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A wall between real estate valuation standards and professional appraisal practice: A focus on Italian market

Martina Agosta, Emanuele Schimmenti, Caterina Patrizia Di Franco, Antonio Asciuto*

Department of Agriculture, Food and Forest Sciences, University of Palermo, 90128 Palermo, Italy *** Corresponding author:** Antonio Asciuto, antonio.asciuto@unipa.it

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Copyright © 2024 by author(s). Journal of Infrastructure, Policy and Development is published by EnPress Publisher, LLC. This work is licensed under the Creative Commons Attribution (CC BY) license. https://creativecommons.org/licenses/ by/4.0/ **Abstract:** Real estate appraisal standards provide guidelines for the preparation of reliable valuations. These standards emphasize the central role of market data collection in marketoriented valuation methodologies such as the Market Comparison Approach (MCA), which is the most commonly used. The objective of this study is to highlight the difficulties in data finding, as well as the gap between the standards and the actual appraisal practices in Italy. Thus, a detailed comparison was made between the real estate data considered necessary by the standards and those ones reasonably detectable by appraisers, showing that some important market information is not reachable due to legal, technical and economic factors. Finally, a case study is presented in which the actual appraisal of a residential property is schematically described to support what is claimed with the research question and thus the degree of uncertainty around an estimate judgment.

Keywords: market transparency; real estate appraisal; market data collection; property characteristics

1. Introduction

Until recently, both the rural and the urban Italian appraisal scenarios were characterized by an almost exclusive reliance on "expertise" which was more or less cleverly disguised as an estimate. Single-parameter or income capitalization valuation procedures were applied by an "appraiser" in a way that was easily open to the subjective interpretations of professional users (Ciuna et al., 2014; Ciuna et al., 2015; Simonotti, 2003).

In fact, appraisers are quite often criticized for the superficiality of their property valuation reports when applying single parameter procedures, or for the false sense of rationality they convey in the balance sheets and income capitalization estimates they produce for agricultural land valuations. However, the economic context and peculiar conditions of the Italian market, which is characterized by a general lack of transparency—meant as an extreme difficulty in the collection of reliable property transaction data—justifies their modus operandi (Ciuna et al., 2015).

In Italy, during the past fifteen to twenty years there has been some development of new appraisal methodologies which make use of market-oriented (Simonotti, 2011) and income-based approaches (D'Amato, 2015; Simonotti, 2011), applied to the urban market. These Italian academics have been stimulated in their studies by the increasing awareness of the problems with the widespread dependence on "expertise" in real estate appraisal, including serious repercussions with such delicate areas as real estate foreclosures and credit risk exposure checks.

At this regard, Simonotti was one of the first scholars to identify the urgency of adopting real estate valuation standards in Italy (1998; 2008; 2009), followed by other scholars (Ciuna et al., 2015; Manganelli, 2017; Salvo and De Ruggiero, 2012).

Real estate appraisal standards, like all standards in general, come about and evolve over time through a combination between innovations in research of the real estate sector and the professional best practices implemented in each country (Michieli and Cipolotti, 2018) to prepare reliable and scientifically correct estimates. Furthermore, they represent guidelines, i.e., references for those working in the real estate appraisal field, which provide the operational protocols necessary to carry out valid and scientifically sound appraisal processes.

Most recently, during the last few years, various organizations dedicated to appraisal have been established in Italy, including various professional associations.

Thanks to these ones, various initiatives (including seminars, conferences, training and professional refresher courses) are designed, promoted and implemented to spread knowledge of real estate appraisal standards and the most innovative valuation methodologies recognized by them, in order to keep seasoned professional appraisers up to date and to train new generations of appraisers who are more aware of the limitations of the methodologies that have been used, with the main objective of improving the overall quality of real estate appraisals, bringing it closer to that of other countries (Simonotti, 2009).

Nonetheless, the overall quality of real estate appraisals is not yet at the longdesired levels. This situation can be attributed to two categories of causes, which are somewhat connected.

The first one is strictly connected to individual professional behaviour and concerns an insufficient qualitative level of the adopted appraisal methodologies. This issue can be referable either to a lack of professional training or to the fact that valuers are not willing to use the most appropriate appraisal tools because of purely economic reasons. It is rather unlikely to obtain reliable results without incurring in high costs for data search and data collection. In fact, professional fees for appraisal services in Italy are not proportionate to the efforts needed to comply with real estate appraisal standards, especially during the delicate phases of search and subsequent data collection, and of the market analysis, contradicting what is clearly stated in the UNI 11558/2014 Norm¹.

The second critical aspect is related to the lack of transparency conditions of the Italian real estate market (Curto and Fregonara, 2019; Gabrielli et al., 2021; Gabrielli et al., 2022; Grillenzoni, 1970; Manganelli et al., 2022). Indeed, in a given market there is transparency when information is promptly available to all the market participants (supply and demand). On the opposite, a market with lack of transparency is defined as an opaque one and produces an information asymmetry of market participants (Schulte et al., 2005).

Compared to other real estate markets, the complexity of the Italian bureaucratic system can slow down sales transactions and result in uncertainties. The procedures for acquiring, selling, and registering properties are often lengthy and complicated. Additionally, real estate information is often scattered across different sources and not centralized in a single accessible database. This is further compounded by the "culture of secrecy," where many sellers and buyers prefer to keep confidential the terms of their transactions.

This dense opacity of information on real estate transactions prevents the availability of reliable, complete data, obtainable in a timely manner (as required for appraisals) and at reasonable costs, which are essential for the operation of marketoriented procedures such as the MCA. This happened despite several editions of the Tecnoborsa Code were published for about twenty years (2000, 2002, 2005, 2011 and 2017).

The importance of obtaining value estimates as close as possible to the market price is often neglected, especially in matters concerning the legal and financial fields in which any distortions in the values estimated by professionals can produce significant repercussions on the real estate supply chain.

In light of the above constraints, the research question of the present study is the following: "In Italy are nowadays professionals in the position of correctly operating in their valuations to obtain precise, reliable, objective and scientifically valid estimates as outlined by valuation standards? Or is the issue of the market opacity still affecting their work?"

To date, the existing literature concerns the issue of lack of market transparency and its consequences but does not analyse what is requested by the evaluation standards compared to what surveyors can actually implement. This study is therefore aimed at highlighting the perspective gap between the operating real estate valuation standards and the appraisal practices of freelance professionals in Italy for urban properties. This is carried out through a detailed analysis of the economic, technical and legal constraints affecting the collection of real estate data essential for the application of market-oriented valuation methods such as the Market Comparison Approach (MCA) and the Multiple Regression Analysis (ARM), in accordance with the real estate valuation standards, and in particular with the Italian Property Valuation Standard (Tecnoborsa, 2018). We actually focused on MCA, presenting an illustrative case study of its application and related constraints in section 4, as it is one of the most widely used appraisal models in Italy nowadays for two main reasons: i) it does not require a large amount of data; ii) its application does not involve statistical knowledge that could pose difficulties for an average-skilled surveyors.

2. A brief literature review on the Italian real estate market

As above mentioned, the low quality of real estate appraisals is attributable to the lack of transparency of the Italian real estate market, noted in the literature since the mid-twentieth century.

Based on his assertion that a country is as economically developed as its ability to make the market of exchangeable goods transparent, Grillenzoni (1970)—regarding the farmland market—proposes the institution of a bank of rural land prices. Thus, the same professionals involved would provide current data in real time.

Well ahead of his time, the same author argues that the establishment of this price bank would avoid arbitrary value attributions and allow for the use of reliable data, something that has not happened to date in the Italian market.

Decades after Grillenzoni's (1970) work, various appraisal scholars are still addressing the lack of transparency in the Italian real estate market.

Among these authors, Simonotti (1998) affirms that the lack of surveys and systematic and comprehensive data and real estate market information collection can be attributed to: the real estate market's lack of transparency; a strong segmentation of the same; the rudimentary administrative objectives of the surveys conducted by the public administration. To improve the level of real estate estimates, he therefore advocates the creation of an information base of reliable, detailed, and objective data related to the various market segments.

D'Amato (2010) affirms that in the Italian real estate market, both properties' real prices and characteristics are not clearly indicated in legal documents and data is often missing.

In another work, Simonotti (2009) observes how the Italian real estate market's lack of transparency is connected to the widespread behaviour of contracting parties as well as the excessive complexity of juridic-administrative procedures. In turn, these cause heavy inefficiencies in the real estate market that impact professional activity and strongly limit the breadth of the available market data observations, which are necessary for the execution of accurate valuations.

In a study regarding mass appraisals, the same Simonotti (2002) laments the evident constraints imposed on the Italian real estate market by the lack of transparency in sale prices, which cause consequent problems for appraisers seeking to use valuation procedures based on the systematic collection of real estate data. These procedures are commonly used in foreign countries, where real estate data is either recorded directly or acquired from private companies or cadastral databases.

To improve the transparency of the specific market of auctioned properties, Guerrieri (2010) stresses the need for a comprehensive knowledge of each item, including their legal, urban planning, technical and economic aspects. All of these are rather underdeveloped in Italy.

Guerrieri (2010) also sustains that while the economic importance of the role played by real estate appraisals has clearly grown over time, the level of knowledge and transparency of the real estate market has not changed as profoundly. It makes valuations less accurate and also impedes buyers from exercising any control over the price-quality ratio of the asset under consideration (Guerrieri, 2012).

More recently, Curto and Fregonara (2019) highlight the obstacles in using transaction prices due to the difficulties in the extraction of data from the deeds of sale, causing a low-quality level in the valuation reports.

Gabrielli et al. (2021) carry on stating that in an opaque market such property data are either not available or they may be purchased only at a very high cost, therefore professionals are practically obliged to refer to other sources of information, which in a transparent market would be classified as inadequate. Then they consider that transparency is an undeniable problem of the Italian real estate market, where transaction data of sales are not directly and easily available for valuers. A direct consequence is that most professionals count on the asking prices of the selling advertisements; these ones are often incomplete and inaccurate in the data they include, thus worsening the reliability of the appraisal reports.

Gabrielli et al. (2022) and Manganelli et al. (2022) directly address the lack of

transparency of the Italian real estate market, which often leads appraisers to use asking prices as proxies for market prices in the selection of comparable properties, resulting in substantially lower quality valuation reports.

Gabrielli et al. (2022) seek to verify how information opacity still represents a crucial problem in the Italian real estate market, focusing on the information employed during the process of estimating the market value of real estate. Instead, Manganelli et al. (2022) try to directly measure the lack of transparency (opacity) of the Italian real estate market as the gap between the asking price and the (future) market price by using a multiparameter statistical analysis model, concentrating on the marginal influence of the principal macroeconomic and microeconomic variables on the spread. The microeconomic variables are mostly related to the comparable extrinsic and intrinsic property characteristics.

3. Real estate appraisal standards

In this section, a description of the principles on which the most important global and European real estate valuation standards are based is first provided, followed by a description of the main Italian standards created in response to the International Valuation Standards (IVS) and European Valuation Standards (EVS). In particular, an analysis of some fundamental points outlined by the Tecnoborsa Code is conducted to understand the steps that an appraiser is supposed to follow in the context of a valuation assignment.

3.1. Main international and European real estate valuation standards

Among the internationally recognized standards, the (IVS) are the longest standing, having been first published in 1981 by a few British and American valuation associations that came together to promote global real estate standards and a common valuation vision among different countries.

They represent the general guidelines for worldwide appraisals and are composed of a few commonly shared principles that can be applicable by different national or regional standards. In the field of valuation, they are published in what is commonly known as the "White Book" including a proposal for worldwide standardizing some concepts and terms in the field of real estate appraisal.

The approaches considered by the IVS to estimate market value include: the Sales Comparison Approach, to be applied by comparing prices adjustments for similar properties based on their different comparable attributes; the Income approach, based on the premise that the value of a property is determined by the income it generates; the Cost approach values a property in terms of replacement costs and is related to the economic principles of market price, discounting of future benefits and substitutability between different goods.

In addition, the IVS require that the final valuation report should provide, among other information, a description of any limiting or particular assumptions required for the valuation assignment, and a statement of compliance with the standard.

In summary, the objective of the IVS is to establish transparent and coherent valuation practices and thus to increase users' trust in appraisers and in the discipline of Appraisal.

Another important appraisal standard is the "Red Book", instituted by the Royal Institution of Chartered Surveyors (RICS), a global accreditation organization for professionals in the real estate appraisal field, that is fully in line with the IVS.

At the European level, the EVS were created in compliance with the IVS and are published in the "Blue Book". In accordance with the IVS, they propose the same valuation methods with a preference for the Sales Comparison Approach compared to the other two since it is directly linked to real market dynamics. The EVS standards also require appraisers to specify that the standards will be applied in their letter of appointment. Should this not occur, appraisers must give explanation why their application is impossible.

3.2. Italian real estate valuation standards

The principal standards in Italy are those of the Associazione Bancaria Italiana (ABI, Italian Banking Association), the "Linee guida per la valutazione degli immobili in garanzia delle esposizioni creditizie" (Guidelines for the valuation of real estate as collateral for credit exposure), and the "Codice delle Valutazioni Immobiliari" (Code of Real Estate Valuations).

The ABI guidelines are principally based on the following European regulatory and normative sources for real estate valuations for credit exposures:

- Regulation EU No. 575/2013 on requirements for credit institutions and investment firms.
- Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms.
- Directive 2014/17/EU on credit agreements for consumers relating to residential immovable property.
- The European Banking Authority (EBA) Guidelines in loan origination and monitoring published on 29 May 2020 (EBA/GL/2020/06).

The Directive 2014/17/EU was implemented in Italy by Decreto Legislativo no. 72/2016, which introduced article 120 to Decreto Legislativo no. 385/1993(Testo Unico Bancario–TUB).

The goal of the ABI Guidelines is to promote maximum transparency and fairness in real estate appraisals, and to ultimately ensure the greater stability of banks in their credit operations and in the issue and acquisition of securities and of covered bank bonds.

Tecnoborsa Code (henceforth referred to as the Code) is considered as the main real estate valuation standard to be referred to in professional practice in Italy.

This standard, unlike its predecessors, has been designed based on the international standards it takes inspiration from. It has been partially modified and integrated with additional rules for adapting it to the Italian real estate market.

According to the Code, market analysis is essential for the reliable performance of market-oriented appraisals and a fundamental prerequisite for the identification of Highest and Best Use (HBU). Indeed, it is indispensable for obtaining all the elements necessary for the estimate, i.e., the quantitative and qualitative characteristics of a real estate asset. For this purpose, the Code lists the property features, according to different classification criteria, including those that are intrinsic and extrinsic, quantitative and qualitative, positional, environmental, typological, institutional and economic.

3.2.1. Tecnoborsa code

The Code for real estate appraisal² (2018) states that the survey and collection of actual prices and rents is the only reliable approach (1.1), useful for market transparency and equity in the order to curb distortive effects and make real estate appraisals more efficient (1.2).

Regarding the data concerning the price, only people directly involved in the transactions—such as construction company technicians, real estate agents, buyers and sellers, tenants, notaries, etc.—can have full knowledge of the facts, and thus of the actual data.

Furthermore, a correct collection of real estate market data must be carried out according to principles of validity, reliability, and representativeness (1.7) through survey forms to collect and analyse both the market segment and real estate data (1.8).

The investigation of the segment parameters must be carried out in the field, collecting relevant information from industry operators. Where conditions allow, this should also include collections of the sector's trade uses and customs (2.6).

Market segments need to be identified and described for various reasons. These range from appraising a single property, to performing mass appraisals of part or all the properties in each segment, to mapping all the market segments present in a particular geographical area (e.g., municipality, district, block, etc.), to constructing a database (2.7).

In the second case regarding the market value of real estate, surveys should look at the segment of the property to be valued as well as comparable market segments (if they fall in a different segment than that of the property being estimated) (2.8). The real estate survey form is designed to collect information on market prices or rents and the technical-economic characteristics of the real estate in question (2.9). This real estate data is used in professional appraisals, mass appraisal and in the development of sample statistics, indices and coefficients used for real estate valuation (2.9.1).

Finally, the market segment survey form of the property to be appraised, the survey forms of the market segments of comparable properties, as well as the real estate data survey forms (including attachments) of all the properties used for the valuation must be included in the final appraisal report (4.1).

In addition, the Code presents some advice for appraisers regarding the phases of detection, storage, and exchange of data and information related to the real estate market.

It discusses the quantitative-qualitative nature of data and the use of nominal, ordinal and cardinal scales to describe the quantitative characteristics (1.5), and the use of nomenclates for qualitative characteristics (1.7).

The next point regards primary sources (2.1) for sales, lease or rent data, i.e., property transfer documents (notary deeds), or the sellers, buyers and third parties involved (tax consultants, notaries, accountants, mortgage credit bankers,

construction company technicians, freelance professionals, condominium administrators, and real estate agents).

Other information (3.1) that can be used to verify sale and rental or lease data include the registry data of the parties, the family or data derived from corporate relationships between buyer and seller, marketing of the property (real estate agency, direct sale, sale via internet, newspaper ads, word of mouth), time of marketing, rights and encumbrances on the property, and type of financing.

The Code also offers some issues to keep in mind when implementing survey instruments such as the questionnaire (4.2), the phone interview (4.3) and the personal interview (4.4) in relationships with the concerned parties in instances when sales or rent/lease data is not available within official documents (sales deeds) or is incomplete.

Furthermore, the Code warns appraisers that some data sources should not be considered in the data collection phase, identified as "invalid data". These include some types of sales or rentals such as those to public administrations or to charitable entities, voluntary transfers and expropriation indemnities, sales and rentals between close relatives or between affiliated companies. Other situations in which one must not rely on the relative data are sales made under special conditions, such as those of judicial auctions or those in which the purchaser is the owner of an adjacent property to the one to be valued.

It should be noted that the above chapter is largely inspired by the document published in 2020 by the International Association of Assessing Officers (IAAO), whose main theme is the identification of methods for verification and adjustment of real estate transaction data, according to a specific valuation standard.

In the relevant chapter, the Code describes the MCA in detail, noting that it is the most widely used real estate valuation procedure worldwide. It also emphasizes that the assessment system and allocation system are complementary to the MCA and can be used in combination with it to determine the marginal prices of qualitative property characteristics.

However, the guidelines by the Tecnoborsa Code do not seem to effectively take into account the conditions of the Italian real estate market, characterized by a lack of transparency in information. The code tries to propose alternative ways (i.e., points no. 4.2, 4.3, and 4.4) to obtain the missing data, but these seem quite convoluted and difficult to follow. It is true, though, that the standards express what is necessary to carry out valuations in the most objective, reliable and transparent way, and it is unthinkable that this will be radically changed or that the standards will be entirely adapted to the conditions of a specific market like the Italian one.

4. Collection of market data and the unavailable information

In this section, an examination of the constraints that limit the effectiveness of market value estimates in Italy is conducted, taking into account the innovative processes as MCA, General Assessment System, etc.

As already mentioned, for these appraisal procedures to work and provide reliable results, it is necessary to know not only the characteristics of the property being appraised but also those of the properties used for comparison, known as "comparables". While the characteristics of the property being appraised are easily obtained through the information and documentation provided by the property owners or clients of the appraisal, this is not the case for comparables. There are countries where information on real estate transactions is collected in public databases or is accessible upon request. Among these, United States has platforms like Zillow, Redfin, and Realtor that offer an easy way to identify recently sold homes quickly, showing both current prices and historical transaction prices, as well as other property-related information. These are useful for finding comparables and making comparisons to estimate market value.

This analysis is carried out by comparing the theoretical level to be reached in the data and market information collection phase—the standard—and the operational level for an appraiser aiming for full compliance with real estate valuation standards. In order to carry out a detailed analysis of what can be detected with a good operating margin, a verification is conducted of the useful information contained in property transfer documents, which are primary sources of purchase and sale data, as indicated in the Code.

The most reliable source of real estate data, such as sales or rentals, is the notarial deed but often the market information and real estate data contained in these documents are not detailed enough.

In order to carry out a correct market survey it is necessary to analyse in detail real estate purchase and sale deeds.

Starting with the real estate data collection form, a systematic verification of the presence in a generic notarial deed of sale is carried out for all the locational and typological characteristics.

The characteristics relevant to the building where the real estate unit chosen for appraisal is located, such as the number of floors above ground level and the construction date, can usually be obtained from the notarial deed. This information can also be easily obtained through the Google Maps Street View tool or even through a simple site visit. The construction date is not always specified in the deed. Finally, location data of the property, such as municipality, fraction, district, address, house number, interior, etc., are always indicated in the notarial deeds.

Notaries rarely include information about the main surface area (the interior area) and any secondary surface areas of a real estate unit in purchase and sale agreements. These could include ancillary areas (balconies, terraces, verandas, porticoes, etc.) as well as connected surfaces (cellars, attics, garages, etc.). This data may be extracted from measurements taken by professional technicians before the agreement is signed, used to survey the property's cadastral and urban state.

The cadastral data are essential in any deed of sale because this information is mandatory by law and notaries must indicate them as they identify the property that is the object of the transaction, and they are usually provided to the notary directly by the seller or obtained from the current (or historical) cadastral survey.

In addition to other features which can be inferred from the deed text, such as the level or floor above ground, there are others which are usually not included in the body of the deed, such as the predominant exposure of the real estate unit, the view, the panorama, the brightness, the presence and conservation status of technological systems (plumbing, heating and cooling, electrical, etc.), the general state of maintenance (including any partial or total renovations carried out and the corresponding completion date) and the quality level of the finishes present in an apartment at the time of the deed's signing.

According to Tecnoborsa, relevant subjective characteristics are rarely explicitly stated in the deed, such as the professional condition and occupation of the contracting parties, unless they are legal persons (corporations, cooperatives, etc.), in which case the notary is obliged to verify the name and status of the activity (active, ceased or in liquidation) by requesting a business search at the Chamber of Commerce. On the other hand, the data of buyers and sellers are always available, such as name, surname, tax code, date and place of birth and residence, otherwise the deed is null and void.

The motivation to sell and the motivation to buy the property in question are also rarely mentioned characteristics.

The economic characteristics, as well as any protection or planning restrictions on the property, are usually stated in the deed. Among these, the rental situation of the property (flat occupied or free of people) and the presence of usufructuary, use or habitation rights, as well as easements, are specified in the deed.

Financial characteristics, such as the presence of a mortgage or other form of financing, are also always reported in the deed.

The urban and cadastral conformity of the property must be indicated in the deed of sale, although this almost never occurs through a compliance and cadastral conformity report, which is a certification provided by the seller and transcribed into the deed of sale in which a qualified technician must confirm that the state of the property is in accordance with the documents deposited at the cadastre and the Municipality, and must verify that the property is certified for occupancy.

Finally, the real estate data collection form (Simonotti, 2011; Tecnoborsa, 2018) includes attachments such as architectural plans of the area, the building and the single real estate unit, as well as detailed photographic documentation.

The architectural plans of the area and of the building (in the case of condominiums) are not included as attachments to a notarial deed for obvious reasons. However, it is not as obvious why the floor plan of the real estate unit is not required to be attached to the notarial deed according to Decreto Legislativo No. 78/2010. Furthermore, the notary does not need to include the description of the verifications carried out in this regard in the deed; in fact, a brief indication that they have been carried out is sufficient, including when they took place and their results.

Without a doubt, the absence of a survey plan poses significant issues for appraisers, as this is essential for obtaining data related to surface area, such as the main Net Internal Area and Gross Internal Area as well as any secondary surfaces of the real estate unit (e.g., balconies, terraces, porches, carports, parking spaces, garages). This data is important for the implementation of processes such as the MCA for calculating the marginal prices of the surface characteristics.

Given that notarial deeds are public acts, one would think that the architectural plans, when attached, would also be public. Apparently, the "Agenzia delle Entrate" (the Italian Revenue Agency) is not of the same opinion in this regard.

In fact, according to the Italian Revenue Agency notice no. 9 from 25 November 2003, for a professional to request a copy of the architectural plans of a

property, he or she must first obtain a delegation signed by the current owner since by the notice states that architectural plans "take on a strong aspect of confidentiality" in according to the privacy law protecting personal data (Codice in materia di protezione dei dati personali, issued with Decreto legislativo 30 June 2003, n. 196).

However, it is easy for appraisers to follow the indications of the Code to obtain photographs of the area's building types and of the property in question; on the contrary, it is impossible to reproduce a photographic documentation representing the interior of the real estate unit which is not included in the deeds. Therefore, the only description available for appraisers is the extremely concise one reported in the deed, describing the property's number of floors, the number and types of main and accessory rooms and the number of bathrooms.

After examining the real estate property characteristics that an appraiser is expected to collect to fill out the form, it becomes clear that some of these cannot actually be obtained from the sales deed.

In accordance with the Code's proposed methodology, appraisers seeking to fulfil the requirements of the data collection phase should look for an alternative approach for any features that cannot be discerned from reading the notarial deed.

To summarize, some of the most significant characteristics of the real estate property for the purposes of an appraisal cannot be found directly from the property transfer documents such as surface area (main and secondary), condition of technological installations (plumbing, heating and cooling, electrical, etc.), general state of maintenance (specifying any partial or total renovation work carried out and the corresponding date of completion), panoramic view, lighting and the overall quality of the finishes in the apartment at the time of the deed.

Clearly, when using market comparison-based approaches to appraise properties, this is only a problem for those properties chosen as comparables. In fact, the appraiser will have direct knowledge of the evaluated elements for the property being appraised but will have problems acquiring the same information for the comparable properties without conducting an on-site visit (Guerrieri, 2010).

In this situation, the appraiser can determine all these characteristics by resorting to alternative methods suggested by Tecnoborsa. However, these methods entail all the operational difficulties involved with these kinds of investigations, coming from the automatic distrust these subjects have for appraisers and their work, which is still not well known or appreciated.

At this point, appraisers can only rely on themselves, attributing amounts to unknown characteristics based on their own potentially strongly tainted judgment, which can emerge as expertise.

For exactly this reason, Italian valuation practices have historically been based on appraisers' knowledge of the region and economic market, using expertise to overcome the lack of objective, organized and accessible technical and economic information (Simonotti, 2003).

The difficulties that arise during the collection of real estate data can also be sought in the parameters of the market segment, especially in the market ratios.

As already noted, these could be calculated from data collected from sales deeds when the deed refers to individual portions of a property, and not to the whole property. If only the total price for the whole property is reported, a direct detection of market ratios cannot take place (Simonotti, 1998). In such cases, experts often turn to the use of indices reported in public administration operating manuals and notices (Ciuna and Simonotti, 2014).

In well-developed real estate markets that are efficient and transparent, market ratios are widely available as market data (Simonotti, 2008). On the contrary, undeveloped real estate markets, such as the Italian one, compromise the accuracy of market-oriented procedures because they lack the very data those approaches are founded on.

5. An illustrative case of the difficulties in applying real estate valuation standards: The appraisal of the market value of a house in a seaside area

For illustrative purposes, a case study is briefly described using data from a real professional situation in which the valuer tried to adhere as closely as possible to appraisal standards.

In particular, the appraisal was carried out at the specific request of a private client, during which surveys were conducted on all elements of the residential structure. Simultaneously, three sale deeds of similar properties belonging to the same market segment, were obtained from some notary offices³. Physical access to the three comparables was not possible due to privacy concerns, but observations were made from the outside and based on the real estate data from the aforementioned deeds, supplemented by aerial images from Google Earth and Google Maps.

This approach is consistent with what is typically done by most appraisers during their professional activities.

This example regards the appraisal of the most likely market value of a villa built in 1958 belonging to the A/7 (villino, i.e., small homes with gardens) cadastral category. The property, which is accessed directly from the public road, is laid out on four floors: two above ground (ground floor and 1st floor) and two below the street level (S1 and S2). On the ground floor, there is the actual residential space with four bedrooms, a kitchen, the living room and two bathrooms, while on the first floor there is a terrace. The floors below are occupied by a large room, two storage rooms and a bathroom (S1 floor) and by three rooms, a storage room, and a bathroom (S2 floor).

The property main area and balconies respectively cover 348 m^2 and 38 m^2 , an external storage area has a usable floor area of about 60 m², and there is 3256 m^2 of outdoor space with a possible private access to the sea. The area's population density is not very high, since all the surrounding villas include large areas of appurtenant land.

Table 1 shows the market ratios for the identified market segment, extracted from the relative survey form filled out by the appraiser.

After having identified 3 comparable properties and having chosen the characteristics to include in the procedure, the following data table was elaborated (**Table 2**).

Indicator	Value
Surface area of garage—storage areas	0.25
Secondary surface area (balconies and terraces)	0.25
Annual price change rate	0.03
Complementary ratio	0.15

Table 1. Segment market ratios.

Table 2. Property data.				
Property characteristics	Comparable 1	Comparable 2	Comparable 3	Subject property
Main area (m ²)	387.00	201.00	274.00	348.00
Balcony area (m ²)	45.00	30.00	12.00	38.00
Garage-storage areas (m ²)	54.00	25.00	0.00	60.00
External area (m ²)	7083.0	1223.0	1267.75	3256.0
Bathrooms (no.)	4	2	3	4
Date (month)	12	12	1	0
Pool + poolside area (presence/absence)	1	0	0	0
Ceteris paribus				
Waterfront access				
External and internal upkeep conditions				

The above-mentioned table reports the real estate property characteristics and relative quantities, as well as those characteristics considered coeteris paribus, i.e., waterfront access, and external and internal upkeep conditions.

For the comparables, waterfront access was personally ascertained by the appraiser; on the contrary, upkeep condition is considered coeteris paribus because it was impossible to verify both at the time of the sale and at the time of the appraisal.

At this point, the appraiser proceeded to estimate the marginal prices (Table 3) and successively completed the valuation table⁴ (**Table 4**).

Property characteristics	Marginal price Comparable 1	Marginal price Comparable 2	Marginal price Comparable 3
Main area (€/mq)	2301.44	2301.44	2301.44
Balcony area (€/m ²)	575.36	575.36	575.36
Garage–storage areas (€/m ²)	575.36	575.36	575.36
External area (€/m ²)	31.77	31.77	31.77
Bathrooms (€/n)	1500.00	1500.00	1500.00
Date (€/month)	3750.00	2358.38	1875.00
Pool + poolside area (ϵ/n)	15,000.00	15,000.00	15,000.00

Table 3. Marginal price	es.
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Property characteristic	Comparable 1	Comparable 2	Comparable 3	
Sale price	€1,500,000.00	€943,350.00	€750,000.00	
Main area	-€89,756.32	+€338,312.27	+€170,306.86	
Balcony area	-€4027.53	+€4602.89	+€14,959.39	
Garage – storage areas	+€3452.17	+€20,137.64	+€34,521.66	
External area	-€121,569.25	+€64,580.69	+€63,159.15	
Bathrooms	€0.00	+€3,000.00	+€1500.00	
Date	-€45,000.00	-€28,300.50	-€22,500.00	
Pool + poolside area	-€15,000.00	€0.00	€0.00	
Adjusted price	€1,228,099.07	€1,345,682.98	€1,011,947.05	
Absolute percentage divergence ⁵	32.98%			

Table 4. Appraisal table.

As shown by **Table 4**, the absolute percentage divergence is equal to 32.98%. Such a high value did not allow the appraiser to continue with the valuation synthesis by estimating the market value of the property. The literature only considers the test passed if the value does not exceed 3%-5%, while in professional practice the maximum threshold rises to 10%. If the MCA has been correctly set up and carried out in its previous phases, this difference can be attributed to some important qualitative characteristic that has not been considered by the expert.

If this were the case, this could mean that the adjusted prices of the comparable properties differ because of the remaining qualitative characteristics (Simonotti, 2011, p. 161). Following this hypothesis, the appraiser identified two inaestimabilis characteristics (zone and urban planning compliance) that were used in the General Assessment System⁶. This procedure, separating the effects of the aforementioned qualitative characteristics, has made it possible to estimate the marginal prices and simultaneously to obtain the market value of the property being estimated.

However, it is not at all certain that the divergence between the adjusted prices is solely due to the omission of one or more qualitative features. In fact, this divergence could be the result of a series of approximations accumulated throughout the process. In the present case, the appraiser resorted to a series of assumptions ranging from the quantification of the market segment's market ratios (surface area ratios, complementary ratio, annual rate of price variation) to the inclusion of the "upkeep condition" under the "coeteris paribus" condition.

Regarding this last point, the unavailability of third parties (notaries, real estate agents, construction companies, etc.) and the impossibility of verifying the actual conditions of the comparables with a site visit or through photographic documentation, implicitly "forced" the appraiser to renounce the inclusion of this property characteristic in the valuation process.

This situation, if the actual maintenance conditions of the comparables were significantly different from each other and from those of the subject, could lead to significant procedural biases in the valuation of the property.

What has just been written for the "upkeep condition" is nevertheless applicable to other property characteristics, such as technological systems (electric, heating, air conditioning, water-sanitary, lift), the constructive characteristics of the building and the finishes of the interior, and to the parameters of the market segment such as market ratios (regarding both surfaces and not) and instrumental ratios, which are difficult to detect but of a great interest to valuation purposes.

In the case under consideration, regarding the determination of market ratios, in the absence of the regular sources described in the technical-valuative standards for their ascertainment, the appraiser "took refuge" in technical manuals, valuation texts, and ministerial or Italian Revenue Agency notices to get an idea of the values to be assigned to these market ratios in relation to the appraised property's market segment.

Both in this specific case and in general terms, the professional's work is strongly constrained by the non-transparent conditions of the real estate market in which he/she operates, notwithstanding a medium-high level of theoreticalmethodological knowledge and Best Practices in the appraisal field.

In fact, professional appraisal is heavily impacted by the inadequate amount of economic information, which reduces the availability of the market data that would be necessary to carry out accurate valuations (Simonotti, 2009).

6. Conclusions and future trends

6.1. Considerations

The research question was posed whether it is currently possible to effectively apply real estate appraisal standards in the Italian urban market.

The study of the various standards has allowed us to identify the basic principles and appraisal methodologies that they have in common. Particular attention has been paid to the Tecnoborsa Real Estate Valuation Code, which was inspired by the main international standards but particularly designed for the Italian real estate market.

Given that the crux of the Italian real estate market's problem is its lack of transparency, this study's analysis focused on the data collection phase that represents the weak link of real estate appraisal processes.

The comparison between the appraisal forms proposed in the Tecnoborsa Real Estate Appraisal Code (for both market segment and real estate data) and the data that can be obtained from property transfer documents (sales deeds) clearly showed that in current conditions appraisers cannot complete both forms according to standards.

Paradoxically, the greatest limitation to the work of the appraiser is Italian privacy law, which prevents him/her from obtaining all the data and information that are necessary to carry out an appraisal in line with the standards. This is indeed a paradox, because the standards were created—with the contributions and collaboration of all national orders of technical professions—precisely to improve the quality of estimates in the real estate sector. On its part, the State with its legal framework on data protection (Decreto Legislativo 30 June 2003, n. 196) prevents the efficient performance of real estate appraisal, which not only plays a primary role for the interests of private citizens (Grillenzoni, 1970), but also in credit granting processes, the establishment and management of real estate funds and the

verification of the degree of coverage offered by insurance companies (Guerrieri, 2012).

The lack of transparency in the Italian market still prevents even the most experienced appraisers from fully meeting the requirements set out in the various standards, unlike in most Anglo-Saxon countries, where the appraisal activity is facilitated by a great availability of information useful for drafting an effective real estate valuation report.

Therefore, this study has outlined on the one side the ideal context and on the other side the existing constraints by identifying clearly the missing points which do not allow to bring appraisal practice closer to theory.

6.2. Future perspectives

There are various ways in which the operating conditions of appraisers can be improved to reduce the "distance" between real estate appraisal standards and valuation practices for professional freelancers in Italy.

For example, it would be desirable to set up a database of both prices and real estate characteristics of properties involved in transactions that would be regularly updated and available to professionals in the urban real estate sector through specific legislative acts.

As observed by Guerrieri (2012) and Agosta et al. (2022), public entities could play an important role in managing real estate registers and cadastral databases by reorganizing the structure of the information they possess, which is currently used for tax equalization, to supply professionals with the microeconomic data necessary for appraisals.

In the future it would be beneficial to identify the minimum levels of available information that would enable the practical application of standard valuation principles, as suggested by Guerrieri (2012).

Furthermore, the Italian Revenue service could grant working professionals' exemptions regarding the consultation of architectural plans, since they are integral parts of notary deeds, which are recognized as public acts, and furthermore constitute an important valuation instrument.

Building Information Models (BIM) are promising information technology tools that could be useful for the real time acquisition and sharing of technical information regarding both the structural and non-structural projects carried out during the life cycle of either entire buildings or individual parts.

This would presuppose the issuance of targeted regulations, as well as increased collaboration between actors operating in the real estate industry such as construction companies and appraisal professionals. Furthermore, a nationwide memorandum of understanding between appraisers, real estate agencies and notaries would be beneficial. This agreement would contribute to improving the general quality of appraisals, significantly increasing the quantity of market information available with positive repercussions for the growth and transparency of the Italian real estate market.

Before these projects are carried out, a partial revision of privacy law is necessary since some of the required information is still protected by the Codice in materia di protezione dei dati personali in force.

Furthermore, the government could launch an informational campaign to increase private citizen's knowledge and awareness of appraisers as professional figures.

The skills and the specialist knowledge of the latter are in fact often underestimated. One of the reasons is that the Real Estate Agencies offer evaluations almost in real time and nearly for free to potential customers.

Lastly, but not least, improving coordination within each professional association and between those ones of the various technical professions would contribute to enhance the figure of the appraiser within the real estate supply chain. At the same time, it would be desirable to have a better collaboration in theoretical and applied validations, among the Professional Associations, the Scientific Societies and the Academics operating in the field of appraisal disciplines.

The practical solution to remove these constraints can come either from voluntary collaboration or through regulations on the availability and sharing of information among all stakeholders in the industry. This aims to protect and promote the improvement of the quality of real estate appraisals, recognising their delicate role.

We agree with Schulte et al. (2005) in stating that information sharing and the availability of market data can be beneficial for everyone and that "the key to more market transparency is a change in the mentality of market participants".

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Notes

- ¹ The UNI 11558/2014 standard is an Italian technical standard that defines the competency requirements for real estate appraisers. Published by the Italian National Unification Entity (UNI), this standard establishes the criteria that professionals must meet to be considered qualified in the field of real estate valuation. This standard thus represents a fundamental tool for the professionalization of the real estate appraisal sector in Italy, promoting trust and transparency in the real estate market.
- ² Below, some key points regarding the collection of market data for a market-oriented estimation are extracted from the various articles of the Tecnoborsa Code, citing the numerical section reference at the end of each point.
- ³ Each deed of sale is registered by the notary at the time of signing with its own identification code. The deeds are public documents, but they cannot be easily found unless the evaluators interested in examining them know this numerical code. In this case they can request a copy directly from the notary upon payment of a secretarial fee.
- ⁴ The mathematical calculations carried out to determine the marginal prices (**Table 3**) and the adjusted prices (**Table 4**) are not reported here both for convenience and because the explicit description of these MCA steps is not essential to the objectives of the work.
- ⁵ The absolute percentage divergence in the MCA is calculated as the difference between the highest and the lowest of the comparables' adjusted prices, divided by the lowest adjusted price and finally multiplied by 100.
- ⁶ It was not considered convenient to report the steps taken and the results of the General Assessment System as they are irrelevant to the objectives of the present work.

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