Population and Migration Trends in the District Differ from Nation's

By Subhayu Bandyopadhyay and E. Katarina Vermann

Economists who study urban areas argue that cities lead to higher levels of productivity due to agglomeration economies. In other words, the higher the density of individuals, the higher the overall level of productivity within that area. To examine the potential for productivity growth in the Eighth District, we looked at population and population density growth trends between 2000 and 2011.

The District, whose population grew 6.5 percent since 2000 and 2.0 percent since 2007,¹ experienced significant growth in its metro areas.² To illustrate, Table 1 indicates that the population in the District's metro areas grew 9.9 percent since 2000 and 2.9 percent since 2007. During these time periods, three of the four major metro areas in the District grew at rates lower than the nation's. Specifically, the populations in Louisville, Memphis and St. Louis grew 11.0 percent, 9.7 percent and 4.3 percent, respectively, since 2000 and 3.6 percent, 2.5 percent and 1.3 percent since 2007. Little Rock grew 15.9 percent since 2000 and 5.7 percent since 2007, rates higher than the District's and the nation's cities.

The District's largest levels of growth, however, came from some of the smaller metro areas. Of these areas, the fastest growers were Fayetteville-Springdale-Rogers, Ark.-Mo. (35.6 percent since 2000 and 8.5 percent since 2007); Bowling Green, Ky. (22.0 percent since 2000 and 6.9 percent since 2007); Columbia, Mo. (20.3 percent since 2000 and 6.1 percent since 2007); and Springfield, Mo. (19.0 percent since 2000 and 4.0 percent since 2007). Only one area—Pine Bluff, Ark.—showed a population decline (–7.7 percent since 2000 and –2.9 since 2007).

TABLE 1

General District Population Trends

| | Populatio | on Growth | Migration (2007-2011) | | |
|---|---------------|---------------|-----------------------|------------------|--|
| | Since 2000 | Since 2007 | Movers | New Residents | |
| Bowling Green, Ky. | 22.0% | 6.9% | 22.6% | 41.8% | |
| Cape Girardeau-Jackson, MoIII. | 7.2 | 2.5 | 18.8 | 38.2 | |
| Columbia, Mo.* | 20.3 | 6.1 | 27.2 | 40.7 | |
| Elizabethtown, Ky. | 14.5 | 8.0 | 18.5 | 58.0 | |
| Evansville, IndKy. | 4.9 | 1.5 | 14.6 | 27.1 | |
| Fayetteville-Springdale-Rogers, ArkMo.* | 35.6 | 8.5 | 21.0 | 32.3 | |
| Fort Smith, ArkOkla.* | 9.6 | 2.6 | 16.4 | 27.2 | |
| Hot Springs, Ark. | 10.0 | 2.5 | 16.5 | 37.9 | |
| Jackson, Tenn. | 7.2 | 1.5 | 15.0 | 41.6 | |
| Jefferson City, Mo. | 7.3 | 2.7 | 16.5 | 43.6 | |
| Jonesboro, Ark. | 13.6 | 5.7 | 22.3 | 30.4 | |
| Little Rock-North Little Rock, Ark. | 15.9 | 5.7 | 18.1 | 29.0 | |
| Louisville, KyInd. | 11.0 | 3.6 | 14.0 | 26.5 | |
| Memphis, TennMissArk. | 9.7 | 2.5 | 17.0 | 19.7 | |
| Owensboro, Ky. | 4.8 | 2.2 | 13.4 | 29.4 | |
| Pine Bluff, Ark. | -7.7 | -2.9 | 17.2 | 41.7 | |
| St. Louis, MoIII. | 4.3 | 1.3 | 13.7 | 22.1 | |
| Springfield, Mo. | 19.0 | 4.0 | 20.6 | 32.8 | |
| TOTAL URBAN USA | 11.7 | 3.9 | 15.1 | 42.8 | |
| ALL DISTRICT CITIES | 9.9 | 2.9 | 16.2 | 27.6 | |
| FULL DISTRICT CITIES | 8.5 | 2.7 | 15.7 | 26.8 | |

NOTES: 1) "All District Cities" reports changes in metro areas where more than half of the population lives within the Eighth District; "Full District Cities" indicates changes in metro areas where all of the population lives within the Eighth District; 2) "Movers" are individuals who changed residences in the year preceding the period in which they were surveyed; 3) "New Residents" are individuals who changed residences in the year preceding the period in which they were surveyed; 3) "New Residents" are individuals who changed residences in the year preceding the period in which they were surveyed; 3) "New Residents" are individuals who changed residences in the year preceding the period in which they were surveyed and moved from a residence outside of their current metro area; 4) Italics indicate a major metro area in the District; and 5)* indicates that the metro area is partly contained in the Eighth District.

Migration into District Cities

To examine the migration into the District's cities, we looked at city- and countylevel data from the 2007-2011 American Community Survey. According to Table 1, the percent of District residents who had moved during the sample period was 16.2 percent, about 1 percentage point higher than the percentage of urban residents in the U.S. who had moved during that time.



TABLE 2

Intracity Migration Patterns

| | Migration to Outlying Counties | | Central Area's Density | | Outlying Area's Density | |
|---|-----------------------------------|-------------------|------------------------|---------------|----------------------------|---------------|
| | New Residents | Other Migrants | Since 2000 | Since 2007 | Since 2000 | Since 2007 |
| Bowling Green, Ky. | 5.3% | 66.0% | 24.3% | 7.6% | 3.9% | 0.3% |
| Cape Girardeau-Jackson, MoIII. | 11.5 | 66.7 | 11.4 | 4.2 | -6.2 | -3.3 |
| Columbia, Mo.* | 3.5 | 77.1 | 21.8 | 6.4 | 0.2 | 1.2 |
| Elizabethtown, Ky. | 3.5 | 34.7 | 15.6 | 8.8 | 6.8 | 2.2 |
| Evansville, IndKy. | 18.4 | 52.9 | 6.5 | 2.0 | -1.0 | -0.7 |
| Fayetteville-Springdale- Rogers, ArkMo.* | 7.8 | 63.3 | 38.7 | 9.3 | 7.8 | 1.1 |
| Fort Smith, ArkOkla.* | 38.5 | 32.5 | 11.9 | 3.2 | 5.8 | 1.5 |
| Hot Springs, Ark. | NA | 65.1 | 10.0 | 2.5 | NA | NA |
| Jackson, Tenn. | 18.6 | 68.2 | 6.7 | 1.3 | 10.2 | 3.1 |
| Jefferson City, Mo. | 53.9 | 43.1 | 6.9 | 3.3 | 7.6 | 2.1 |
| Jonesboro, Ark. | 13.4 | 67.2 | 19.1 | 7.6 | -4.3 | -1.2 |
| Little Rock-North Little Rock, Ark. | 25.4 | 60.7 | 13.2 | 5.1 | 27.9 | 8.3 |
| Louisville, KyInd. | 20.3 | 53.7 | 10.2 | 3.7 | 14.9 | 3.2 |
| Memphis, TennMissArk. | 13.4 | 64.9 | 8.7 | 2.4 | 17.0 | 2.6 |
| Owensboro, Ky. | 15.7 | 69.5 | 6.1 | 2.7 | -1.7 | -0.8 |
| Pine Bluff, Ark. | 21.4 | 64.7 | -9.4 | -3.2 | -1.5 | -2.0 |
| St. Louis, MoIII. | 12.2 | 23.2 | 3.4 | 1.3 | 10.8 | 1.6 |
| Springfield, Mo. | 15.1 | 51.9 | 20.2 | 4.6 | 14.0 | 1.6 |
| TOTAL URBAN USA | 7.9 | 50.7 | 11.2 | 3.9 | 17.3 | 3.9 |
| ALL DISTRICT CITIES | 15.9 | 48.6 | 9.7 | 3.2 | 11.3 | 2.4 |
| FULL DISTRICT CITIES | 16.4 | 47.3 | 7.9 | 2.7 | 12.1 | 2.3 |

NOTES: 1) "All District Cities" reports changes in metro areas where more than half of the population lives within the Eighth District; "Full District Cities" indicates changes in metro areas where all of the population lives within the Eighth District 2) "New Residents" are individuals who have changed residences in the year preceding the period in which they were surveyed and moved from a residence outside of their current metro area; 3) "Other Migrants" are individuals who have changed residences in the year preceding the period in which they were surveyed but remained within their original metro area of residence; 4) Italics indicate a major metro area in the District; and 5)* indicates that the metro area is partly contained in the Eighth District.

The District's metro areas with the highest levels of mobility from 2007 to 2011 were Columbia (27.2 percent), Bowling Green (22.6 percent) and Jonesboro, Ark. (22.3 percent).³ The cities with the lowest levels were Owensboro, Ky. (13.4 percent), St. Louis, Mo.-Ill. (13.7 percent) and Louisville, Ky.-Ind. (14.0 percent).

Of those moving within metro areas in the District or into those metro areas from outside, only 27.6 percent were new residents to the area, compared with 42.8 percent of migrants who were new residents to their respective cities throughout all U.S. urban areas. In fact, only two of the District's metro areas—Elizabethtown, Ky., and Jefferson City, Mo.—had higher percentages of new residents than the average among all U.S. cities.

Migration within District Cities

The low rate of new residents as a percentage of total movers in the District implies that there are high levels of intracity migration. This trend could indicate that the cities within the District were growing spatially. Table 2 examines the level of suburban sprawl: individuals moving from central cities and inner suburbs to outlying suburbs.

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ENDNOTES

- ¹ These District numbers are for all metro areas where at least half of the population resides in the District. With only metro areas that are fully contained in the District, metro area population growth increased 8.5 percent since 2000 and 2.7 percent since 2007. We chose 2007 as the midyear point for two reasons: 1) due to the availability of disaggregated data using the American Community Survey five-year sample (which has data from the 2007-2011 period); and (2) examining data from 2007 onward allows us to continue the work of a 2007 District Overview article by Pakko and Wall; this article also examined population trends in the District.
- ² We define cities as Core Based Statistical Areas (CBSAs): urban areas with at least 10,000 people and the neighboring areas that are socioeconomically linked to the urban center by commuting.
- ³ Columbia, Mo., is a university city. As such, it is more likely to have higher resident turnover due to changes in student populations.

REFERENCES

- Glaeser, Edward L.; and Gottleib, Joshua D. "The Wealth of Cities: Agglomeration Economies and Spatial Equilibrium in the United States," *Journal of Economic Literature*, December 2009, Vol. 47, No. 4, pp. 983-1,028.
- Pakko, Michael R.; and Wall, Howard J. "District Overview: Population, Sprawl and Immigration Trends in Eighth District Metro Areas Vary Widely." Federal Reserve Bank of St. Louis' *The Regional Economist*, Vol. 15, No. 3, July 2007, pp. 16-17.

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banking, housing permits, income and jobs. Much of the data are specific to the Eighth District. To see these charts, go to

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Among the new residents in the District's metro areas from 2007 to 2011, 15.9 percent moved directly to outlying counties compared with 7.9 percent of new residents in U.S. cities. Across metro areas, there is a high level of variation in the percentage of new residents moving directly to outlying areas. For example, only 3.5 percent of new residents in Columbia and Elizabethtown moved directly to the outlying counties compared with 53.9 percent of new residents in Jefferson City, Mo.

From 2007 through 2011, the District also had fewer individuals moving from the central city to the outlying areas (48.6 percent) relative to the average of all U.S. cities (50.7 percent). The movement to outlying areas also had a high degree of variation. For example, 23.2 percent of St. Louis movers left the principal city for residence in outlying counties, while 77.1 percent of residents in Columbia left the principal city for outlying counties.

Changes in population density allow us to examine whether fewer city residents are moving out into the suburbs. Within the District, the population density in cities overall, central areas and outlying areas has grown at rates slower than in the rest of the country. For example, central city population density and outlying area population density have increased 3.2 percent and 2.4 percent, respectively, since 2007. These figures show that the density of residents in central areas has actually increased more during the past five years than the density of residents in outlying areas. In fact, suburban population density has actually decreased in five of 18 cities in the District: Cape Girardeau-Jackson, Mo.-Ill.; Evansville, Ind.-Ky.; Jonesboro; Owensboro; and Pine Bluff. Only one central area-Pine Bluff-had a decrease in central area population density over this period. Ω

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