

Patterns of Net Migration by Age for U.S. Counties 1950-1980: The Impact of Increasing Spatial Differentiation by Life Cycle*

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Introduction

During the 1970s, population growth in nonmetropolitan areas of the U.S. exceeded that of metropolitan areas, reversing a pattern that had predominated throughout U.S. history. While most attention has focused on the U.S., a similar reversal, favouring growth in less urbanized areas, has been documented for Canada and other developed countries.¹ This "turnaround" continues to prompt speculation and

*A previous version of this paper was presented at the Canadian Learned Societies Conference, May 29, 1987, Hamilton, Ontario. We thank William Frey, Jacques Ledent, Kao-Lee Liaw and two anonymous reviewers for helpful comments. Research reported here was supported by grant # HD 18739 from the National Institute of Child Health and Human Development, U.S. Department of Health and Human Services.

¹Engels (1986) found that nonmetropolitan growth exceeded metropolitan growth in the 1970s in six out of ten developed countries (including the U.S.) for which data were available, and was very similar in two others. Like the U.S., most of these countries experienced renewed metropolitan growth after 1980. Using a somewhat different classification system, Vining and Pallone (1982) showed increased trends toward population deconcentration in seventeen countries over the past three decades.

research into the nature of the phenomenon (for example, Kephart 1988; Wilson 1988). Much of the literature has focused on attempts to identify the underlying cause of the reversal, and on its implications for future growth differentials. Although U.S. metropolitan growth returned in the 1980s, the question remains as to whether migration patterns of the 1970s reflect merely an aberration or an enduring change in the demographic and economic structure of migration.

In this paper, we investigate net migration by age for U.S. counties for each decade over the period 1950-80. Our approach focuses on the diversity of county experience in light of increased migration to non-metropolitan areas in the 1970s and the accelerated movement from the older northern industrial states to the South and West. Our analysis will examine patterns separately for metropolitan and nonmetropolitan counties, as well as differences across regions. We wish to shed light on the processes associated with the new migration trends and, in particular, on the extent to which the patterns reflect an increased specialization by counties in amenities and services associated with different periods of an individual's life cycle.

Background

Perhaps the most provocative line of research attempting to explain recent migration patterns has focused on the role of residential preferences in inducing new patterns of population redistribution (Zuiches 1981). Where models of migration previously concentrated on employment considerations, residential amenities and climate are now included. The positive association between local area income and population growth among nonmetropolitan counties appears much weaker in the 1970s than before. Counties with recreation opportunities have grown particularly quickly (Fuguitt 1985). Interregional movements also follow patterns that suggest the importance of climate in migration choices (Biggar 1979).² While new patterns may reflect preferences, they also may be predicated on changes in transportation and communication technology that facilitate employment in low density and remote environments (Chalmers and Greenwood 1980).

We wish to propose that growth in such preference-oriented migration may induce specialization across locations, resulting in altered patterns of age-specific migration. Rather than migration merely reflecting the growth or decline of an area, it may increasingly reflect the exchange of migrants in different life stages. The growth of retirement communities, which played a role in nonmetropolitan growth, indicates one aspect of such a trend, but we suspect the trend

²Such interregional flows have contributed to movements between metropolitan and nonmetropolitan areas (Wilson 1987).

is more general. Even through the 1970s, metropolitan areas, in the aggregate, experienced appreciable positive net migration of those in their early twenties (Tucker 1976; Frey 1986), while suffering overall losses. Could it be that metropolitan areas—or some parts of them—have become increasingly likely to provide an environment most attractive to those in particular age groups, while nonmetropolitan areas appeal to others?

The relationship between age and migration has long been recognized. Mobility is highest among young adults; historically, rates of migration have declined steeply after a peak in the age range 20-30. The early human capital formulation of Sjaastad (1962) provided a clear explanation for this age profile. Migration was viewed as an investment, with costs incurred at the time of move and the returns, due to higher wages, accruing over the remaining life in the new location. Moves would be made predominantly by young adults, since returns would be maximized if the move was made shortly after entry into the labour force.

In the application of this model, differences in net migration across locations were taken to be a result of differences in employment opportunity. Moves by young people were expected to predominate in migration streams for all locations. Those areas experiencing growth through migration would have high rates of net migration in the ages 20-30, while declining areas would suffer losses in those age ranges.³

The potential importance of amenities in migrants' decisions suggests that the simple human capital model is in need of modification. Rather than assuming that a move is made to a location in which the individual will stay for the remainder of his life, we must allow for the possibility of multiple moves. The growing literature on elderly migration assumes that a retiree may gain by "investing" in a move to an area where nonpecuniary benefits are particularly abundant. Graves (1979) showed that net migration at older ages is more responsive to amenity measures and less responsive to employment opportunity. Carrying the life cycle notion one step further, we expect that individuals may make moves at various times to take advantage of location characteristics that they know will be attractive only during the current life stage.

³A large literature assumes that net migration reflects primarily employment opportunity (for example, Fields 1976; Elgie 1984). Eldridge and Thomas (1964) provide an insightful analysis of net migration by age across states over the period 1870-1950. While they argue that net migration for those in the prime migrating years will generally be in the same direction as total net migration, they note that the correspondence may be violated for short periods as a result of return migration.

This kind of dynamic would induce specialization of areas according to services attractive to limited age groups.⁴ Rather than merely reflecting the growth or decline of economic base, age patterns of migration may also indicate spatial differentiation according to life cycle. We may identify four phenomena that illustrate the potential diversity of county roles.⁵

First, areas with large teaching institutions serve a specialized function for young adults wishing to obtain higher education. In such areas, we observe net immigration of young adults, and disproportionate losses at ages where studies are completed (White 1977).

Second, some areas are particularly attractive to young adults entering the labour market. Such attraction stems not only from high wages but also from the diverse occupational opportunities valuable for those early in their careers. The training that comes with jobs in large corporations—which are usually restricted to larger metropolitan areas—may be valuable even for those who later move on. In addition, as David (1974) has noted, a gamble early in life may be a wise choice if success will pay dividends throughout a career. Those areas offering uncertain opportunities will attract young adults willing to “try their luck”. Of course, those who are unsuccessful, or who have obtained the training they desire, are likely to move on at a later age.

Third, areas that offer certain types of residential amenities attract disproportionate numbers of families with children. Such movements are most obvious in the growth of suburban areas of large metropolises, many of whose residents commute to the central city. But there is no need to limit consideration to commuters. Any area that attracts residents by virtue of residential desirability, causing them to make other sacrifices, whether in the form of lower paying jobs or commuting costs, must be included in this category.⁶

Finally, areas with the lowest costs of living and high levels of residential amenities will be most attractive to retirees. We expect these to be areas with less attractive job opportunities.

If greater wealth and improvements in the technology of communications and transportation make migration easier, such patterns of area specialization according to age-specific amenities and opportuni-

⁴Our claim is related to that of Zelinsky (1974), who suggested that modernization would induce new patterns of mobility in which personal preferences played an increasing role, and in which the character of locations would grow to reflect such sorting.

⁵Although these are not mutually exclusive, they do suggest the ways in which counties may tend toward specialization in serving particular age groups.

⁶The role of commuting has grown less important in explaining suburban growth, since an increasing proportion of suburban residents work in the suburban ring. Commuting, however, may help explain the growth of nonmetropolitan counties distant from a central business district but proximate to a growing suburban job market.

ties will increase. The increasing size, longevity and relative prosperity of the aged population would be expected to vastly increase the market in retirement-oriented residential amenities. More generally, further geographical separation of individuals by life cycle both reflects and facilitates the substitution of markets for transactions once occurring between generations and within extended families.

Our empirical focus is on *net migration* patterns by age. Since net migration incorporates decisions by residents to depart and choices by nonresidents to select a particular destination, the direct behavioural interpretation of net migration is unclear. There is no individual who can be identified as a “net migrant”. However, for our purposes, net migration has important virtues. Net migration indicates the patterns of change in employment and institutions that both cause and are caused by migration. Patterns of net migration by age—the gain of individuals at one age and the loss at a later age—identify an area’s “steady state” specialization.

Although life cycle specialization may exist in the absence of overall growth or decline among areas, such patterns are often superimposed on those patterns reflecting increases or declines in the employment opportunities of locations. Our hypothesis is that such steady state differentiation has grown more important over the period of our study. Specifically, we hypothesize that age patterns of net migration will be less likely to correspond with those predicted by the simple employment opportunity model. In particular, net migration at other ages will be less likely to correspond to that for the prime migrating years. We also expect the dispersion across counties in the net migration rates for ages past the prime migrating ages to grow. In contrast, the dispersion within the prime migrating ages should decline as overall growth and decline in employment opportunities come to play a smaller role.

Quite aside from the life-cycle specialization hypothesis, age patterns of net migration are of intrinsic interest. Net migration identifies the impact of redistribution on local population structure. Its operation in one period determines the population at risk for migration and other demographic events in the next, and can thereby inject a long run dynamic (Long and Frey 1982).

Data and Methods

For the decades of the 1950s and 1960s, we have used net migration estimates for U.S. counties calculated by age, race, and sex by Gladys Bowles and colleagues (Bowles and Tarver 1965; Bowles, Beale, and Lee 1975). They obtained estimates by first calculating net migration as the difference between enumerated population in the specific age-

race-sex group at one census and the number "expected" to have survived from the prior census. These were then adjusted by the "plus-minus" method to agree with estimates of net migration by race and sex obtained from vital statistics methods. We constructed estimates for 1970-80 (White, Mueser, and Tierney 1987) following as closely as practicable the methods employed by Bowles and colleagues, with one important exception. We employed *adjusted* census population counts based on estimates of undercount for each demographic group, and have applied census survival ratios modified to adjust for the undercount.⁷

For each age group we have calculated net migration "rates" for each decade as the net number of migrants divided by the expected population in that age group in the absence of migration. We refer to these ratios as rates for the sake of presentation, although they are not expressed in terms of a true population at risk.

In our analyses, we have relied on nonparametric indicators to represent central tendency and dispersion of net migration across counties. For each age group we have calculated the median net migration rate, the values of the cut points for 20th and 80th percentiles, and the interquintile range. These measures have the advantage of being robust to extreme values of net migration, which do occur among counties. In total, we analyze more than 3000 counties or county equivalents. In calculating these statistics, we have weighted each county by total population at the conclusion of the decade. Since we divided the sample of counties by metropolitan status, unweighted and weighted results were broadly similar.

Nonmetropolitan Migration: Changes Over Three Decades

Figure 1 plots median net migration (upper panel) and interquintile range (lower panel) for nonmetropolitan counties in the decades 1950-60, 1960-70 and 1970-80.⁸ The classification of counties applies to the year 1973, so that the same 2458 nonmetropolitan counties or county

⁷We have used estimates of undercount for the 1970 and 1980 censuses for each age-race-sex group. No account has been taken of differences in undercount by geographic region or state. For the most part, counties and county aggregate units are the same as those used by Bowles *et al.* (1965; 1975), with a handful of exceptions. Since the 1980 racial classification was different from that of earlier censuses, it was necessary to adjust census population counts by race. See White, Mueser, and Tierney (1987) for details.

⁸Tables containing statistics on net migration rates for counties (median and cut points for the 20th and 80th percentile), corresponding to Figures 1-4, are available from the authors.

equivalents are used for all three decades.⁹ Each five-year age range is identified by the lower age at the end of the decade (for example, 10 indicates the cohort aged 10 to 14 at the end of the decade). Net migration estimates therefore include moves made by individuals who were as much as ten years younger at the time of migration than specified by the age range. The final category (AG) identifies statistics for the aggregate net migration rates.

For 1950-60, the age pattern of the median is that typical of rural areas suffering net migration losses (Pittenger 1978). The net migration loss is greatest at ages 20-29, with the loss progressively smaller at older ages. This pattern, in large part, reflects the age pattern of migration propensity. Losses are smaller at ages where individuals are least likely to make any move. We see no evidence that nonmetropolitan counties provide a particular draw for any one age group; rather, the evidence is of general decline, with losses greatest among those most able to move.

Over the following two decades, the median rate increases for all age groups. While certain aspects of the pattern of migration persist from one decade to another, net migration in the ages 30-34 increases much more than does migration for other age groups. By 1970-80, it is the age category with the highest median net gain. This suggests that, as a group, nonmetropolitan counties have become particularly attractive to migrants in their late twenties or early thirties. This may reflect departure following training or failure in the urban job market, and the relatively low cost of housing in lower density areas. In addition, the positive median net migration for those aged 0-14 suggests that these are families with children. This evidence is consistent with the hypothesis that nonmetropolitan moves have grown to reflect age-specific motives.¹⁰

This change in the age profile of nonmetropolitan net migration developed gradually through the 1960s. The estimated rates for 1960-70 are intermediate between those for 1950-60 and 1970-80. As indicated by the simple age pattern of median net migration, the transition from migration loss to gain over the sixties was a smooth one.

The medians hide a great deal of diversity, however, in net migration by age across counties. The quintile cut point shows that in the 1970s a county at the 80th percentile had a net migration rate of nearly 0.5 for those aged 30-34, while a county at the 20th percentile had net migration near zero. The lower panel of Figure 1 shows the

⁹This implies that counties that obtained metropolitan status during our sample period but before 1973 are not included in Figure 1. Such counties are discussed below.

¹⁰We see below that this pattern is similar to that for counties—largely suburban areas—that were incorporated into metropolitan areas over the period.

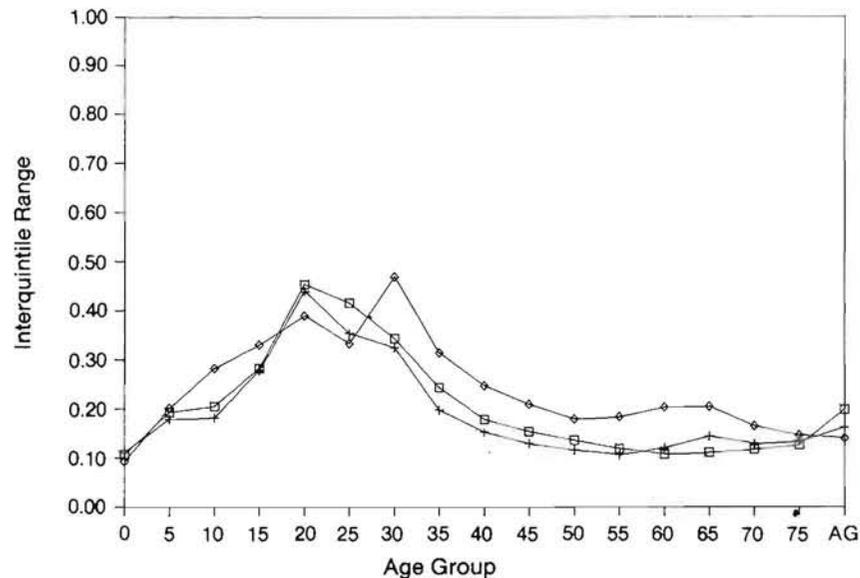
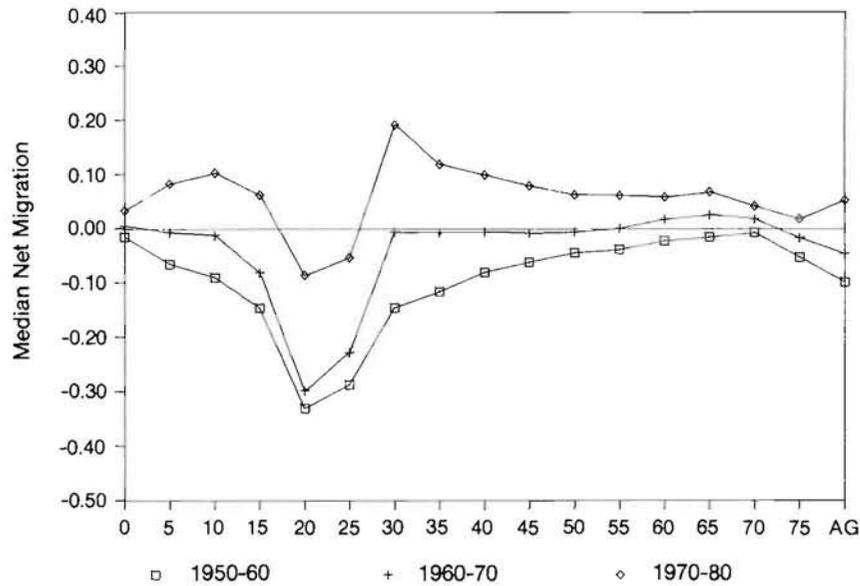


Figure 1

MEDIAN AND INTERQUINTILE RANGE OF NET MIGRATION RATES FOR 2458 U.S. COUNTIES NOT IN METROPOLITAN AREAS IN 1973

pattern of the interquintile range of net migration, and allows us to identify trends over time. Between the 1950s and 1960s, changes in the interquintile range were generally moderate. For ages up to 60, the range declined by an average of 10 percent, indicating a growing similarity of migration experiences among counties. In contrast, the range increased for ages over 60 by an average of 15 percent. This latter trend is an indication that a few counties were beginning to attract a disproportionate share of older migrants. To some degree, this must reflect the growth of "retirement communities".

In the seventies, an important change clearly occurred. In addition to increases in median rates of net migration, nonmetropolitan counties exhibit growing diversity across almost all age groups. The interquintile range of county net migration increased for all ages except 0-4 and 20-29. The increase was especially dramatic over age 30, for which the range increases an average of 55 percent. For all age groups, the bottom quintile cut point was higher in 1970-80 than in the previous decade. However, in the face of increased attraction, the ability of nonmetropolitan counties to draw mature migrants also became more disparate.

One may be tempted to attribute these patterns to changes in migration propensity by age over the period. If older populations were generally more likely to make an intercounty move in recent periods, we would expect increasing variance in migration rates at older ages. In fact, general propensity to migrate by age exhibited virtually no change, as indicated by the proportion of individuals in the census reporting a change of county in the previous five years.

In contrast to the increase in dispersion among most age groups, over the three decades there is a decline in the dispersion of net migration of those age 20-29, and of those 0-4 (many of whose parents would be in their twenties). The interquintile range declined an average of 11 percent for these age groups between 1960-70 and 1970-80. This is, of course, the age category for which most nonmetropolitan counties continued to lose population to migration in the 1970s. The large interquintile range in the earlier decades reflects differences in the growth or decline of economic base across counties. We may infer that such differences played a smaller role in the 1970s than before. This may be partly due to the decline in the importance of agriculture over this period. As noted by Fuguitt *et al.* (1979), losses of agricultural employment, which were closely tied to migration loss in the 1950s, could no longer play an important role by the 1970s, since by this point few counties had large shares of their employment in agriculture.

It is worth noting that since these changes in dispersion differ by age they cannot be identified in total (age-aggregated) net migration rates. We observe a modest decline over the three decades in the dis-

persion of total net migration across nonmetropolitan counties. Hence, if we were to focus on the total net migration figures, this would lead to the erroneous conclusion that the nonmetropolitan migration experiences had converged.

Among elderly interstate migrants, choices of destination tend to be concentrated in a few states in the South and West (Biggar 1979; Longino *et al.* 1984). It is possible that the apparent increase in age specialization by counties actually reflects differences across regions; that is, divergence of regional growth rates. In fact, the interquintile ranges for counties in *each* of the four U.S. census regions indicate very similar patterns of change over the three decades. Between 1950-60 and 1960-70, the interquintile ranges declined slightly for all but the oldest age groups, following the aggregate pattern, in all regions but one. The exception was the Northeast, for which the range increased for most age groups. Just as nonmetropolitan counties in the Northeast showed signs of growth before those in other parts of the country, increasing diversity of attraction occurred earlier as well. Between 1960-70 and 1970-80, the dispersion in rates of net migration for all age categories over age 30 increased dramatically for all regions, corresponding with the aggregate trend.

The patterns illustrated in Figure 1 apply to counties that were not in metropolitan areas in 1973, and therefore omit counties that were incorporated into metropolitan areas over the 1950s and 1960s. These are likely to be particularly fast-growing counties, and it seems likely that results may have been influenced by their omission. We therefore calculated net migration statistics for the 200 counties that were designated metropolitan between 1963 and 1973.

These statistics (not shown) suggest that our basic conclusions apply to these counties as well. Although the median rates of net migration were much higher, the age structure of net migration was quite similar to that for the nonmetropolitan counties. The primary exception was that in the 1950-60 period these counties were less likely to suffer losses in the age range 20-29 than were other nonmetropolitan counties. Increased dispersion of net migration among these counties for ages over 30 is even more striking here than among counties remaining nonmetropolitan. Ability to draw or retain older migrants varied widely among these newly metropolitan areas. The dispersion in net migration for those aged 20-29 declined over the two decades, also paralleling findings for continuously nonmetropolitan counties.

As noted above, age-specific county net migration rates reflect not only county specialization by age but also a general dynamic of growth or decline. Median migration rates (for total population) for nonmetropolitan counties changed over the three decades from -0.099 to

-0.047 to 0.052. In order to examine age patterns associated with growth or decline over these periods, we focus on a specially chosen subsample of counties with similar rates of total net migration.

Figure 2 presents the median rates of net migration by age for counties with total net migration gain or loss in excess of 5 percent. The criterion is applied independently in each decade, so the statistics apply to different counties in each period. In the case of losing counties (top panel), we see that the age pattern associated with decline differs in the three periods, although the basic shape is quite similar. During the 1950s the net migration loss in the ages 20-40 is greater by 0.10 than it is in the 1970s. This is partly due to the greater losses suffered by nonmetropolitan counties in the 1950s—even in this selected subsample. However, for ages over 55, counties in 1950-60 suffered losses that were no more severe than those of similar counties in the 1970s. Hence, while net migration for those aged 20-39 continues to be important for nonmetropolitan counties, county declines are less tied to losses among these ages than in the past. In fact, even for these declining counties, by the 1970s there is a small positive net gain of those aged 30-34.

For counties with total net migration gains of at least 5 percent over the period (bottom panel), the patterns for the early and later periods differ dramatically. For the period 1950-60, the age of greatest relative gain is 25-29, with similar gains for adjacent age categories. We see below that this pattern is characteristic of metropolitan areas. Hence, those counties that gained population in the early period did so partly by attracting or retaining migrants aged 20-29. By 1970-80, the age pattern had shifted appreciably, exhibiting relatively low net positive rates among those 20-29 but very large rates for ages over 30. Age-specific attraction had grown to play an increasing role in inducing growth, creating patterns very different from those of metropolitan areas.

Nonmetropolitan Net Migration by Region, 1970-80

The major census regions differ appreciably in the total net migration for the 1970s, with southern and western counties, both within and outside metropolitan areas, having the highest rates. To what degree, we may ask, do regional differences in net migration patterns parallel changes over time? Can we say that some regions are exhibiting patterns that are "more advanced" than others?

Figure 3 provides the median and interquintile range for net migration by age for the four Census regions in the 1970-80 census period. Although the regions share many of the same patterns of net migration rates by age, there are some notable differences. For the

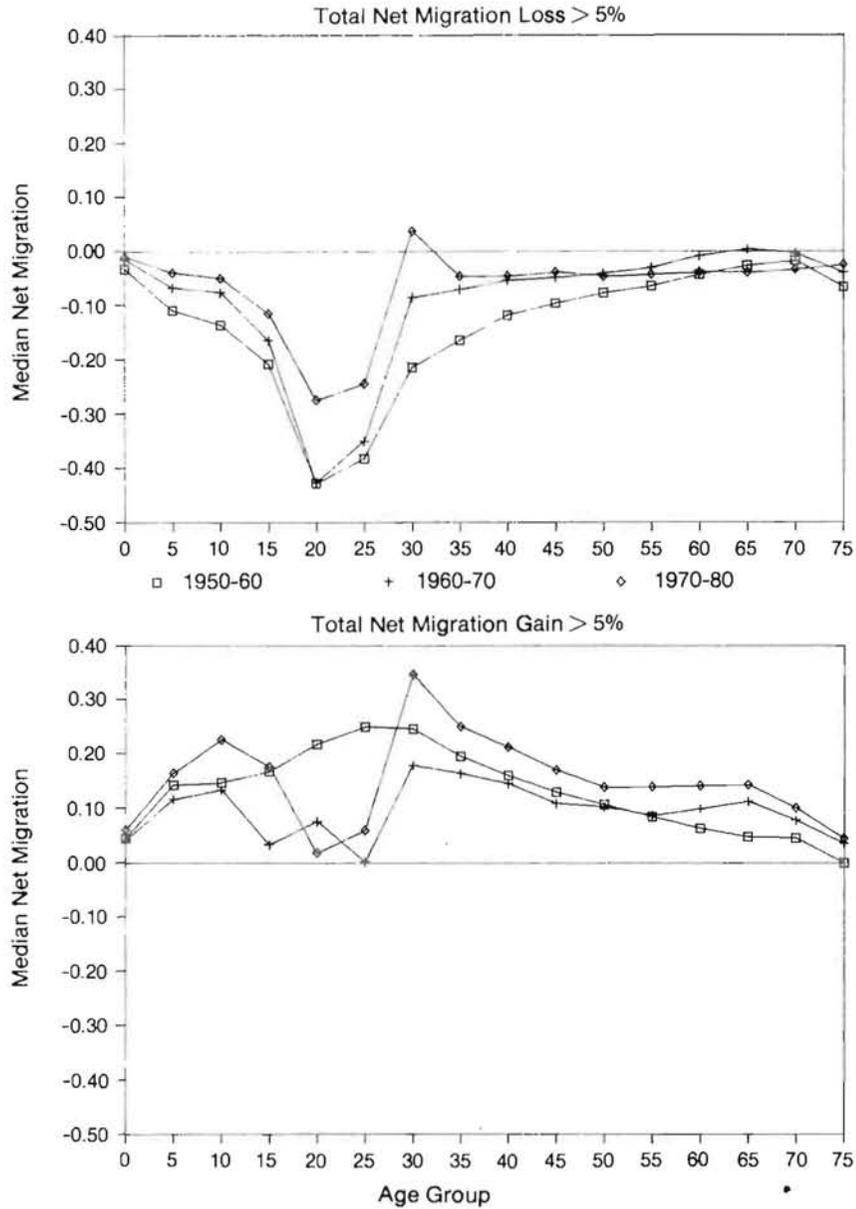


Figure 2

MEDIAN OF NET MIGRATION RATES FOR U.S. COUNTIES NOT IN METROPOLITAN AREAS IN 1973 BY AGGREGATE NET MIGRATION IN EACH PERIOD

(Number of counties: Net migration loss greater than 5 percent, 1950-60, 1969; 1960-70, 1521; 1970-80, 518. Net migration gain greater than 5 percent, 1950-60, 180; 1960-70, 320; 1970-80, 1111.)

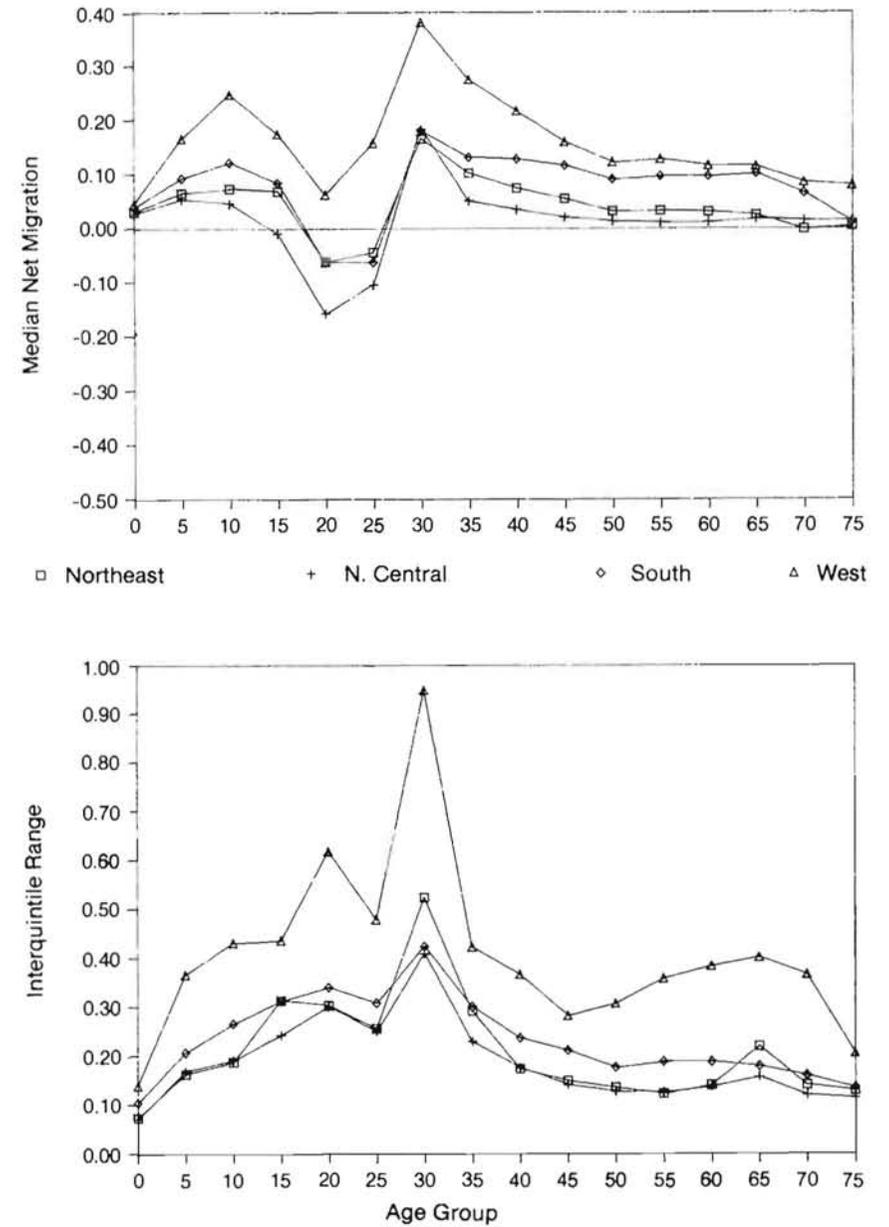


Figure 3

MEDIAN AND INTERQUANTILE RANGE OF NET MIGRATION RATES OF U.S. COUNTIES NOT IN METROPOLITAN AREAS IN 1973 BY REGION, 1970-80

(Number of counties: Northeast, 117; North Central, 875; South, 1116; West, 350.)

South, the peak at ages 30-34 is less pronounced than it is for the other regions. In this respect, the pattern for the South looks more like that prevailing in 1960-70. The most pronounced peak at those ages is for the West. More than any other region, nonmetropolitan counties in the West are experiencing growth that is largely based on population gains for ages 30-39.

Although differences in median net migration rates by region are appreciable, most of the differences are within rather than between regions. The lower panel of Figure 3 indicates that there are also important differences in the extent of dispersion within region. The dispersion in county experience is greatest in the West. The interquintile range is extreme for ages 30-34. In addition, the dispersion in county net migration experience over age 50 is notable. The primary reason for this dispersion in the West is the large gap between the median and the upper quintile cut point. It thus appears that a significant minority of counties have extraordinarily high levels of attraction for migrants aged 30-34 and over age 50.

Can the diversity of the western experience be attributed to the fact that the West comprises the Pacific and Mountain divisions, which differ from one another in attractiveness? When we examined county variation for these two divisions, we found that most variation was within division. The interquintile range in net migration for every age group in the Mountain and Pacific *divisions* was greater than the corresponding figure for any of the *regions* outside the West.¹¹

Dispersion is somewhat greater in the South than in the Northeast or North Central regions, especially at ages between 40 and 64. This cannot be attributed to variations between divisions within the South, although the divisions do differ somewhat. The West South Central division has greater variation than do the other two southern divisions, with interquintile ranges comparable to those of the Mountain and Pacific divisions. Nonetheless, the interquintile ranges among counties for net migration over age 40 for the other southern divisions are generally greater than those for the Northeast or North Central regions.

We conclude that although differences by region in patterns of median net migration for nonmetropolitan counties are modest, the dispersion of rates within regions varies dramatically. Differences in the ability of counties to attract migrants over age 50 are particularly striking in the West. Differences between regions do not stem from

¹¹Land area for counties is appreciably greater in the West than in the other regions. If counties in the West were broken up into units similar in size to those elsewhere, the dispersion across these units would necessarily be greater than that observed with counties. Hence, if counties were of similar size across regions, it is likely that the greater dispersion in the West would be more pronounced.

variation between the divisions, but rather are due to variation within division.

Metropolitan Migration

Figure 4 plots net migration statistics by age for counties that were in metropolitan areas in 1963. The metropolitan counties display net migration patterns that are, to a large degree, a mirror image of those for nonmetropolitan areas. The peak in net migration rates occurs at ages 20-29. Over the three decades the pattern softens, with the age of the maximum net migration increasing and the height of the peak declining. In the period 1950-60, the median net migration for metropolitan counties of persons aged 25-29 at the time of the census was 0.266, as compared with 0.093 for persons 30-34 and 0.033 for persons 35-39. By the 1970-80 decade, the median net migration for these three age groups was no longer so disparate, with values of 0.053, 0.056 and -0.028, respectively.

The lower panel indicates that between 1950-60 and 1960-70, the interquintile range for net migration for the ages 20-34 is reduced very dramatically, but changes only slightly in the following decade. It is as if those metropolitan counties that were gaining a disproportionate share of young migrants in the 1950s no longer had the same level of unexploited opportunities by the 1960s. To some degree, extreme migration gains may have been self-dampening.¹²

In contrast, the dispersion in net migration for older ages declines from the first to the second decade, but then increases in the following decade. We observe then, in the final decade, the same kind of specialization for metropolitan counties that we observed above for counties outside nonmetropolitan areas. The rate of net migration for those over age 70, relative to rates of other ages, increased over this period as well. This may reflect the disproportionately metropolitan location of facilities providing nursing care for the elderly. In addition, the variance in this final category has increased, suggesting that among metropolitan areas a subset has begun to specialize in the provision of services for the elderly.

There were appreciable changes in the rate of total net migration for metropolitan areas over the decades. The median metropolitan county for the 1950-60 period had a net migration rate of 0.044, which declined to 0.016 and then -0.030 in the following decades. We examined patterns of net migration by age for metropolitan counties

¹²Such a dampening occurs naturally if rates of gross migration remain constant. A large gain in population must result in a decline in the net migration rate, since a fixed number of arriving migrants contribute proportionally less to population as population grows (Mueser and White 1988).

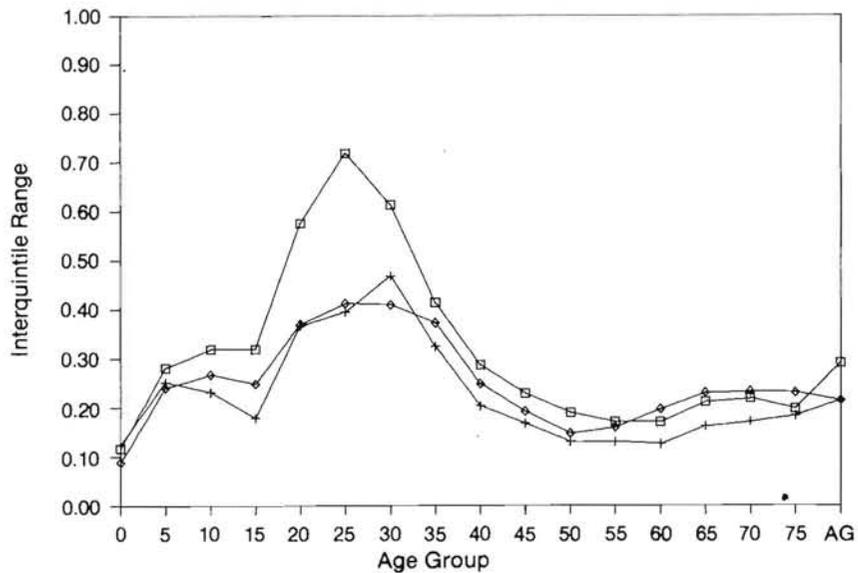
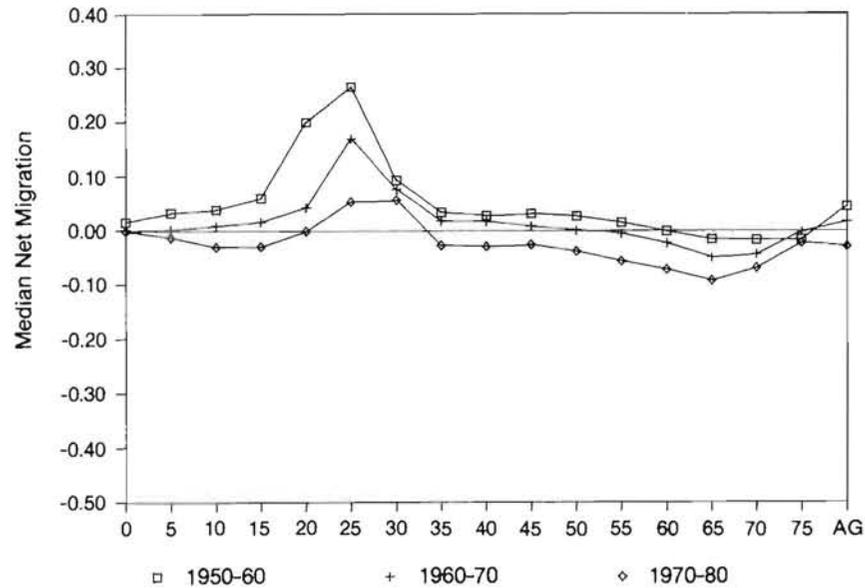


Figure 4

MEDIAN AND INTERQUINTILE RANGE OF NET MIGRATION RATES
FOR 408 U.S. COUNTIES IN METROPOLITAN AREAS in 1963

experiencing growth and those experiencing decline. In general, changes over time in the age patterns for growing and declining metropolitan areas correspond to those in Figure 4. By the 1970s, the average metropolitan county, whether losing or gaining by migration, no longer exhibited a severely peaked profile. The change is most striking for metropolitan counties losing to net migration. In the 1950-60 period, metropolitan areas that were losing population overall continued to have positive migration in the ages 20-29. By the 1970s, net loss was universal across all age groups among these counties.

Conclusion

The demographic structure of migration responds to forces that reflect and affect the residential and economic characteristics of individual locations. Here, motivated by the attention given to the nonmetropolitan turnaround, we have examined age patterns of net migration for U.S. counties. We argued that the shift in the character of population redistribution will be reflected in the age structure of net migration across counties, and we advanced the hypothesis that the increased specialization of counties with respect to activities characteristic of particular states of the life cycle would be manifest in the greater dispersion of net migration rates at selected ages. Our results confirm the importance of changes in age-specific patterns and provide support for our specific hypothesis.

While opportunities for age specialization have always been present, the increasing importance of localized amenities in conjunction with an associated growth of age-specialized institutional structures across locations serves to increase concentration of net migration in certain age groups. We find that, as a group, nonmetropolitan counties became particularly attractive to migrants in their late twenties and early thirties. Moreover, we observe appreciable increases since 1970 in dispersion of net migration rates for those over 30, a pattern that is hidden in aggregate net migration data. Although this trend is common to all regions, the degree of dispersion differs greatly across regions, and is especially large among counties in the West. Metropolitan counties exhibit declines in the dispersion of net migration rate from the 1950s to the 1960s, which we suggest may indicate the exhaustion of the most attractive urban opportunities, perhaps due to the self-damping effects of migration. However, since 1970, we do observe an increase in dispersion, especially for rates applying to those over age 55, suggesting increased age specialization among metropolitan counties.

Our objective has been to place the net migration experience of individual counties against the backdrop of increased migration to

nonmetropolitan areas and interregional movement to the South and West. We find that changes both in the median rates of net migration and in the dispersion of those rates are consistent with increased specialization in the age-related opportunities and services those counties provide. Whatever the specific source, new patterns of net migration by age suggest that changes in both the causes and effects of migration go far beyond a simple shift in the balance of population flows.

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