

COHORT POPULATION REDISTRIBUTION AND THE URBAN HIERARCHY

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A large part of the urbanization of the United States has occurred within the last three generations. In 1880, less than 30 per cent of the population lived in cities; more than 70 per cent were rural. By 1960, these percentages were reversed—30 per cent rural and 70 per cent urban. Urban population has grown through natural increase, through expansion of city boundaries, through net immigration from abroad, and through net migration from rural areas within the nation. The last process, the redistributions of the native population, is the subject of this inquiry.

The collection of residence histories provides a means for obtaining from the current population, retrospectively, a relatively complete account of the migrations and population redistribution experienced throughout their lifetimes. The residence history supplement to the May 1958 Current Population Survey provides at least partial coverage of patterns of population redistribution for the entire period from before 1880 to 1958.¹ Residence histories supply basic data permitting almost any conceivable type of migration study. In contrast to historical census data, in which states must be the basic units for migration analysis, residence history data permit identification of specific places of residence. For this analysis, I use a tabulation classifying birthplace and succeeding residences by size of place. This permits identification of patterns of redistribution within the hierarchy of urban places for successive cohorts.

In these tabulations, six cohorts are delineated in terms of age in 1958: 18-24, 25-34, 35-44, 45-54, 55-64, and 65 and over. The corresponding years of birth for each cohort are shown in the stub of Table I. For each cohort, cross-tabulations were made showing size of birthplace by size of place of residence at age 18, at age 24, and, as applicable, at age 34, at age 44, and at attained age at the time of the survey in 1958.²

These tabulations resemble net rather than gross migration data. They are based on comparisons between successive population distribution, not on direct information about specific migration streams. Like nearly all "net migration" data for the United States, these data refer to net redistribution of population over various intervals of time. Only indirect inferences can be made about the actual migration paths followed by individuals.

The size-of-place classification takes account of type of place (metropolitan or nonmetropolitan, farm or nonfarm, rural or urban) as well as size (500,000 and over, 50,000-499,999, 2,500-49,999).³ Specific place names were coded by size using a National Office of Vital Statistics list based on 1950 census data and the "old" urban definition. This procedure provides a constant set of places within each category, and represents one arbitrary solution to the question of which point in time to use for characterizing places at which the person may have lived for many years. The correlation across places between size in 1950 and size at some other time is less than perfect, and this tends to weaken some of the subsequent interpretations.⁴

The amount and timing of the redistribution from birthplace for each cohort may be ascertained from the data in Table 1 which gives the size-of-place distribution at birth and at each successive age. To summarize the amount of redistribution, an index of dissimilarity has been computed, comparing the size distribution at each age with the size distribution at birth (Table 2).⁵ For example, comparing the residential distribution of the youngest cohort at age 18 with its residential distribution at birth, an index of 7.5 is obtained, indicating that the distribution at age 18 could have been obtained by moving a minimum of 7.5 per cent of the

TABLE 1. SIZE-OF-PLACE DISTRIBUTION OF EACH COHORT AT SUCCESSIVE AGES

<i>Cohort: Age in 1958 and Year of Birth</i>	<i>Age</i>	<i>Total</i>	<i>Metropolitan</i>			<i>Nonmetropolitan</i>			<i>Farm</i>
			<i>500,000 and over</i>	<i>50,000 to 499,999</i>	<i>2,500 to 49,999</i>	<i>Rural non- farm</i>	<i>2,500 to 49,999</i>	<i>Rural non- farm</i>	
18-24 (1933-40)	Birth	100.0	15.5	16.6	6.4	6.7	16.7	16.7	21.4
	18	100.0	14.6	18.8	8.5	9.9	16.4	15.8	16.0
	24	100.0	13.9	21.0	9.2	11.3	19.0	15.4	10.2
25-34 (1923-33)	Birth	100.0	17.5	17.5	6.4	6.5	16.1	16.6	19.4
	18	100.0	18.4	19.6	7.3	8.2	16.2	14.8	15.5
	24	100.0	18.0	20.5	9.7	11.5	15.4	14.5	10.4
	34	100.0	15.1	19.0	11.9	15.0	14.9	14.5	9.6
35-44 (1913-23)	Birth	100.0	16.9	15.8	6.0	5.5	15.5	16.3	24.0
	18	100.0	18.6	18.4	6.7	6.4	16.2	14.2	19.5
	24	100.0	20.1	20.3	7.5	8.1	15.7	13.4	14.9
	34	100.0	16.8	19.3	10.4	12.9	15.0	13.9	11.7
	44	100.0	15.3	19.7	10.1	13.4	13.6	15.1	12.8
45-54 (1903-13)	Birth	100.0	15.9	14.5	4.4	5.1	15.2	17.4	27.5
	18	100.0	17.8	17.9	5.4	5.9	15.8	15.0	22.2
	24	100.0	19.3	19.6	6.3	6.5	16.0	14.4	17.9
	34	100.0	18.7	20.2	7.8	8.5	15.8	13.9	15.1
	44	100.0	17.2	19.7	9.0	9.9	15.8	14.6	13.8
	45-54	100.0	15.7	19.3	9.9	11.2	16.0	15.3	12.6
55-64 (1893-1903)	Birth	100.0	14.8	12.5	4.1	4.6	15.1	17.2	31.7
	18	100.0	15.9	16.0	4.7	5.0	15.4	15.7	27.3
	24	100.0	17.4	18.9	5.4	5.5	15.9	14.4	22.5
	34	100.0	17.9	19.6	6.2	7.3	16.2	14.3	18.5
	44	100.0	18.1	20.6	6.1	7.9	16.1	13.9	17.3
	55-64	100.0	15.6	20.2	7.7	10.7	16.4	15.2	14.2
65 and over (to 1893)	Birth	100.0	12.5	10.8	3.5	4.4	12.9	17.2	38.7
	18	100.0	13.7	13.3	3.9	4.5	14.4	16.4	33.8
	24	100.0	14.9	15.5	4.3	4.7	15.2	15.9	29.5
	34	100.0	15.3	17.6	5.2	5.7	16.5	16.3	23.4
	44	100.0	15.3	18.0	5.1	5.6	16.4	16.1	23.5
	65 and over	100.0	12.7	18.8	7.4	8.4	18.8	19.4	14.5

TABLE 2. INDEXES OF DISSIMILARITY COMPARING DISTRIBUTION OF EACH COHORT AT BIRTH WITH DISTRIBUTION AT EACH SUCCESSIVE AGE

<i>Cohort</i>		<i>Index Comparing Birth with Age</i>					
<i>Years of Birth</i>	<i>Age in 1958</i>						<i>in 1958</i>
		<i>18</i>	<i>24</i>	<i>34</i>	<i>44</i>		
1933-40	18-24	7.5	14.1	—	—		—
1923-33	25-34	5.7	11.8	15.5	—		—
1913-23	35-44	6.6	12.0	15.3	15.9		—
1903-13	45-54	7.7	12.6	15.9	16.5		17.2
1893-1903	55-64	5.9	12.0	16.1	17.7		19.5
to 1893	65 and over	5.7	10.5	16.2	16.3		24.2

members of the cohort from their birthplaces. Actually, a much higher percentage moved, but some moved to places of the same size, and the effect of other moves was cancelled by persons moving in contrary patterns. Hence, the index of 7.5 is a measure of the net population redistribution among sizes of place between birth and age 18.

For each of the six cohorts, the index of redistribution between birth and age 18 is between 5.7 and 7.7, and the index of redistribution since birth is greater at each higher age. Beyond age 34 increases in the index of redistribution were generally small during any 10-year period.

Comparison of the cohorts in Table 2 suggests there has been little change over time in the amount or timing of redistribution among the size classes. Indexes for the youngest cohort are higher than for other cohorts, but there are only two observations so far on this cohort.

Eldridge and Thomas have documented pronounced secular trends in the volume of net migration among states.⁶ From their in-

TABLE 3. INDEXES OF DISSIMILARITY COMPARING SIZE-OF-PLACE DISTRIBUTION OF EACH COHORT AT EACH AGE WITH DISTRIBUTION AT PRECEDING AGE

<i>Years of Birth</i>	<i>Cohort Age in 1958</i>	<i>Index Comparing</i>				
		<i>Birth and 18</i>	<i>18 and 24</i>	<i>24 and 34</i>	<i>34 and 44</i>	<i>44 and age in 1958</i>
1933-40	18-24	7.5 (1945)	6.9 (1954)	—	—	—
1923-33	25-34	5.7 (1937)	6.6 (1949)	5.7 (1952)	—	—
1913-23	35-44	6.6 (1927)	5.9 (1939)	8.2 (1947)	3.2 (1952)	—
1903-13	45-54	7.7 (1917)	4.9 (1929)	4.1 (1937)	3.3 (1947)	3.1 (1952)
1893-1903	55-64	5.9 (1907)	6.1 (1919)	4.1 (1927)	1.8 (1937)	6.0 (1947)
to 1893	65 and over	5.7 (1892)	4.8 (1904)	6.1 (1912)	0.5 (1922)	11.6 (1932)

Note: Years shown in parentheses are medians of approximate corresponding calendar-year intervals.

terstate data, high indexes of redistribution were found for the 1900s, 1920s, and 1940s, and low indexes for the 1910s and 1930s. To search for secular trends in the size-of-place data, an index of dissimilarity was computed, comparing the distribution of each cohort at each age with its distribution at the preceding age. This permits an assessment of the net redistribution within age-periods of varying length—mainly 18 or 10 years—and these periods can be identified in terms of corresponding calendar years (Table 3). Unfortunately, the calendar-year intervals obtained by this procedure are relatively long and do not correspond precisely with each other. Very roughly, however, the indexes on each diagonal can be regarded as applying to approximately similar time periods. This gives, for the 1950s, indexes of 6.9, 5.7, 3.2, and 3.1; for the 1940s, indexes of 7.5, 6.6, 8.2, 3.3, and 6.0; and so forth. Averaging the indexes for each decade produces the first series shown below. The second is based on averages using data for ages 18–24 and 25–34 only, ages of maximum mobility rates.⁷

1900s . . .	5.4 . . .	4.8
1910s . . .	6.6 . . .	6.1
1920s . . .	4.0 . . .	4.5
1930s . . .	5.8 . . .	5.0
1940s . . .	6.3 . . .	7.3
1950s . . .	4.7 . . .	6.3

No pattern such as that found by Eldridge and Thomas appears in these data; indeed, if there is any significant alteration, it is in the opposite direction. There is not even a distinctly low index for the 1930s. Apart from weaknesses in the data and methods, this lack of evidence of secular trends may reflect a relative insensitivity of population redistribution among size groups to the business cycle. As opposed to interstate redistribution, size-of-place redistribution does not require much long-distance migration, and it may reflect life-cycle processes within each cohort as well as over-all economic adjustments. Perhaps as the volume of migration declines during a depression the efficiency increases, so that the same or even more net redistribution is accomplished. Alternative tabulations of the

residence history data would be required to provide a firm basis for such speculation.

Designation of the size-of-place classification as defining an urban hierarchy implies that each category represents places more urban than those below it and less urban than those above it. There are obvious questions about the particular order of places—most seriously, should metropolitan suburbs precede or follow central cities in the hierarchy, or should size of metropolitan area be substituted? Bypassing such questions for the moment, let us consider the known general tendency for population redistribution during the past century to have been from the lower portions to the upper portions of the urban hierarchy. To what extent has this general pattern of redistribution characterized the redistribution of individuals in each cohort? The answer to this question draws on cross-tabulations of size of place of birth by size of place of residence at each of the successive ages. For example, for the youngest cohort there is a tabulation showing size of birthplace by size of place at age 24 (*see* Table 6, top panel). Those persons who have never moved, as well as some of those who have, are in the same size of place at each time; this is true of 47.4 per cent of this cohort. For 32.5 per cent, place of residence at age 18 is higher up the urban hierarchy than birthplace, and for 20.1 per cent place at age 18 is lower on the hierarchy than birthplace. Similar comparisons for each cohort at each successive age are shown in Table 4.

Within each cohort, the percentage residing in the same size category as birthplace decreases with age. By age 18, the percentage in each case is down to 70–80, and it continues to drop sharply until at least age 34. For each cohort at each age, redistribution up the size hierarchy predominates over downward redistribution. This tendency is clearly indicated in ratios of upward to downward redistribution, which range from 1.6 to 3.4 (Table 4, final column).

With but one minor exception, as each cohort ages, both the percentage of upward redistributions and the percentage of downward redistributions increase. This is possible, of course, because of the declining percentages remaining in birthplace. Within cohorts, there is a tendency for the ratio of upward to downward redistributions

TABLE 4. COMPARISON BETWEEN SIZE OF BIRTHPLACE AND SIZE OF CURRENT PLACE, FOR COHORTS AT SELECTED AGES

<i>Cohort: Age in 1968 and Yrs. of Birth</i>	<i>Age</i>	<i>Size of Place at Specified Age Compared to Size of Birthplace</i>			<i>Ratio of Larger to Smaller</i>		
		<i>Same</i>	<i>Larger</i>	<i>Smaller</i>			
18-24 (1933-40)	18	69.4	19.0 (22.5)	11.6 (14.8)	1.6	(1.5)	
	24	47.4	32.5 (38.3)	20.1 (25.3)	1.6	(1.5)	
25-34 (1923-33)	18	74.7	16.3 (19.8)	9.0 (11.2)	1.8	(1.8)	
	24	56.0	29.0 (35.2)	15.0 (18.6)	1.9	(1.9)	
	34	46.9	32.9 (39.6)	20.2 (25.5)	1.6	(1.6)	
35-44 (1913-23)	18	75.6	16.7 (20.1)	7.7 (10.2)	2.2	(2.0)	
	24	62.0	27.5 (33.1)	10.5 (13.8)	2.6	(2.4)	
	34	48.2	34.2 (41.2)	17.6 (23.2)	1.9	(1.8)	
	44	45.7	36.8 (44.5)	17.5 (23.9)	2.1	(1.9)	
45-54 (1903-13)	18	74.6	18.1 (21.5)	7.3 (10.1)	2.5	(2.1)	
	24	63.4	27.4 (32.6)	9.2 (12.7)	3.0	(2.6)	
	34	52.5	34.2 (40.7)	13.3 (18.3)	2.6	(2.2)	
	44	47.3	36.6 (43.6)	16.1 (22.3)	2.3	(2.0)	
	45-54	43.3	38.6 (45.9)	18.1 (25.0)	2.1	(1.8)	
55-64 (1893-1903)	18	79.2	14.8 (17.4)	6.0 (8.8)	2.5	(2.0)	
	24	66.8	25.1 (29.4)	8.1 (11.8)	3.1	(2.5)	
	34	56.0	33.1 (38.9)	10.9 (15.9)	3.0	(2.4)	
	44	52.9	35.7 (41.9)	11.4 (16.7)	3.1	(2.5)	
	55-64	44.4	40.2 (47.1)	15.4 (22.6)	2.6	(2.1)	
65 and over (to 1893)	18	80.9	13.8 (15.8)	5.3 (8.6)	2.6	(1.8)	
	24	70.0	22.7 (26.0)	7.3 (11.9)	3.1	(2.2)	
	34	58.0	32.5 (37.1)	9.5 (15.5)	3.4	(2.4)	
	44	57.3	33.0 (37.6)	9.7 (15.9)	3.4	(2.4)	
	65 and over	41.5	44.2 (50.5)	14.3 (23.3)	3.1	(2.2)	

Note: Figures in parentheses are based on totals excluding those not exposed to the possibility of movement to a larger place (born in cities of 500,000 and over) or to a smaller place (born on farm).

to increase up to age 24 or 34, and then decrease. Such a pattern could be explained by a relative predominance among younger persons of redistribution from rural places and small cities to large cities, and among middle-aged persons of redistribution from large cities to metropolitan suburbs.

The younger the cohort, the smaller the percentage of its members who still live in the same size class at age 18 as that in which they were born. Similarly at each succeeding age, the younger the cohort, the smaller the percentage still in birthplace. This pattern does not necessarily indicate an increasing prevalence of migration among the younger cohorts, but may reflect changes in the timing of

migration, as a result of changing age at marriage and increased prevalence of college education, as well as changes in the size-patterns of moves—altering the ratio of gross to net redistribution. Perhaps there is a greater tendency among younger cohorts to move to a different place on leaving home, even though, as noted above, the amount of net redistribution has not increased.

The prevalence of upward over downward redistribution is greater among the older cohorts than among the younger ones. Two general processes help to explain these results. Most important, there is a higher proportion of farm-born among the older cohorts, and persons leaving farms can only move up the urban hierarchy. By contrast, younger cohorts include higher proportions born in large cities, who can move down the hierarchy, but not up. The ratios in parentheses in Table 4, which control for this problem, show much less increase with age of cohort. A second process is the changing balance between concentration in large metropolitan centers and dispersal within metropolitan areas. Older cohorts were redistributing up the urban hierarchy at a time when central cities were still growing rapidly, and suburbanization was not yet numerically dominant in metropolitan growth. Recent cohorts, with large proportions born and raised in large cities, are far more likely to participate in suburban movement at each stage in the life cycle.

All of the discussion to this point has been based on data abstracted from complete redistribution tables, which show for each cohort the distribution of persons born in each size of place by their distribution at age 18, age 24, etc. From the perspective of maintaining some control over the scope and complexity of this analysis, it is fortunate that the full set of 24 redistribution tables is much too bulky for presentation here. A few segments of these tables are shown in Tables 5 and 6—the former illustrating intracohort comparisons and the latter intercohort comparisons.

Intracohort comparisons based on the redistribution tables confirm, in a more complex fashion, the previous observation that redistribution among sizes of place continues as each cohort ages, despite the known concentration of individual migrations in the young adult ages. For the cohort born in 1903–1913, Table 5 pre-

TABLE 5. PERCENTAGE DISTRIBUTION OF SIZE OF PLACE OF RESIDENCE AT AGES 18, 34, AND 45-54, BY SIZE OF BIRTHPLACE, FOR COHORT BORN IN 1903-13

<i>Size of Birthplace</i>		<i>Size of Place of Residence at Indicated Age (see stub)</i>								
		<i>Total</i>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
<i>At age 18</i>										
Metropolitan,	500,000 and over	(1)	100.0	85.6	4.7	3.8	2.4	1.7	0.9	0.9
	50,000-499,999	(2)	100.0	7.7	79.5	2.4	3.4	3.5	2.2	1.3
	2,500-49,999	(3)	100.0	5.7	9.4	71.7	3.5	4.0	2.5	3.2
	rural nonfarm	(4)	100.0	5.5	6.6	4.4	75.5	2.4	3.4	2.2
Nonmetropolitan,	2,500-49,999	(5)	100.0	6.8	10.1	2.3	2.0	70.2	5.3	3.3
	rural nonfarm	(6)	100.0	4.8	8.9	2.1	2.1	11.0	66.0	5.1
	farm	(7)	100.0	2.2	6.5	1.5	1.3	7.8	7.0	73.7
<i>At age 34</i>										
Metropolitan,	500,000 and over	(1)	100.0	71.9	6.6	8.7	6.7	2.8	2.1	1.2
	50,000-499,999	(2)	100.0	12.2	61.1	7.2	8.7	5.6	3.7	1.5
	2,500-49,999	(3)	100.0	9.4	12.4	52.1	9.4	8.1	5.0	3.6
	rural nonfarm	(4)	100.0	8.4	11.5	9.1	56.2	5.3	6.2	3.3
Nonmetropolitan,	2,500-49,999	(5)	100.0	11.2	20.6	5.1	4.7	45.3	9.0	4.1
	rural nonfarm	(6)	100.0	9.0	15.2	4.9	5.1	16.9	43.1	5.8
	farm	(7)	100.0	4.9	12.4	3.7	4.5	15.1	13.2	46.2
<i>At age 45-54</i>										
Metropolitan,	500,000 and over	(1)	100.0	55.7	9.1	15.1	10.5	3.7	4.4	1.5
	50,000-499,999	(2)	100.0	11.7	50.0	10.2	12.4	8.2	5.6	1.9
	2,500-49,999	(3)	100.0	7.8	14.5	43.8	13.8	9.5	6.6	4.0
	rural nonfarm	(4)	100.0	6.7	11.9	10.9	54.1	5.8	8.3	2.3
Nonmetropolitan,	2,500-49,999	(5)	100.0	10.9	20.6	7.4	8.5	37.5	10.3	4.8
	rural nonfarm	(6)	100.0	8.6	15.5	6.5	7.7	18.0	38.2	5.5
	farm	(7)	100.0	4.9	13.0	4.6	6.5	16.9	17.4	36.7

sents comparisons between size of birthplace and size of place of residence at age 18, age 34, and ages 45-54. Regardless of size of birthplace, with increasing age the members of this cohort were less likely to reside in the size interval of their birthplace. The farm-born increasingly relocated to nonmetropolitan places. Those born in large cities increasingly relocated to other parts of metropolitan areas. Those born in places of intermediate size tended to experience a net redistribution up the size hierarchy from birth to age 18, continuing to age 34, but then reversing somewhat because of an increased prevalence of suburbanization. Although the volume of actual migration must have been several times greater between 18 and 34 than between 34 and 45-54, the amount of

net redistribution was only somewhat larger in the earlier period. Perhaps as a cohort ages its members less often engage in circular and repeat migration. The efficiency of migration may increase with age in the sense that the disparity between gross and net redistribution narrows.

Illustrative intercohort comparisons can be made from Table 6, which compares birthplace and place of residence at age 24 for the youngest cohort and for the oldest cohort. The figures on the main diagonal, representing those still in the same size of place as birthplace, are consistently lower for the younger cohort. This confirms for each size of birthplace an observation made previously on an aggregate basis. The largest intercohort differences are for the farm-born. (Approximately 39 per cent of the older cohort and 21 per cent of the younger cohort are farm-born.) Among the older cohort, 70 per cent of the farm-born were living on farms at age 24, another 18 per cent were in other types of nonmetropolitan residence, and only 12 per cent were living in metropolitan areas (recall that this refers to metropolitan character as of 1950,

TABLE 6. PERCENTAGE DISTRIBUTION OF SIZE OF PLACE OF RESIDENCE AT AGE 24, BY SIZE OF BIRTHPLACE, FOR COHORTS BORN IN 1933-40 AND BEFORE 1894

Size of Birthplace			Size of Place of Residence at Age 24 (see stub)							
			Total	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Cohort born 1933-40										
Metropolitan,	500,000 and over	(1)	100.0	58.3	12.7	8.7	9.8	4.7	5.1	0.7
	50,000-499,999	(2)	100.0	5.0	61.2	6.7	9.4	8.7	6.7	2.3
	2,500-49,999	(3)	100.0	6.5	6.5	49.1	22.2	12.0	2.8	0.9
	rural nonfarm	(4)	100.0	4.6	13.8	8.3	56.8	6.4	8.3	1.8
Nonmetropolitan,	2,500-49,999	(5)	100.0	6.1	16.2	7.1	7.7	44.0	15.5	3.4
	rural nonfarm	(6)	100.0	6.3	13.6	4.2	5.7	23.2	38.6	8.4
	farm	(7)	100.0	5.9	11.9	6.5	5.1	19.7	14.9	36.0
Cohort born before 1894										
Metropolitan,	500,000 and over	(1)	100.0	82.8	6.8	3.0	1.8	3.0	1.3	1.3
	50,000-499,999	(2)	100.0	8.7	77.1	2.7	2.8	3.6	2.8	2.3
	2,500-49,999	(3)	100.0	9.6	15.2	60.3	4.3	5.3	1.5	3.8
	rural nonfarm	(4)	100.0	6.8	9.8	6.2	66.2	4.4	4.6	2.0
Nonmetropolitan,	2,500-49,999	(5)	100.0	8.0	11.8	1.8	1.6	65.2	7.3	4.3
	rural nonfarm	(6)	100.0	6.0	8.2	2.6	2.4	12.4	61.9	6.5
	farm	(7)	100.0	2.4	6.4	1.6	1.3	8.9	9.2	70.2

and not necessarily at the time of residence). By contrast, among the younger cohort only 36 per cent of the farm-born were living on farms at age 24; 35 per cent were in other nonmetropolitan places, and 29 per cent were in metropolitan areas.

Not all of the differences between the two cohorts are in the direction of greater upward relocation among the younger cohort. Among those not born on farms, the older cohort generally has the greater percentage living in cities of 500,000 and over, whereas the younger cohort displays a much greater redistribution toward smaller cities and rural territory. Particularly striking is the suburbanization of those members of the younger cohort born in large cities. Of those born in cities of 500,000 or over, by age 24 nearly 42 per cent were living in smaller places. Of those born in cities of 50,000–499,999, by age 24 only 5 per cent were living in larger cities as compared to 34 per cent in smaller places.

Virtually all of the preceding data are consistent with the prevalence of stage migration.⁸ The notion of stage migration incorporates the idea that persons tend to move to places not grossly dissimilar from those in which they previously lived. Redistribution up the urban hierarchy is thus accomplished not so much by farmers moving to large cities as by a series of displacements, with farmers moving to villages and small towns, and residents of small cities moving to larger cities. Data cited above demonstrate for both the oldest and youngest cohorts that the farm-born who leave their birthplace are more likely to locate in other nonmetropolitan places than in metropolitan areas. Careful inspection of the intracohort comparisons also reveals the successive displacement pattern characteristic of stage migration. Additionally, these data clearly indicate that in terms of stage migration processes, metropolitan suburbs should be ranked above large cities in the urban hierarchy. Taken together, these and the various other findings discussed above provide strong inferential evidence that the urbanization of the United States was accomplished principally by stage migration.⁹

SUMMARY

In 1880, less than 30 per cent of the population of the United States lived in cities; by 1960, 70 per cent were urban. Residence histories provide a means for obtaining from the current population, retrospectively, an account of the migrations and population redistribution experienced throughout this period. This analysis, based on the May 1958 residence history supplement to the Current Population Survey, utilizes tabulations showing for six cohorts cross-classifications of size of birthplace by size of residence at successive ages.

A variety of intercohort and intracohort comparisons support these conclusions: There has been little change over time in the amount or redistribution among the size-of-residence groups. As opposed to interstate population redistribution, size-of-place redistribution shows little sensitivity to the business cycle. As each cohort ages, increasing numbers leave their birthplace and redistribute both up and down the hierarchy of urban places. At each age, upward redistribution prevails over downward. The ratio of upward to downward redistribution, however, is greater among the older cohorts. Downward redistribution is largely accounted for by suburbanization, and recent cohorts have been more likely than older cohorts to participate in suburban movement at each stage in the life cycle. Although migration frequency declines rapidly after the early adult ages, each cohort has continued to redistribute among sizes of place, perhaps because the efficiency of migration increases with age. Taken together, these data provide strong inferential evidence that the urbanization of the United States was accomplished principally by stage migration.

REFERENCES

¹ Additional information about the residence history supplement is given in Taeuber, Karl E., Haenszel, William, and Sirken, Monroe G., Residence Histories and Exposure Residences for the United States Population, *Journal of the American Statistical Association*, 56, 824-834, December, 1961; also Taeuber, Karl E., Duration-of-Residence Analysis of Internal Migration in the United States, *The Milbank Memorial Fund Quarterly*, 39, 116-131, January, 1961.

² Some examples of these cross-tabulations are given in Tables 5 and 6.

³ In these tabulations, the small number of metropolitan farms is included with nonmetropolitan farms.

⁴ Coding of size of place according to population in 1950 probably leads to understatement of the tendency of persons to move to places only one or two steps up the size hierarchy. Places which are classified as large cities may have been smaller at the time many of their residents moved to them. Other results presented here are affected in more complex fashion by this coding procedure; any alternative procedure would also lead to complications in interpreting longitudinal trends. For instance, should a person born in Houston in 1900 and still living there be counted as moving from one size class to another because Houston's population has changed (45,000 in 1900, 596,000 in 1950)?

⁵ The index of dissimilarity is the sum of the positive (or negative) differences between corresponding figures in two percentage distributions.

⁶ Eldridge, Hope T., and Thomas, Dorothy Swaine, Population Redistribution and Economic Growth, United States, 1870-1950, in DEMOGRAPHIC ANALYSES AND INTERRELATIONS, Philadelphia, The American Philosophical Society, 1964, Vol. III, Part 2, Chapter 2.

⁷ For both series, the averages are unweighted. The second series, in which each average is based on data for only two consecutive cohorts and for two age periods of high mobility, clearly would be little affected by any weighting of each index of dissimilarity for size of cohort or volume of migration represented.

⁸ Previous residence history tabulations, of a quite different character, also provided inferential evidence of the prevalence of stage migration; *see* Taeuber, Haenszel, and Sirken, *op. cit.*

⁹ In oral discussion, Hope Eldridge observed that urbanization in the United States has been homogeneous in the sense that growth rates for each size class are positively correlated with growth rates for other size classes. In other words, the entire system of cities has grown, rather than cities of only one size or type. The character of stage migration as well as other facets of population redistribution is likely to be quite different in a nation with a primate city or an otherwise unbalanced or rapidly changing city-size distribution.

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