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direzione / editorial office:
DICEA - Dipartimento di Ingegneria Civile, Edile e Ambientale
Università degli Studi di Roma "La Sapienza"
Via Eudossiana, 18 – Roma 00184
telefono: 06 44 58 53 85
electronic mail: saverio.miccoli@uniroma l.it

direttore / editor-in-chief: Saverio Miccoli

comitato editoriale / editorial board: Fabrizio Finucci Rocco Murro

PROPERTY MARKETS WITH UNREVEALED PRICES: ADAPTIVE VALUATION PROCEDURES

Rocco Murro

foreword by Saverio Miccoli

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info@aracneeditrice.it info@gioacchinoonoratieditore.it http://www.aracneeditrice.it

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Foreword

Saverio Miccoli*

The current property valuation practice takes into account methods based on historical data, known as Revealed Preference Techniques (RPTs), which make it possible to derive the preferences expressed by the actions of market subjects through authentic transactions. When operating in rapidly changing urban contexts, in highly dynamic economic situations, in conditions where the market is not explicit and cannot provide reliable historical data and enable admissible procedures to be used, the reference to substitute methods that allow to come to reliable property valuations is generally allowed.

In order to operate where it is not possible to rely on historical market data, the essay of Rocco Murro proposes to refer to the Stated Preference Techniques (SPTs), valuation approaches of an asset that are based on hypothetical markets through procedures allowing to detect the preferences stated by the individual subjects of the two groups that operate in the market: buyers and sellers. As opposed to revealed preference methods, SPTs provide a response from operators who are certainly interested in a given transaction; moreover, the estimates based on stated data have a dynamic nature, in that they keep account of the way human actions and choices evolve.

The deepen analysis conducted by the Rocco Murro on the main issues of valuation practices and the limitations of current solutions, highlighted how, in contexts where market prices are

^{*} Full Professor – Sapienza University of Rome.

unrevealed and there are no reliable historical data for real estate appraisal, estimating values regarding projects involving several articulate sales spanning over several years by referring to the current situation makes it impossible to come up with forecasts and to account for highly-dynamic markets. In these conditions it is preferable to use substitute methods that produce reliable opinions of value.

The essay offers an original contribution to improve the property appraisal based on subjects operating in hypothetical markets; as the shortcomings of these procedures could arise from the fact that the survey usually considers only one of the transaction subjects, either the buyer or the seller, the adaptive valuation procedures proposed by the author is based on the preferences stated by two samples, in order to initially identify the hypothetical demand and supply curves and subsequently intersect them to obtain the most likely equilibrium price and the quantity in the market.

Considering the results obtained by the experimentation of the proposed procedures, it can be assumed that the procedures can be employed in different fields. Although the main objective is to estimate the most likely transaction value of an asset, if it were required the estimation of the market price for newly produced real properties, it could be possible to obtain further information, such as the incidence of the characteristics in the market price formation for both the consumers and the producers, the market share of possible alternative assets and the best marketability alternative.

The proposed procedures, as substitute and integrative methods to standard appraisal techniques, are a fundamental tool in urban requalification processes when operating in markets with unrevealed prices. It makes it possible to conceive different scenarios and forecast the values connected with the different project hypotheses that in turn make it possible to estimate the possible revenues through reliable hypothetical market values.

By detecting consumer and producer preferences, it is possible to acquire instrumental information for the design, especially in the devising and proposal phases, which becomes a funda-

mental tool to stimulate and elicit the detection of alternative and creative solutions. It makes it possible to size real estate interventions by detecting both the amount of real properties to put into the market and the characteristics of the assets in question as a function of the appreciation of the different attributes in the market. By deriving the implicit prices, the procedure can become a fundamental reference for the adjustment procedures in standard appraisal methods.

The adaptive either integrative valuation procedures experimented by Rocco Murro and their subsequent application represent an interesting starting point for further research developments for the purposes of improving those aspects that to date have limited the application of SPTs in the estimation of the market value of properties in special terms.

Property investments and urban regeneration

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1. Features and dynamics of contemporary city

The historical city — compact and clearly distinguishable from the rural areas that stretch around it — preserved its distinct features up until the early XIX century. Until then, diffused or direct sprawl along the major infrastructural lines among different cities was quite an exceptional event. Through higher living density, historical cities used less land for an increasing number of inhabitants, thus becoming saturated, with poor collective services and few public open spaces.

As of the second half of the XX century, urban growth in Italy caused the land occupied by cities to increase, in some instances by over 300%. Public initiatives peripheries are an emblematic example of new urban sprawls. Designed as complete urban fragments theoretically capable of performing every urban function, as they stood they often were non-quarters, separated from the traditional city in terms of distance from the centre and morphological discontinuity. Most times, they stood out as rows of orthogonal settlements that did not appear as organically as cities; indeed, they lacked services to residents and urban green areas and often became segregated and autistic islands, where degradation went together with expansive land use the public transportation network could not cope with.

Another aspect of the recent urban sprawl was the rise of settlements outside the traditional city, which catered to new needs (industrial/manufacturing, tourist, residential, supermarkets and malls, etc.) or new paradigms for existing uses (residential solutions, market–roads, etc.). The industrial and commercial areas were, among the new settlement types, some of the first forms of extra-urban expansion forms to take distinct and clear traits opposed to the

multi-functional complexity of the traditional city. Often, they lacked any relation with the surrounding areas, except for the functional connection with mobility infrastructure, and over time they took a hybrid nature, suspended between specialised stores and supermarkets, which in turn mixed with leisure facilities and new residential areas.

Other aspects of the ongoing urbanisation trend are the widespread urbanisation of rural areas and the seasonal centres developing along the coast. These two phenomena are bound by the common pursuit of living models providing more comfort and isolation; these recent forms of urban growth have a tendency to appear at the borders of cities or along major roads.

Second house proliferation was an important element of this trend; it took place both in the countryside (where it caused progressive transformation and reduced its productive importance to a residual condition), as well as along the coast (where it fit into the intense and diffused building boom starting in the Sixties, both in the planned and unauthorised way, in the narrow strip of land between infrastructural lines and the coast).

Finally, in the central portion of metropolitan areas the market-road paradigm grew, consisting of the progressive rise of small manufacturing businesses, logistic or commercial facilities, both wholesale and retail, developing along state or provincial roads. Lacking any alternative road access, on the one side such settlement types posed specific efficiency and road safety issues, but on the other they suggest a possible alternative model to the industrial and commercial pen model, since they leverage the local rooting of existing urban areas and may stand as an antidote to land use for the same purposes in the open country.

The major new settlement trends taking place on the urban scale in a complex local network are:

- 1. linear attractors (river parks, market–road) as urbanisation generators;
- 2. hybrid machines (office and shopping centres) whose presence changes the distribution and mode of use of mobility and centres;

- 3. islands (production and residential centres) introducing destabilising elements in areas that have not transformed yet;
- 4. repetition areas (urbanisation of areas meant for mixed use);
- 5. plugs (interstitial densification initiatives);
- 6. metamorphic areas (transformation of brownfields).

At metropolitan scale, the urbanising processes may be traced back to recurrent models:

- 1. capital city, the place for privileged contacts;
- 2. multi-centre urban systems, creating relations among interconnected centres;
- 3. post-industrial reconversion cities;
- 4. southern metropolis;
- 5. non-axial linear alignments along the coast.

Two main trends may be detected:

- 1. urban polarisation (attraction produced by minor centres near major urban areas);
- 2. urban dispersion (settlement dilation, simplification of urban functions, separation between production-related activities and consume-related activities) caused by the decentralisation of metropolitan areas.

Such depopulation and settlement concentration phenomena affected the dynamics and balance of the real estate market quite substantially. Residential preferences produces local divides based on real estate value in constantly growing and steadily shrinking areas. In polarising areas real estate value tends to grow, to the detriment of the areas that are being progressively abandoned: higher demand calls for higher production of goods and services. In the dispersing areas the trends consist of a sort of real estate value redistribution on the hinterland and diffused growth.

The real estate market is deeply suffering because of the changes taking place in the settlement processes. As real estate value exists as a function of demand, it tends to grow in high-development prospect areas and tends to decrease in areas affected by depopulation and demographic emptying. As such, it is a strategic priority to prevent the depopulation of city centres from happening by means of a management paradigm aimed at development and value generation.

There are cities that mainly perform one function, and there are even more small and large cities where there is no such thing as a main vocation, but rather a more or less balanced bundle of functions.

There are relatively few cities having almost or all the range of functions, and there are even less that have them all and perform them at macro-regional level. The latter are called metropolis, while the few metropolis whose influences stretches on a planetary scale are called *world or global cities*.

In 1990, King described some traits of the global cities:

- high labour specialisation and division;
- stability and permanence over time;
- high internal cultural, ethnic and social differentiation;
- primary transportation and communication infrastructural nodes;
- urban environment with high cultural, physical and architectural quality;
- strong social polarisation, that is, many rich and many poor.

1.1. Distressed Urban Areas

Most European cities feature extensive distressed areas that suffer from severe and widespread shortage of those characteristics that qualify urban life and its development prospects: degraded lodgings, inadequate infrastructure, inefficient public transportation service, abandoned industrial areas (brownfields), environmental problems, lack of general services; from a social standpoint, such areas usually stand out for high unemployment rates and remarkable social issues, such as poverty, low education levels, population ageing, low healthcare coverage and strong dependency from welfare. Such shortcomings hinder the sustainable development of the entire city, discouraging investments and employment creation, while favouring social exclusion and environmental deterioration.

Deep local, economic, social, cultural and structural divides are forming in most European cities between on part moving towards development and quality of life improvement, and another, usually smaller but still quite sizeable, following different economic and social models, which are rather backwards, subordinate and strategically ineffective.

It would be difficult to fathom the causes of this phenomenon, which has become structural in the European urban system. Many possible reasons were offered, such as the globalising pressure, the governmental fiscal crisis, the competition between areas and cities, the collapse of *welfare state*, the emergence of information and knowledge society, etc., even though we cannot underestimate contingent and locally-defined conditions, which are often the triggering cause.

In literature, the issue of large distressed urban areas has enjoyed poor coverage mostly because of the very phenomenon and the meagre recognition it was met with. Indeed these areas are sometimes regarded as a matter of urban/building/environmental requalification issue, or else as an economic, social or cultural problem or, finally, as a simple matter of safety. Rarely was this problem dealt with a systematic approach that could account for all these aspects together, while managing them in terms of general governance of the city.

The focal point lies in recognising these large areas as a crucial urban issue. As things stand now, large distressed urban areas lack institutional, technical, cultural and political recognition. Rather, they are regarded as a mass of local, environmental, social, economic problems more ore less related one another but not connected in a system. As such, each of those problems is viewed as suitable to be dealt with and solved individually.

The quality of life in large distressed urban areas is lower than in other areas of the same city, and the coordination systems among the stakeholders are structurally weaker and less effective that in the rest of the city (Bentivegna, 2005).

More specifically, as compared to the city as a whole, in these areas:

- the decision-making processes combine risks, uncertainty and dynamic instability with an open-endedness that stems from unpredictable exogenous events, inconsistent interaction and opportunistic attitudes; decision makers must tackle high risks, strong, localised diseconomies and high costs, also in terms of price/quality ratio: the creation of an effective and rather predictable decision-making context would imply remarkable difficulties;
- economic development and social changes are hindered by low urban governance levels; in these areas public funding is the main source of investments, but it's too low, not only because of the paucity of public resources, but also because of competition with more efficient areas in the city;
- social, economic and environmental renewal is basically supported by public intervention, the strategies, though are insufficient and often break down into many different sector-targeted policies managed by many agencies and organisations (public, private and non governmental); in general, access to market, knowledge, information and power systems is less likely and more uncertain than elsewhere: consequently, the decision-making processes are widely fragmented;

- development requires sizeable investments in many sectors, but local companies struggle to access credit and the risk conditions are higher: the financial and credit markets do not operate easily in such areas;
- the guarantee and protection of human rights are weaker as compared with other areas in the city and the State finds it relatively harder to guarantee the respect and protection of such rights; social security is poor, and violence against women, children and immigrants is more frequent than elsewhere: it is not pleasant to live in such areas.

Among the strategies pursued by the public administration to stimulate the requalification of these areas the following turned out not to be enough:

- choice of policies based on massive fixed capital initiatives in order to re-qualify the built-up environment;
- urban environment requalification aimed at improving quality of life. Because property value game in the real estate market is such that local tenants are forced to move from the area, and the problem is merely transferred to some other urban or metropolitan area, be it far or nearby;
- focusing on job creation. Indeed, if qualified jobs are created to recover the local competitiveness of the area given the poor qualification of the local inhabitants this new employment opportunity will advantage qualified workers residing elsewhere; on the contrary, boosting employment in obsolete sectors would prop up inefficient solutions, destined to fail in the short term;
- qualifying the local labour force, to give it the tools to compete effectively in the labour market, in that the ensuing increase in individual income would cause the qualified workers to move to other areas in the city where quality of life is better, thus impoverishing the deteriorated area of its best assets;

— turnover policies aimed at changing the economic, social, ethnic or age structure of the existing population. In fact, without generalised structural measures, the risk is to shatter mutual support — or even survival — networks that had formed over time, thus triggering negative processes within the relational systems of weaker demographics, such as to cause their expulsion.