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Development Rights Markets to Manage Urban Plans in Italy

Ezio Micelli

Summary. Urban economists and planners have been debating the possibility of using innovative methods and tools in managing urban plans to increase their effectiveness. According to many theoretical contributions, a major step would lie in shifting from the use of authoritative tools towards market-based ones. The institution of a development rights market in order to implement urban plans represents a major attempt to transfer into the practical urban government such a theoretical perspective. Several significant elements emerge from an analysis of the major case studies of development rights markets in Italy. First, markets for development rights do not replace the command-and-control tools traditionally used in planning. In reality, the success of the new markets seems to depend significantly on their integration with the latter. Furthermore, markets for development rights have not proved to be automatic devices led by an invisible hand: the visible hands of the administrations take steps to establish market rules and to promote them, reducing transaction costs as much as possible.

Introduction

For several years now, urban economists and planners have been debating the possibility of using innovative methods and tools in managing urban plans in order to increase their effectiveness. According to many theoretical contributions, a major step would lie in shifting from the use of authoritative tools towards those that employ market levers to implement public policies and, as economists say, to restore conditions of efficient resource allocation. The institution of a development rights market in order to implement urban plans has been significantly used in the US and in several other developed countries (Renaud, 1998) and represents a major attempt to transfer into the practical urban government such a theoretical perspective. Since the beginning of the 1990s, in Italy, a growing number of urban plans have been based on so-called equalisation (the equal distribution of developing rights to all land-owners involved in the plan) and on the principle of the transfer of development rights. By analysing such plans and their management through time, we can assess if such tools can effectively pass from economic theory to the actual practice of urban governments.

This essay seeks to examine this step and its relative pitfalls with concern to the Italian experience. The first section takes into consideration some of the theoretical aspects linked to public intervention in urban planning and to the possible use of market-based tools in order to implement urban plans. The second examines from an empirical perspective the major experiences of urban plan

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management, based on the tools of equalisation and transfer of developing rights in Italy. The third presents a critical evaluation of the case studies in light of economic theory.

Planning as a Means of Regulating Urban Externalities

Cities, Externalities and Public Intervention

From an economic point of view, planning can be considered a way of regulating the externalities that characterise urban systems (Chung, 1994; Ferraro, 1990, pp. 36 et seq.). Zoning—understood as a device for regulating land use within a defined spatial area—represents a tool through which a community can deal with market failures represented by the externalities generated by the physical and spatial interaction typical of the urban contexts.

In fact, zoning establishes land uses and the ways in which property can be exploited. By attributing specific designations to land, it attempts to avoid incompatible uses that can be mutually damaging and to integrate activities that are supposed to interact positively. The zoning rules are also established with the aim of improving urban quality—thereby generating positive externalities—and reducing to a minimum the negative externalities that could occur in virtue of the interaction between non-compatible activities. In addition, zoning identifies the areas designated to the community, on which plans locate any type of public facility. Such facilities, in economic terms, can be considered as sources of positive externalities that the market would produce, if at all, in a sub-optimal way (Chung, 1994, pp. 78–79).

Planning regulates the land uses to optimise the interaction of urban functions and to ensure that certain land is designated for public infrastructures and facilities: both interventions are economically legitimate since they regulate externalities. It is also worthwhile noting how, in these two activities, the public entity changes position with respect to the economic agents. In the first case, the public administration regulates the interaction between the acts of production and consumption of other economic agents. In the second, it is directly involved in the process of forming externalities: it actually sets up projects that generate external economies by designating specific areas for urban infrastructures and facilities.

These latter arguments are known in the field of urban planning primarily through the categories of classical economics. In particular, planners know that urban land increases (or decreases) its value—its economic rent—if a plan locates new urban facilities or infrastructures, or if it decides about the land uses in the nearby areas. In this reasoning, the formation of economic rents is analogous to the effects of externalities: in both cases, urban planning decisions generate (or destroy) value that can be considered either the result of externalities, or related to urban aspects that determine urban rents (Alonso, 1960; Camagni, 1992, pp. 279 et seq.). Thus, externalities affecting cities and urban land rents indicate interrelated phenomena that planning proposes to control through norms, standards and constraints.

An economic interpretation of plans as devices through which a municipality regulates externalities arising in the urban domain allows us to see that traditional planning—a good example of command-and-control techniques—does not represent the only possible way of regulating urban externalities. In addition to the direct normative approach of command and control regulation—or government through the determination of standards and norms—externalities can be regulated through the approach of market-based devices without resorting to normative tools, generally held to determine less effective and efficient results (Turner et al., 1996, p. 188).

In fact, numerous economists have shown how market failures represented by externalities have actually been followed, first, by public intervention and, secondly, by non-market failures, tied to the inefficiency of the forms of government based on the command-and-control approach and, in general, by an incorrect intervention of the public entity...

Following these arguments, the weak efficiency of urban planning can be attributed—at least in part—to the authoritative nature of the tools for implementing and managing plans. As a result, there is great interest in creating innovative planning tools—in particular through real estate taxation and the creation of new markets—that do not replace the market (as command-and-control tools do), but are limited to intervening to correct its failures (Lanotte and Rossi, 1995; Stellin and Stanghellini, 1997).

Creating Development Rights Markets to Manage Urban Plans

Creating a development rights market to manage urban plans has aroused great interest in various developed countries. According to Coase (1960), the establishment of a property rights market can replace direct forms of public intervention in order to solve the economic inefficiencies due to market failures. The key concept around which his reasoning is developed is that of the property right. Coase’s theorem affirms that, if the property rights of any resource are clearly attributed, there is an automatic tendency to strive towards a socially optimal solution through negotiation between the parties, independently of who holds them. The implications of this turn out to be highly significant for public decision-making and urban policies. If we accept the results of Coase’s theorem, public administrations would no longer need to regulate externalities with command-and-control tools, if there is a possibility of establishing a specific property rights market. In such a case, the demand and supply autonomously and automatically would re-establish the conditions of efficient equilibrium by buying and selling the property rights of the resources: the market—with no public intervention—would lead to an economically optimal situation.

The exchange of environmental permits represents a device that is analogous to the creation of a property rights market. As in the case of the rights market, trading environmental permits takes advantage of the market itself modifying its information with the aim of orienting economic agents’ choices towards socially shared goals (Turner et al., 1996, pp. 235 et seq.).

The first step towards establishing a market for permits lies in determining their initial amount (for example, the amount of rights to pollute) to attribute to economic agents. Once this initial allocation has been made, the economic agents owning permits are free to market their rights. As in the conclusions of Coase’s theorem, the permits trade in this new artificial market would lead, if not to an optimal resources allocation, at least to a better performance than would be obtained by employing the traditional command-and-control tools. In the US, various environmental policies have successfully adopted the tool of negotiable permits, ensuring consistent benefits for private companies without increasing pollution (Gastaldo, 1992).

The tools based on the markets under consideration are not without limits and objections. The limits of Coase’s theorem, which the author himself acknowledged, are different. In particular, it may be impossible to establish an efficient market for property rights because of the high transaction costs tied to the negotiation between the parties involved or—still earlier in the process—because of the difficulty in precisely identifying which entities generate externalities and which, instead, submit to them (Pearce and Turner, 1991, pp. 77 et seq.; Frank, 1992, pp. 659 et seq.).

Various objections have also been raised regarding the use of markets for the environmental permits. Among the most important ones, it is possible to mention legitimising improper use of the environment (one can, for example, buy the right to pollute) and—once again—the high administrative costs that can characterise the marketing of permits.

Yet, even if these criticisms significantly condition the effectiveness of similar approaches, the prospect of enhancing planning
performance through tools based on market behaviours which limit—to whatever extent possible—the use of command-and-control tools appears nonetheless stimulating. It is not merely by chance that the International Conference on the Environment held in 1997 in Kyoto explicitly indicated environmental permits as a tool for managing the exhaust gases linked to the greenhouse effect on an international scale.

In the field of urban planning, the prospect also appears of interest in virtue of the intense experimentation carried out in recent years in several countries. Going beyond traditional land-use management based on zoning to new markets in which development rights are exchanged seemed possible in particular in Italy. In the past decade, a fair number of municipalities have decided to implement plans through these new tools and development rights markets have been used for a wide range of urban plans and projects, dealing with different issues such as urban renewal or the protection of the environment.

Markets of Development Rights and Plan Management in Italy

The institution of markets of development rights has been employed in order to manage several urban plans in Italy. The goal of this section is to present: first, the key issues of these experiences; secondly, to identify the major empirical methodological steps in the transfer of principle into practice; and thirdly, two specific case studies in which such markets have been applied.

Models and Strategies

In Italy, all the cases of urban plans whose management relies on the institution of a market of development rights have followed the same basic scheme. Within an average to long-term planning framework, the local administration identifies the areas designated by the plan for transformation. These areas, appropriately classified, are successively attributed a building index that is applied, without distinction, to the areas assigned to private and public use alike.

Every class of urban land designated by the plan to conversion is then sub-divided into sections, inside which the property-owners can negotiate the transfer of the development rights they own. The owners of properties designated for municipal facilities and public infrastructure own rights that can only be used in those areas of the plan designated for private development. The owners of these latter areas use their own volumetric rights and ‘host’ the rights of the other land-owners. Once the development rights have been used, the property-owners of the areas designated to public facilities (see Figure 1) relinquish their areas to the administration at farm prices or for nothing at all.

This scheme aims at reaching several goals at once. First, the ownership of the land designated for conversion is only treated with reference to its current and legal status, irrespective of the land-use choices of the plan. In the traditional planning management scheme, land-owners whose areas were designated for public facilities could only wait for the land-requisition process to be carried out, receiving indemnity values that would generally reach only half the market value. With the distribution of developing rights to all the land-owners who afterwards trade them to implement the urban project schemes, the inequity of the zoning is thus mitigated by distributing the land value among all the land-owners involved in city’s transformation. Moreover, the equalisation principle makes land-ownership less sensitive to planning choices: if all the property-owners obtain the same building index, they are no longer interested in diverting public decisions towards private interests.

Finally, the equitable distribution and transfer of the development rights allow the administration to acquire the land required for public use at farm prices or for nothing at all, in agreement with the land-owner, whose property value is in any event recognised.

This general scheme has been applied with two different strategies. In the first, the institution of a developing rights market is
applied to all the urban areas designated for urban transformation. Such a device becomes a pervasive tool in regulating the use of city land, whether it be for the areas that the plan designates for conversion from agricultural to urban use, or for those that are the object of significant urban renewal (for example, abandoned areas). Examples of this approach include, among others, the plans for Turin, Reggio Emilia, Piacenza, Casalecchio di Reno, Parma.

In the second strategy, the transfer of developing rights is only applied to a portion of the areas undergoing change, the municipality considering that different tools can be more appropriate for other areas of the city. From the moment that the transfer and marketing of development rights principle is applied to part of the area designated for conversion, the plan includes two distinct regimes: that of traditional zoning; and, that of equalisation of the development rights applied to certain categories of land. The most significant example of this second strategy is the rehabilitation project for the city of Ravenna’s wharf and the concomitant development of the ‘green belt’ surrounding the city. Similar projects are also underway in Padua and Venice.

**Putting into Practice the General Model**

The goal of this section is to analyse two steps that appear to be crucial in the mechanism: the urban land classification; and, the attribution of the development rights.

The attribution of development rights and their transfer is only applied to a portion of the real estate property: the areas designated for conversion by the urban plan. This land category can be defined on the basis of legal and economic criteria. According to the former, an area of conversion can be defined on the basis of the uses legally allowed by the previous plan. On the one hand, we identify the agricultural areas that are now to become urban; on the other hand, the planners identify those urban areas that, having been declared ‘abandoned’, are to be renewed according to a new design and new uses. Other criteria can be obviously identified in order to operationalise a more detailed classification of the new urban areas.

From an economic point of view, the segmentation of the conversion areas is determined as a function of their effective use, that reflects either its actual and potential value. The expected rent of the land is related to the probable urban trends and to future urban planning and architectural projects. In the case of agricultural land that is to become urban, the nature of the expected value is what economists call absolute rent; in the case of an area that is already urban but is undergoing change in form and use, planners recognise differential rents. In the
classification process, the assessment of the expected rents of the new urban conversion areas integrates the legal characteristics to determine the correct classification of the urban areas.

The application of these sets of criteria can lead to two extreme cases. In the first, the areas designated for conversion have substantially analogous legal and economic characteristics: that means that they have been designated for the same use under the previous planning instruments and that they possess similar characteristics of accessibility and environmental quality. In the second case, the areas may also be quite different, both from the perspective of the norms regulating use and that of the features affecting financial value. If all areas present similar features, the classification is simple. There is just one large category of land—the areas designated for conversion—and it is possible to attribute the same building index to the entire area. In the second case, the classification of areas that are legally and economically homogeneous is much more difficult to reach. The properties are all different and the same building capacity cannot be granted to all of them. At the extreme, by systematically recognising the legal and economic differences of each real property designated for conversion, each area could correspond to a category.

The management of plans has never had to confront the complexity of the latter; nor, however, have they have been faced with cities as simple as those hypothesised in the former. To correctly classify each property, technicians and administrations have elaborated criteria and methodologies to achieve land classifications capable of guaranteeing equitable treatment of property. The areas surrounding the existing city and designated to be transformed from part of the outlying urban territory into part of the city itself belong normally to the class of land with the most restricted building capacity. The areas within the city where use and design have become obsolete and which, as a result, have been designated for renewal, are included in a category distinguished by a greater building capacity (see Figure 2).

Other categories can be added to these as a consequence of the individual characteristics of a city. In some cases, legal issues have led to the further development of the categories. Where, for example, some of the areas of the outlying urban region had already been designated by the plan for urban use, the recognition of ‘acquired rights’ has led to diversifying the categories by granting a higher building capacity to the areas reconfirmed for urban use.

In other cases, economic reasons have led to diversifying categories: in Piacenza, for
example, large abandoned areas have been differentiated from smaller ones, bearing in mind the overall returns bound to the land values. The use of more or less detailed categories makes it possible to strive for equitable treatment of the real estate property involved in the city’s urban transformations. Whereas land classification is limited to grouping together areas with similar characteristics, the attribution of the indexes establishes how much usable surface area (or volume) can be built upon—thereby substantially determining an area’s value. Land value is primarily a function of the building capacity it has been attributed: thus the attribution of the indexes represents a crucial step in the process. High indexes ensure quicker agreement with land-owners, but do not recover as much land for collective use. Conversely, more restrictive indexes permit the municipality to expand its property-base, but require more careful negotiation with the property-owners involved.

From an empirical point of view (see Table 1), the experiences underway make it possible to emphasise certain points of convergence and others of diversity. The experiences completed in the Emilia–Romagna region show how the land-owners and administration reached an understanding with indexes around 0.1 square metres per square metre for the land converted from agricultural to urban use. In Piacenza, Reggio Emilia and Ravenna, this building index set off a process of co-operation between property-owners and the administration, ensuring the acquisition of important land reserves by the local authorities.

Higher values were determined for areas that were abandoned, underutilised and/or undergoing progressive abandonment. By virtue of the different rights acquired in terms of potential building capacity, the areas included in these categories can reach indexes that are significantly higher: in Reggio Emilia, abandoned areas were attributed an index of 0.4 square metres per square metre; in Piacenza, similar areas reach a building density of 0.5 square metres per square metre.

Two Case Studies: Cesena and Ravenna

Cesena. In 1998, the municipality of Cesena decided to draft a new Structural Plan for the city. Among the underlying choices made by the municipal administration, in the framework of long-term planning choices, were to renounce the mechanism for acquiring the areas designated for public facilities and to focus on managing a development rights’ market to reduce the costs and to minimise the public and private conflict.

The initial choice was to consider a developing rights market as the tool to be applied to all areas under conversion. With the exception of those areas where transformation was already underway, the local administration established an acquisition policy that privileged this new operative tool.

The transformation involved areas that were very different from one another, and the administration considered it necessary to differentiate between the different ownership positions. With the goal of transparency in the process of treating the different properties involved, it was determined useful to distinguish the land designated for conversion in terms of its economic and legal characteristics. Under this operative profile, the municipality organised the process of classifying the areas based on three criteria: the use designated by the urban plan in force; the actual use of the area when the plan was drafted; and, the general design programme that had emerged through the Structural Plan.

On the basis of these criteria, the administration of Cesena broke the conversion areas down into five classes: high environmental value areas; development areas; development areas already designated for urban use in the previous plan; urban renewal areas; high-density urban renewal areas.

The method used to determine the building indexes was based on the project which the municipal administration intended to promote for the city over the coming years through the Structural Plan. The characteristics of the different areas of conversion compared with the design simulations led to the attribution of different building capacities:
### Table 1. A comparison of nine examples of equalisation and transfer of development rights

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Generalised use</th>
<th>Number of classes</th>
<th>Land classification</th>
<th>Use of volumetric incentives</th>
<th>Building index (square metres per square metre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casalecchio di Reno</td>
<td>Yes</td>
<td>2</td>
<td>Marginal areas inside the city</td>
<td>No</td>
<td>0.23</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Peri-urban region</td>
<td></td>
<td>0.115</td>
</tr>
<tr>
<td>Reggio Emilia</td>
<td>Yes</td>
<td>3</td>
<td>Abandoned areas</td>
<td>No</td>
<td>0.40</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Converted settlements</td>
<td></td>
<td>0.25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Green areas</td>
<td></td>
<td>0.10</td>
</tr>
<tr>
<td>Piacenza</td>
<td>Yes</td>
<td>6</td>
<td>Abandoned areas &lt; 3 hectares</td>
<td>No</td>
<td>0.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Abandoned areas &gt; 3 hectares</td>
<td></td>
<td>0.35</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Productive areas</td>
<td></td>
<td>0.30</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mixed-use areas</td>
<td></td>
<td>0.30</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Military areas</td>
<td></td>
<td>0.25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Open areas</td>
<td></td>
<td>0.10</td>
</tr>
<tr>
<td>Venice</td>
<td>No</td>
<td>1</td>
<td>Areas of environmental up-grading</td>
<td>Yes</td>
<td>1.33&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Padua</td>
<td>No</td>
<td>2</td>
<td>Abandoned areas of the Urban Redevelopment Plan</td>
<td>No</td>
<td>0.40</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Abandoned areas with greater building density</td>
<td></td>
<td>0.50</td>
</tr>
<tr>
<td>Ravenna</td>
<td>No</td>
<td>1</td>
<td>Green-belt areas</td>
<td>Yes</td>
<td>0.10</td>
</tr>
<tr>
<td>Turin</td>
<td>Yes</td>
<td>4</td>
<td>Urban renewal zone</td>
<td>No</td>
<td>0.70</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Renewal areas for services</td>
<td></td>
<td>0.23</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Urban and river parks</td>
<td></td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The natural park areas of the hills</td>
<td></td>
<td>0.03</td>
</tr>
<tr>
<td>Parma</td>
<td>Yes</td>
<td>3</td>
<td>Areas inside the built centre</td>
<td>No</td>
<td>0.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Areas outside the built centre</td>
<td></td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Previously restricted areas of the built centre</td>
<td></td>
<td>0.25</td>
</tr>
<tr>
<td>Cesena</td>
<td>No</td>
<td>5</td>
<td>High environmental value areas</td>
<td>No</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Development areas</td>
<td></td>
<td>0.08</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Development areas already designated for urban use</td>
<td></td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Urban renewal areas</td>
<td></td>
<td>0.40</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>High-density urban renewal areas</td>
<td></td>
<td>0.60</td>
</tr>
</tbody>
</table>

<sup>a</sup>cubic metres per square metre.
the category of land characterised by high environmental importance was designated to receive an extremely low building capacity: 0.03 square metres per square metre. The areas of new expansion were attributed an index of 0.08 square metres per square metre, while the land already designated by the plan to become part of the city was attributed an index of 0.12 square metres per square metre. The urban renewal areas were attributed two different indexes in accordance with the two sub-categories identified. The new areas were attributed an index of 0.4 square metres per square metre, while for the areas of high urban density, the Structural Plan provided an index of 0.6 square metres per square metre.

The management of the implementation mechanism provides for the sub-division of each category into sections. In choosing the size of the sections, the administration proceeded by minimising the expected transaction costs. In other words, each section represents a homogeneous unit from a design perspective and contains as limited a number of property-owners as possible. Within the section, the development rights are relinquished by property-owners of the sending areas and acquired by property-owners of the receiving areas: in most cases, this scheme ends up being a very simple transaction carried out between two or three property-owners. Far from limiting its role as an invisible hand, the administration functions as a link and an information-provider between the property-owners who give up and acquire volumetric rights, with the aim of making clear the mechanism of distributing and trading development rights. In the sections where development is further advanced, it is possible to affirm that the key to the success of similar operations is actually due to the role performed by the administration within the framework of the commercialisation of the development rights on behalf of the property-owners involved.

Ravenna. Unlike Cesena, Ravenna’s Plan of 1993 does not entrust its entire management to a programme for the development rights, but only some of its strategic areas. Two objectives explain this selective use of a transfer programme: first, the municipality wanted to acquire green belt—by far the largest set of parks for the city—at farm prices, without using the compulsory acquisition procedure; secondly, the municipality wanted to promote an important urban renewal operation in the wharf area—the Darsena—through a high-density urban renewal programme.

All of the areas of the green belt were gathered into a specific category of urban area and were attributed the same amount of development rights: 0.1 square metres per square metre. However, these development rights cannot be used in these areas, but have to be transferred into the sections of the Darsena renewal project. Once the rights are transferred, the areas of the green belt are purchased by the municipality at farmland values. In response to the willingness to host the rights matured in the green-belt areas, the property-owners of Darsena land are attributed a specific ‘award’: a supplementary bonus of building capacity is added equal to 15 per cent of the surface area normally attributed.

To support economically the strategic project of the Darsena, the municipal administration asked for and obtained access to funds for the Urban Renewal Plans managed by the Ministry of Public Works. From the moment the Urban Renewal Plan was drafted, the 22 properties of the green belt involved had to state officially their participation in the project on the basis of conditions established by the administration and sanctioned in specific unilaterally binding acts. With these acts, the property-owners agree to participate in the Darsena project by receiving the building volumes coming from the green belt.

Each section launched the project by stipulating a formal agreement with the administration—developed on the basis of a prototype to which all the operators involved refer—between the municipality and the property-owners, in which the precise conditions of public and private co-operation are specified. With such a mechanism, 33 000 square metres of usable surface area are to be
transferred from the green-belt areas to the wharf area, giving the opportunity to the municipality to acquire 33 hectares for the green-belt parkland.

To date, the transfer of development rights has been favourably viewed by both real estate operators and land-owners. The municipality of Ravenna has already activated the first public–private agreements and the first 10 hectares of land have been acquired for creating Teodorico Park which, together with the Baroni Park and Cesarea Park, will make up the core of the new system of urban green space.

The management of this urban plan allows us to consider how developing rights are exchanged in practice. Schematically, two mechanisms are possible. In the first, real estate investors that intend to carry out a real estate investment in the wharf area, buy the land areas owned by the green-belt areas. They then become owners of development rights that can be used in the wharf area, respecting the design prescriptions set by the planners. In the second, real estate investors buying the green-belt areas acquire development rights not to exploit them directly, but just to have an asset that could be used in the wharf area, or that could be resold like any other real estate asset. In this latter case, the development rights get separated from the areas that actually generated them, becoming an independent marketable asset—as in some cases in the US.7

The Necessary Integration between Command-and-control and Market-based Tools

Rights Markets and Plan Rules

The integration of market-based and command-and-control tools is the general trait that distinguishes cases of development rights markets in Italy. The creation of property rights markets never aims to replace the plan’s traditional implementation tools, but rather to integrate the former to make the latter more efficient.

The attribution of development rights is actually made on the basis of a planning decision, and their marketing is organised in a significant way by the public authorities. Furthermore, the rights can only be marketed within the sections and their use is in any event subordinated to adherence to the design proposals furnished by the administration.

Moreover, this is consistent with the administrations’ search for tools capable of ensuring better performance in terms of the plans’ efficiency, but which can work alongside existing tools. From the point of view of the municipalities, two major problems normally faced in the implementation of plans can be solved: first, the resistance of property-owners to the compulsory purchase procedure, which significantly reduces the value of their holdings; secondly, the administrations’ need to recover part of the financial value generated by the plan with the aim of financing its implementation and, in particular, the public facilities. If well managed, the institution of a development rights market—limited to the property-owners of areas designated for urban transformation—enables these two problems to be solved.

Analysis of the Italian cases shows how the development rights markets have been used in the context of regulating specific externalities. In particular, they have been used to regulate the externalities relating to the public facilities projects: through this management innovation, the municipality can acquire part of the financial value it generates through the planning activity that otherwise would belong only to the private sector.

Is it possible to hypothesise new rights markets oriented not only to such a problem, but also to the externalities that rise from the interaction between consumers and/or producers in the city? An analysis of transaction costs is crucial in answering this question. In reality, the negotiation around the externalities bound to city form and functions concerns a substantial number of economic agents. Consistent with what has been foreseen by Coase, in the presence of high transaction costs as a practical matter, the market may be-
come too costly to operate. In these circum-
cstances, it may be preferable to impose
special regulations (Coase, 1959, p. 26).

Thus, the effectiveness of the rights markets
is not ensured and the return to command-and-
control tools remains the only possible sol-
ution.

The institution of development rights mar-
kets can solve certain significant urban man-
agement problems, such as the inequity
associated with zoning, and the recovery of
portions of value produced by the public
sector and otherwise designated only to a few
property-owners. Other issues such as land-
use designations and building density that
regulate the externalities tied to land use have
been left to traditional tools of command and
control. Hypothesising the use of the former
tools for regulating other externalities could
prove to be wrong. And thus, for structural and
not contingent reasons, the high transaction
costs make it rational to employ command-
and-control tools. In all probability, the elim-
ination of every form of norm and standard in
urban planning belongs to the utopia of certain
ultra-liberal groups (Jacobs, 1997, p. 64),
which goes beyond the positions of Coase
(Chung, 1994, p. 92).

On the contrary, it is probable that the
success of the market-based tools is tied to
their capacity to be integrated with traditional
urban tools (Renard, 1999, p. 16). The failure
of some experiences demonstrates that co-
ordination between the newly instituted mar-
kets and the traditional planning rules is
crucial. The inflexibility of norms bound to
forms and functions can heavily condition the
take-off of the development rights markets,
failing in terms of private goals—if the devel-
opment rights are not transacted, the land-
owners have no compensation and no
financial gain—and in terms of public goals—
the public and the private city remain simple
provisions of the plan.

The Visible Hand of the Organisation of the
Rights Market

The public administration significantly condi-
tions the form of the development rights
market. It is the administration that establishes
the areas to which the building rights are to
be assigned: in the case of pervasive equalis-
atation of the property rights, they go to all the
areas of urban transformation; in the cases of
partial equalisation, only to some areas. The
public entity also organises the land
classification and subsequent attribution of
building indexes.

Nevertheless, the administration’s visible
presence during the rights allocation phase is
common to most of the cases where rights and
environmental permits markets have been cre-
ated. The initial distribution of the develop-
ment rights actually has significant analogies
with the initial distribution of environmental
permits. When the administration gives out
environmental permits (permits to pollute, for
dexample), it usually makes an initial allocation
of permits based on levels of pollution
recorded in the past. This procedure follows
an historical approach known as grandfather-
ing: thus, pollution rights are tied to past
pollution levels (Turner et al., 1996, pp. 235–
236). In the development rights market—for
the management of urban plans, as in the
management of environmental permits—there
are no automatic mechanisms for the initial
allocation of rights and the administration
necessarily becomes the entity that has to
establish the rules. And, usually, the rules held
to be most equitable take into consideration
the ‘rights acquired’ in the past by the econ-
omic agents to whom these rights or permits
are attributed.

The exchange of rights has taken on differ-
ent forms. On the one hand, it can arrive at
actual land transactions managed by the ad-
ministration, which organises and favours the
exchange of public and private areas through,
for example, a barter game. In this case, the
rights market tends to disappear in favour of
a technique of land recomposition. On the
other hand, where the economic operators
learn the new rules of the game—and have
faith in whoever has promoted them—it is
possible for the development rights to become
the object of a local market endowed with its
own autonomy. The previously mentioned
experience of Ravenna confirms the plausibility of this hypothesis.

The exchange of rights between property-owners is, in any event, always characterised by significant transaction costs. Usually, public administrators have found it useful to reduce these costs by decreasing the number of property-owners involved in the urban sections, the minimal spatial unit subject to urban transformation. Thus, activating the transactions seems to depend significantly on a small number of economic agents being involved. This, however, leads to the possible formation of monopolies and/or monopsonies among the property-owners within the section, which significantly reduce the chance for real market prices to form (Renard, 1999, p. 15; Jacobs, 1997, p. 63). Once again, the administration has to be ready to intervene, through the backing of a ‘bank’, for example, to purchase the development rights and allow the property-owners of the rights not to give in to potential situations of monopoly or monopsony.

The institution of a previously non-existent market does not appear to be a risk-free operation. On the contrary, it requires the administrations entrusting the implementation of their plans to tools of this kind to make a significant effort towards innovation. Moreover, it would be illusory to maintain that the market of development rights can function immediately in a decentralised way: the success of these innovations requires an important effort in communication and training to the extent that the marketing of development rights is not at all an operation to be taken for granted (Renard, 1999, p. 14).

The administration’s investment in training on property-ownership and of the field operators, together with specific normative provisions—especially in the field of taxation—provides grounds for experimenting in reducing the transaction costs present in the development rights markets, with important implications for their success.

Conclusion
Planning intervenes to regulate the numerous externalities that characterise cities and regions. Having recognised the partial inefficiency of the authoritative command-and-control-tools, some administrations have been trying to implement and manage urban plans through the use of tools that intervene in the market, orienting the behaviour of the agents towards socially shared goals.

The development rights market represents an innovative tool of great interest in this direction. Several significant elements emerge from an analysis of the major case studies in Italy. In the first place, markets for development rights do not replace the command-and-control tools traditionally used in planning. In reality, their success seems to depend significantly on their integration with the latter.

Furthermore, the markets for development rights have not proved to be automatic devices led by an invisible hand. As in other markets for rights and environmental permits, the visible hand of the administration takes steps to establish the market rules and to promote its operation, reducing transaction costs as much as possible. In a perhaps paradoxical way, the use of tools that intervene in the market seems to require significant managerial and administrative investment on which the success of the initiative depends.

Future research could examine the crucial aspects for the success of municipal market-based tools, especially beginning with the best practice that, in recent years, certain municipalities have been able to design and implement, with “a strong innovative quality in the planning tools servicing objectives of both efficiency and equity” (Camagni, 1999, p. 169).

Notes
1. Renard (1998) examines experiences in France, New Zealand and the US. See also the section of the journal Urbanistica edited by Fusco Girard (1997) that presents comparative cases in Italy, Spain and the US.
3. Several studies have already been conducted

4. On the requisition procedure and on the indemnity attributed to the property-owners, see Stanghellini (1997).

5. On the difference between absolute and differential rent, see Alonso (1960) and Camagni (1992).

6. On the relationships between plans, design and developing rights market, see Crocioni (1998) and Micelli (1997b).

7. For example, in Pinelands (NJ), where the local administration established a ‘bank’ whose mission is to help land-owners to market the development rights (Johnston and Madison 1997; Micelli, 1997a).

References


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