Appraisal Value and Assessed Value in Italy

Marina Ciuna[1], Francesca Salvo[2], Marco Simonotti[1]

Abstract. The appraisal value is an appraiser's opinion (not determination) of the current worth of a property on the real estate market. The assessed value is the value placed on real estate property by government assessors for determining ad valorem taxes. Assessed value is used rarely as basis for appraisal value. The Italian appraisal practice is characterized by valuations developed in subjective opinions formulated by the valuers, according to the experience and the competence rather than on the survey of the market data of comparable properties. These opinions are indicated by the term expertise, borrowed from the estimates made in the art market. In Italy, the valuation of the properties applies a form of expertise based on subjective opinion rather than on the market prices. The basis of the expertise is one synthetic estimate of the value based on a single parameter, often derived from generic list of interval values quotations.

Keywords: Market value. Unit value. Commercial surface. Assessed Value.

1 Introduction

The real estate appraisal is developed in relation to the economic, legal and social system in each country. In Italy, the real estate market has poor transparency and a deficient level of information, consequently in the appraisal profession it is common to make use of empirical valuation based on subjective judgments formulated by experts in the form of a real estate expertise. In this way, the lack of market information is compensated with experience and ability (*animus aestimandi*). The valuation of the expert cannot be proved or ascertained, nor is it repeatable, but can only be confirmed by the valuations of other experts.
Different are the international valuation standards that are based on the collection of data for real estate valuations [1][2][3] and the standards of measurement [4] [5]. For residential real estate (apartments, houses, etc.) (single-family houses, condos and town houses), the appraisal of market value is based on the surface of the property and on a set of coefficients reflecting the effect of other characteristics different from the surface (state maintenance, floor level, exposure, etc.). The surface of the property is composed of the main surface and the secondary areas (balconies, terraces, etc.),

[1] *Department of Civil, Environmental, Aerospace and Materials Engineering University of Palermo, Palermo, Italy*
[2] *Civil Engineering Department, University of Calabria, Rende (CS), Italy*

considered as fractions of the main surface. This surface is called commercial area. The coefficients of non-surface characteristics are expressed with pure numbers, higher or lower depending on whether the variation of the amount of the characteristic increases or decreases the market value of the property being appraised.

1.1 Unit Value

In the real estate appraisal in Italy in practice, a value (*€/sqm*), assigned by expertise is multiplied by the commercial area (*sqm*) and a certain number of coefficients. In general, the market value of residential property is the following:

$$\textit{Market value} = \textit{Unit value} \cdot \textit{Commercial surface} \cdot \textit{Coefficients}. \quad (1)$$

The unit value is estimated by the appraiser or detected by databases of quotations prepared by the public administration, magazines of real estate sector and other generic sources (list of interval values, list of price, etc.) [6]. The calculation of the commercial surface considers the ratios of the secondary surfaces (surface ratios) with the main surface. The ratio of the price of a secondary surface over the price of the main one can assume values less than, greater than or equal to the unit at the discretion of the market.
The surface ratios are detected directly from the housing market.
The criterion of secondary surface is applied to particular purposes relevant to: the determination of the cadastral area of the property assessed in ordinary use (DPR 23 March 1998, n. 138); the allocation of costs among the members of the buildings of co-operative housing (Circular 26 March 1966 n. 12480 of the Ministry of Public Works); the UNI 10750 norm that defines the homogenization ratios for the services of estate agents. These are usually fixed ratios uniquely determined. At the local level there may be agreements between operators and agencies and professional organizations to fix ratios as constant and uniform practice.
The coefficients of the non-surface characteristics are subjectively established by the evaluator and often with the help of commercial manuals, where their values are reported for each characteristic in the form of an interval between a minimum and a maximum. The present study deals with the real estate expertise in Italy considering: the market surface ratios (*paragraph 2*), proposing a series of tests designed to predict the influence of these surfaces on the result of the valuation (*paragraphs 3* and *4*); and the coefficients of the non-surface characteristics offering a measure of the valuation error caused by their use (*paragraph 5*). Overall the study aims to bring out on a rational way, the deficiencies, inaccuracies and errors of the valuations based on the expertise when it is applied to the real estate market.
In Italy the application of the valuation standards is in the early stages of start-up.

1.2 Commercial Surface

In the ratios of the secondary surfaces it is generally supposed that these are worth less than the main surface (surface ratio less than one), such as an open surface compared to a covered one by reason of a lower construction cost or a minor use. However, it is not considered that secondary surfaces can sometimes require work with structural complications or be more useful than the main surface. In addition, these secondary areas may characterize architecturally and typologically the property and be subject to significant estate transformations. Consequently, the distinction between the main surface and secondary surfaces is weak and sometimes contradictory, namely when a surface is considered secondary instead of a main surface for a particular or special type of property (surface ratio greater than one) whereas it represents the spaces of greater importance for the property.
The market ratio π_i of the generic secondary surface ($i = 2, 3, ..., n$) is equal to the ratio between the average price pi of the secondary surface and the average price p1 of the main surface as follows:

$$\pi_i = \frac{p_i}{p_1}. \tag{2}$$

In the expertise the market value V of the property being appraised is calculated by multiplying the unit value v by the commercial area and the coefficients, according to (1), as follows:

$$V = v \cdot \left(x_{01} + \sum_{i=2}^{n} x_{0i} \cdot \pi_i \right) \cdot \alpha_1 \cdot \alpha_2 \cdot \ldots \cdot \alpha_h \cdot \ldots \cdot \alpha_l, \tag{3}$$

where x_{01} is the main surface of the property being appraised (0); x_{0i} is the generic secondary surface of the property being appraised; π_i is the ratio of the generic secondary surface; α_h (with $h = 1, 2, ..., l$) is the coefficient of a generic property's characteristic different from the surface. In the real estate expertise the surface ratios are indispensable because their omission leads to an error of overestimation or underestimation of the market value of the property.
In the approaches based on the data collection and on their comparison, such as the market comparison approach, the adjustments lead to correct prices for each property of comparison [1] [2] [3].
The calculation of the correct price V_j of the generic comparable property j (*with* $j = 1, 2, ..., m$) can be referred to the comparison with the property to be estimated (0), highlighting the adjustments to surfaces as follows [7]:

$$V_j = P_j + p_1 \cdot \left(x_{01} - x_{j1} \right) + p_1 \cdot \sum_{i=2}^{n} \left(x_{0i} - x_{ji} \right) \cdot \pi_i + A_j, \tag{4}$$

where P_j is the known market price of the comparable property, x_{j1} is the main surface and x_{ji} is the generic secondary surface of the generic comparable and A_j the set of adjustments for non-surface characteristics (with $h = 1, 2, ..., l$). These adjustments are equal to:

$$A_j = \sum_{h=1}^{l} \left(x_{0h} - x_{jh} \right) \cdot p_h . \tag{5}$$

Denoting by X_0 the commercial area of the property being appraised and by X_j the commercial area of the generic property:

$$X_0 = x_{01} + \sum_{i=2}^{n} x_{0i} \cdot \pi_i , \tag{6}$$

$$X_j = x_{j1} + \sum_{i=2}^{n} x_{ji} \cdot \pi_i , \tag{7}$$

the price p_1 of the main surface can be calculated as the ratio between the price partially corrected P^*_j for the adjustments of the non-surface characteristics ($P^*_j = P_j + A_j$) and the relative commercial surface, as follows:

$$p_1 = \frac{P_j + A_j}{X_j} = \frac{P_j^*}{X_j} . \tag{8}$$

The correct price of the generic property is calculated by replacing the (8) in the (4) as follows:

$$V_j = P_j^* \cdot \frac{X_0}{X_j} . \tag{9}$$

The correct price is equal to the price corrected for the non-surface characteristics of the comparable property multiplied by the ratio between the commercial surfaces of the building being appraised and that of the comparable property.
In order to isolate, the secondary areas in the surface ratios, it is indicated with Π_0 the surface ratio weighted by the surfaces of the building:

$$\Pi_0 = \frac{\sum_{i=2}^{n} x_{0i} \cdot \pi_i}{\sum_{i=2}^{n} x_{0i}}, \tag{12}$$

and Π_j indicated the surface ratio weighted by the areas of the comparable property:

$$\Pi_j = \frac{\sum_{i=2}^{n} x_{ji} \cdot \pi_i}{\sum_{i=2}^{n} x_{ji}}. \tag{13}$$

Substituting in (9) the (12) and (13), the market value for the set of secondary area is equal to:

$$V_j = P_j^* \cdot \frac{x_{01} + \Pi_0 \cdot \sum_{i=2}^{n} x_{0i}}{x_{j1} + \Pi_j \cdot \sum_{i=2}^{n} x_{ji}}. \tag{14}$$

When the ratio π_i is equal for all the secondary surfaces, then Π_0 and Π_j are equal to π_i though the secondary areas may differ in the property being appraised and in the comparable building. This means that the respective ratios between the sum of the secondary areas and the main surface are in the same ratio despite having different sizes. In practice this circumstance occurs for serial or modular properties, such as apartments in multi-story buildings, and more generally for similar properties belonging to the same market segment where the typological surface ratios are almost equal. The higher the difference between the surface ratios of two or more secondary surfaces (eg. π_i and π_{i+1}), the smaller that between the weighted ratios (Π_0 and Π_j). In principle, if the number of the secondary surfaces increases, this relationship is more valid. This means that with good approximation can be considered a unique surface ratio for all secondary surfaces.

Ultimately in the approaches based on the data collection, the surface ratios have minor importance compared to procedures based on the expertise.

The surface ratios vary from market segment to market segment and over time. Sometimes in the same market segment information may indicate more than one surface ratio related to the same situation, usually because of a lack of the same information and circulation of ratios taken from non-commercial sources.

In these circumstances it may be useful to compare the surface ratio from different sources to check the consequences of the use of fixed coefficients compared to those of the market, and vice versa, and of different fixed coefficients. This verification

may also refer to ambiguous situations in which two or more amounts of the market surface ratio are simultaneously found.

1.3 Multiplicative Coefficients

In the expertise the coefficient of a real estate characteristic is the ratio between the value that it is believed the property being appraised should have and the value assigned until that moment without taking into account other characteristics that are uncorrelated, or taking them into account in some way (in the first instance, they are considered subjective) [8].
In the market survey, the coefficient of a property characteristic is the ratio between the price of a property P_h that has this characteristic and the price of a property P that does not have this characteristic (or does not possess the same level) other things being equal [9]. The coefficient of the generic characteristic α_h (with $h = 1, 2, ..., l$) is equal to:

$$\alpha_h = \frac{P_h}{P}. \tag{26}$$

In the traditional form, the market value of the property being appraised is equal to the product of the unit value, the commercial area and the coefficients of the property being appraised, according to (3):

$$V = v \cdot \left(x_{01} + \sum_{i=2}^{n} x_{0i} \cdot \pi_i \right) \cdot \prod_{h=1}^{l} \alpha_h. \tag{27}$$

For the real estate characteristics measured on nominal scale (absence, presence) there is only one coefficient for the characteristic calculated with the (26).
For real estate characteristics measured on ordinal scale, there are as many coefficients as the number of levels of the characteristic minus one. The coefficient $\alpha_{h(f)}$ of the generic characteristic is given by the ratio between the price of a property $P_{(f)}$ with $f = 1, 2, ..., g$ that possesses the characteristic at the f level and the price of a property $P_{(1)}$ which has the characteristic on the first level:

$$\alpha_{h(2)} = \frac{P_{(2)}}{P_{(1)}}; \alpha_{h(3)} = \frac{P_{(3)}}{P_{(1)}}; ... \alpha_{h(f)} = \frac{P_{(f)}}{P_{(1)}} ...; \alpha_{h(g)} = \frac{P_{(g)}}{P_{(1)}}. \tag{28}$$

For the real estate characteristics measured on cardinal scale, the αh coefficient of the generic characteristic considers the mode of x_h of the property with the price P_h, the mode x of the property with the price P and the mode x_0 for the property being appraised, in the following way:

$$\alpha_h = 1 + \frac{P_h - P}{P} \cdot \frac{x_0 - x}{x_h - x}. \tag{29}$$

In the approaches based on the comparison of the data, the adjustment is set equal to the difference between the prices of properties with and without the characteristic (or with different level of the characteristic) assuming that all the other characteristics are identical. The market value V of the property to be estimated according to the comparison function (4) is equal to the adjusted price calculated in the following way:

$$V = P + \sum_{h=1}^{l} (P_h - P) = P \cdot \left(1 + \sum_{h=1}^{l} \alpha_h + l \right). \tag{30}$$

For the property being appraised of commercial surface X_0, the price P is equal to:

$$P = v \cdot X_0, \tag{31}$$

the absolute error E can be measured by the difference between the market value according to the expertise and the market value according to the market approach and, respectively, with (27) and (30):

$$V = v \cdot X_0 \cdot \prod_{h=1}^{l} \alpha_h - v \cdot X_0 \cdot \left(1 + \sum_{h=1}^{l} \alpha_h + l \right). \tag{32}$$

The percentage error e can be referred to the property being appraised and is equal to:

$$e = \frac{E}{P} = \prod_{h=1}^{l} \alpha_h - \sum_{h=1}^{l} \alpha_h + l - 1. \tag{33}$$

In general for $\alpha > 1$ and for $\alpha < 1$ the error is positive ($E > 0$ and $e > 0$). In practice, any alternation of coefficients major and minor than 1 can determine compensation.

2 Assessment Value

A cadastral system addresses the valuation of incomes and property values primarily under the provisions of tax laws. A cadastral system is thus linked to the tax framework, to the legal system, to the socio-economic conditions and to the political system of a country [10].

The composition of the real estate, the era of the constitution, the successive reforms and the development of estimation and stacking procedures also have an impact on the structure of the cadastral system. A system of cadastral valuation should adhere to the principle of tax fairness and the principle of economic justice, and should also establish the instrumental meaning of the estimates with respect to the cadastral system of real estate taxation, aiming to separate the technical responsibilities of the valuation by the imposition tax.
From the founding law of 1886, the Italian Land Registry assesses the income of some of the ordinary buildings (homes, offices, etc.) with the system of the tariffs, and the income of the properties with special destination (factories, hotels, etc.) with the direct valuation. The Cadastre Italian is called a "Cadastre in income" because it pertains to income and not to the asset value. When it was necessary to calculate the assets for tax purposes, the capitalization of cadastral income with the use of multipliers established by law was needed.
For the valuation of tariffs of properties in ordinary use, it has been used the method "for classes and tariffs", so called because it divides properties rents into groups (or classes): each group is not defined as a range of rent (between two extremes) but with a single approximate average income. This rent per unit of consistency of the property (compartment, *sqm*) is the estimation tariff. So, in the same group, properties with different market rent, are counted in the Cadastre with the same tariff, i.e. with the same intermediate rent.
To estimate the cadastral income of the properties with special destination it is applied the direct valuation according to the criteria of the market valuation, a property at a time.

2.1 Estimation Tariff

The Italian Land Registry has divided the country into census zones (about the size of a province) and urban properties in categories and classes: the 'cadastral Category' distinguishes the properties for the type and functional use (homes, shops, etc.); the 'cadastral Class' specifies the income's group, assigning the first-class to properties with the lower income and subsequent classes to the properties with increasing rents. In the valuation of the estimation tariff, the Italian Land Registry uses the method for classes and tariffs, which is based on the division of the national territory into census areas and in the division of urban properties in cadastral categories and classes.
On formation of the urban Land Registry (1939) the calculation of the cadastral income occurred for each census area (roughly a province), by choosing a municipality-type, representative of the real estate situation of the province. In the municipality type' for each category of properties it has been defined a building type belonging to a given class (eg home category: *3rd* class) on a scale of classes established a priori (ie *1st*, *2nd*, *3rd*, *4th* and *5th*). For this property the cadastral income is determined with the preparation of financial statements referred to the owner: the assets included fees and other revenue, and the operating expenses were considered as liabilities (excluding taxes). The cadastral income of the "type property" was divided by the size of the property (compartment) in order to establish the

'estimation tariff' of the property type . The tariff is expressed in euro per square meter per year.
In order to determine the estimation tariff for the other classes in the same category (*1st*, *2nd*, *4th* and *5th*) 'scale of merit' was used. These scales are built with scores (merit points) subjectively assigned to each class with reference to a fixed base score for the class of the property type (in the *3rd* class). The merit point is a pure number without units (dimensionless) formulated by one or more cadastral administration officials based on their expertise and experience. Each point expresses the merit relative to the class in question compared to the one taken as a basis. The points are assigned according to appreciably different degrees of profitability of real estate, based on the judgment of the officials (for example *20%* between a class and the other) (*Table 1*).

Table 1 – Scale of merit for a category of municipality type

Category	Class	Point
Housing	5^a	φ_5
	4^a	φ_4
	3^a	*1*
	2^a	φ_2
	1^a	φ_1

The points $\varphi_1 < \varphi_2 < 1 < \varphi_4 < \varphi_5$ constitute the scale of merit: each point express the relative merit of the class considered with respect to that taken as a basis (for example *3rd = 1*).
In order to determine the estimation tariff for the classes of the other municipalities in the province were employed the ' connecting scale'. This scale is built with merit points subjectively assigned to each class of each municipality with respect to the fixed base score for the class of " property type " of the " municipality type " (*3rd* Class = *1*) *(Table 2).*

Table 2 – Provincial framework of points: scale of merit and connecting scale

Category	Class	Municipality type	Municipality A	Municipality B	...	Municipality Z
Housing	5^a	φ_5	φ_{5A}	φ_{5B}	...	φ_{5Z}
	4^a	φ_4	φ_{4A}	φ_{4B}	...	φ_{4Z}
	3^a	*1*	φ_{3A}	φ_{3B}	...	φ_{3Z}
	2^a	φ_2	φ_{2A}	φ_{2B}	...	φ_{2Z}
	1^a	φ_1	φ_{1A}	φ_{1B}	...	φ_{1Z}

The points of the row of the *3rd* class (1, φ_{3A}, φ_{3B} , ... , φ_{3Z}) represent a connecting scale between the points awarded for different municipalities. The provincial framework shows the merit points for all classes and all the municipalities of the Province referred to the base point 1: the table columns represent the scale of merit; the rows in the table represent the connecting scale.

The transition from the framework of the merit points to the *Provincial framework of estimation tariffs* takes place by placing the estimation tariff of the "property type" R (expressed in *euro/room·year*) equal to *1* and calculating other tariffs in direct proportion to their points of merit (*table 3*).

Table 3 – Provincial framework of estimation tariffs (*euro/room·year*)

Category	Class	Municipality type	Municipality A	Municipality B	...	Municipality Z
Housing	5^a	$R \cdot \varphi_5$	$R \cdot \varphi_{5A}$	$R \cdot \varphi_{5B}$	...	$R \cdot \varphi_{5Z}$
	4^a	$R \cdot \varphi_4$	$R \cdot \varphi_{4A}$	$R \cdot \varphi_{4B}$	...	$R \cdot \varphi_{4Z}$
	3^a	R	$R \cdot \varphi_{3A}$	$R \cdot \varphi_{3B}$	...	$R \cdot \varphi_{3Z}$
	2^a	$R \cdot \varphi_2$	$R \cdot \varphi_{2A}$	$R \cdot \varphi_{2B}$	...	$R \cdot \varphi_{2Z}$
	1^a	$R \cdot \varphi_1$	$R \cdot \varphi_{1A}$	$R \cdot \varphi_{1B}$	...	$R \cdot \varphi_{1Z}$

For the other categories of the same Province we proceed in the same way: the building type, the merit points, scale of merit, the connecting scale and calculation of estimation tariffs. And so on for the whole country.

After completion of the tariff framework, the cadastral tariff is assigned to the properties with ordinary use surveyed in Cadastre. The operation of attributes tariff to the property is called 'class transfer'. This is the assignment of the category and class of each housing unit registered in Land Registry and then in the allocation of the corresponding estimation tariff.

Logically the attribution of the class should take place considering the real income of the property, placing the property in the same relative group of which it would take the nominal class. However, the class is not defined by an interval of the cadastral income but only by the intermediate income: then the identification of the class becomes an arbitrary operation and virtually it is not possible to appeal, except with qualitative arguments.

In the method for classes and tariffs, any objection to the estimation tariff attributed to the property owner is only possible to the taxpayer of the "type property", in which the estimation tariff was determined, who probably witnessed the estimative operations and would have no reason to appeal.

An element of unfairness inherent in the method for classes and tariffs is the fundamental principle which gives a single tariff to properties belonging to the same class, while presenting these incomes estate different: in practice it is not estimated the income of each individual property, but a tariff for all.

The units of the same class have given the same tariff despite the fact that their real unit income may be higher or lower: in the case of higher actual incomes, this determines a tax advantage for the taxpayer, in the opposite case a tax disadvantage is determined.

The distinction between ordinary and special properties has induced inequality in the estimation of the cadastral income. So for example, for two properties with the same real income but with different destination (eg an apartment and a shed rented at the same income and with equal expenses) in cadastral estimate: the apartment has been merged with other apartments (class) to which has been attributed a collective single

tariff indistinctly (class transfer); while the shed has been evaluated individually (one by one) with direct valuation of its income.
In methodological terms, the method for classes and tariff is an estimation procedure, which is archaic and impractical in the presence of economic transformations, dynamics of the housing market and real estate complexes such as the urban ones. The valuation for merit points is an empirical estimation, because it is based on a synthetic judgment (the point) that can not be controlled nor verified rationally. This assessment may result in arbitrary and unacceptable simplifications in the estimate.
The Italian Cadastre has maintained its original method for classes and tariffs until 1990, when it performed the original and unique revision of tariffs of urban property.

2.2 Revision of Tariffs

In the process of revision of estimation tariffs of 1990, we started from the assumption that it was difficult, if not impossible, to detect income market for the widespread presence of lease contracts regulated by the law on the regulation of leases of urban property (L . July 27, 1978, n. 392).
The review process has proceeded for calculating estimation tariffs from patrimonial quotations, by multiplying the latter by a rate of fruitfulness fixed for the whole country (for example, *1%*), and thus abandoning the criterion of the budget.
In the law of establishment of the building-urban Land Registry (1939) the calculation of the income on the basis of the application of a rate to the capital value was considered an exception. It was also an exception in the law revision, but in the same revision has become the general rule for determining the applicable rate. This rule can be considered a major cause of the litigation that followed the review and - of course - an important component of the current inequalities in the tariffs.
In the Italian real estate, the quotations of the Observatory of Real Estate Values of the cadastral administration refer to broad areas of market with approximate contours, identified by area (centre, periphery, etc.), by destination (residential, commercial, etc.) and typology (housing, box, etc.). The sources of the quotations are numerous and heterogeneous: estate agents, previous estimates, auctions, acts, courts, etc.
For the review of the estimation tariffs, the patrimonial quotations expressed per square meter did not fit with the surfaces of the building units expressed in cadastral rooms, it was necessary then transform cadastral rooms in square meters of housing.
The conversion factors for the room in square meters have been established for each cadastral category at the provincial level with a subjective estimate conducted by the administration without the systematic survey of a sample of data of real estate surface.
In the example for Category A1 of the municipality type, the conversion factor can be set equal to σ (expressed in square meters per room) for each cadastral compartment (*Table 4*).

Table 4 – Framework of estimation tariffs converted into square meters (Municipality type)

Cadastral category	**Class**	**Tariff** (*euro/room·year*)	**Tariff** (*euro/sqm· year*)
Housing	5ª	$R \cdot \varphi_5$	$R \cdot \sigma \cdot \varphi_5$
	4ª	$R \cdot \varphi_4$	$R \cdot \sigma \cdot \varphi_4$

3ª	R	R
2ª	$R \cdot \varphi_2$	$R \cdot \sigma \cdot \varphi_2$
1ª	$R \cdot \varphi_1$	$R \cdot \sigma \cdot \varphi_1$

The review process was considered a municipality type, in which for each category of properties it was settled a minimum price and a maximum price expressed in euro per square meter, corresponding to the first and last class of the same category (q_{min} and q_{max} respectively assigned *1st* class and *5th* class).
So the two quotations were transformed into the corresponding estimation tariffs with the use of a fixed rate of fruitfulness (for example $r = 1\%$). Between the first and the last class mechanically intermediate classes were arranged, making sure that the tariff for each class was a constant sum δ apart from that of the next class of with δ equal to in the example:

$$\partial = \frac{q_{max} - q_{min}}{5 - 1} \cdot r$$

The resulting tariff framework at constant groups was compared with the framework of the old tariffs of 1939 based on the number of classes. If the number of classes in the current provisional framework coincided with that of the existing framework, the current framework would be confirmed as definitive (*Table 5*).

Table 5 - Framework of provisional and definitive picture of estimation tariffs (Municipality type)

Cadastral category	**Class**	**Tariff pre-existent** (*euro/sqm·year*)	**Tariff revisioned** (*euro/sqm·year*)
A1	*5ª*	$R \cdot \sigma \cdot \varphi_5$	$q_{max} \cdot r$
	4ª	$R \cdot \sigma \cdot \varphi_4$	$q_{max} \cdot r - \delta$
	3ª	R	$q_{max} \cdot r - 2 \cdot \delta$
	2ª	$R \cdot \sigma \cdot \varphi_2$	$q_{max} \cdot r - 3 \cdot \delta$
	1ª	$R \cdot \sigma \cdot \varphi_1$	$q_{min} \cdot r$

If the number of classes in the draft framework was lower or higher than the pre-existing framework, care was taken to correct it numerically, the provisional tariffs according to the old classes.
Once completed the calculation of the new revised tariffs of the "municipality type", revised tariff frameworks predisposed have been determined for all the other municipalities of the province, deriving them from tariff framework of the municipality type in the usual way, i.e through the use of the merit and connecting scale.
In conclusion, the financial statements, the property type were replaced with: the conversion coefficients of the rooms in square meters, the use of patrimonial quotations related to broad contexts, fixed rates of fruitfulness and the mechanical division of the classes within the category.

2.3 Cadastral Subsidies

To support the estimation cadastral method for classes and tariffs two pillars are needed: the census period and census Commissions. The former indicates the time interval at which the income and, therefore, the tariffs are referred; the latter have the task of supporting the cadastral expertise with which the tariffs were estimated.
The method for classes and tariffs is static as tariffs are fixed permanently with reference to the census period or cadastral revisions. The method is rigid because the update over time of the property types and incomes involves the redefinition of all or part of the cadastral framework, unless the old framework is maintained and only the cadastral income is re-evaluated. The Finance Act of 2005 determined the reclassification of urban property whose value had increased over time beyond a certain threshold. The operation of reclassification is the allocation of new classes to these properties. In practice the new partial class transfer intends to operate in two ways: the first way move properties from low positions to the high positions of the scale of merit, built with the revision of 1990, within the same category; in the second way all the properties migrate from one category to another more profitable. While the transition from one category to another can take place tentatively based on building conditions and estate detectable macroscopically (eg from civil residential to stately home), the transition from one class to another in the same category is looming as operation of mere monetary revaluation without reference to reality real estate. In the building-urban Land Registry of 1939, the census era was referred to the three-year period 1937-39, in the revision of the estimation tariffs in 1990, the census era was referred to the 1988-89 biennium. The reference at the census time to the cadastral income is inherently unfair because it overestimates or underestimates the actual income, not taking into account the cycles of the real estate market [11]. The phenomenon is more evident considering the range of time that includes the census time and the next period necessary to perform the operations of training or revision of cadastral rents. It is said that the *expertise* to become an ordinary valuation must find the response of the estimates of other experts. In the valuation of the estimation tariff, this task is entrusted to the census Boards, the function of which is the only way to check the estimation tariffs which are otherwise unprovable. The verification of tariffs can be accomplished by increasing the number of subjects who perform or supervise the estimates. In practice it is the Commission's opinions expressed on other opinions of the cadastral administration. Historically this need arose in Cadastres where estimates were made on the basis of the declaration of taxpayers.
In Bourbon Cadastre (1741) verification of the tariff was carried out with the *apprezzo*, that is, with an estimate made by a committee made up of six members of different wealth and four valuers (two citizens and two foreigners). The deputies controlled the statements of the owners, while the valuers were concerned with the adequacy of the *apprezzo*. The Land Registry in Milan (1718) was launched by a working committee of royal appointment, composed of officials who were not from Milan, in order to safeguard the neutrality and objectivity of the data.

3 Conclusion

The real estate expertise does not obey written definitions, limits and rules approved, checked and verified.
In Italy, in the market valuations, the real estate *expertise* is based on quotations, surface ratios and the unit coefficients. Quotes are referred to large areas of the market, with approximate contours, identified by zone (central, semi-central, peripheral, etc.), by destination (residential, commercial, etc.) and by typology (new, used, refurbished, etc.). The sources of property quotations are numerous and heterogeneous: from the interview of technicians, intermediaries, consultations of economic newspapers and magazines, the price lists of judicial auctions, the advertising brochures.
The recognition in the market of the secondary surface ratios to the main one can be difficult, because many contracts are fixed-price and the interviews of operators frequently lead to different outcomes. In practice, fixed coefficients reported in the manuals and circulars of the public administration are often improperly used.
The unit coefficients of the other real estate characteristics different from the surface characteristics are typically detected in commercial handbooks, where they are reported for single characteristic in an interval between a minimum and a maximum.
In Italy the cadastral method for classes and rates does not value the individual property independently but, after grouping the buildings into classes, attributes to all properties of the class the same average unit income, one for all. In fact, this creates within the class an imbalance of property that naturally, because of the market, have a unit income higher or lower than the average of the class, determining an underestimate or overestimate of the tariff, respectively.
The valuation of the intermediate income of the cadastral classes does not take place on the systematic collection of data samples in the housing market, but with a process based on a system of subjective scores, ie real estate *expertise* expressed in points rather than money. The process is borrowed from the valuation for typical values developed in Germany and Switzerland in the mid-nineteenth century for the valuation of agricultural land according to their fertility, which in the absence of more precise measurements, was established with scores in accordance with agricultural practice. The valuation procedure for typical values is based on a scoring system (or merit points or typical values), which will fix a base score for a property with known price and assign a score to the property to be appraised on the basis of the differences compared to the property with known price. The value of the property being appraised is obtained by applying a ratio of the base score and the price known and the assigned score and the unknown value of the property. The scoring of merit points is a subjective task of those who perform the valuation.

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