Data Article

Housing rental prices: Data from a central urban area of Naples (Italy)

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ABSTRACT

The database presented was collected to analyze the housing rental prices for a central urban area of Naples (Italy) during 2016. The data sample relates to 64 housing units located in "Santa Lucia" and "Riviera di Chiaia" neighborhoods. It provides significant information on the urban structure of these neighborhoods. The variables are indicators elaborated from official data sources: real estate rental price, commercial area, maintenance status, number of floor level of housing unit, geographical position. The geographical position is expressed assigning a prefixed sequence of characters to each housing unit, so as to classify every housing unit as falling to a defined sub-area with homogeneous values. The urban area considered is subdivided in five sub-areas. The five subzones are homogeneous in terms of services and infrastructure qualification.

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Specifications Table

Subject area	*Economics*
More specific subject area	*Real estate*
Type of data	*Table and graph*
How data was acquired	*Survey*
Data format	*Raw*
Experimental factors	*Sample pretreatment as follows: sources with incomplete data were rejected. The variables surveyed were examined using ordinal or interval scales.*
Experimental features	*First, descriptive statistics were provided, and a correlation matrix was prepared. Then a Multiple Regression Analysis and Genetic Algorithms were used and compared, with the aim to determine the marginal prices of real estate characteristics in order to the formation of real estate rental prices.*
Data source location	*The data were collected from 15 real estate agencies located in the city of Naples.*
Data accessibility	*The data are attached to this article.*

Value of the data

- The data provides indicators of real estate rental prices (based on official sources) for existing housing units, in a central area in one of the most important Italian cities (Naples). To our knowledge, There are no published databases for the real estate market in Naples, due to the "opacity" – i.e. lack of transparency – of the real estate market (typical condition in Italy), and the scarcity of real estate data freely available.
- The data contains an original indicator – geographical position – constructed (again based on official data sources) to describe the real estate values distribution in the two neighborhoods considered.
- The data presented here can be processed by means of a variety of statistical methods, from multivariate regression to cluster analysis, and hedonic price models.
- To understand the diversity of local real estate values and the relationship between real estate values and real estate characteristic.

1. Data

Q5   In the field of real estate appraisals often there is low transparency on market information together to stationary conditions [1,2], these aspects force the analysts to work with single and small dataset for the implementation of hedonic pricing models.

Hedonic price models assume that the values of real estate properties are influenced by their characteristics, with predicted values strongly influenced by dimension and quality of available real estate data. In particular, the minimum dimension of real estate sample necessary to implement a statistical inference model is, as known, correlated to the number of independent variables explaining the real estate characteristics [3].

Therefore, real estate data are essential for the implementation of statistical models used to determine the econometric function of the real estate prices. Hedonic models are widespread in urban studies, as Multiple Regression Analysis or more complex statistical techniques as Genetic Algorithms, Linear Programming, Semi-Parametric or Non Parametric Regressions, Artificial Neural Networks, all these last certainly less commons [3–20].