

THE EFFECTS OF OFFICE SUBMARKET CONCENTRATION ON  
METROPOLITAN OFFICE MARKET DYNAMICS - A  
COMPARISON ACROSS 28 U.S. METROPOLITAN AREAS

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## Summary

It has long been theorized that the productivity of firms throughout a metropolitan area benefits from a dense concentration of office activity in the central business district (CBD). Most CBDs are populated by office-users engaged in high value-added and communication intensive functions such as head-offices and divisional headquarters, producer service providers, and certain units of government. These users are willing to locate in the CBD despite higher land prices and wages because of the benefits of agglomeration economies. These benefits have been shown to spillover to firms outside the CBD in inverse proportion to their distance from the CBD. In fact, several studies which employ hedonic equations to explain rent levels by property type, show that rent decreases with distance from the CBD, controlling for other factors which affect the relative attractiveness of location.

Less is known about the external effects, if any, of large concentrations of office-users in what are now known as "suburban downtowns" or "major suburban nodes". These suburban downtowns are often larger in terms of total square footage of office space than their respective CBDs. The literature suggests that some, but not all, of the highly value-added office-using functions found in the CBD are replicated in the suburbs. It is an open question, however, as to whether these lower density, more heterogeneous clusters of office users in the suburbs benefit from the same agglomeration economies and provide the same growth spillovers to the metropolitan area.

This research develops a methodology for measuring metropolitan CBD and major suburban node spatial organization resulting in the estimation of two concentration variables (CBD and suburban) for each of 28 U.S. metropolitan areas. Office market data was provided by REIS Reports, Inc. Concentration is measured in terms of percent share of total metropolitan office space. These metropolitan areas are then grouped by their degree of CBD and major suburban node concentration. Difference-of-means tests are conducted between the groups for measures of average annual changes in office rents, average annual office rent levels and average annual office vacancy levels.

Although these tests did not turn up significant findings due to large variances within the data, simple correlations do suggest that metropolitan areas with highly concentrated CBD office space may be characterized by lower vacancy rates than metropolitan areas characterized by high suburban concentration. Although further study is called for, the research suggests that measures of CBD and suburban office market concentration may be helpful to institutional investors in their efforts to predict metropolitan-level movements of rents and vacancies.