

Urban Sprawl in Portuguese Medium Cities

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Urban Sprawl phenomena have recently become one of the most contested issues both in urban planning and transport planning. It is assumed by a great part of the literature that sprawl is responsible by a series of negative impacts, namely excessive automobile use, excessive energy consumption, equity issues, among others.

In this study the levels of urban sprawl between 1991 and 2001 were modeled using a sample of 65 Portuguese medium cities (excluding the metropolitan areas of Lisbon and Oporto). Since urban sprawl manifests itself in different dimensions, five measurements of sprawl were considered: density, growth in urbanized area, fragmentation, dispersion and irregularity. The variations in these indexes during the 1990 decade were regressed, using stepwise OLS regression models, against a comprehensive set of variables. These variables described several aspects that are considered to influence sprawl, ranging from geographical and climatic aspects, urban dimension, administrative importance, property structure, economic growth and dynamics, demographic and socioeconomic structure, municipal policies and accessibility. The results point to two main conclusions: First although previous urban evolution, economic growth, property structure and socioeconomic characteristics influence sprawl, the municipality technical structure and adopted policies also have a part in explaining the evolution of this phenomena, thus leaving room for policy action either in reducing or reversing the sprawl levels. Secondly, there is a need to further detail some of the variables used in order to gain a more profound insight in some aspects of public policies that contributed to sprawl, thus leaving room for subsequent research.

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