USC LUSK CENTER FOR REAL ESTATE Fall 2009

Research BRIEF

Do Local Government Policies Influence Employment Center Growth?

EVIDENCE FROM THE LOS ANGELES REGION

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mployment centers are familiar features of - major metropolitan areas—instead of a single "downtown," there are several, sometimes numerous, concentrations of substantial economic activity and, hence, employment (Giuliano et al 2007, McMillan and MacDonald 1997, Redfearn 2007). For local policymakers, it is useful to understand the forces that lead to growth in employment centers, and much theoretical work has been devoted to the subject. In the standard theory, growth of employment centers is explained on the basis of scale economies in production, also known as "agglomeration economies" (see, for example, Mills 1967 and Fujita 1989). Specifically, firms accrue a variety of benefits, both pecuniary and technological, by locating close to other firms, such as access to a large skilled labor pool, knowledge spillovers, and input sharing. In addition, employment center growth is facilitated by good access to transport facilities, including expressway networks (regional access) and airports (national and international access). At the same time, some of the benefits of agglomeration are offset by its disadvantages, such as congestion. These determinants of employment center growth proposed by theory, however, are not sufficient to explain the growth of employment centers at particular locations within a metropolitan region; for example, employment centers do not grow at all locations with good labor force and transport network access.

Thus, it can be argued that local government policies could influence employment center growth; after all, within a single metropolitan region there are multiple local governments. These local governments use a variety of development policies, including growth management, land use regulations, infrastructure investments, and so on. Often local governments use different development policies, which could explain differences in employment center growth at particular locations.

Despite the abundance of theoretical research on the growth of employment centers, little systematic empirical work testing the theories has been done to date. This Research Brief summarizes the results of new empirical research on employment centers that also explores the role of local government policies. Using 1990-2000 data from the Los Angeles metropolitan region, I empirically examine determinants of employment center growth. The Los Angeles region is ideal for this study, because it contains more than 150 cities and many employment centers make a systematic analysis possible. The findings suggest that economic factors, such as labor force access, prevail over local government policies in affecting employment center growth. Overall, employment center growth appears to be a part of the larger decentralization phenomenon-firms value access to labor force, and as the population decentralizes, so do jobs. The findings also suggest that local government policies tend to be largely reactive; that is, cities experiencing high growth enact strong growth control policies, whereas cities facing economic decline engage in active growth promotion.



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METHODOLOGY AND DATA

The study area is the Los Angeles Consolidated Metropolitan Statistical Area (CMSA), which includes the counties of Los Angeles, Orange, Riverside, San Bernardino, and Ventura. I use the 48 employment centers in the region identified by Giuliano et al (2007). I define employment centers as a set of contiguous census tracts such that (1) each census tract in the set has a minimum employment density of 10 jobs per acre and (2) the set has a total employment of at least 10,000 jobs. Employment center growth is quantitatively examined as a function of local government policies, controlling for economic factors such as agglomeration benefits, labor force access, transport network access, congestion, and industry mix.

Four proxies are used to measure the effect of local government policies: per capita annual expenditure on developmental activities, index of local growth promotion policies, index of local growth control policies, and local taxes and license fees on businesses. A pro-growth city may be expected to spend larger amounts in promoting development than a growth-averse city. Employment centers may be expected to grow in cities with strong growth promotion policies, while strong growth control policies are likely to be impediments to employment center growth. A pro-growth city might be expected to impose lower costs of doing business—such as local license fees and taxes—inside its jurisdiction.

SUMMARY OF RESULTS

The region's 48 employment centers differ from each other in several respects, including geographic area, employment density, and the ratio of employment to population. There is a consistent trend of increasing employment density with center size, suggesting that centers can grow not only by expanding physically, but also by becoming denser. Between 1990 and 2000, not all centers grew—some also lost employment. There was an almost even split in the number of centers that gained jobs (termed growing centers) and the ones that lost jobs (termed declining centers).

Figure 1 presents the locations of employment centers in the region in 2000. Note that all employment centers are located close to a major freeway. There are centers near each of the region's four major airports (marked with a star). The region's core, which includes



Figure 1 Employment Center Growth in Los Angeles Region, 1990-2000

downtown Los Angeles, declined between 1990 and 2000, and the majority of the declining centers are located in Los Angeles County, the region's central county.

The results are broadly consistent with the theoretical economic determinants of employment center growth. Larger centers tend to grow at a slower pace—even though the large centers have high agglomeration benefits, some of those benefits are offset by high congestion diseconomies. Employment density is negatively associated with employment center growth, because high density centers tend to have high congestion levels. Employment centers located farther from the central business district, that is, the suburban locations, grow faster. Labor force access and industry mix are strong determinants of employment center growth. However, distance from LAX international airport (the region's largest airport) is not significantly associated with employment center growth. This anomaly may be explained by the fact that the aerospace industry (such as Boeing) had a substantial presence close to LAX until the early 1990s, when the industry experienced substantial job losses following federal cuts on defense spending.

The analysis does not find any association between any of the four local development policy measures and employment center growth. Cities spending higher amounts on development are the ones experiencing employment losses. Local taxes and license fees rates do not play a role in employment center growth, perhaps because they are not as substantial as other local costs, such as real estate rents. Finally, the majority of all employment centers in the region were located in cities with both strong growth control policies and strong growth promotion policies. It is not clear why cities would implement such mutually counteractive policies.

DISCUSSION

This study suggests that economic factors play a significant role in promoting employment center growth, while local government policies to promote such growth are generally not very effective.

The results from this study could be interpreted in several ways. First, the emergence and growth of employment centers is a part of the larger decentralization phenomenon in general. Firms value access to the labor force (the labor force access measure is significantly associated with employment center growth) and, hence,

jobs follow people. As the population decentralizes, so do jobs. Agglomeration economies are indeed important to some, if not all, firms, which leads to growth of multiple employment centers in the region. Within this largely economic explanation, there is little scope for the local governments to influence employment center growth.

Second, local development policies are reactive instead of proactive. There is a clear indication that cities with high economic growth implement strong growth control policies, whereas cities facing employment losses implement strong growth promotion policies and tend to spend higher amounts on developmental activities. However, it may be more difficult to achieve the desired outcomes when policies have to work against the prevailing economic environment.

Finally, the proxies for local government activities used in this study may be inadequate. For example, it may take more time for policies to produce results than the period covered in this study; unfortunately, the data to conduct a longer time series test are not currently available. In addition, the developmental expenditure variable does not capture investment made by private agencies in public infrastructure, which could be substantial; again, however, reliable data to test this possibility are not currently available. Finally, the study takes policies at face value, ignoring the differences in levels of enforcement; and, again, unfortunately, there is no way to ascertain what was actually enforced and what was not during the study period.

ACKNOWLEDGEMENTS

This research was generously supported by USC Lusk Center for Real Estate, METRANS Transportation Center, Lincoln Institute of Land Policy, and USC School of Policy, Planning, and Development. I am thankful to Mr. Larry Kosmont for generously providing me with the Cost of Doing Business Surveys.

REFERENCES

Fujita, M. (1989) Urban Economic Theory: Land Use and City Size, Cambridge, UK: Cambridge University Press.

Giuliano, G and C. Redfearn, with A. Agarwal, C. Li, and D. Zhuang (2007) "Employment concentrations in Los Angeles, 1980-2000." Environment and Planning A, 39, 2935-2957.

Giuliano G. and K. Small (1999) "The determinants of growth of employment subcenters," Journal of Transport Geography, 7(3), 189-201.

Glickfeld M., W. Fulton, G. McMurran, N. Levine (1999) Growth Governance in Southern California. Claremont, CA: Claremont Graduate University Research Institute.

Glickfeld, M. and N. Levine (1992) Regional Growth... Local Reaction: The Enactment and Effects of Local Growth Control and Management Measures in California. Cambridge, MA: Lincoln Institute of Land Policy.

McMillen, D. and J. MacDonald (1997) "A nonparametric analysis of employment density in a polycentric city," Journal of Regional Science, 37(4), 591-612.

Mills E. (1967) "An aggregative model of resource allocation in a metropolitan area" The American Economic Review 57(2) 197-210.

Redfearn, C. (2007) "The topography of metropolitan employment: Identifying centers of employment in a polycentric urban area," Journal of Urban Economics, 61(3), pp 519-541.

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