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Contents – Part III

The Appraisal of Buildable Land
for Property Taxation in the Adopted
General Municipal Plan

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Abstract. In Italy, tax base for "Imposta Municipale Unica" related to the
building area - made such by General Plan or its General Variation adopted but not
approved - is the value (of the same building area) depending on the building
potential of prediction even if not immediately exercisable. However, the building
rights can be exercised only after: (i) the final approval of the General Plan/General
Variation; (ii) the approval of the Implementation Plan required by Law; (iii) the
issuance of certificates of permission building. This has produced in recent years
several disputes between owners and local governments; the law did not give
univocal solutions: today (2015) there is a conflict of case law relating to consider
this areas absolutely as building areas, as well as it isn't defined what estimating
procedures should be used. In this paper, through the application of a model of
financial mathematics, an approach that overcomes the conflict law related to the
appraisal of the building areas included in General Plans/General Variation adopted
but not yet approved, is proposed: the appraisal will be performed in relation to the
time and variables between the time of the appraisal and the time (alleged) for the
completion of the administrative procedure for obtaining authorizations to build.

Keywords: Value of transformation · Land taxes · General municipal plan ·
Appraisal · Financial mathematics

1 Introduction

Among the issues related to real estate taxes, taxation holds particular relevance for
"Imposta Municipale Unica" (IMU, formerly ICI) for the building sites considered as
such on the basis of only the General Municipal Plan (GP) or, more frequently, its
General Variation (GV)[1], adopted by the City Council (CC) but not approved,

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The contribution is the result of the joint work of the two authors. Scientific responsibility is equally
attributable to all two authors.

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[1] VG/GP means any modification/revision of a "general" and not "specific" nature, of the GP in force.
Since nearly all the municipalities have approved GP and therefore in force, the overall planning
practiced by the CC in Italy, as of 2015, only applies to GV; under a formal and substantive
standpoint, GP and GV have similar and coincident tools.

following ADNAP areas (with provision of "adopted but unapproved" building rights), and therefore without building rights, as the actual building rights may only be exercised[2], after the approval of both the GV, issued by the Regional Administration (RA) or provincial (PA) and an Implementation Urban Plan (by CC), as well as qualifying title[3]. The tendency, almost unanimous, of CC in Italy, on the taxation of ADNAP areas, has always been to consider how a tax base for the application of tax rates depending on the value of the estimated building potential, although not immediately exercisable due to the rules of protection that allow for the implementation of the measures with the dual compliance: the plan in force and the adopted plan.

This created several disputes in recent years for which the law did not provide single solutions. Two orientations, contradictory in fact, have emerged in the course of time:

- A first (prevalent) orientation in which it is believed that the purpose IMU is in the simple insertion of the land in the GV adopted with intended use that admits the building rights, because taxed as such. This approach is based on the assumption that the inclusion of the land in the GV as building area determines an obvious and inevitable increase in its value and therefore the IMU withdrawal should be compared to that value, while the actual building potential of the same seems to be completely irrelevant (art. 5 Decree. N. 504/1992; Cassation sentence no. 16751/2004; Cassation sentence no. 19750/2004; art. 11 quaterdecies paragraph 16 Legal Decree no. 203/200 converted by Law no. 248/2005, art. 36 paragraph 2 of Decree no. 223/2006 converted by Law no. 248/2006; Supreme Court with sentence no. 25506/2006; Constitutional Court Ruling no. 266/2008);
- A second orientation in which the circumstance of including the land in the GV to tax it as building land is considered not sufficient, if in fact that land remains without building rights In this case the land must be considered and therefore taxed for IMU, as agricultural land (Cassation sentence no. 21644/2004; Cassation sentence no. 17035/2013).

To date (2016), in this situation of lack of clarity, the main orientation continues to consider the value of ADNAP areas for IMU purposes according to their building rights, even if not exercised. This approach does not consider, among other things, that the ADNAP areas, if held as collateral for credit, are now valued as a function of only their agricultural value. The European Central Bank (ECB) in fact, as part of "Asset Quality Review" (2014), review of the quality of the assets on the balance sheets of the 130 largest European banks to check their state of health, has established criteria and methodology for estimating so-called "Collateral" or of property used to guarantee the loans granted by the banks themselves. With regard to building areas, the ECB has established that they could be considered as such and therefore their value estimated in terms of their building potential, only if the authorization process is completed and

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[2] As a rule and unless it is an extension of zone B in accordance with Ministerial Decree no. 1444/68.

[3] Building Permit by the relevant technical departments of the CC or alternatively Activity Start Report (DIA) where permitted (where the implementation urban plan provides for building types is still thorough in the aspects as well as urban planning, even building).

therefore any permits issued for construction; in all other cases the valuation principle to consider is the agricultural value (AA.VV. 2014a).

The often burdensome taxation on ADNAP areas, given the uncertainties (upon approval by RA/PA, changes may be officially made, pursuant to Art. 3 of Law 765/1967, which writes off areas for building purposes from the adopted GV) and long bureaucratic process for the completion of the approval process of the various tools required to provide these areas with building rights, together with the "sterility" of the same for the disbursement of credit, are the cause of several negative effects, such as: (i) frequent non-payment of IMU taxes by a significant number of taxpayers owners of ADNAP areas; (ii) cases of avoidance and evasion; (iii) progressive weakening of the vitality of the real estate market on ADNAP areas, which results in contraction (actual and forecast) of real estate development initiatives (AA.VV. 2010b), or in the proposed initiatives in specific urban variant submitted also by private entities, thanks to regulations (e.g. art. 2 of Law no. 179/1992, Art. 8 of Presidential Decree no. 160/2010, art. 14 of Presidential Decree no. 380/2001) which enable the approval of the same specific variant in less time than to those needed for a GV (AA.VV. 2010, AGN International 2014).

A fair taxation on areas ADNAP may be a first and significant step to counter the negative effects mentioned above, as well as to return full and broad programming and planning power for the development of their territory in place a transformation for specific periods of time to the CC (Stanghellini 2012, Van Ommeren and Van Leuvensteijn 2005); to this end, the first step to be performed is the exact determination of their Market Value, by estimating the value of their transformation through the proper application of the principles, criteria and methods of traditional estimation discipline.

2 Context, Methodological Approach and Aims of the Work

An analysis of direct property taxation in 12 European countries (AGN International 2014, European Commission 2013 and 2014, Garnier et al. 2014, Kneller et al. 1999) has shown the existence of two problems concerning the real estate taxation and that both of them imply appraisal issues: (1) definition of the applicable rate in the direct taxation of real estate; (2) appraisal of a specific value which has to be considered such as a taxable income (on which to apply the above mentioned tax rates).

Issues related to the first problem, concerning the definition of tax rates, are responsibility of Legislative and Executive/Administrative Power (Mirrlees and Adam 2011, Piketty and Saez 2012, Profeta et al. 2014): decisions regarding this issues are political; these are mainly determined paying attention to balancing the public accounts (Andrews 2010, Arrondel and Masson 2013, Atkinson et al. 2011, Bertocchi 2011).

Issues related to the second question, concerning the appraisal of asset in the real estate, is a technical matter (in Italy, for example, the Revenue Agency holds the competence to appraisal - for tax purposes - some categories of assets, such as buildings; the Municipalities, instead, usually define the land-values) and may be solved through the use of the tools that the estimation discipline makes available; nowadays, the use of methods and standards recognized in the international arena is growing up.

In this paper, a methodological approach aimed to appraisal the market value (taxable income for tax rate application) of a specific real estate asset - ADNAP area - is defined.

This approach, structured on an Italian specific case, under a methodological point of view may find wider and international use: while the question related to definition of tax rates concerns fiscal policy of every State, appraisal of asset that must be taxed concerns technical issues, of which this paper deals (specifically ADNAP areas).

Referring to the above, the specific aim of this article is to provide elements for estimating the Market Value of an area ADNAP through the method of Transformation Value (also named Hope Value Approach in the international evaluation standard) in accordance with the time distance and variables that exist between the time of the estimate and the time (estimated) of completion of the administrative process for obtaining building authorizations. In particular in the paper are identified: (i) the variables that affect the convertibility of urban area; (ii) time for the conclusion of the planning processes for changing the intended use of the areas[4].

Thereby a solution to "Italian conflict case law" in line with the contents of the Supreme Court of Cassation United Section sentence no. 25506/2006 (to date, in 2015, still not passed) - which notes that the start of a process that will provide an area with building rights, does not correspond to immediate building rights, and that therefore, for tax purposes, it must be regarded as the greater or lesser relevance and potential of its building rights - is possible.

Below: par. 3 will analyze the procedural process for the approval of a GV, and in particular will identify: stages and schedules, main variables; par. 4, based on the results of the analysis, will describe procedures for the proper application of transformation value for estimating an area ADNAP; par. 5 will draw the conclusions of this work.

3 Procedural Analysis of the Process for the Approval of a GP: Stages and Schedules, Main Variables

The following analysis has been implemented in order to identify:

- The stages that make up the procedural process of approving a GV and, consequently, the timing for the conclusion (in favour) of the procedures for its approval;
- The main variables that have implications for the outcome of the process of approving a GV.

The study of phase/time and relevant variables is a prerequisite to the identification of the factors that have an incidence on the market value of an ADNAP area and, in particular, with reference to the combination of interest in the method of calculating the Transformation Value (Campo, 2015):

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[4] During the estimate of the value of ADNAP area, these identified elements (variables, time), may be transformed into parameters and coefficients to be applied operationally by the assessor; simultaneously a time calculation model "really based" may be defined to reach time for the conclusion of the GV authorization.

– Involve a change in the exponent relative to the time in the so-called combination of interest (phases/schedules);
– Affect the rate of industrial profitability (main variables).

The analysis was conducted by referring to the procedure of a sample of 59 GV concluded in the Lazio region (Provinces of Rome, Rieti and Viterbo) 2000–2015.

3.1   Phases and Schedules

The phases that make up the procedural process for final approval of a GP or a GV are:

1. Adoption phase

   - Adoption of GV by the Town Administration with Town Council Resolution;
   - Publication of the proceedings;
   - Presentation of observations;
   - Investigation on observations;
   - Counter-arguments concerning the observations and the relevant Town Council Resolution.

2. Gathering opinions from the relevant authorities phase

   - Acquisition of all the pertinent opinions by the relevant local authorities[5];
   - Strategic Environmental Assessment Procedure.

3. Approval phase

   - Investigation by the Regional Offices (requests for clarification and additional opinions);
   - Transmission and related opinion of the Regional Technical Committee for the Territory (hereinafter the RTC);
   - If approved (0 % of the sample analyzed);
   - Submission of the opinion to the Regional Council for its approval resolution to end the proceedings;
   - If approved with modifications (100 % of the sample analyzed);
   - Re-submission to the Town Administration;
   - Acceptance of the amendments by the Town Administration with Council Resolution and referral to the Region for Regional Council approval resolution;

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[5] Such opinions are routinely: (1) opinion art. 89 of Presidential Decree 380/01 (former art. 13 L.64/74), Regional Council Resolution no. 2694/99 and 545/10; (2) prior ASL opinion art. 20-f L.833/78 and art. 1 Regional Law 52/80; (3) regional opinion art. 2 Regional Law 1/86 Residential Uses; (4) regional landscape opinion; (5) opinion of the Basin Authority responsible in case the affected areas fall within the ideological and hydrogeological risk perimeter; (6) Impact Assessment under Directive 2009/147/ EC and 1992/42/ EEC "Habitat", as governed by Law 157/1992 and Presidential Decree 357/1997, as amended by Presidential Decree 120/2003; (7) Parks or Nature Reserves management opinion; (8) BB.AA.CC. Ministry opinion local Superintendent; (9) opinions from government departments and public bodies concerned if the planning instrument changes areas and state-owned property (roads, railways, navigation, etc.).

- In case of non-acceptance or partial acceptance of the changes, Town Council rebuttal resolution to the changes required and return to the Region;
- Investigation of the regional offices of the rebuttal resolution and transmission to the Regional Technical Committee for the Territory;
- Final opinion of the RTC and transmission to the Regional Council;
- The Regional Council final approval resolution that concludes the administrative procedure;
- Publication of the Regional Council Resolution on the Regional Official Bulletin which marks the final validity of the GV;

The study of 59 GV (in Lazio Region) procedures taken as the survey sample, has been further developed in order to determine the time required for the completion of the various stages of the approval process, thus being able to determine the average length of the process. The complexity of the GP and/or GV approval procedure is due to the long time required to reach final approval; an average total length of the process from adopt to approval is about seven years, as reported in Fig. 2.

It should also be noted that for each of the above mentioned phases involving a specific Town Council resolution, it is necessary (especially in medium and large towns) to discuss the measure and their contents through the appropriate board committees, resulting longer time frames for the conclusion of the procedure.

3.2 Main Variables

The main variables that may affect the approval of a GV and/or result in changes with the write-off of ADNAP areas or regulations limiting the urban convertibility are associated with the presence of the following on the ADNAP area:

- Landscape constraints (legal constraints, declarative constraints, landscape plan constraints);
- Archaeological constraints;
- Geological protection requirements (seismic hazard, mechanical properties of the soil);
- Hydro geological protection requirements (danger of flooding, landslide, joint flood and landslide);
- Elements of environmental vulnerability (specific environmental protection provisions in the higher environmental instrumentation order);
- Residential uses;
- Natural parks and reserves;
- Sites of Community Importance (SCI) and Special Protection Areas (SPA).

Although the overall planning on the municipal level should consider all higher environmental and landscape instrumentation order indications/restrictions/requirements as territorial constants (Guarini and Battisti 2014a), the analysis of 59 case studies in the Lazio region showed that, during the preparation and adoption of a GV, choices and subsequent provisions based on "local" reasons prevail (i.e. meeting residential and non settlement demand; completion of areas already partially urbanized

regardless of a more complex analysis of the nature of the landscape and environment; research of easy political consensus; will to decentralize residential functions and services to strip city centres), even if not totally consistent with the higher instrumentation order. Consequently, while foreseeing an urban destination for an ADNAP area, in the course of the complex GV approval process, this forecast could be revised if not cancelled; in this case the owner subject to IMU taxation, according to the current orientation prevailing in Italy, until the final conclusion of the approval process, the taxpayer is required to pay the tax in relation to the original building rights conferred by the planning instrument adopted.

4   The Estimate of an ADNAP Area Through the Transformation Value

Through the so-called Transformation Value method (hereinafter Vt), an estimate can be obtained to determine the most accurate and comprehensive evaluation of building land, referred to today (Tajani and Morano 2015). Even today this traditional procedure is more effective than other assessment procedures (Guarini and Battisti, 2014b). The Vt is estimated, analytically, through the following formula:

$$Vt = \frac{Vm(pt) - \sum Kp}{(1 + r')^n}$$

where:

- Vm (pt) = is the Market Value of the property built on the area;
- Σkp = is the sum of all production costs (cost of construction, cost of utilities, technical expenses, general and administrative expenses, concession fees, finance charges, promoter profits, other expenses necessary to build the building);
- r' = is the specific return rate for the work;
- n = is the number of years required to complete work.
- For the implementation of the equation that allows for the Vt estimate of a building area, the Vm (pt) and Σkp estimate can be resolved through the collection, from information sources, of known prices of similar goods.
- If the estimate of an ADNAP area, particular attention should be paid to the estimation of r' and n.

In order to estimate the rate of industrial profitability r', it is to consider that this is the sum of several components, as shown in the following formula (AA.VV. 2010):

$$r' = rrf + \Delta nl + \Delta ra + \Delta ur$$

where:

- rrf = "risk free" profitability rate on a "guaranteed" and "risk-free" investment. This rate is normally equal to the rate on government bonds with consistent maturities with respect to the time horizon of the investment;

— Δnl = change in the rate due to "non liquidity" or the difficulty to quickly convert the value of an investment property into cash; this risk is essentially linked to the time of transaction of goods once made according to the market conditions at the time of marketing of the same goods produced;

	Ascending influence	Descending influence	Relevance
Landscape constraincts			
By Law	if present	if absent	very high
Declarative	if present	if absent	high
From landscape plan	if present	if absent	medium
Archaeological constraints			
All constraints	if present	if absent	high
Geological limitations			
Seismic hazard	if high	if low	very high
Mechanical properties of the soil	if low	if high	medium
Hydro-geological limitations			
Flood danger	if applicable and frequent	if not applicable or infrequent	high
Landslide danger	if applicable and frequent	if not applicable or infrequent	high
Joint flood and landslide danger	if applicable and frequent	if not applicable or infrequent	very high
Elements of environmental vulnerability			
Park Authority established	if present	if absent	medium
SIC and ZPS	if present	if absent	very high
Soil, subsoil, topsoil	if there are any elements of environmental vulnerability	if there are not any elements of environmental vulnerability	medium
Air	if area transformation creates contamination risk	if area transformation does not create contamination risk	low
Water	if area transformation creates contamination risk	if area transformation does not create contamination risk	low
Flora	if area transformation creates alteration risk	if area transformation does not create alteration risk	low
Fauna	if area transformation creates alteration risk	if area transformation does not create alteration risk	low
Population and human health	if area transformation creates pollution risk	if area transformation does not create pollution risk	low

Fig. 1. Ascending and descending influences of the rate of profitability of an ADNAP area

- Δra = change in the rate due to the "risk area", closely linked to the specific characteristics of the investment property. This component thus reflects, if applicable, the initiative promoter's part of profits (extra-profit) (Morano et al. 2015), meaning the individual so starts and manages as well as sells the property; the higher the change an expected result does not materialise, the higher the risk of that investment. It is a type of risk that depends on the characteristics of the housing market and the competitiveness of the object in the same market.
- Δur = change in the rate due to the "urban risk"; it reflects the difficulty and/or temporal uncertainty of obtaining all necessary permits to carry out the task in question; the risks associated to the favourable conclusion of the approval of a GV for an ADNAP area are included in this industrial profitability rate component.

If the components rrf, Δnl and Δra can be defined as a result of the financial and real estate market, the estimation of Δur is particularly significant: in this financial mathematic estimate method that can be answered through the study of ascending and

Months	Phases	
0	Adoption of VG / PRG by the Town Administration with Town Council Resolution	
1	Publication of the proceedings	
1	Presentation of observations	**Adoption**
4	Investigation on observations	
1	Counter-arguments concerning the observations and the relevant Town Council Resolution	
12	Acquisition of all the pertinent opinions by the relevant local authorities	**Opinions from**
12	Strategic Environmental Assessment Procedure	**relevant authorities**
12	Investigation by the Regional Offices (requests for clarification and additional opinions)	
12	Transmission and related opinion of the Regional Technical Committee for Land	
	if approved with modifications	
0,5	Re-submission to the Town Administration	
1	Acceptance of the amendments by the Town Administration with Council Resolution and referral to the Region for Regional Council approval resolution	
2	In case of non-acceptance or partial acceptance of the changes, Town Council rebuttal resolution to the changes required and return to the Region	
6	Investigation of the regional offices of the rebuttal resolution and transmission to the Regional Technical Committee for the Territory	
12	Final opinion of the CTR and transmission to the Regional Council	**Approval**
2	The Regional Council final approval resolution that concludes the administrative procedure	
0,5	Publication of the Regional Council Resolution on the Regional Official Bulletin which marks the final validity of the VG / PRG	
	or if approved	
0,5	Submission of the opinion to the Regional Council for its approval resolution to end the proceedings	
0,5	Publication of the Regional Council Resolution on the Regional Official Bulletin which marks the final validity of the VG / PRG	

Fig. 2. GV approval process time frame

descending influences in relation to the specific ADNAP area and in particular in relation to the presence of limitations/requirements that have been identified in par. "Main variables" on the ADNAP area.

For the purposes of a estimate of the component rru, Fig. 1 shows the analysis of the main ascending and descending influences of the rate of profitability of an ADNAP area. The table shows when and how an element (constraints, limitation, etc.) assumes the character of ascending or descending influence, as well as the relevance[6], which translates into greater or lesser weight of influence[7] for rate estimation (the relevance depends on the capability of the factors considered - constraints, limitation, etc. - to slow down or disallow favorable conclusion of the process by which it attributes the building rights to a land) (Fig. 1).

With reference to the estimate of n, we must assess the time needed for the conclusion of the proceedings. Following is an indication of the time axis derived from the analysis set out in par. 3.1 (Fig. 2).

5 Conclusion

The analysis of the process of approving a GV has highlighted the many variables that make the same procedure uncertain and determine that long lead times for its conclusion.

The proposed evaluation method reflects the results of an analysis conducted on the last 59 GV procedures concluded in the Lazio Region in the period 2000/2015, in valuation parameters that allow for the estimate of such ADNAP areas in relation to their real market value. This can contribute to a fairer taxation and also can have a positive effect on the segment of the real estate market for development.

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[6] The relevance depends on the capability of the factors considered - constraints, limitation, etc. - to affect the process by which it attributes the building rights to a land.

[7] In this paper the quantification, in percentage terms, of the ascending and descending influences identified has not addressed; this can be done by the assessor during the estimate. A study by authors on the quantification of this variables even so is ongoing.

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