

## Real estate appraisal: Hedonic approach – the case of flats in Ponta Delgada city

### Summary

In Portugal, appraisal studies have traditionally been carried out by employees of the tax services and by those who make real estate appraisal their professional activity. Unfortunately, the appraisal activity still doesn't have many good manuals, as well as a database that allows discussing the property appraisal as a matter of a scientific nature. Regulations on real estate appraisal practices appear, in Portugal, with the Law No. 153/2015, September 14<sup>th</sup>, which regulates the access and exercise of the activity of real estate appraisers who provide services to entities of national finance system. There are also regulations regarding the exercise of expert and arbitrator in procedures for the declaration of public utility and for the administrative possession regarding expropriation processes (Decree-Law No. 94/2009, April 27<sup>th</sup>, which makes the second amendment to Decree-Law No. 125/2002, May 10<sup>th</sup>). The Decree-Law 287/2003, november 12<sup>th</sup>, with successive amendments, approves, among other provisions, the Municipal Property Tax Code, a diploma that promotes a set of regulatory provisions that allow the determination of property valuation, namely about the attribution of its taxable value.

Despite the legislative production over the last few years, the lack of a credible system of information on the transaction values of real estate assets, in general, is often referred to as an impediment to the development of the activity. One of the reasons given to justify this reality seems to reside in the generalized tendency to declare transaction values lower than the real ones, often motivated by reasons related to taxation. This fact often leads the appraisers to take as a reference the value requested by the seller (asking price), and not the true value of the transaction, which leads to obtaining models often pointed out as incoherent and inaccurate. The hedonic methodology is presented as a possible solution to improve the accuracy of the estimated value of real estate assets, since it allows the construction of models based on explanatory or independent variables (chosen from the characteristics/attributes of real estate products). These models make it possible to explain and predict the behaviour of the market, which has unique characteristics/attributes because of the heterogeneity of each property.

The interest in empirical investigation of hedonic models, on one hand, is the possibility of determining how the value of a real estate asset varies with its set of characteristics/attributes and, on the other hand, the possibility of estimating the characteristics/attributes that most contribute to the appreciation of real estate assets, as well as the way in which they are related. The main objective of this investigation focuses on the development of a methodology and theoretical foundation, from which the real estate appraisals can base the exercise of their activity when appraising flats/apartments in Ponta Delgada city.

### Keywords

Real-estate market, real-estate appraisal, hedonics models, flats/apartment, attributes, market value/m<sup>2</sup>.



(1)

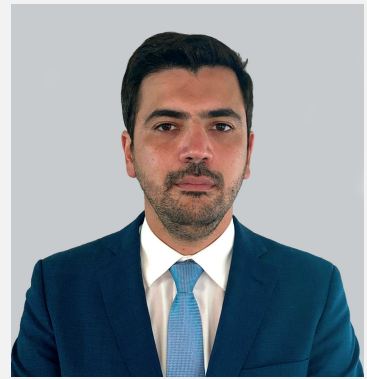


(2)



(3)

*Real estate properties have unique characteristics/attributes, which translates into a heterogeneity of each property. This heterogeneity is the main reason for the difference between transaction prices. The hedonic methodology is presented as a possible solution to improve the precision of the value of real estate properties, since it allows the construction of models based on explanatory variables (chosen over the characteristics or attributes of real estate properties).*



#### PhD student

João Paulo Melo Dâmaso Moniz

#### PhD program

Civil Engineering (IST, University of Lisbon)

#### Supervisor

Carlos Oliveira Cruz (CERIS, IST, University of Lisbon)

#### Co-supervisor

Vitor Faria e Sousa (CERIS, IST, University of Lisbon)

#### Period

2020-2024

#### Funding

-