

Improving financing conditions for land readjustment projects: a real estate appraisal model

José Antunes Ferreira¹, Beatriz Condessa², Ana Morais de Sá³, Joana Almeida⁴

¹*Universidade de Lisboa, Instituto Superior Técnico, CERIS-CESUR (Centro de Sistemas Urbanos e Regionais), antunes.ferreira@tecnico.ulisboa.pt*

²*Universidade de Lisboa, Instituto Superior Técnico, CERIS-CESUR (Centro de Sistemas Urbanos e Regionais), beatriz.condessa@tecnico.ulisboa.pt*

³*Universidade de Lisboa, Instituto Superior Técnico, CERIS-CESUR (Centro de Sistemas Urbanos e Regionais), ana.morais.sa@tecnico.ulisboa.pt*

⁴*Universidade de Lisboa, Instituto Superior Técnico, CERIS-CESUR (Centro de Sistemas Urbanos e Regionais), joana.c.almeida@tecnico.ulisboa.pt*

Keywords: Land Readjustment; Real Estate; Appraisal Model.

In PERCOM research project results it was identified the main reasons that contribute to a low level of execution of urban development projects involving several landowners making them unattractive for bank financing. In order to conceptualize a model for overcoming this problem (financing) is mandatory to identify the reasons why banks do not finance urban development involving several landowners and define new procedures to mitigate these reasons.

With the aforementioned objective in mind, a review of the state of the art of bank financing for urban development projects was carried out. The results of the bibliographic research allowed for the conclusion that this area has been the object of very little study, thus underlining the importance and topicality of this research.

As Korthals Altes (2010: 929) noted, "Past research has revealed that [urban projects developed by] governments are often tempted to underestimate the costs (...) The profits made by local authorities from land development are growing, while the costs, revenues, and results are, on average, underestimated by local authorities. This may have consequences for the explanation of budget overruns and the solutions that may be effective in countering this problem". However, we should also note that

financing is achieved mainly through cost recovery, value capturing and public subsidy rather than through bank financing (Mittal, 2014; Shishir 2013a; 2013b; Turk, 2008)

Most countries with urban project implementation models decide on the partial or total self-financing of the urban project, namely through cost recovery and value capturing (funding mechanisms that allow total or partial recovery of the amounts invested in the urban project at the end of a specific period of time).

Indeed, bank financing for land development projects involving several landowners is something that is very rarely mentioned in the literature consulted. References to bank financing are made in the French case, where Valadier (2001) claims the loan application process is complex and unlikely to be successful.

With a view to identifying the openness of the banking sector to financing urban development projects, the applicable financing model, the eligibility conditions for projects applying for financing and the respective contractual conditions, six semi-structured interviews were carry out to the leading financial institutions operating in Portugal. The aim was to identify the financing conditions for the different types of land development projects (e.g., urban expansion, urban regeneration and tourist developments) in the past, present and future.

According the results of this survey, one of the constraints identified to the attribution of credit for these land readjustment operations is connected to the determination of the initial and final property values (Condessa et al., 2015).

To answer this constraint, it was developed a real estate appraisal model based on real and actual data, that is presented in this paper.

To understand the state of the art in the valuation of real estate on a national level, aside from the so called “traditional methods”, a study was made on expropriation and tax appraisal methods. The former are important because appraisal for expropriation purposes is the most common method to settle property disputes in planning, whenever a landowner refuses to participate in the plan’s execution. The latter were chosen as they are usually based on mass valuation systems, which are not likely to be discretionary.

For the purpose of building a compared analysis, four countries as well as Portugal were selected for the study: Germany, Denmark, Spain and Italy.

The methodology consisted of the research, study and comparison of the legal framework on expropriation and tax appraisal for each country, complemented by some research on the actual practice. Both their characteristics and related procedures were registered and they are presented in this paper.

All real estate transaction values in Portugal must be declared to the tax authorities so that they can calculate the property transfer tax (IMT). Therefore, it is assumed that this information exists and can be used for the purpose of constructing a national transaction database. However, the tax authorities, to date, didn't provide the data.

Property transaction values are broken down into two key components: land value and construction value. The land values will be estimated through the **Fine Zoning** of the whole country. It would be a similar process to that which already exists for the Portuguese municipal property tax (IMI), in which the country is parcelled in small zones of homogeneous land value. Construction value does not fluctuate as much as land value, because it is not as sensitive to the influence of location. This means it can be determined over a wider area. For this purpose the model uses the level NUTS III of the European units for statistical purposes. This is the basis for **Coarse Zoning**. Due to their large size, each NUTS III will have a great deal of attached property value information.

A Standard Building was defined for each coarse zone. The model will then need to be calibrated for all buildings that differ from the standard, determining the construction value for any kind of built property within the same NUTS III.

Despite the model validation limitations (based on non-actual transaction values and tested in a limited area) the process carried out did not result in the rejection of the model.

In real life a model of this kind could increase transparency, reduce discretion and regulate the real estate market.

Bibliography

CONDESSA, B., MORAIS DE SÁ, A., CAMBRA, P. and ANTUNES FERREIRA, J. (2015), 'Land readjustment in Portugal: the case of Sines', *Town Planning Review*, **86**, 381-410.

- KORTHALS ALTES, W. K. (2010), 'The financial estimates and results of servicing land in the Netherlands', *Environment and Planning B: Planning and Design*, **37**, 929–941.
- MITTAL, J. (2014), 'Self-financing land and urban development via land readjustment and value capture', *Habitat International*, **44**, 314-323.
- SHISHIR, M. (2013a) Self-financing urbanization: Insights from the use of Town Planning Schemes in Ahmadabad, India, *Cities*, **31**, 308-316.
- SHISHIR, M. (2013b), 'Use of land pooling and reconstitution for urban development: Experiences from Gujarat, India', *Habitat International*, **38**, 199-206.
- TURK, S. S. (2008), 'An examination for efficient applicability of the land readjustment method at the international context', *Journal of Planning Literature*, **22**, 229-241.
- VALADIER, B. (2001). *L'Association Foncière Urbaine: la coopération au service de la qualité de l'urbanisme*, MSc Thesis in Topography, Ecole Supérieure des Géomètres et Topographes, Paris, http://afuadesgrandsmeix.pagesperso-orange.fr/Files/afu_memoire_fin_d_etude.pdf (Accessed 8 October 2013).