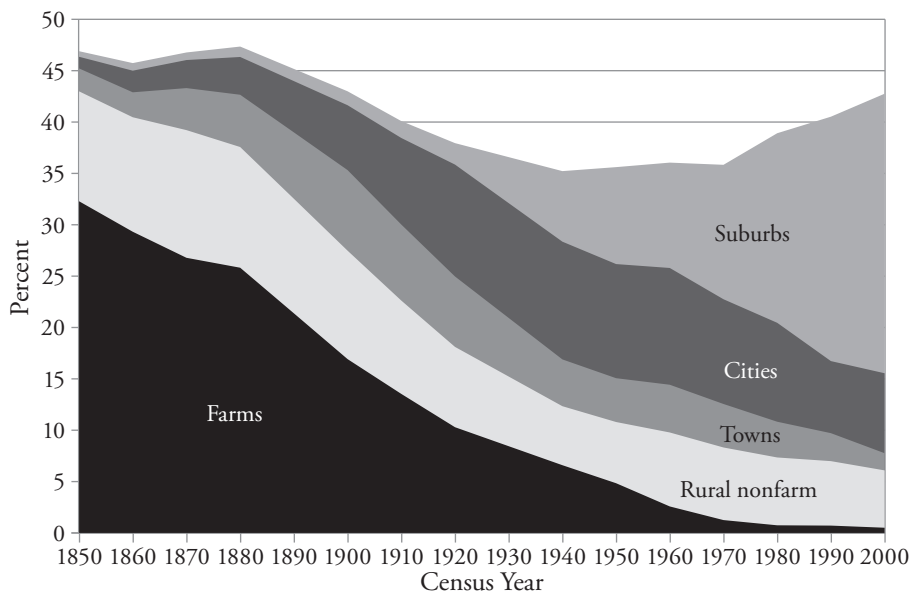
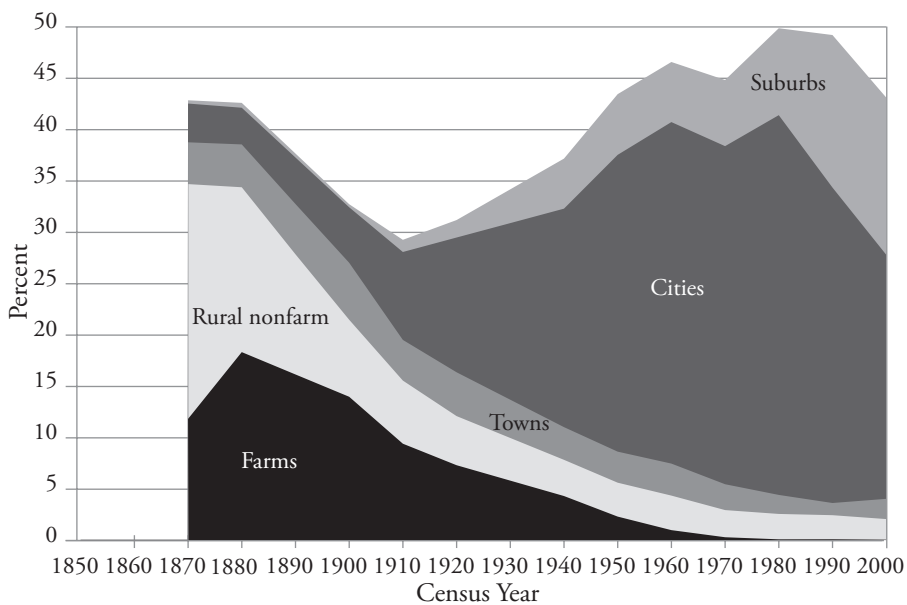


Figure 8
Interstate migration destinations for native-born blacks
aged 50–59, United States, 1870–2000



Source for figures 7 and 8: Steven Ruggles et al., *Integrated Public Use Microdata Series: Version 3.0* (Minneapolis, 2004) <<http://ipums.org>> (July 12, 2004).

cities drove the Great Migration, and the percentage of blacks in their fifties who had migrated did not peak until 1980. The rise in migration for whites since World War II has resulted entirely from suburbanization and was doubtless partly a consequence of the movement of blacks to central cities during the preceding decades.¹⁸

Migration and Socioeconomic Status

The Thernstrom hypothesis that the high migration of the nineteenth century reflected a floating proletariat moving from town to town in search of work gets little support from the new census data. As we have seen, most white migrants in the mid-nineteenth century went to farms, and most black migrants apparently moved as slaves. In addition, the census reveals that male nonfarmers who were migrants had higher-status occupations than male nonfarmers who remained behind. Figures 9 and 10 show the percentage of employed male nonfarmers who were migrants by occupational status. In all periods and among both whites and blacks, white-collar workers were more likely to have moved across state lines than were skilled or unskilled workers, and the differences were particularly pronounced in the nineteenth century. (The percentages for black white-collar and skilled workers before 1920 are subject to high sampling error.)¹⁹

One of the most potent criticisms of the safety-valve thesis was that the poor lacked sufficient resources to move west and establish farms; even when land was inexpensive or free, it took money to travel west and purchase the equipment and supplies needed to farm.²⁰ Thus, according to this argument, migration was concentrated among those who were already doing well. Although our data cannot tell us how much money migrants had before they left, we do have information about their education. From 1850 to 1920, the census inquired about literacy. From 1940 onward, the census substituted a question on educational attainment for the inquiry on literacy. Those with the least education were probably concentrated among the poor. Since most people would have acquired literacy and primary education prior to migration, those measures provide clues to the pre-migration socioeconomic status of eventual migrants.

¹⁸ William H. Frey, "Black In-Migration, White Flight, and the Changing Economic Base of the Central City," *American Journal of Sociology*, 85 (May 1980), 1396–1417. Publications using IPUMS data to analyze migration out of the South include James N. Gregory, "The Southern Diaspora and the Urban Dispossessed: Demonstrating the Census Public Use Microdata Samples," *Journal of American History*, 82 (June 1995), 111–34; Stewart E. Tolnay, "Migration Experience and Family Patterns in the 'Promised Land,'" *Journal of Family History*, 23 (Jan. 1998), 68–89; Thomas N. Maloney, "Migration and Economic Opportunity in the 1910s: New Evidence on African-American Occupational Mobility in the North," *Explorations in Economic History*, 38 (Jan. 2001), 147–65; Trent Alexander, "Great Migrations: Race and Community in the Southern Exodus, 1920–70" (Ph.D. diss., Carnegie Mellon University, 2001); and Jason Digman, "Which Way to the Promised Land? Changing Patterns in Southern Migration, 1865 to 1920" (Ph.D. diss., University of Illinois, Chicago, 2001).

¹⁹ White-collar workers are those in occupations classified as professional, technical, managerial, clerical, and sales in the 1950 U.S. Census Bureau classification, except for hucksters, peddlers, and newsboys, who are classified as unskilled. The occupations of craftsmen, artisans, and operatives are designated as skilled, and those of service workers and laborers as unskilled. U.S. Census Bureau, *Alphabetic Index of Occupations and Industries: 1950* (Washington, 1950).

²⁰ Murray Kane, "Some Considerations on the Safety Valve Doctrine," *Mississippi Valley Historical Review*, 23 (Sept. 1936), 169–88; Clarence H. Danhof, "Economic Validity of the Safety-Valve Doctrine," *Journal of Economic History*, 1 (Dec. 1941), 96–106.

Figure 9
Percentage of native-born employed white males aged 50–59 residing outside state of birth by occupation, United States, 1850–2000

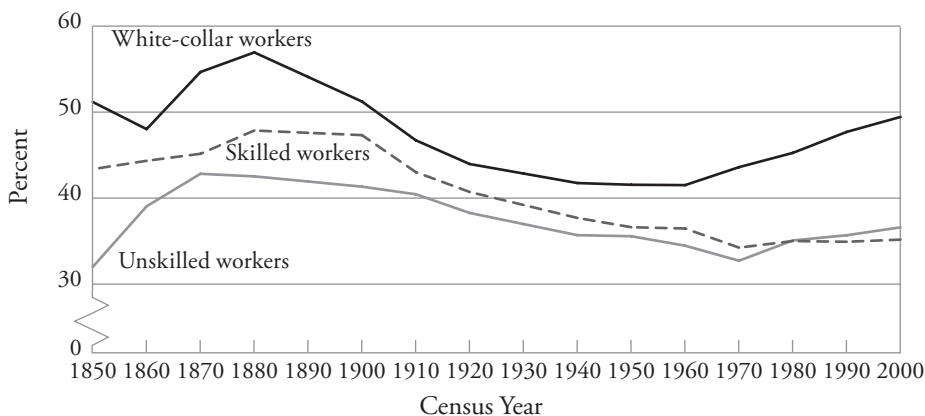
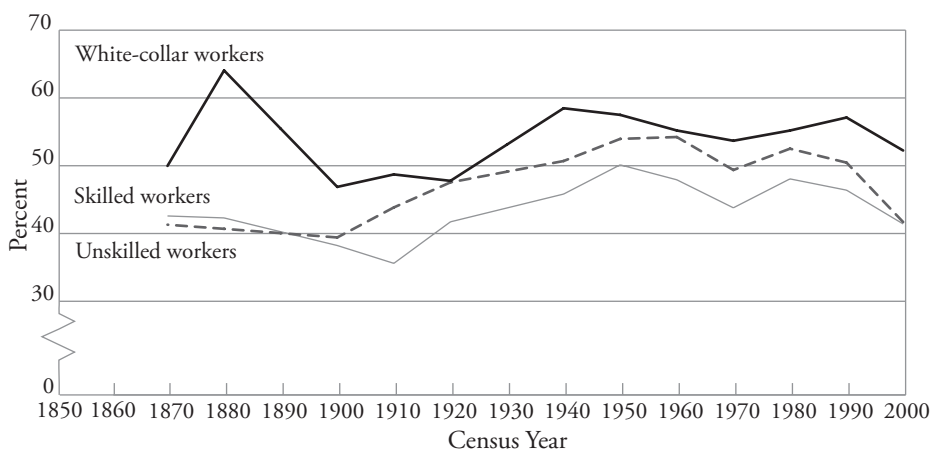


Figure 10
Percentage of native-born employed black males aged 50–59 residing outside state of birth by occupation, United States, 1870–2000



Note: Values for 1890 and 1930 are interpolated. Farmers are excluded. Source for figures 9 and 10: Steven Ruggles et al., *Integrated Public Use Microdata Series: Version 3.0* (Minneapolis, 2004) <<http://ipums.org>> (July 12, 2004).

Figures 11 and 12 show the percentage of migrants among whites and blacks by literacy and completion of the fifth grade of school. From 1870 onward, the results are consistent with past research on migration selectivity: those with the least education were least likely to move.²¹ By contrast, before 1870—when westward migration to

²¹ Larry H. Long, "Migration Differentials by Education and Occupation: Trends and Variations," *Demography*, 10 (May 1973), 243–58; Bogue, *Principles of Demography*, 769–70; Stanley Lieberson, "Selective Migration from the South: A Historical View," in *The Demography of Racial and Ethnic Groups*, ed. Frank D. Bean and W.

Figure 11

Percentage of native-born whites aged 50–59 residing outside state of birth by literacy and educational attainment, United States, 1850–2000

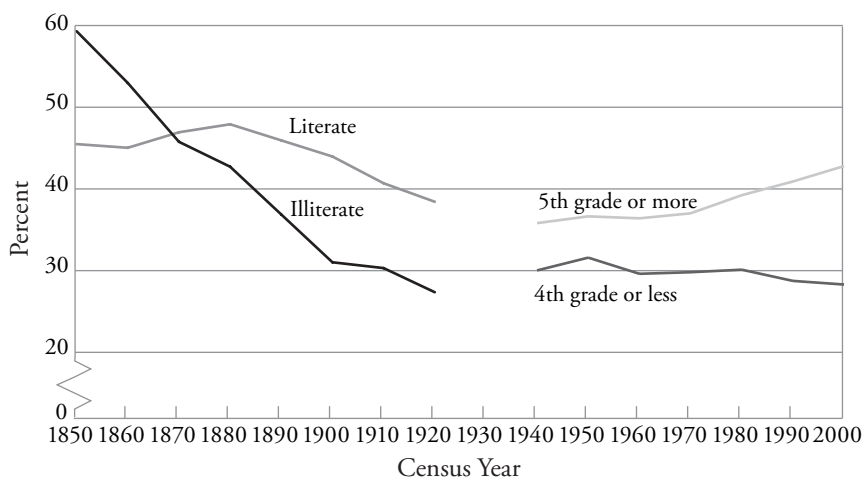
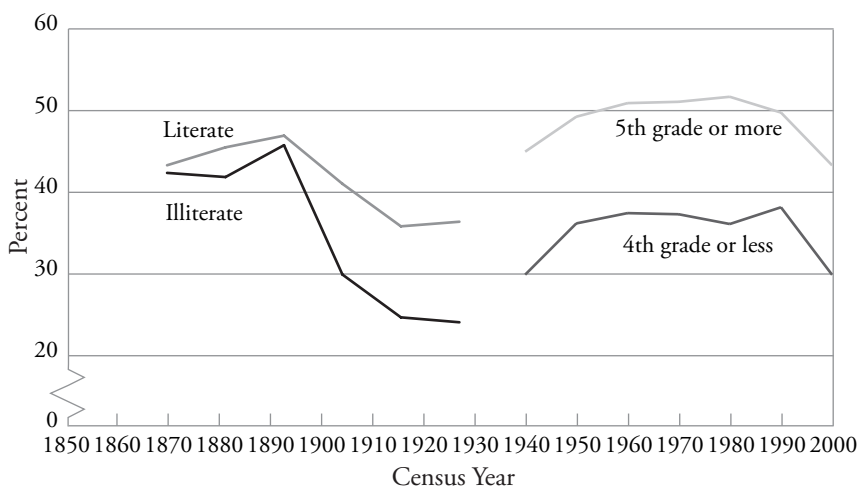


Figure 12

Percentage of native-born blacks aged 50–59 residing outside state of birth by literacy and educational attainment, United States, 1870–2000



Note: Values for 1890 and 1930 are interpolated. Source for figures 11 and 12: Steven Ruggles et al., *Integrated Public Use Microdata Series: Version 3.0* (Minneapolis, 2004) <<http://ipums.org>> (July 12, 2004).

farms was at its peak—illiterate whites were substantially more likely to have migrated than were persons who could read and write. Those data do not tell us whether the

Parker Frisbie (New York, 1978), 119–41; Stewart E. Tolnay, “Educational Selection in the Migration of Southern Blacks, 1880–1990,” *Social Forces*, 77 (Dec. 1998), 487–514; Stewart E. Tolnay, “The Great Migration Gets Underway: A Comparison of Black Southern Migrants and Nonmigrants in the North, 1920,” *Social Science Quarterly*, 82 (June 2001), 235–52.

very high geographic mobility of the illiterate in the early nineteenth century was associated with upward economic mobility; the results therefore could be consistent with either the safety-valve hypothesis or Thernstrom's interpretation. The data do, however, clearly reveal a precipitous drop in the mobility of the poorly educated among both whites and blacks during the latter part of the nineteenth century, suggesting a fundamental shift in the relationship of socioeconomic status to migration.

Cross-sectional sources such as the IPUMS cannot resolve the issue of the relationship between geographic mobility and economic mobility since they do not reveal the occupations or wealth of migrants before they left home. New nationally representative samples of individuals linked from one census to the next being compiled by Joseph P. Ferrie provide more direct evidence on the relationship between geographic and occupational mobility. Ferrie's work suggests that nineteenth-century urban laborers made up a substantial portion of the westward migration stream and that as a group those migrants did far better than laborers who stayed in the eastern cities. Ferrie's most recent analysis also indicates that upward social mobility was far more frequent in the United States than in England and Wales.²² Those results are still preliminary, but if confirmed they will provide powerful support for Turner's safety-valve thesis: nineteenth-century westward migration offered an escape for large numbers of urban workers.

Conclusion

Nineteenth-century Americans were extraordinarily mobile. Despite the difficulty of travel, almost half of the population moved across state lines, and most of those migrants moved long distances. The bulk of mid-nineteenth-century migrants moved to the Midwest, and almost nine out of ten went to rural areas. Just as Turner predicted, the closing of the frontier in 1890 led to a dramatic decline in westward migration to rural areas. Among whites, even the lure of the cities could not stem the precipitous decline of mobility; it was not until the rise of the suburbs following World War II that interstate migration began to return to its historic levels. For blacks, however, the history of internal migration is sharply different. Free blacks never migrated west to farms in large numbers. The Great Migration of blacks occurred in the early and mid-twentieth century, dominated by movement from the South to large cities in the Northeast and North Central regions.

Turner's thesis generated one of the great debates in American historiography. His critics found numerous inconsistencies and made a plausible case that he exaggerated

²² Joseph P. Ferrie, "Migration to the Frontier in Mid-Nineteenth Century America: A Reexamination of Turner's 'Safety Valve,'" paper delivered at the World Congress of Cliometrics, Munich, Germany, July 1997 <<http://www.faculty.econ.northwestern.edu/faculty/ferrie/papers/munich.pdf>> (July 12, 2004); Joseph P. Ferrie, "Longitudinal Data for the Analysis of Mobility in the U.S., 1850-1930," paper delivered at the conference "Longitudinal and Cross-Sectional Historical Data: Intersections and Opportunities," sponsored by the International Microdata Access Group, Montreal, Nov. 10-11, 2003 <<http://www.nappdata.org/imagpapers/ferrie.pdf>> (July 12, 2004). Building on Ferrie's work, Steven Ruggles is developing a series of large-scale representative samples of linked nineteenth-century censuses, which will provide a tool for investigating such issues; see Steven Ruggles, "Linking Historical Censuses: A New Approach," paper delivered at the conference "Longitudinal and Cross-Sectional Historical Data," *ibid.*

the significance of the frontier in the development of American character and democratic institutions. On several key empirical points, however, Turner got it right. The mass movement to the frontier in the nineteenth century was extraordinary, and it is reasonable to infer that a demographic experience of such magnitude would have profound implications for social mobility and political institutions. The metaphor of the safety valve may be appropriate: the availability of western land probably did increase economic opportunity. Turner's greatest insight, perhaps, was his prediction of the sea change in American migration patterns; the closing of the frontier led to a precipitous decline in westward migration.

Turner did not predict the twentieth-century recovery of migration. The closing of the frontier was not the end of American restlessness. The nonlinear trend in American migration revealed by the IPUMS represents a significant revision of the demographic literature. For the first time, we can see the U-shaped curve of American migration history: there were two great periods of intense interstate migration over the last 150 years separated by an intervening trough of relative stability.

APPENDIX

Table A.1 gives the unweighted case counts underlying the percentages shown in figures 2 through 12. Note that the number of cases available for blacks aged 50–59 in some categories is small, especially the category of white-collar workers in the pre-1920 censuses.

These data are drawn from the Integrated Public Use Microdata Series (IPUMS). For many census years, the IPUMS includes more than one sample. The following list identifies the samples used for this analysis:

- 1850, 1860, 1880, 1940, 1950, 1960, 2000: regular 1% IPUMS samples
- 1870: regular 1% IPUMS samples with 2% black oversample
- 1900: preliminary 0.5% IPUMS sample
- 1910: Preston 0.4% sample
- 1970: 1% Form 1 state sample
- 1980, 1990: 5% state samples

The IPUMS samples are stratified and clustered, so variances may differ from those in a simple random sample of the same size. Since the effects of stratification and clustering tend to cancel one another out, however, the migration estimates presented in this article probably approximate the precision of a true random sample with the same number of cases.¹ Because many of the samples are weighted, the unweighted case counts shown in table A.1 should not be used to calculate percentages.

¹ Steven Ruggles, "Sample Designs and Sampling Errors," *Historical Methods*, 28 (Winter 1995), 40–46.

Table A.1
Unweighted case counts for population subgroups in figures 2–12

<i>Whites, 50–59</i>									
<i>Census Year</i>	<i>Males</i>	<i>Females</i>	<i>White-collar workers</i>	<i>Skilled workers</i>	<i>Unskilled workers</i>	<i>Literate</i>	<i>Illiterate</i>	<i>4th grade or less</i>	<i>5th grade or more</i>
1850	4,159	3,952	377	680	328	7,283	828		
1860	5,592	5,248	658	900	561	9,870	944		
1870	7,524	6,721	1,017	1,395	824	12,398	1,844		
1880	9,354	8,783	1,377	1,847	957	16,157	1,980		
1900	8,070	7,701	1,626	1,607	1,125	14,588	1,183		
1910	9,342	8,239	2,194	1,999	1,508	16,655	1,016		
1920	28,304	26,257	7,119	6,919	4,546	52,598	1,963		
1940	46,161	45,316	12,692	12,564	7,630			9,539	81,938
1950	56,715	53,356	16,919	18,937	7,429			2,811	32,063
1960	69,207	72,879	24,116	27,747	8,816			7,381	134,705
1970	82,223	88,767	31,793	34,350	10,330			5,280	165,710
1980	461,104	497,994	204,870	162,764	50,045			21,470	937,928
1990	441,259	465,297	209,967	141,681	51,312			12,238	894,318
2000	119,147	123,384	60,498	34,596	12,326			1,653	240,878

<i>Blacks, 50–59</i>									
<i>Census Year</i>	<i>Males</i>	<i>Females</i>	<i>White-collar workers</i>	<i>Skilled workers</i>	<i>Unskilled workers</i>	<i>Literate</i>	<i>Illiterate</i>	<i>4th grade or less</i>	<i>5th grade or more</i>
1870	2,594	2,296	41	188	1,718	656	4,231		
1880	1,672	1,494	25	123	778	598	2,568		
1900	1,288	1,103	32	136	463	597	1,794		
1910	1,201	996	39	130	458	893	1,304		
1920	3,338	2,663	157	387	1,292	3,440	2,561		
1940	4,836	4,529	240	631	2,208			4,904	4,461
1950	7,110	6,768	477	1,625	2,805			1,550	2,016
1960	7,178	7,785	607	2,213	3,280			4,862	10,074
1970	7,651	9,000	868	2,994	3,087			3,084	13,567
1980	45,991	57,743	8,666	17,070	12,578			9,818	93,916
1990	40,706	52,790	9,760	14,509	9,885			4,436	89,060
2000	12,111	14,656	3,251	3,941	2,358			494	26,273

Source: Steven Ruggles et al., *Integrated Public Use Microdata Series: Version 3.0* (Minneapolis, 2004) <<http://ipums.org>> (July 12, 2004).