

METROPOLITAN AND NONMETROPOLITAN
GROWTH DIFFENTIALS:
CAUSE AND IMPACTS ON HOUSING

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During the decade of the 1970's, in contrast to the experience of every other decade in this century, the population in nonmetropolitan areas grew more rapidly than the population in metropolitan areas, due to net internal migration into nonmetropolitan areas and out of metropolitan areas. Since 1980, the situation has reversed and the population in metropolitan areas has grown at a significantly higher rate than the nonmetropolitan population.

This population shift has been reflected in an increase in the share of national new housing construction occurring in metropolitan areas. Due to differences in such factors as land cost, land use restrictions, availability of labor and materials, economy-of-scale considerations, and building codes, there are significant differences in typical building practices in metropolitan areas compared to nonmetropolitan areas. Some of the shifts in national averages with respect to the types of homes constructed and the manner in which they are constructed are attributable to the greater share of construction occurring in metropolitan areas, rather than to changes in tastes, technology, or costs.

Numerous explanations of the net migration flow into nonmetropolitan areas and then back toward metropolitan areas

have been offered. I will attempt to demonstrate that the net movement into metropolitan areas in the 1980s is primarily attributable to a change in the mix of national employment by industry, rather than reversals in the relative attractiveness of living or locating business activities in either type of area.

1. Dimensions of the change

The population of metropolitan areas (based on 1984 MSA definitions) grew at a 1.0% compound rate over the decade of the 1970s while the nonmetropolitan population grew at a 1.3% rate. This represented the first time in more than a century that the nonmetropolitan population grew more than the metropolitan population. For the first half of the 1980s, however, the metropolitan population growth rate was 1.2% while nonmetropolitan areas grew at a 0.7% rate. Moreover, the gap in the two growth rates apparently has widened, with the populations growing 1.1% and 0.3%, respectively, in the year ending July 1, 1985. (Engels, 1986)

The relative growth of metropolitan and nonmetropolitan areas is affected somewhat by changes in the definitions of metropolitan areas. Using any of the official definitions in use at some time since 1950, the nonmetropolitan growth between 1970 and 1980 exceeded the metropolitan growth. However, for the period from 1980 to 1984 the metropolitan population growth exceeds the nonmetropolitan growth only if

one of the metropolitan definitions as of 1974 or later is used. For the more limited set of areas designated as metropolitan before 1974, growth between 1980 and 1984 was slightly below that of the nation as a whole (Census, 1985, p 869). However, the apparent metropolitan growth spurt since 1984 may have eliminated that distinction.

The more rapid nonmetropolitan growth in the 1970s was concentrated in the early part of the decade. By the late seventies, the metropolitan and nonmetropolitan growth rates began to converge (Richter, 1985).

Many of the migrants to nonmetropolitan areas in the 1970s came from the very largest metropolitan areas. The turnaround in population in the 1980s was to a large extent due to the greater ability of the very large metro areas to retain population. Of the nation's ten largest metropolitan areas, six experienced declines in population over the 1970 to 1980 period, but only the Detroit area lost population since 1980. Moreover, of the four largest areas that experienced population growth in the 1970s, all but Houston had accelerated growth in the 1980 to 1985 period.

In the first half of the 1970s the growth of employment in nonmetropolitan areas outpaced the growth in metropolitan areas, but in the second half of the decade, employment--unlike population--grew more rapidly in metropolitan areas.

In the 1980s, employment has continued to grow more rapidly in metropolitan areas.

Annualized growth rates for population and employment according to one set of measures were as follows:

	<u>Metro</u>	<u>Nonmetro</u>
Population:		
1970-75	1.0%	1.4%
1975-80	1.0	1.2
1980-84	1.0	0.8
Employment:		
1970-75	1.4%	1.7%
1975-80	3.0	2.4
1980-84	1.8	0.8

Source: Bureau of Economic Analysis. Based on 1984 definitions of SMSAs and NECMSs

The differential between the relative population growth rates and relative employment growth rates in the late 1970s no doubt contributed to a reversal in the relative unemployment rates in the two types of areas. After remaining consistently below the metropolitan unemployment rate, the nonmetropolitan unemployment rate rose above the metropolitan unemployment rate in 1980. Since 1980, the gap between the two rates increased.

2. Impact on the housing market

The differential growth rate between metropolitan and nonmetropolitan areas is not so great as to have major impact on most economic activities in the short term, but it does profoundly influence new construction of housing, since housing demand depends primarily on the rate of growth in an

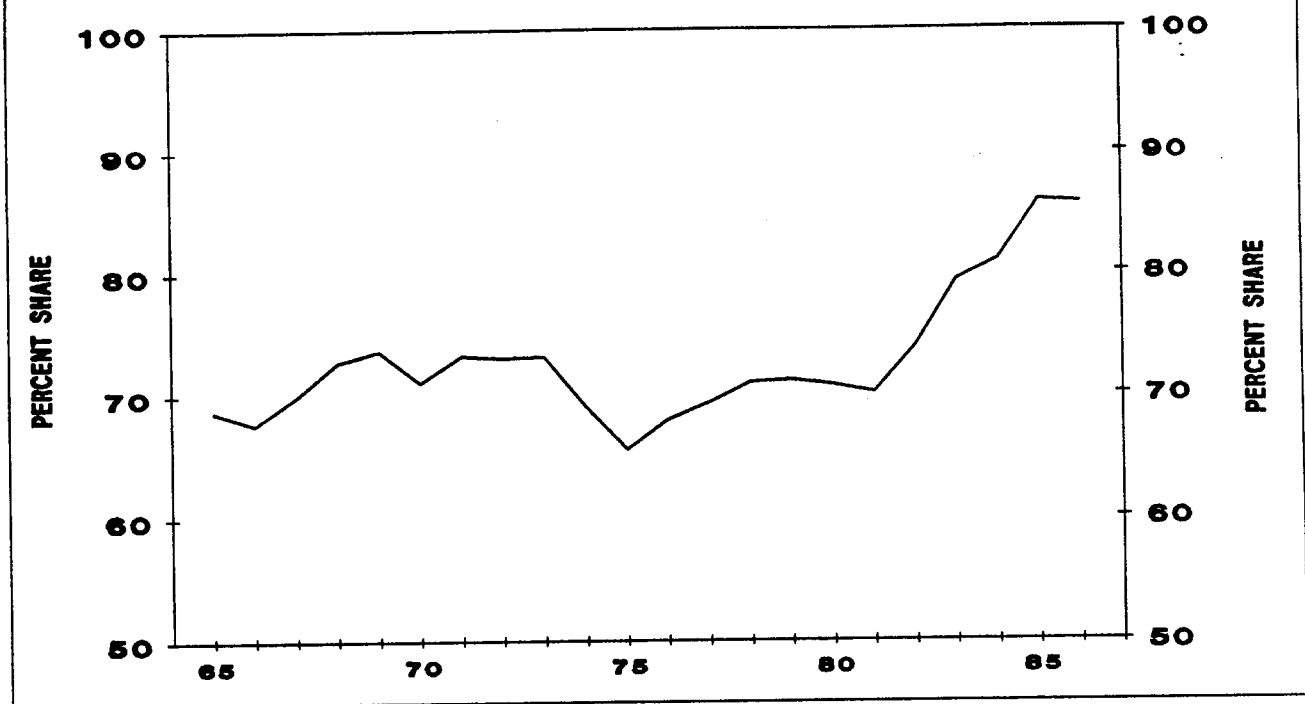
area rather than its size. The sensitivity of housing demand is illustrated, for example by the fact that states like Florida or Arizona that have experienced substantial net immigration have had ten to twenty times as many housing starts per capita as states like New York that have had net outmigration and negligible population growth.

The shift of population toward metropolitan areas was the principal factor behind a substantial increase in the share of total national housing starts occurring in metropolitan areas. Figure 1 shows the metropolitan share of total housing starts as reported by the Census Bureau. The metropolitan share rose from a trough of 65.5% in 1975 to an estimated 86% in 1986. This increased share is partly attributable to changes in the designations of metropolitan areas. The change in metropolitan definitions and designations raised the share of population classified as metropolitan from about 72% to about 76%, but the primary source of the increase in the metropolitan share of housing starts was greater concentration of construction activity rather than changes in metropolitan definitions.

METROPOLITAN SHARE OF TOTAL HOUSING STARTS

FROM 1965-1986

FIGURE 1



One impact of the change in metro share has been an increase in the multifamily share of new construction and a decline in demand for mobile homes. The 1983 Annual Housing Survey showed the distribution of occupied single family, multifamily, and mobile homes to be as follows:

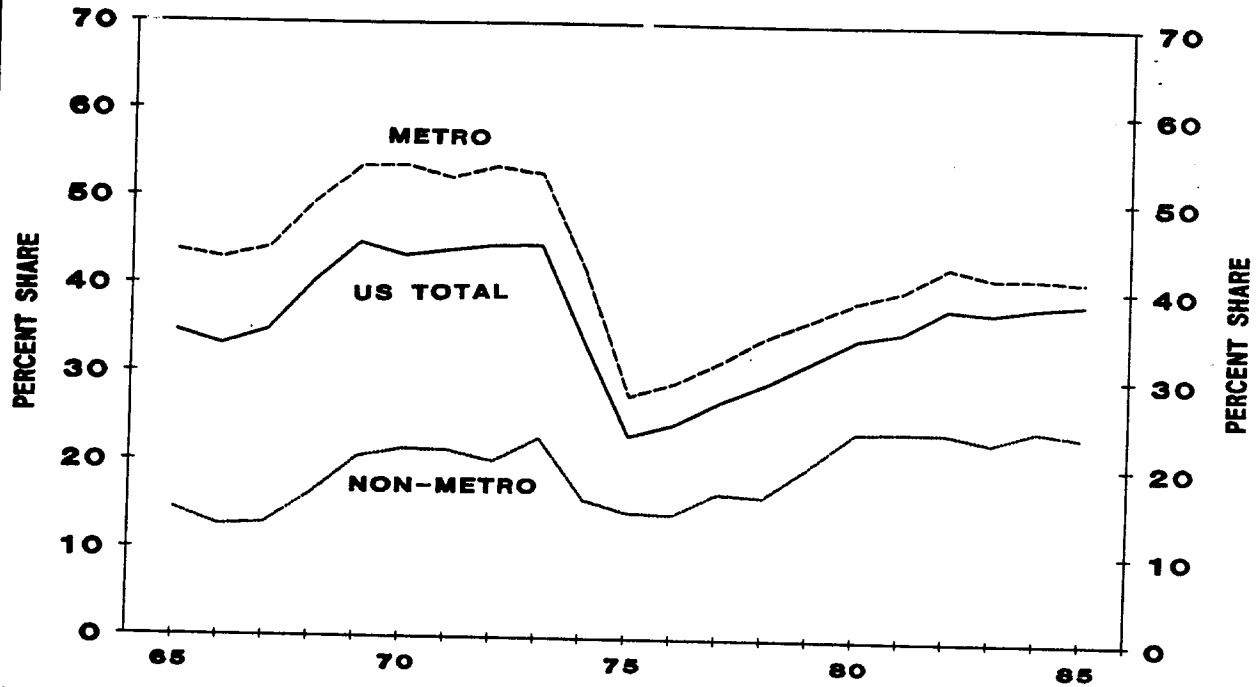
	<u>Metro</u>	<u>Nonmetro</u>
Single Family	36,549 (63.2%)	21,104 (78.6%)
Multifamily	19,671 (34.0%)	3,316 (12.4%)
Mobile	1,579 (2.7%)	2,420 (9.0%)
Total	57,798	26,840

Figure 2 shows the multifamily share of housing starts in metro and nonmetro areas as well as for the nation as a whole. While the multifamily share increased in metro areas and in nonmetro areas, as well as overall, the overall share increased more than the shares in either metro areas or nonmetro areas, thanks to the shift in total starts to metro areas. Although we don't have data on mobile home shipments for metro and nonmetro areas, the recent relative weakness in overall mobile home demand is probably also attributable to the movement toward metropolitan areas.

Figure 3 shows the impact of the change in the metro share of construction on the proportion of new single family homes built for sale (rather than custom-built, owner-built, or built for rent). In nonmetropolitan areas, it is more common for single family homes to be built on land already owned by the prospective occupant, who either hires a general contractor or serves as general contractor himself or herself. In this instance the impact of the increase in the metro share of total starts is especially great, because the difference between the metro and nonmetro incidence of for-sale construction is so large.

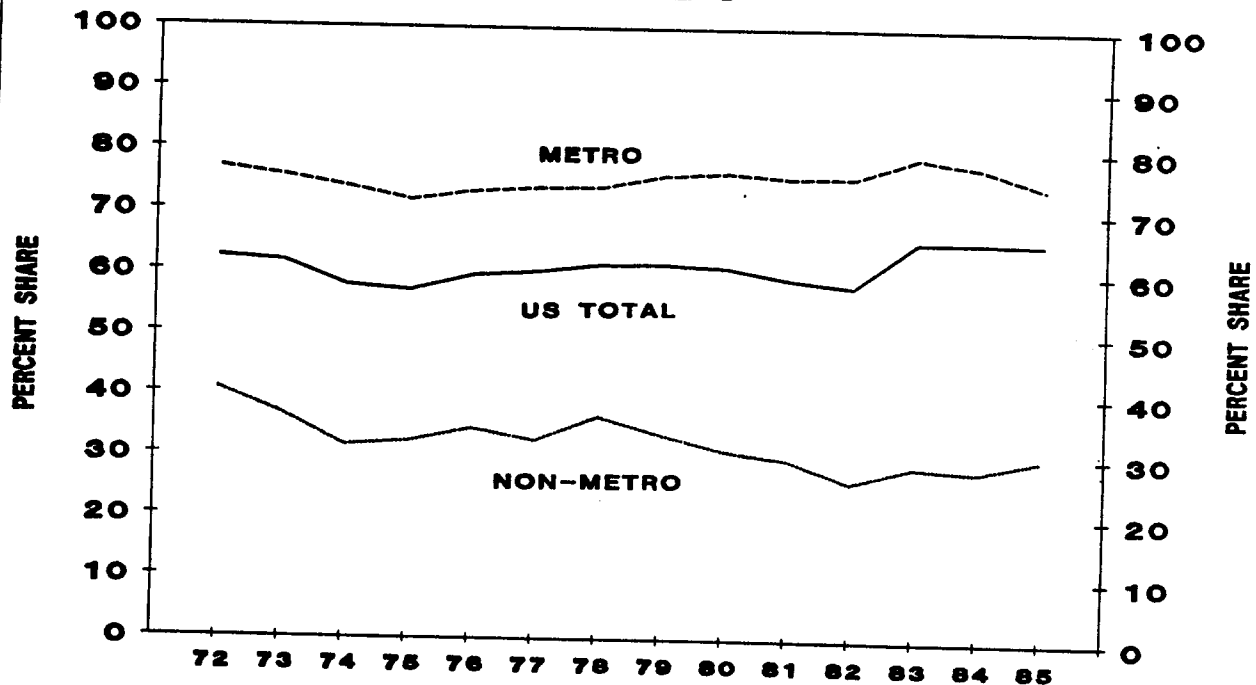
MULTIFAMILY SHARE OF TOTAL HOUSING STARTS

FROM 1965-1985
FIGURE 2



SHARE OF SINGLE FAMILY COMPLETIONS "FOR SALE"

FROM 1972-1985
FIGURE 3



The shift into metro areas has also probably slowed the growth of modular housing. Modular construction is generally relatively more cost-effective for scattered-site construction where there are limited supplies of skilled labor or materials distributors. In metropolitan areas, modular construction is more likely to be at a cost disadvantage relative to convention stick building.

The shift to metro areas has probably helped to increase the market share of large tract builders at the expense of small and mid-sized building firms.

The shift to metro areas has probably made a slight contribution to the decline of the homeownership rate in the 1980s. Overall, the metro homeownership rate 1983 was 60.8%, while the rate in nonmetro areas was 72.9%. Much of the difference is attributable to mobile homes in nonmetro areas, which are typically owned by the occupant but located on rented sites. In any case, because the homeownership is a stock rather than flow measure, it is not very sensitive to variations in migration, and the migration reversal wasn't a primary factor in the phenomenon of declining homeownership.

Theories of Metro-Nonmetro Movement

The turn toward net migration into nonmetropolitan areas in the 1970s and the return to net migration into metropolitan areas in the 1980s has stimulated a substantial literature of attempted explanation.

Pollakowski and Apgar (19__) note that decentralization of manufacturing, warehousing, and transportation have been going on for some time, and attribute the 1970s turn to a slowdown in the offsetting trend toward decreased employment in agriculture. They identify lower wage rates and lower living costs as the primary attractions for business location in low-density areas. They suggest that the recent experience is simply a pause in a movement to low density areas.

Beale and Fuguitt (1985) note the weakness in rural agriculture, mining, and manufacturing as factors contributing to slow nonmetropolitan growth in the 1980s, but they attribute much of the 1970s nonmetro growth to quality of life factors which may, in their view, have weakened in the 1980s. This is consistent with the earlier view expressed in Beale (1982) that the 1970s turnaround was "economically facilitated and socially motivated."

A study by the U.S. Department of Agriculture (Bender et.al., 1985) characterized nonmetropolitan counties into seven overlapping types and found extraordinary growth in some categories such as retirement-oriented areas that presumably were not dependent on job opportunities, but instead might be driven by non-economic factors. The population growth rates for the seven county types are shown in Table 1. The 1980-85 growth is based on new county population data from the Census Bureau applied to the list of counties developed by the Agriculture Department researchers. All categories show reduced rates of growth in the 1980s, although the retirement areas still displayed growth rates above the metropolitan average. The study did

Table 1
Population Growth in Different Categories of Counties

	<u># of Counties</u>	<u>POPULATION IN THOUSANDS</u>			<u>ANNUAL PERCENTAGE CHANGE</u>	
		<u>1970</u>	<u>1980</u>	<u>1985</u>	<u>70-80</u>	<u>80-85</u>
METRO		147,775	161,741	171,040	.91	1.12
NON-METRO	2443	52,900	61,115	63,710	1.45	.82
FARM	702	7,715	8,332	8,561	0.77	.54
MANUFACTURING	678	21,387	24,020	24,553	1.17	.44
MINING	200	3,190	3,748	3,861	1.63	.59
GOVERNMENT	315	7,360	8,832	9,412	1.83	1.28
FEDERAL LAND	247	3,936	5,192	5,675	2.81	1.79
POVERTY	242	3,207	3,635	3,749	1.27	.62
RETIREMENT	515	10,363	14,026	15,526	3.07	2.05
UNCLASSIFIED	370	9,065	10,091	10,353	1.08	.51

Based on Classifications in Bender, et.al., 1985

not attempt to explain overall net migration into nonmetropolitan areas, and in fact argued against treatment of nonmetropolitan areas as an undifferentiated whole. However, the results of that and other similar studies have been influential in promoting the view that the nonmetropolitan turnaround had a noneconomic impetus.

The argument that noneconomic factors powered the turnaround was also strengthened by surveys of movers, including the Annual Housing Survey, that found a larger percentage of metro-to-nonmetro migrants than of nonmetro-to-metro migrants citing noneconomic reasons for moving. The majority of migrants in both directions, however, cited job-related reasons for moving (Fuguitt, 1985).

Long and DeAre (1983) emphasized the importance of the deconcentration of manufacturing in promoting the 1970's turnaround, but they suggest that "some of the advantages of nonmetropolitan areas in attracting new industry and new residents may have been lost" in the early 1980s. In developing their argument, which disputes the noneconomic explanation, they use County Business Patterns data for 1975 and 1979 to show the growing nonmetropolitan shares of manufacturing.

Kerry Richter documented the slowdown in the growth in nonmetropolitan areas in the latter part of the 1970's and suggests that it may indicate some sort of equilibrium under which the nonmetro growth advantage early in the decade caused a move toward a balanced distribution of population (Richter, 1985). She notes theories that technological change made it possible for people and businesses to act on the preferences for a rural setting, thus providing an economic basis for realization of noneconomic factors.

Garnick (1983) refers to self-limiting forces determining the relative attractiveness and, therefore, relative growth of areas. He implies that over the course of a decade the nonmetropolitan sector first captured and then lost a comparative advantage in attracting people and firms, as the lower costs of operating and living were pushed up in nonmetro areas while such costs were limited in emptying metro areas. In a subsequent article, however, he emphasizes the importance of industrial composition and changes in fortunes of different industry groups at a national level (Garnick, 1985). This latter focus is essentially similar to the approach I have taken in this paper.

Distinguishing the Causes of the Reversal

Most reports of the reversal in the 1980s of the striking turnaround in net migration in the 1970s have acknowledged the concentration of agriculture and mining

industries in nonmetropolitan areas as a possible factor. Generally, however, such reports then have proceeded to suggest that nonmetropolitan locations have lost their recently-acquired charm, like Cinderella at midnight.

The influence of industrial composition is often the dominant factor in the fortunes of regions in the short to medium term. As the evidence presented below demonstrates, the industrial composition of nonmetropolitan areas is weighted towards goods-producing industries, while metropolitan areas hold greater concentrations of service-producing industries.

The mix of national employment among industries is affected by changes in the mix of demands for output, changes in the market shares of U.S. producers in the domestic and international marketplace, and changes in the labor requirements associated with given levels of output. All three of these factors have tended to reduce the share of U.S. employment in goods-producing industries.

In order to assess the influence of industrial composition on overall employment growth in metropolitan and nonmetropolitan areas, data from County Business Patterns were analyzed. A value for total metropolitan employment by industry was obtained, based consistently on 1977 definitions of Standard Metropolitan Statistical Areas (New England County Metropolitan Areas in the six New England states).

Such metro area data were obtained for the years 1975 through 1981 and 1984. While there are some deficiencies in County Business Patterns data, such as the exclusion of agricultural, self employed, and government workers, these data provide greater industry detail than any alternative measures for which consistent metro area totals were available.

Table 2 shows the 1984 distribution of employment among 2-digit SIC industries and major industry groups for the U.S. for metropolitan and nonmetropolitan areas. Overall, nonmetropolitan areas accounted for 19.3% of CBP employment. Not surprisingly, nonmetro areas accounted for larger shares of agricultural services, forestry and fisheries (28.5%) and of mining (56.2%). More surprisingly, the nonmetro share of manufacturing was also disproportionately large, compared with the overall distribution of CBP employment, with 24.1% of the total. Manufacturing accounted for 30.98% of total CBP employment in nonmetro areas, compared with 23.29% of employment in metro areas. Within the broad manufacturing group, the nonmetro share was especially large in textiles, apparel, lumber, furniture, and leather goods. The nonmetro share of finance, insurance, and real estate (12.6%), wholesale trade (15.7%), and services (15.1%), however, was disproportionately small.

The last column in table 2 shows the growth rate over the 1980 to 1984 period for employment in each of the industry categories. A casual glance will show that the major industries that did best, such as finance and services, are not generally those that are disproportionately concentrated in nonmetro areas.

In order to quantify the aggregate effect of the change in the mix of national employment by industry on metro and nonmetro areas, the implied metro and nonmetro change in employment by industry over the 1980 to 1984 period was calculated using actual national change in employment but holding the metro and nonmetro shares of each 2-digit SIC class constant at their 1980 values. These "simulated" values are shown in table 3. The percentage growth in employment shown for each 2 digit industry is identical for metro and nonmetro areas, by assumption, but for the broad industry groups (mining, manufacturing, etc.) and for total employment the metro and nonmetro percentages are different, reflecting the different mix of 2-digit industries within the broader industry groups. The "simulated" values for total employment change, 4.8% for metro and 1.8% for nonmetro, are quite close to the actual percentage changes for total metro and nonmetro employment, 5.0% and 1.0%, respectively, shown in columns 7 and 8. Thus, the greater growth in metro employment over the 1980-84 period is primarily attributable

to changes in the employment distribution among U.S. industries, rather than reduced attractiveness of nonmetro location.

For the actual change in employment to be roughly equal to the simulated values is an indication that nonmetro areas are in fact continuing to attract jobs. While it may be appropriate to assume constant metro and nonmetro shares of industries that serve national and international markets, the shrinkage in the relative size of nonmetro employment and population suggests that the nonmetro share of industries that serve local markets, such as retail trade, most services, and, especially, construction, should fall and that the actual differential in employment growth should be greater than the simulated differential. An examination of the actual employment growth rates for 2-digit manufacturing industries confirms that on an industry-by-industry basis, the nonmetro share grew. In 14 of the 20 industries comprising the manufacturing sector, the actual percentage growth was higher (or percentage decline smaller) for nonmetro areas than for metro areas, indicating the nonmetro share of those fourteen industries increased over the period. Considering that significant elements of the manufacturing sector actually serve local rather than national markets, so that we would have expected that ceterus paribus the nonmetro share of most manufacturing industries would fall. That further implies that there has not been any

diminution of the attraction of nonmetropolitan areas for locating manufacturing activities.

The 58 thousand mining jobs lost over the 1980-84 period in nonmetropolitan areas was an important contributor to weakness in job growth in such areas. Although CBP data do not include farm employment, separate BEA data indicate that 200 thousand nonmetro farming jobs were also lost over the period. However, the adverse aspects of the industrial structure in the nonmetropolitan parts of the country extend beyond concentration in mining and agriculture. The manufacturing industries that are concentrated in nonmetropolitan areas have fared less well than those with heavier proportionate concentration in metropolitan areas, and nonmetro areas include relative few jobs in hot fields such as business services and brokerage.

In table 4 the same methodology is applied to the 1975 to 1980 period. Over that period changes in the national mix of employment by industry implied that metro employment should have grown by 24.0% and nonmetro growth should have grown by 22.2%, but nonmetro actual growth of 23.6% was greater than the simulated growth, while actual metro growth of 23.7% was below the simulated growth. During that period, the nonmetro share grew in 10 out of 20 manufacturing industries.

Conclusions

The basic conclusion that I draw from the evidence presented here is that the interaction of changes in the national economy with the industrial structure of metropolitan and nonmetropolitan areas fully explains the reversal of the relative growth rates of the two types of areas in the 1980s. There has been no apparent dilution of whatever economic or lifestyle advantages provided an incentive for migration to nonmetropolitan areas in the 1970s. The fact that the nonmetropolitan share of most manufacturing industries increased despite the slowdown in overall nonmetropolitan growth suggests that nonmetropolitan areas are still attractive locations.

The shift in the mix of employment by industry, however, is likely to continue to favor metropolitan areas. A revival of agriculture, energy, metal mining, or manufacturing industries such as textiles, apparel, or leather goods does not seem to be imminent. Thus the ability of nonmetropolitan areas to gain greater shares of particular industries may not offset the fact that the industries that are concentrated in nonmetropolitan areas are growing more slowly than the industries that are concentrated in metropolitan areas.

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