

EQUITY, CADASTRE AND REAL ESTATE MARKETS: NEW PERSPECTIVES OF ANALYSIS AND RESEARCH

This issue of *Territorio Italia* focuses on equity in relation to taxation and as a requirement to be extended to all the real estate appraisals. In fact the controversial tax named IMU is currently attracting attention, while eluding the various political, social and economic implications, which should deserve a much higher level of detail. Certainly the increase of cadastral values - in an undifferentiated way and regardless of the real values of the properties - has accentuated the system inequity which, in turn, has become a deterrent, not inserted in a proper context. But we have to remember that in the growth period Italy has carried out a policy of rent freeze together with a policy of incentives and expansion of the real estate to the medium and medium-low classes, with a consequent contraction of the rental market and a gradual development of the sale one. In Italy the capital model, supported by the progressive increase of market prices, would have prevailed on the income model, with distorting effects on the level of real estate return. The rate of return on capital - as ratio between investment and net income - has historically been lower than in other countries, but if we consider it in terms of capital gain, the rate of return has historically been very high. In the real estate valuation field, this anomaly resulted for many years in a lack of attention to the income and financial approach compared to the European context.

Fiscal policy involves, therefore, a very significant percentage of small and very small owners, who share the same interests of big owners and at a political level may form with them a sort of building block, fostered by the real estate taxation inequity.

Taxation is in fact treated in a totally restrictive way, not even considering the negative effects that the lack of real estate taxation can have on local finance and, accordingly, on the possibilities of an economic recovery in the construction sector which has gone into a real collapse, with all the economic and social consequences.

It is a matter of identifying the opposing interests; starting from equity, it is necessary to reach an agreement between the owners themselves, also reconsidering the positive effects that a fiscal policy could produce if aimed at supporting land policies and a sustainable urban regeneration, avoiding a continuous land waste.

While Italy stands out from the other European countries because of the high percentage of owners, they cannot be considered as an indistinct *unicum*, but have to be discriminated by the value of their properties.

It follows that the equity issue cannot be tackled apart from a radical revision of cadastral values, currently totally unrelated to the real market values, that they set aside, without submitting to any apparent logic or rule to some extent expected.

Gianni Guerrieri faces the controversial problem of a cadastre value and income based; moving from the question of "horizontal" and "vertical" inequity of real estate taxation, he recalls the measures of different legislatures, from the Presidential Decree 138/1988 until the Bill of 15 June 2012 "Delegation to the Government providing rules for a fairer tax system", whose Article 2 sets out the main principles.

The author faces the reasons and the possible consequences of the transition from an income based cadastre to an incomes and values cadastre; he takes inspiration from the concepts of normal value and balance, opens to theoretical and methodological issues which deserve to be punctually debated and definitively clarified.

The author takes for granted, however, the current position according to which a medium-long time would be necessary for the revision of cadastral values, time incompatible with policy and the needs of the country.

Curto and Fregonara present a project submitted by a group of academic researchers to MIUR – the Italian Ministry of University and Research.

The project sees the revision of the estimates as a complex process time structured into phases, where the first one foreshadows the possibility to carry out in a “short” time a first revision, to eliminate the distortions arising from the location and the use of the cadastral room as size unit.

The methodology is based on the past experience that had already led in 2002-2003 to validate a methodology for Agenzia del Territorio according to specific methodological guidelines, considering the quantitative importance of the review process and the stochastic components of the real estate markets.

They open to geospatial statistic and data mining and consider the potential of new technological infrastructures to organize and manage Big Data and Open Data in the logic of the LIS (Land Information System) to make possible a more modern real estate taxation, able to intercept the dynamism of values and to foreshadow fairer and more differentiated taxation forms, able to measure the increase of the values caused by the policies and public investments as pecuniary externalities.

Ciuna and Simonotti increase the theme of equity, and lead it back to all real estate valuations, which - to be equitable - must be submitted to specific prerogatives, *i.e.* evaluation standards, which are intended to minimize subjectivity, differently and in reason of the availability of information and of the degree of dynamism of the involved real estate markets .

They have the merit to consider, in addition to the iniquity of the cadastral system, the problem, far from indifferent in terms of quantity, of the real estate appraisals, including judicial ones, which are often made outside of any appraisal rule.

Starting from the valuation standards principles and assumptions , Ciuna and Simonotti face the real estate *expertise* issue - in its components, objective or able to be objectified in procedures - distinguishing between the market and the cadastral *expertise*.

The first one is therefore treated using special models and procedures, among which the paired data analysis and the market comparison approach may be mentioned.

The second one, the cadastral *expertise*, even assuming the same general formula of value is based on the creation of statistically significant samples (two different ones), on the use of the multiplicative model, exponential in its parameters, log-log and on its validation through the ratio study, following a methodology coherent with what outlined in the previous contribution.

If the analyses assumed by the estimates revision regard the mechanisms of price formation as central for their prediction, the article of Ghirardo, Ciula and Festa concerns the dynamics of the Italian market, considered at a regional level, paying attention to the short and long term, in order to forecast their development, considering the impacts of the real estate trends on real economy.

Starting from the international literature, the authors use the regressive technique of panel data for the short period, and then the principal components one to analyze the link between the change rate of house prices and three specific “factors”: a national factor belonging to all series, a local specific one for various territorial areas and one incident to the persistence of single series, representative of the so-called “memory of the past”. In analogy with the incomes growth and their convergence theory, the authors use the main components, stationarity test and integration in the long term to verify the possibilities of convergence between the regional markets time series, emphasizing the limits and the necessity of exploring the techniques currently in use. This article undoubtedly encourages new research advancements. In fact in Italy market analyses are generally concentrated on prediction of prices, because the revision of cadastral values is anyway a crucial problem for our country.

In the last decade, however, a process of “globalization of real estate markets” took place, the dynamics of which are conditioned by factors that go widely beyond the national level and increasingly refer to the

international economic and financial supra-system, as well proved by the origin of the world economic crisis, produced by the perverse integration between real estate and international finance.

Stratigea and Papadopoulou face, within the decision making field, the theme of land use planning, focusing on the issue of the involvement of the public and the stakeholders, going beyond the technocratic approaches to the participated ones.

The paper is set, then, in the current of local government, proposing an approach and methodologies alternative to those considered by the journal, more mindful to knowledge generated by the use of geographic information systems to support policies.

The paper considers the case study of Herakleion-Crete to test a methodological approach aimed at supporting planners and decision makers in evaluating alternative scenarios, including multiple perspectives and, not least, considering the possible “alliances” and / or “conflicts” between the different groups of interest, with the aim of improving strategic options.

The methodological approach is fit to be further tested on issues pertinent the journal *Territorio Italia*, including also those related to real estate taxation, since it uses, in addition to an impact matrix, a equity matrix, both being considered as inputs for the valuation carried out by applying to the discrete multicriteria model NAIAD. Osello *et al.*, while not directly facing it, open to the issue of interoperability and processing of information related to energy consumptions, considered both at building and neighborhood/district level.

The authors, in fact, based on the experiences of two projects focus on environmental sustainability, considering the potential of a differentiated use of ICT technologies, aimed at the acquisition of information through sensors, at the involvement of users and at facility management through specific applications.

The paper presents the results achieved through two projects, based on the development of real case studies, which have been monitored and tested through the use of BIM (Building Information Modelling) methodology and aimed at energy saving.

The first project - SEEMPUBS (Smart Energy Efficient Middleware for Public Spaces) considers on the scale of the building, with the aim of reducing energy consumption and carbon dioxide production in existing buildings (including the historical ones).

The second one - the project DIMMER (District Information Modelling and Management for Energy Reduction) - represents the evolution of the first one as it extends the topic of energy efficiency at the scale of the neighborhood/district.

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