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Theme 1

PREFERENCES FOR URBAN AND RURAL SPATIAL ENVIRONMENTS – A HOUSING MARKET PERSPECTIVE

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Main theoretical framework

Households and individuals decide the local of residence based on a complex set of criteria, direct or indirectly related to quality of life (familiar reasons, employment opportunities, costs of living, urban amenities supply, and intrinsic housing characteristics, among others). The choice of location residence in a more rural or urban context, therefore, depends on the importance that each one gives to the advantages and disadvantages of living in those territorial environments, which differ from person to person. Economic theory on housing choice is based on a rational framework, where residents minimize commuting costs to their daily affairs (work, leisure, etc.). Thus, the most attractive places, and consequently, with a higher market value, are those with good accessibilities, compared to those located in peripheral locations or and sparsely populated areas.

However, the reduction of physical and social barriers has contributed to distances becoming less relevant to locational decisions; other dimensions have gained importance, such as: neighborhood environmental or other intangible attributes of the place. As a consequence, the notion of space evolved: from a concept of absolute space (defined by traditional notions of physical or geographical distances) to a relational space (where space is socially produce by people, and thus is dynamic, fluid, pleated, twisted as a chain and unstable Murdoch, 2006 - defined by multiple geometries); and from the reductionist to a non-reductionist view of

space (Lefebvre, 1974 Marques, 2012; Harvey, 2006), where boundaries cannot be precisely defined. Territorial

elements, such as, roads, information and communications technologies, social networks, cultural barriers, administrative divisions have a strong impact on the how way the spatial segmentation and spatial interaction occur, contributing to extend, shrink or even annihilate distances. The strong anisotropy of the space results in a complex territorial pattern not easily understandable by simple geometric measures.

Research problem and main aims

The main objective of this article is to analyse the role of space in the context of housing market, more specifically, how important is the housing location attributes in the moment of buying or renting a house, comparing the two territorial contexts: rural vs urban. The results will show: i) the main differences, in term of housing preferences, between areas more urbanized and those located in more remote areas; ii) the spatial segmentation of housing market; and finally, iii) the spatial interactions across urban, suburban and rural zones.

Methodology and techniques

There are two different methodological approaches to assess preferences and measure the utility of a set of attributes of complex and heterogeneous good: i) revealed preferences and ii) stated preferences. The first, are based on real markets, where consumers reveal their willingness to pay a specific commodities price; ii) the latter, use questionnaires to determine their willingness to pay or accept for additional units of the commodity. In this work, a combination of these two approaches has been used, where hedonic pricing models were applied in the context of housing market. Based on the seminal work of Lancaster (1966) and Rosen (1974), this kind of models allow to decomposes the price of an item, in this case a house, into separate components that determine its price. In the specific application of housing, dwelling unit values are regressed on a bundle of characteristics of the unit that determine that rent or value. The hedonic regression assumes that the determinants of a unit's value are known: $P = (F, L, T)$; where, P denotes the value of the house (price, or price per unit area), F represents physical and structural characteristics of the dwelling; L are housing attributes related with location, such us, environmental and neighborhood characteristics; and finally, T is the time (date, month) when value is observed. Dwelling unit values (or proxies such as price or rents) are regressed on a bundle of characteristics of units that are most

relevant in the explanation of the house price value; facilitating an understanding of household preferences, residential location, and therefore urban structure, both spatial segmentation and spatial interactions. However, there are some problems which must be solved when these methodologies are applied (estimation of a hedonic function). One challenge is related to the variability of shadow prices and the housing characteristics across submarkets and across time. Correspondingly, there is substantial literature on the definition of submarkets, arising from the question of how to analyse similarity (see for instance, Marques et al, 2012). The other challenge is related to how to measure spatial interactions among spatial units. The traditional approach is to consider geographic distances or similarities to capture spatial structure of the housing market, however, there is no reasonable explanation for the fact that spatial interactions should need to be limited to geographic or bi-dimensional Euclidean distance (see for instance Batthacharjee, et al 2012; Marques, 2012).

Main findings

The results were obtained applying the above techniques in the context of the municipality of Aveiro and Ílhavo. The main findings are:

    i)   Regarding the housing preferences

Physical housing characteristics are more valuable by households (higher preferences) comparing location housing attributes. i.e., although location is important, the intrinsic attributes of the housing are determinant for price formation. More specifically, the ranking of housing preferences is the following: 1) dimension of housing (total area, kitchen area and number of bedrooms); 2) characteristics of housing (conservation, existence of garage); and 3) location (distance to the traditional central business district) - accessibility to the centre influences the price in a positive way as well. It means that individuals first decide the house and then the place, even if it is in a suburban or a rural zone.

    ii)   Regarding the spatial segmentation

There is a substantial spatial heterogeneity across submarkets (in both datasets), in terms of physical and location characteristics. The substantial contrast between the city centre and the surrounding areas (suburban and rural zones) shows that the traditional core of the city has distinctive structure of housing preferences.

    iii) Regarding the spatial interactions across the territory

The classical spatial contiguity explains some spatial interaction, but socio-cultural and economic aspects are also important dimensions to explain spillover effects. Its means that there is a close interdependence between rural, suburban and urban areas, i.e, people who search a house in a more urban area can find an alternative in the other zones.

In short, this complex territorial pattern of spatial relations shows that urban and rural areas cannot be viewed as two opposite or competitive territories, both have important complementarities. These insights can be easily extended to other spatial context, in terms of scale and specificities. Thus, one can say that the rural and urban spaces have characteristics that are well valued by people, and planning policies should be focused in reinforcing the idiosyncrasies of each space [defining a spatial structure of urban agglomeration based on central places (theory)!?)].

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