William H. Frey

Perspectives on Recent Demographic Change in Metropolitan and Nonmetropolitan America

No. 92-248

Research Report
July 1992

William H. Frey is Research Scientist and Associate Director for Training at the Population Studies Center, the University of Michigan, Ann Arbor, Michigan.

An earlier version of this paper was presented at the National Workshop on Population Change and the Future of Rural America at the Wye Plantation, Maryland, May 30, 1991. The author wishes to acknowledge the assistance of John Price-Wilkin of the University of Michigan Library and Albert Anderson of the Population Studies Center for accessing 1990 Census data from the CENDATA computer retrieval system and the Public Law 94-171 CD-Rom files. He also expresses his gratitude to Cathy Sun of the Population Studies Center for her programming and research assistance efforts.

The Population Studies Center at the University of Michigan is one of the oldest population centers in the United States. Established in 1961 with a grant from the Ford Foundation, the Center has a rich history as the main workplace for an interdisciplinary community of scholars in the field of population studies. Today the Center is supported by a Population Research Center Core Grant from the National Institute of Child Health and Human Development (NICHD) as well as by the University of Michigan, the National Institute on Aging, the Hewlett Foundation, and the Mellon Foundation.

PSC Research Reports are prepublication working papers that report on current demographic research conducted by PSC associates and affiliates. The papers are written by the researcher(s) for timely dissemination of their findings and are often later submitted for publication in scholarly journals. The PSC Research Report Series was begun in 1981 and is organized chronologically.

PSC Publications
http://www.psc.lsa.umich.edu/pubs/
psc-pubs@umich.edu

Population Studies Center, University of Michigan
1225 S. University, Ann Arbor, MI 48104-2590 USA
Voice: 734-998-7176 Fax: 734-988-7415

Table of Contents

PERSPECTIVES ON RECENT DEMOGRAPHIC CHANGE IN METROPOLITAN AND NONMETROPOLITAN AMERICA

William H. Frey
Population Studies Center
The University of Michigan
1225 South University Avenue
Ann Arbor, MI 48104-2590

Few demographic phenomena have received the kind of attention from academic social scientists, policymakers, and the popular press that was given to the "nonmetropolitan turnaround" of the 1970s (Brown and Wardwell, 1980; Fuguitt, 1985; Naisbitt, 1982). Some of this fascination was undoubtedly prompted by the novelty of seeing urbanization come to a complete halt in the world's most industrialized nation. This, after all, countered most conventional wisdoms and theories of urban development. Still other writers were drawn to the prospect that residential preferences for a rural location could come into fashion and be actualized in much the same way that childbearing became fashionable during the 1950s.

Whatever the reasons, the "turnaround" phenomenon generated a great deal of interest, debate, and serious theorizing over the forces that shape rural and nonmetropolitan population change. More so, I dare say, than the so-called "reversal of the turnaround" that occurred during the decade that just ended.[1] Many academic social scientists appear to be focusing attention on urban problems such as the inner city underclass (Jencks and Peterson, 1991), while the popular press is heralding the fact that we are becoming a suburban society with most Americans residing in large metropolitan areas (The New York Times, 1991). However, as this group knows so well, the new, selective patterns of rural and nonmetropolitan population decline present even greater

challenges to local economies, to policy makers, and, as well, to social science theorists than did the surprising growth patterns of the 1970s (Brown and Deavers, 1988).

I will not attempt to present here a new theory or explanation for the nonmetropolitan population changes of the 1980s or 1990s. Instead, I would like to draw on some of the ideas that grew out of the rich literature that was offered to explain the redistribution reversals of the 1970s. I do this on the assumption that each decade's redistribution patterns are not disjoint events, but are shaped by common social and economic forces that evolve over time. One study suggests that the 1970s was a "transition decade" in the recent history of U.S. population redistribution as a result of new social and economic contexts that emerged over that period (Frey and Speare, 1988).

Another assumption I will make is that nonmetropolitan area population change does not occur in isolation of forces that affect redistribution across the nation's entire metropolitan and regional settlement system. Nonmetropolitan America has become increasingly integrated economically, socially and demographically into a national system of settlement (Fuguitt, Brown and Beale, 1989). Hence, explanations which focus on the entire settlement system rather than a specific part are most worthy of consideration.

In the section that follows, I will review three broad approaches that have been proposed to explain the redistribution reversals of the 1970s. This is followed by an evaluation of how these explanations fare in accounting for metropolitan and nonmetropolitan demographic trends over the 1980-90 period. Additional sections will discuss the fate of the rural renaissance and how aspects of the nation's current demographic structure might mediate future redistribution patterns.

PERSPECTIVES ON THE 1970S

While the nonmetropolitan turnaround -- where the nation's nonmetropolitan population grew faster than its metropolitan population -- received a great deal of attention, two related redistribution reversals of the 1970s are noteworthy as well.

Within the metropolitan population, there was a redistribution down the size hierarchy such that the nation's largest metropolitan areas grew more slowly than smaller sized ones. Across regions, the redistribution out of the North (Northeast and Midwest census regions) accelerated, with a greater portion of the South and West region gains accruing to the former region. Together, these reversals across nonmetropolitan, metropolitan and regional categories led toward increased population flows to smaller-sized, less dense, less developed portions of the nation's spatial system (Frey and Speare, 1988). This constituted a distinct departure from previously dominant redistribution patterns and led to a variety of theories and explanations. At the risk of oversimplification, I have distilled these explanations into three broad perspectives.[2]

Period Explanations

Period explanations attribute the 1970s nonmetropolitan population gains and metropolitan declines to a unique array of economic and demographic circumstances that converged during that decade.[3] These include economic factors such as the energy crisis and the decade's recessions. The oil shortage associated with the former precipitated extensive development of extractive industries in nonmetropolitan counties of the Southwest, mountain West, and Appalachia. Worldwide agricultural surpluses stemmed the migration flow away from farming communities. The mid-decade recession and continued economic stagnation served to reduce the job-generating capacities of large industrial metropolitan areas but served to filter low-skilled, low paying manufacturing jobs to smaller communities in the Rustbelt and Southeast.

Demographic developments, unique to the 1970s, were also cited as period explanations. It was during this decade that the huge baby boom cohorts "came of age", and increased the populations of small community college towns. Later, as they attempted to enter an oversaturated Northeast urban labor market, they were driven South and West. It was also during this decade that large birth cohorts (those born in the 1910s

and 1920s) entered their retirement ages and raised demands for nonmetropolitan-located residences.

In short, period explanations treat the 1970s redistribution reversals as aberrations which should subside after the period's short-term economic and demographic dislocations become stabilized.

Regional Restructuring Perspective

Regional restructuring explanations focus more heavily on the metropolitan area declines of the 1970s although they take a national and even global perspective. These writers attribute 1970s metropolitan declines to some of the same economic dislocations as the period writers.[4] Yet, the restructuring theorists view deindustrialization-related decline as a short-term episode leading toward a new spatial organization of production. This new spatial organization is associated with expanding world-wide markets, improved communications and production technologies and, most important, the rise of the multinational corporation. According to this view, continued agglomeration will accrue to those metropolitan areas that function as advanced service centers and as headquarter centers for corporations, banks, and like institutions. Growth is also foreseen in areas with "knowledge-based" industries associated with high-tech research and development. On the other hand, metropolitan areas that cannot successfully make the production-to-services transformation will continue to decline.

Noyelle and Stanback (1984) suggest that the foundation of recent redistribution reversals lies with the enhanced role of services -- particularly business services -- and the diminished role of labor intensive manufacturing production in national economies. A large part of this transformation, as they view it, has occurred within the service sector itself. Services are seen less as final products and more as "inputs" in the production process -- in knowledge based activities like engineering, research and development, and planning. Such activities, they believe, will continue to expand and also benefit from certain economies of agglomeration. The multi-locational corporation is a key agent in

this transformation because it disaggregates a division of labor across a network of places and leads to a centralization of higher-level service activities in specific metropolitan areas.

The regional restructuring perspective does not foresee continued growth for smaller metropolitan areas and nonmetropolitan communities that engage in routine production and consumer service activities. Growth which might occur in these "subordinate" areas is likely to be constrained by the vagaries of external decision-making on the part of absentee corporations with centers located in larger metropolitan areas.

Deconcentration Perspective

The deconcentration perspective draws from the writings of demographers in the human ecology tradition (Hawley, 1978; Wilson, 1984; Wardwell, 1980) in their attempts to explain both the nonmetropolitan turnaround and redistribution down the metropolitan size hierarchy. Like the regional restructuring perspective, the deconcentration perspective takes cognizance of changes in developed economies' industrial structures and the effects of technological innovation on production activities. However, in addition to these influences, this perspective attributes considerable importance to the role of residential consumer preferences in location decisions.

It takes the view that long-standing residential preferences toward low-density locations are becoming less constrained by institutional and technological barriers. The changing industrial structure, rising standard of living, and technological improvements in transportation, communication and production are leading to a convergence -- across size and place categories -- in the availability of "urban" amenities that were previously accessible only in large places. As a consequence, deconcentration writers suggest that the 1970s counterurbanization tendencies represent the beginning of a long-term shift toward the depopulation of urban agglomerations in all regions.

At the nub of this new convergence is the changing role of distance in determining the social organization of space -- leading away from the situation where both producer and consumer space were constrained by the geographic limitations and transport costs of producer activities, and toward a greater locational flexibility on the part of both firms and households (Wardwell, 1980). Small and nonmetropolitan areas are not considered to be reservations for routine production activities. Rather those areas with appropriate amenities are expected to become populated by a broad mix of residents who will be able to find white collar employment in firms that are becoming increasingly deconcentrated in response to a greater competition for well-trained workers.

This perspective sees a much more fundamental redistribution shift underway than that suggested by the regional restructuring perspective. Perhaps the only area of agreement across the two lies in the short-term decline both predict for industrial manufacturing centers. The deconcentration perspective predicts similar long-term redistribution tendencies for large metropolitan areas of all types and a continued dispersal of the population toward smaller communities.

Impacts on Redistribution

Clearly, there were a variety of period, restructuring, and deconcentration influences which converged together to affect the strong counterurbanization tendencies of the 1970s (Beale and Fuguitt, 1978; Fuguitt, Brown and Beale, 1989; Frey, 1990). This is evident from national patterns which show sharp declines in growth for the nation's largest metropolitan areas and dramatic gains for its nonmetropolitan areas (see Figure 1). The nonmetropolitan gains were particularly pervasive such that 80% of the nation's nonmetropolitan counties gained population (compared to less than 45% in the two prior decades). While large metropolitan growth slow-downs were evident in each broad region, actual declines were concentrated among a handful of major metropolitan areas in the North (see Table 1).

All three of the perspectives, presented above, explain some portion of these reversals. Nonmetropolitan and small metropolitan gains arose from a number of sources including the relocation of low-skilled, low-wage manufacturing activities to the southeast and parts of the midwest (a regional restructuring effect), the growth of extractive industries in the South and West, as well as gains for midwest counties specializing in agriculture (both responses to period forces), and recreation and retirement-related growth in Florida, Arizona and other scattered areas (a deconcentration effect). Declines in large metropolitan areas, particularly in the industrial North, are attributed by some observers to short-term period effects, and by others to a longer term industrial restructuring of the economy.

EVALUATION OF THE 1980S

While together the three perspectives accounted for the redistribution reversals of the 1970s, each differs from the other in its projected scenario for the 1980s and 1990s.

Period explanations essentially saw the 1970s as a distortion of long-term urbanization patterns. This implies that more traditional urbanization patterns should re-emerge once the 1970s demographic and economic shocks have subsided. Sunbelt growth would be expected to continue. However, within each region, large areas would grow at the expense of smaller ones and growth in the traditional centers of industry and service would be established. Of course this "return to the past" scenario implied that no new exogenous shocks would occur in the eighties. This assumption turned out to be false.

The post-1980 scenario of the regional restructuring perspective foresaw a return to urbanization but in new locations. The metropolitan losses of the seventies were seen as part of a structural change in the nation's industrial makeup. Future growth should occur in metropolitan areas that serve as corporate headquarter centers, as well as those that specialize in information and "knowledge-based" activities. Hence, renewed growth was forecasted for northern metropolises that already hold strong profiles as corporate

and finance centers and for some that specialize in new industries. Poorer growth prospects were forecasted for single-industry areas, particularly those that are tied to natural resources and old-line manufacturing. Further, unstable growth prospects were seen for smaller "subordinate" cities and nonmetropolitan communities that are engaged in peripheral, routine production activity which might be phased out by external decision makers.

Deconcentation perspective proponents forecasted the continued dispersal of the population away from densely settled agglomerations. These would be mediated by changes in the nation's industrial structure, and improvements in communication and production technologies which would permit both employment opportunities and "urban" amenities to be accessible to residents of small communities and in remote locations that offer an improved quality of life. A continuation of the 1970s redistribution patterns suggests increased growth for the nonmetropolitan areas and small metropolitan areas, particularly in the South and West.

Redistribution in the 1980s

The evidence for the 1980s provides far greater empirical support for the "period" and "regional restructuring" perspectives than for the "deconcentration" perspective. Of course, the period perspective's forecast of a "return to the past" urbanization pattern had to be modified to account for significant new period effects, which had particularly adverse impacts on nonmetropolitan and small metropolitan areas in the 1980s (Beale, 1988; Beale and Fuguitt, 1990). Regional restructuring forecasts, on the whole, successfully characterized the 1980s growth experiences of large metropolitan areas (Frey, 1990; Frey and Speare, 1991). However, new national trends in metropolitan and nonmetropolitan growth during the 1980s made plain that the deconcentration forecasts of broad based, continued population dispersal were overstated (see Figure 1).

Beale's (1988) account describes how the nonmetropolitan population growth was hit hard by the period influences of the 1980s -- including two severe recessions, an

overvalued dollar, a world wide decline in food prices, and the decline in oil prices. In essence, the worldwide and cyclical forces which stimulated the sharp 1970s growth rises in manufacturing and resource-based nonmetropolitan counties, served to turn this growth on its head in the 1980s. Manufacturing counties were particularly hard hit by by the recessions and overvalued dollar of the early 1980s. The domestic farm financial crisis led to growth declines for agricultural counties in the middle part of the decade. Perhaps most dramatic were the changing fortunes of mining and petroleum industries that turned boom to bust in mining counties for the mid and latter years of the 1980s.

The impact of industrial restructuring was a more dominant influence on large metropolitan area growth and decline during the 1980s. As the theory predicted, areas with more diversified, producer service-based economies were able to overcome their deindustrialization-related losses of the 1970s. Some areas, such as New York and Boston, were well poised to build on their strengths in financial services and high-tech development. Other areas, such as Detroit, Cleveland and Pittsburgh -- still heavily wedded to old line manufacturing -- exhibited decade-wide population declines, while places like Houston and Denver -- with economies tied to boom then bust extractive industries --experienced fluctuating growth patterns. On the whole, large metropolitan areas (with greater than 1 million population) regained their growth advantage over small metropolitan areas and nonmetropolitan areas. The gains were led by Sunbelt areas with diversified economies, growing industries, and specializing in retirement and recreation.

Nonmetropolitan and small metropolitan area declines of the 1980s were tied to similar causes -- reversals of the same economic forces which promoted their growth in manufacturing and resource-based industries in the 1970s. These forces led to the accelerated 1970s small and nonmetropolitan growth levels in the South and West regions which have now reverted to dramatic growth slowdowns--particularly in the South for the late 1980s (see Table 1). The 1980s declines were concentrated in the interior portions of the Sunbelt, where many single industry and resource-based

communities are located (see Figure 2). Similar declines are shown for nonmetropolitan areas in the interior (Midwest) portions of the North for communities specializing in agriculture and manufacturing. Ironically, the greatest regional restructuring-driven gains for large metropolitan areas are located in the coastal portions of these regions in light of their historical strengths as trade, finance and recreation centers (Frey and Speare, 1991).

THE RURAL RENAISSANCE

The strong nonmetropolitan growth of the 1970s, brought about by a variety of forces, led to the illusion that a pervasive "rural renaissance" was in the offing. While the grandiose theories suggesting long-term shifts in the nation's settlement patterns were not borne out, there is evidence of continued rural renaissance-type population growth for selected communities. Indeed, the underpinning of the deconcentration perspective was a view that residents would now be able to actualize long-held preferences for nonmetropolitan locations that were heretofore constrained. Two kinds of nonmetropolitan counties continued to show gains in the 1980s, and both represent tendencies for residents to actualize such preferences.

The first of these is the continued growth of nonmetropolitan retirement counties (Beale, 1988; Beale and Fuguitt, 1990). These grew faster than any other category of nonmetropolitan county and continued to outpace the nation's population growth rate. These counties are scattered across most states but are most concentrated in Florida, the upper Great Lakes, the Southwest and West. Their growth is significant because in attracting the elderly retired population, they are drawing perhaps the most "footloose" population whose preferences are least constrained by employment locations. Increasing numbers of elderly movers, with significant discretionary incomes, put these and like nonmetropolitan counties in good stead for continued population and economic growth, since the presence of retired persons creates employment in service, construction, and other complementary activities for younger persons in the labor force.

The second category of nonmetropolitan growth, which represents the fulfillment of residential preferences, involves the continued gains for so-called "exurban" counties that lie adjacent to metropolitan areas and show strong connectivity to these areas through commuting. Residents selecting these counties often hold the distinct preference to live close to a major urban center but not inside it (Zuiches, 1981; Fuguitt and Brown, 1990). While the fastest growing exurban counties tend to lie adjacent to and later become subsumed by fast-growing metropolitan areas (Fuguitt, Brown and Beale, 1989), many of these communities still retain a rural and nonmetropolitan character. It raises the question (though off the topic of this paper) of how well county-based metropolitan definitions serve to designate the difference between communities with metropolitan and nonmetropolitan characteristics.[5]

Clearly, the continued gains of retirement and exurban counties, alone, will not revive the strong nonmetropolitan growth levels observed during the 1970s. As we now know, these accrued to a number of global, cyclical and restructuring related changes which are not likely to converge together again. However, the strong attraction of these areas for individuals who are not subject to constraints on their preferences suggests that there can be a strong demand for the amenities and quality of life offered by smaller communities when economic conditions permit.

DEMOGRAPHIC STRUCTURE AND FUTURE SETTLEMENT PATTERNS

In addition to the broad social and economic forces discussed above, there are aspects of the nation's demographic structure that affect redistribution patterns between metropolitan and nonmetropolitan America. Two of these, which will become increasingly important, are the population's age-cohort structure and its racial and ethnic diversity.

The age-cohort structure of a population tell us the relative size of that subpopulation which resides in the "peak migration ages" of 20-34. It also enables us to track the migration and redistribution experiences of specific cohorts as they pass through

these peak migration ages. This is important, because areas (metropolitan or nonmetropolitan) that are able to capture a disproportionate share of cohort members, during these ages, will tend to retain many of them for most of their remaining working lives (Frey, 1986).

It has been speculated that some of the 1970s reversals in small metropolitan, nonmetropolitan and Sunbelt locations were fueled by the paucity of Northern urban employment opportunities available to the large baby boom cohorts then passing through these ages (Wilson, 1983; Plane, 1989). This suggestion is supported by the migration rates in Figure 3. Out-migration rates from South and West region nonmetropolitan areas were lower among residents in their "peak migration ages" in 1975-80 (when the baby boom cohorts dominated these ages) than were the rates observed for 1965-70. Correspondingly, North large metropolitan in-migration ratios for these ages decreased between 1965-70 and 1975-80. These patterns resulted in lower rates of net out-migration, for these ages, in South and West nometropolitan areas, and greater rates of net out-migration in large North metropolitan areas (right-hand plots in Figure 3).

The net migration patterns for 1980-85 suggest a re-reversal of these patterns for the peak migration ages.[6] While baby boomers still dominate in these ages, the older members of these cohorts have already been assimilated into the job market and the smaller baby bust cohorts are just beginning to enter these ages. I do not wish to overemphasize this "cohort explanation" of age-specific migration patterns. However, the tracking of different cohorts' redistribution experiences, as they pass through these peak migration ages, telegraphs the shape of distribution patterns to come. These early 1980s net migration patterns, coupled with later decade survey data (Lichter, McLaughlin, and Cornwell, 1990) suggest that nonmetropolitan areas are, again, less attractive for younger cohorts.

One bright spot for nonmetropolitan areas, evident from the 1980-85 net migration rates, is the continued attraction of these areas for the elderly population. The

migration of the elderly to nonmetropolitan communities predated the "turnaround" of the 1970s (Fuguitt and Tordella, 1980; Heaton, 1983; Longino et al., 1984), and has remained a significant source of nonmetropolitan population gain. This source should become even more important for nonmetropolitan America as the large baby boom cohorts approach their retirement ages.

Another aspect of the nation's demographic structure, relevant to nonmetropolitan areas, is the increasing growth of racial and ethnic minorities. According to the 1990 census, non-Hispanic whites grew by only 4.7 percent over the 1980-90 decade in comparison to 11.9 percent for non-Hispanic blacks, 53 percent for Hispanics, 107.8 percent for Asians or Pacific Islanders, and 37.9 percent for American Indians, Eskimos, or Aleuts. Of these groups, the redistribution patterns of blacks have been monitored most consistently in the demographic literature as they shifted from a largely, rural Southern population to a predominantly metropolitan population (Taeuber and Taeuber, 1965; Farley and Allen, 1987; Long, 1988). In the immediate postwar decades, black redistribution patterns tended to counter, or at least lag behind, those of the white population. As whites moved from the North to the South and West, and from central cities to suburbs, blacks relocated out of the South to cities of selected large Northern and Western metropolitan areas. With the 1970s, black redistribution became somewhat more consistent with nonblack trends (see Table 2). There was an increased movement back to the South and, although to a lesser extent than for nonblacks, toward small metropolitan and nonmetropolitan areas. During the 1980s, significant black Southern growth continued, at least for large metropolitan areas in the South.

Although the evidence at this point is sketchy, it is likely that a polarization of black migration patterns is emerging. On the one hand, upwardly mobile middle class blacks are relocating to suburban and inter-regional destinations -- similar to white migration patterns of past decades. Many of these blacks, like whites, will choose to move to large "New South" metropolitan areas. On the other hand, a segment of less

well-off blacks with low skills and poor employment prospects are becoming increasingly isolated in both inner city neighborhoods and rural nonmetropolitan communities (though recent studies by Cromartie and Stack (1989) and Johnson and Roseman (1990) have documented migration streams connecting these two types of places). These polarized black migration patterns would not appear to benefit South nonmetropolitan areas where high levels of white and black poverty continue to exist (Fuguitt, Brown and Beale, 1989; Lichter, 1989).

Each of the other growing minority groups, except for American Indians, Eskimos or Aleuts, are much more heavily urbanized than the native white population. Although Mexican Americans show some nonmetropolitan concentration in selected Southwest and California counties (see Table 3), their recent internal and immigrant destination patterns tend to favor urban and metropolitan locations (Bean and Tienda, 1987; McHugh, 1989). Asian Americans are the most urbanized of the growing minorities and except for some rural concentration in Hawaii, are unlikely to penetrate nonmetropolitan communities to a great degree. These distribution trends for the growing American minorities, coupled with the lower fertility of the nonmetropolitan population (Fuguitt and Beale, 1990), suggest slow near-term growth prospects for much of nonmetropolitan America.

FINAL OBSERVATIONS

The perspectives on metropolitan and nonmetropolitan demographic change reviewed here suggest a less rosy growth scenario for rural and nonmetropolitan communities than was forecasted ten years ago when the 1980 census results were presented. The "rural renaissance" predictions of that time failed to disentangle the mix of period, restructuring, and deconcentration influences that merged to provide the illusion that an era of dispersed settlement had begun. The social and economic "period effects" of the 1980s were unduly harsh on much of nonmetropolitan America and this experience should not prompt us, now, to be overly pessimistic about the future. On the

other hand, it should serve to remind us that a strong reliance on resource based and low-skilled industries is not a recipe for stable demographic growth. Nor will the drawing power of largely residential resort-retirement counties and exurban communities serve to reverse long-term urbanization trends. Just as industrial restructuring and economic diversification has led to some economic and demographic revival in many metropolitan areas in the 1980s (Frey and Speare, 1991), similar efforts in nonmetropolitan communities should lead to future gains there. In the long run and when economic conditions permit, preferences may very well motivate broad distribution shifts. When this occurs, the continued stated preference of almost half the population to reside in small or rural places should lead to a more dispersed settlement system.

FOOTNOTES

1. There is a continuing active interest in urbanization-counterurbanization patterns for the 1980s decade, by European scholars and policymakers. See Champion (1989) for a recent review.

2. The discussion below draws from more extensive treatments of these perspectives in Frey (1987) and Frey (1989).

3. These period effects are discussed in more detail in Wardwell and Brown (1980), Richter (1985), and Garnick (1988).

4. A distinction can be drawn between those regional restructuring theorists (as I term them) who espouse an evolutionary "postindustrialization" explantion (Noyelle and Stanback, 1984) and those who adopt what might be termed a "deindustrialization" explantion (Tomaskovic-Devey and Miller, 1982; Smith, 1984; Castells, 1985; Scott and Storper, 1986). The former view sees regional restructuring changes to have evolved, progressively, from technological innovations in production, widening transportation networks, scientific breakthroughs in telecommunications, and the like. While the deindustrialization writers also recognize these technological innovations, they see the primary triggering mechanism for restructuring rooted in a world wide economic crisis during the 1970s that forced capitalists to disinvest heavily in selected economic sectors and in regions dominated by those sectors. These writers tend to be critical of excessive capital mobility and the dislocations that such mobility inflicts upon workers and communities. Yet their descriptions of consequent metropolitan and regional redistribution tendencies coincide closely with those who hold the postindustrialization view.

5. The importance of metropolitan definitions for defining growth in both metropolitan and nonmetropolitan populations is pointed up in studies which show that the addition of new metropolitan territory (through the expansion of existing metropolitan areas or the emergence of new metropolitan areas) has contributed significantly to total metropolitan population change in recent decades (Fuguitt, Heaton and Lichter, 1988; Frey and Speare, 1988).

6. The 1980-85 age-specific net migration measures in Figure 3, were derived by using an indirect survival methodology with age-dissagregated population data from the 1980 decennial census and from 1985 experimental county population estimates by age, sex, and race, produced by the Population Division. U.S. Bureau of the Census. Comparable age-specific in-migration ratios, and out-migration rates are not available for the 1980-85 period.

REFERENCES

Beale, Calvin L., "Americans Heading for the Cities, Once Again," Rural Development Perspectives, Vol. 4, No. 3 (June 1988), pp. 2-6.

Beale, Calvin L. and Glenn V. Fuguitt, "The New Pattern of Nonmetropolitan Population Change." Pp. 157-77 in Social Demography edited by Karl E. Taeuber, Larry Bumpass, and James Sweet. New York: Academic Press, 1978.

Beale, Calvin L. and Glenn V. Fugitt, "Regional and Component Shifts in Nonmetropolitan Trends in the 1980s," paper presented at the annual meeting of the Southern Regional Science Association, Washington, D.C., March 22, 1990.

Bean, Frank D. and Marta Tienda, The Hispanic Population of the United States A 1980 Census monograph (New York: Russell Sage Foundation, 1987).

Brown, David R. and John M. Wardwell (editors), New Directions in Urban-Rural Migration: The Population Turnaround in Rural America (New York: Academic Press 1980).

Brown, David L. and Kenneth L. Deavers, "Rural Change and the Rural Economic Policy Agenda for the 1980s" in Rural Economic Development in the 1980s: Prospects for the Future edited by David L. Brown, J. Norman Reid, Herman Bluestone, David A. McGranahan, and Sara M. Mazie. (Washington, D.C.: U.S. Department of Agriculture, Rural Development Research Report No. 69, 1988).

Castells, Manuel, "High Technology, Economic Restructuring and the Urban-Regional Process in the United States" in High Technology, Space and Society, edited by Manuel Castells. Urban Affairs Annual Reviews, Vol 28, (Beverly Hills, CA: Sage Publications, 1985).

Champion, A. G. (ed.), Counterurbanization: The Changing Pace and Nature of Population Deconcentration (London: Edward Arnold, 1989).

Cromartie, John and Carol B. Stack, "Reinterpretation of Black Return and Nonreturn Migration to the South 1975-1980," Geographical Review, Vol. 79 (1989) pp. 297-310.

Farley, Reynolds and Walter W. Allen, The Color Line and the Quality of Life in America a 1980 Census monograph (New York: Russell Sage, 1987).

Frey, William H., "Lifecourse Migration and Redistribution of the Elderly across U.S. Regions and Metropolitan Areas," Economic Outlook USA, Vol. 13 (1986) pp. 10-16.

Frey, William H., "Migration and Depopulation of the Metropolis: Regional Restructuring or Rural Renaissance?," American Sociological Review Vol. 52 (April 1987) pp. 240-257.

Frey, William H., "United States: Counterurbanization and Metropolis Depopulation," in Counterurbanization: The Changing Pace and Nature of Population Deconcentration (London: Edward Arnold, 1989) pp. 34-61.

Frey, William H., Metropolitan America: Beyond the Transition, Population Bulletin, Vol. 45, No. 2 (Washington, D.C.: Population Reference Bureau, 1990).

Frey, William H. and Alden Speare, Jr., Regional and Metropolitan Growth and Decline in the United States, A 1980 Census monograph (New York: Russell Sage Foundation, 1988).

Frey, William H. and Alden Speare, Jr., "U.S. Metropolitan Area Population Growth, 1960-1990: Census Trends and Explanations," Research Report, No. 91-212, Population Studies Center, the University of Michigan, Ann Arbor, MI. May 1991.

Fuguitt, Glenn V., "The Nonmetropolitan Population Turnaround," Annual Review of Sociology, Vol. 11 (1985) pp. 259-80.

Fuguitt, Glenn V. and Calvin L. Beale, "The Contribution of Migration an Natural Increase to the Nonmetropolitan Turnaround and Its Reversal," paper presented at the annual meeting of the Association of American Geographers, Toronto, Canada, April 21, 1990.

Fuguitt, Glenn V. and David L. Brown, "Residential Preferences and Population Redistribution: 1972-1988," Demography, Vol. 27, No. 4 (November 1990) pp. 589-600.

Fuguitt, Glenn V., David L. Brown, and Calvin L. Beale, Rural and Smalltown America, a 1980 Census monograph (New York: Russell Sage Foundation, 1989).

Fuguitt, Glenn V., Tim B. Heaton, and Daniel T. Lichter, "Monitoring the Metropolitanization Process," Demography, Vol. 25, No. 1 (February, 1988) pp. 115-128.

Fuguitt, Glenn V., and Stephen J. Tordella, "Elderly Net Migration: The New Trend of Nonmetropolitan Population Change," Research on Aging, Vol. 2 (1980) pp. 191-204.

Garnick, Daniel H., "Local Area Economic Growth Patterns: A Comparison of the 1980s and Previous Decades," in Urban Change and Poverty edited by G. H. McGeary and Laurence E. Lyunn, Jr. (Washington, D.C.: National Academy Press, 1988) pp. 199-254.

Hawley, Amos H., "Urbanization as Process," in Handbook of Contemporary Urban Life edited by David Street and Associates (New York: Jossey Bass, 1978) pp. 3-26.

Heaton, Tim B., "Recent Trends in the Geographical Distribution of the Elderly Population," in Aging in Society edited by Matilda White Riley, Beth B. Hess, and Kathleen Bond (Hillsdale, NJ: Lawrence Earlbaum Associates) pp. 95-113.

Jencks, Christopher and Paul E. Peterson (eds.), The Urban Underclass (Washington, D.C.: The Brookings Institution, 1991).

Johnson, James H., Jr. and Curtis C. Roseman, "Increasing Black Outmigration from Los Angeles: The Role of Household Dynamics and Kinship Systems," Annuals of the Association of American Geographers, Vol. 80, No. 2 (1990) pp. 205-222.

Lichter, Daniel T., "Race, Employment Hardship, and Inequality in the American Nonmetropolitan South," American Sociological Review, Vol. 54 (June, 1989) pp. 436-446.

Lichter, Daniel T., Diane K. McLaughlin, and Gretchen T. Cornwell, "Migratrion and the Loss of Human Resources in Rural America, Working Paper No. 1990-37 Population Issues Research Center, Penn State University, University Park, PA (September 1990).

Long, Larry, Migration and Residential Mobility in the United States, A 1980 Census monograph (New York: Russell Sage Foundation, 1988).

Long, Larry and Diana DeAre, "U.S. Population Redistribution: A Perspective on the Nonmetropolitan Turnaround," Population and Development Review, Vol. 14, (1988) pp. 433-450.

Longino, Charles F., Jr., Robert F. Wiseman, Geanne C. Biggar, and Cynthia B. Flynn, "Aged Metropolitan Nonmetropolitan Migration Streams over Three Census Decades," Journal of Gerontology, Vol. 39, No. 6 (1984) pp. 721-729.

McHugh, Kevin E., "Hispanic Migration and Population Redistribution in the United States," Professional Geographer, Vol. 41, No. 4 (1989) pp. 429-439.

Naisbitt, John, Megatrends (New York: Warner Books, 1982).

Noyelle, Thierry J. and Thomas M. Stanback, Jr., The Economic Transformation of American Cities (Totowa, NJ: Rowman and Allanheld, 1984).

Plane, David A., "Incorporating Age Into the Geographical Analysis of Temporal Change in Migration Systems," paper presented at the 11th Pacific Regional Science Conference, Singapore, July 2, 1989.

Richter, Kerry, "Nonmetropolitan Growth in the Late 1970s: The End of the Turnaround?" Demography, Vol. 2 (1985) pp. 245-62.

Scott, Allen J. and Michael Storper (eds.), Production, Work, Territory: The Geographical Anatomy of Industrial Capitalism (Boston: Allen and Unwin, 1986).

Smith, Neil, "Deindustrialization and Regionalization: Class Alliance and Class Struggle," papers of the Regional Science Association, Vol. 54 (1984) pp. 113-28.

Taeuber, Karl and Alma F. Taeuber, Negroes in Cities (Chicago: Aldine, 1965).

The New York Times, "Where America is Growing: The Suburban Cities," February 23, 1991.

Tomaskovic-Devy, Donald and S. M. Miller, "Recapitalization: The Basic U.S. Urban Policy of the 1980s," in Urban Policy Under Capitalism Urban Affairs Annual Reviews, Vol. 22, edited by Norman I. Fainstein and Susan S. Fainstein (New York: Sage Publications, 1982).

Wardwell, John M., "Toward a Theory of Urban-Rural Migration in the Developed World," in New Directions in Urban-Rural Migration edited by David L. Brown and John M. Wardwell (New York: Academic Press, 1980) pp. 71-118.

Wardwell, John M. and David L. Brown, "Population Redistribution in the United States during the 1970s" in New Directions in Urban-rural Migration edited by David L. Brown and John M. Wardwell (New York: Academic Press, 1980) pp. 1-35.

Wilson, Franklin D., "Cohort Size Effects and Migration," International Migration Review, Vol. 17, No. 3 (1983) pp. 485-504.

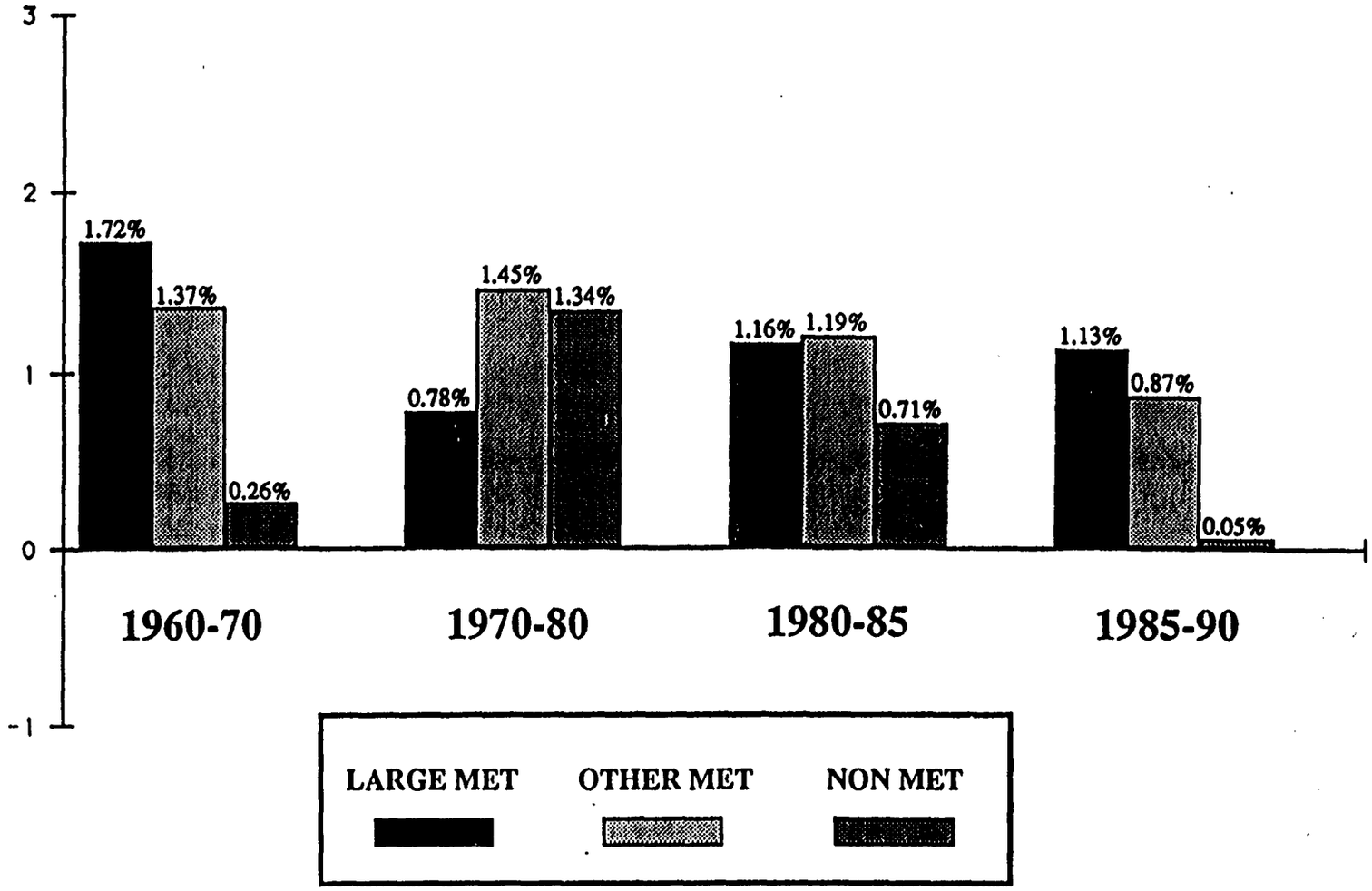
Wilson, Franklin D., "Urban Ecology, Urbanization and Systems of Cities," Annual Review of Sociology, Vol. 10, (1984) pp. 283-307.

Zuiches, James J., "Residential Preferences in the United States," in Nonmetropolitan America in Transition edited by Amos H. Hawley and Sara Mills Mazie (Chapel Hill: University of North Carolina Press, 1981) pp. 72-115.

Figure 1.

TOTAL U. S.

ANNUAL POPULATION CHANGE



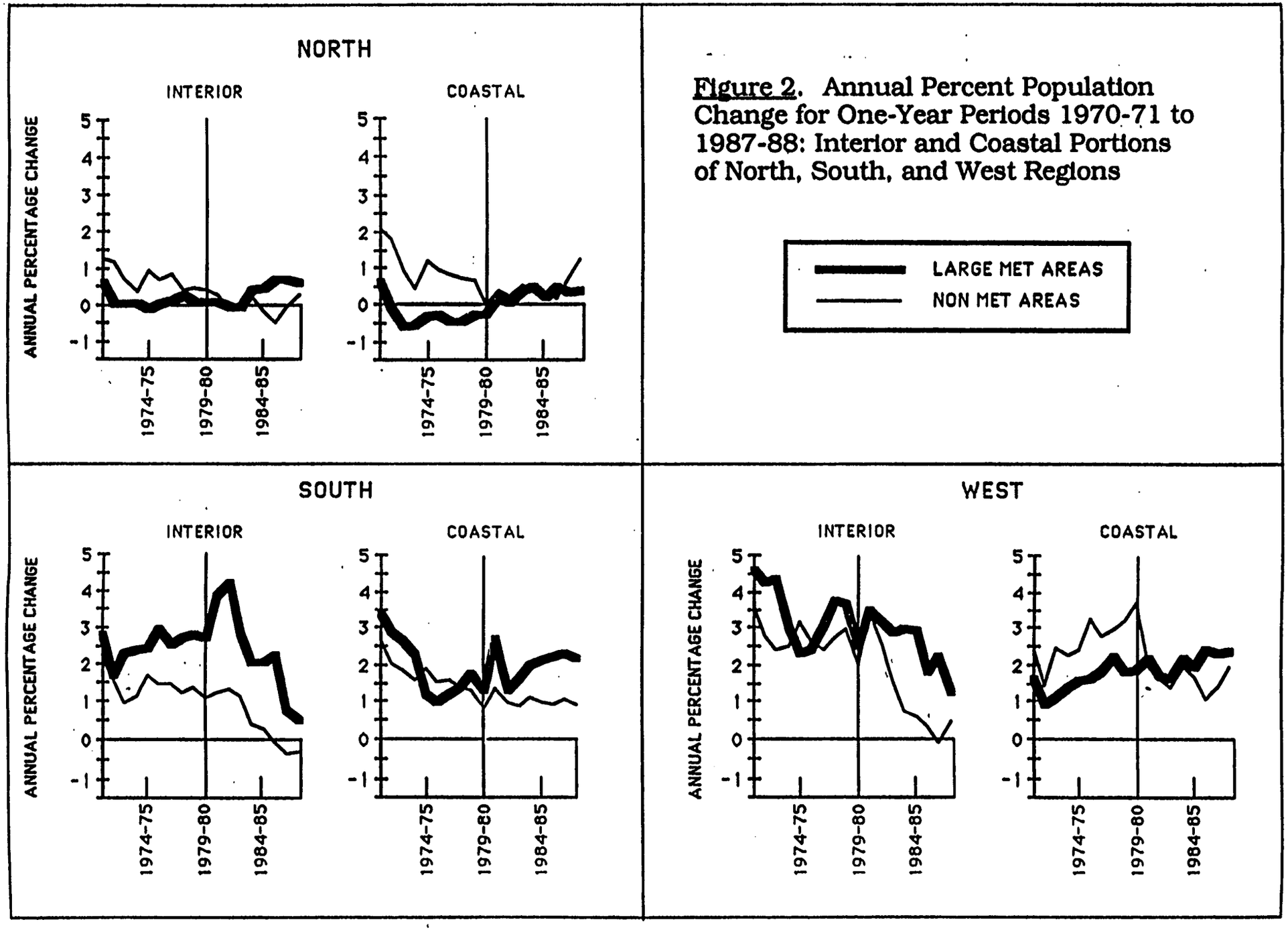


Figure 2. Annual Percent Population Change for One-Year Periods 1970-71 to 1987-88: Interior and Coastal Portions of North, South, and West Regions

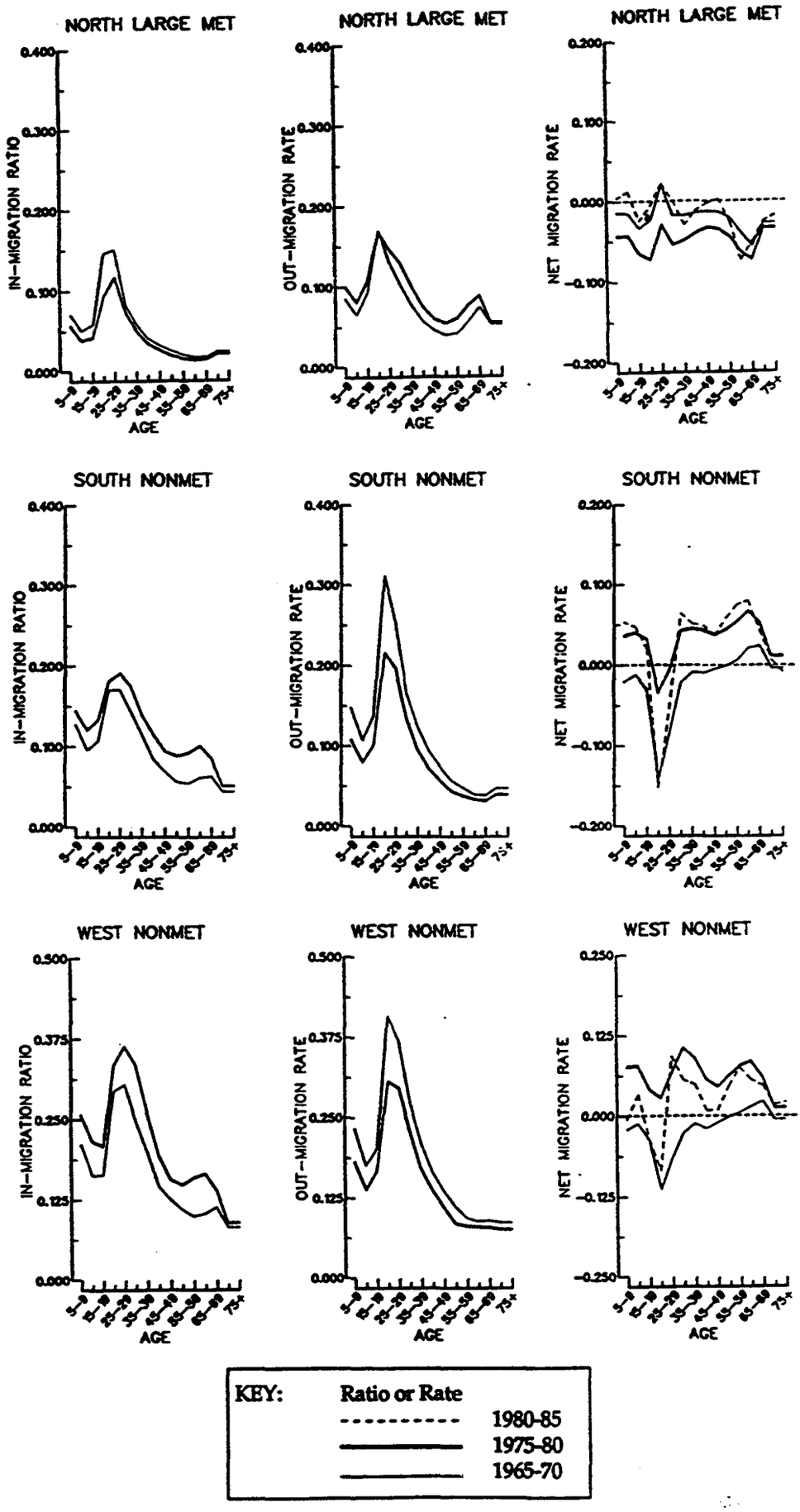


Figure 3 In-migration Ratios, Out-migration Rates and Net Migration Rates for Selected Region and Metropolitan Categories, 1965-70, 1975-80, 1980-85

Table 1: Percent Population Change for Region and Metropolitan Categories[a], 1960-1990.

Region and Metropolitan Category	1990 Size (millions)	Percent 10-yr Change 1960 -70	1970 -80	1980 -90	Percent 5-yr Change 1980 -85	1985 -90
NORTH						
Large Met	62.9	+12.0	-0.9	+2.8	+1.3	+1.5
Other Met	25.6	+11.1	+5.2	+3.3	+0.9	+2.4
Nonmetro	22.6	+2.6	+8.0	0.1	+0.7	-0.6
SOUTH						
Large Met	28.2	+30.9	+23.4	+22.3	+12.3	+8.9
Other Met	31.9	+15.5	+20.9	+13.4	+8.8	+4.2
Nonmetro	24.9	+1.1	+16.3	+4.6	+4.9	-0.3
WEST						
Large Met	33.8	+29.1	+20.0	+24.2	+10.9	+11.9
Other Met	10.8	+24.8	+32.2	+22.8	+11.4	+10.2
Nonmetro	8.1	+9.0	+30.6	+14.1	+9.1	+4.6
US TOTALS						
Large Met	124.8	+18.5	+8.1	+12.1	+6.0	+5.8
Other Met	67.9	+14.6	+15.5	+10.8	+6.1	+4.4
Nonmetro	56.0	+2.2	+14.3	+3.9	+3.6	+0.3
REGION TOTALS[b]						
North	111.0	+9.8	+2.2	+2.4	+1.1	+1.2
South	84.9	+14.2	+20.1	+13.3	+8.6	+4.3
West	52.8	+24.6	+24.0	+22.2	+10.7	+10.3
TOTAL	248.7	+13.4	+11.4	+9.8	+5.4	+4.1

[a] Metropolitan areas are defined according to constant boundaries determined by OMB as of June 30, 1990. Large metropolitan areas include 39 CMSAs and MSAs with 1990 populations exceeding 1 million.

[b] These regions are consistent with standard census definitions where the North region represents the combined Northeast and Midwest census regions. When an individual metropolitan area overlaps regions, its statistics are assigned to the region where its principal central city is located.

Source: US Bureau of the Census, 1960, 1970, 1980, 1990 Decennial Censuses and 1985 estimates prepared by the Population Division.

Table 2: Percent Population Change for Blacks and Nonblacks by Region and Metropolitan Categories[a], 1960-1990.

Region and Metropolitan Category	1990 Population		Black Percent Change			Nonblack Percent Change		
	Blacks	Nonblacks	1960 -70	1970 -80	1980 -90	1960 -70	1970 -80	1980 -90
NORTH								
Large Met	31.7	24.0	+39.1	+13.1	+10.3	+8.8	-3.0	+1.5
Other Met	5.0	11.1	+36.9	+23.2	+15.5	+10.3	+4.7	+2.8
Nonmetro	1.1	10.2	+7.0	+11.7	+22.6	+2.5	+7.9	-0.5
SOUTH								
Large Met	19.2	10.6	+29.4	+25.6	+23.9	+30.7	+22.1	+21.4
Other Met	18.8	11.9	+6.8	+22.0	+12.3	+17.7	+20.7	+13.8
Nonmetro	14.8	9.3	-9.7	+5.4	+1.3	+4.3	+19.1	+5.4
WEST								
Large Met	7.9	14.4	+60.0	+32.5	+21.9	+27.4	+19.1	+24.4
Other Met	1.2	4.8	+42.9	+46.6	+42.2	+24.3	+31.8	+22.2
Nonmetro	0.3	3.7	+16.6	+12.1	+59.0	+8.9	+30.4	+14.1
TOTAL	100.0	100.0	+19.7	+17.3	+13.2	+12.7	+10.7	+9.3
US TOTALS								
Large Met	59.8	49.0	+38.2	+18.9	+15.9	+16.1	+6.5	+11.4
Other Met	25.0	27.8	+12.6	+23.0	+14.1	+14.9	+14.7	+10.4
Nonmetro	16.2	23.2	-0.7	+5.8	+3.2	+3.9	+15.1	+4.0
TOTAL	100.0	100.0	+19.7	+17.3	+13.2	+12.7	+10.7	+9.3
REGION TOTALS[b]								
North	37.8	45.3	+37.7	+14.2	+11.3	+7.7	+1.1	+1.4
South	52.8	31.8	+5.8	+17.3	+12.7	+16.4	+20.6	+13.5
West	9.4	22.9	+56.5	+33.4	+25.1	+23.4	+23.4	+22.1
TOTAL	100.0	100.0	+19.7	+17.3	+13.2	+12.7	+10.7	+9.3
(N)[b]	(29,986)	(218,724)						

[a] Metropolitan areas are CMSAs, MSAs and (in New England) NECMAs, defined according to constant boundaries determined by OMB as of June 30, 1990. Large metropolitan areas have 1990 populations exceeding 1 million.

[b] in 1000s.

Source: U.S. Bureau of the Census, 1960, 1970, 1980, 1990 Decennial Censuses.

Table 3: Distribution of Hispanics and Non-Hispanic Whites, Blacks, Asians and American Indians by Region and Metropolitan Categories[a], 1990.

Region and Metropolitan Category	Distribution of 1990 Population				
	Hispanics	Whites[b]	Blacks[b]	Asians[b]	American Indians[b]
NORTH					
Large Met	20.7	24.7	31.1	23.8	8.3
Other Met	2.6	12.4	5.0	3.9	5.3
Nonmetro	1.2	11.5	1.1	1.5	10.2
SOUTH					
Large Met	16.3	10.0	19.3	9.8	4.1
Other Met	9.9	12.4	19.2	4.5	10.8
Nonmetro	4.1	10.2	15.1	1.2	14.8
WEST					
Large Met	32.2	11.4	7.7	39.8	11.9
Other Met	8.8	4.0	1.2	12.2	8.0
Nonmetro	4.2	3.4	0.3	3.3	26.6
TOTAL	100.0	100.0	100.0	100.0	100.0
U.S. TOTALS					
Large Met	69.2	46.1	58.1	73.4	24.3
Other Met	21.3	28.8	25.4	20.6	24.1
Nonmetro	9.5	25.1	16.5	6.0	51.6
TOTAL	100.0	100.0	100.0	100.0	100.0
REGION TOTALS					
North	24.5	48.6	37.2	29.2	23.8
South	30.3	32.6	53.6	15.5	29.7
West	45.2	18.8	9.2	55.3	46.5
TOTAL	100.0	100.0	100.0	100.0	100.0
(N)[c]	(22,354)	(188,128)	(29,216)	(6,968)	(1,793)

[a] Metropolitan areas are CMSAs, MSAs and (in New England) NECMAs, defined according to constant boundaries determined by OMB as of June 30, 1990. Large metropolitan areas have 1990 populations exceeding 1 million.

[b] not of Hispanic origin.

[c] in 1000s.

Source: US Bureau of the Census, 1990 Decennial Census.