

# The adaptive efficiency of land use planning

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## Introduction

Our communication aims to investigate the usefulness of the concept of *adaptive efficiency* for analysing planning systems. It provides insights in the relationship between institutional change and planning efficiency. The concept of adaptive efficiency has been introduced by North (1990) and defined as :

*“the willingness of a society to acquire knowledge and learning, to induce innovation, to undertake risk and creative activity of all sorts, as well as to resolve problems and bottlenecks of the society through time”* (p. 80).

From a planning perspective, adaptive efficiency can be linked to the capacity of a planning system to deal with societal changes and undesired outcomes of land and property development.

The communication will discuss the hypothesis that planners in certain countries benefit from an institutional framework that is to a larger extent adaptively efficient than planning systems in other countries. A comparison of the control of residential sprawl in the Netherlands, Belgium and Poland serves as a case study. The analysis of those processes in the three countries has provided an attractive approach to test the thesis that dissimilar levels of urban containment can be related to dissimilar degrees of planning adaptive efficiency.

Even though planning failures occur in the Netherlands as well, our work provides evidence that Dutch planning has been able to efficiently adapt regulatory instruments and informal collaborative practices to market changes, while both Belgian and Polish planning have in many respects failed to do so.

## Theoretical framework

Our presentation will start with the presentation of a theoretical framework. This framework differentiates *strategic planning* and the *land use regime*. Strategic planning concerns the way planning goals and land use ambitions are defined. Besides strategic planning, the planning system can be operationalised into a certain

institutional arrangement that we call the “*land use regime*”. The concept of land use regime is closely related to the concept of “user rights regime” (Buitelaar, 2003, p. 322). While the user rights regime refers to land use coordination on a particular location, the related idea of land use regime considers the same mechanisms at the national or supra-local level. The concept of land use regime allows to treat the three coordinating mechanisms of prices, imposed rules and cooperation simultaneously. In this perspective, we believe that it makes sense to distinguish between three aspects of what we have called the land use regime, respectively the property-rights regime (in relation to prices), the cooperative regime (in relation to cooperation) and the land-regulation regime (in relation to imposed rules).

Our theoretical framework will also develop the theme of efficiency and precise the dynamic dimension of the adaptive efficiency concept. In this perspective, the adaptive efficiency of a planning system relates to its capacity to offer resistance to threats, to take advantage of opportunities, to avoid lock-in and to develop new initiatives in order to achieve collective decisions with respect to land uses

### **An international comparison on the control of urban sprawl**

As put forward by an abundant academic literature, residential sprawl in the Netherlands surely did not take place in the same extent as in the two other countries. Even though planning failures exist in this country as well, our analyses confirm that the Dutch planning system offers an institutional framework with a relatively high degree of adaptive efficiency. With respect to Belgium and Poland, by contrast, we have observed conditions leading to (institutional) inertia and lock-in effects that seems to reduce this adaptive capability. On this basis, we can mention a number of conditions that explain why one planning system is able to adapt more efficiently than the other.

The “power relation” between the property-right regime and the land-regulation regime is a fundamental factor to account for adaptive efficiency. If land-regulation is well established, it seems to be a good starting point for institutional support and increasing planning ambitions. On the other hand, if the land-regulation regime is weak (great respect for land ownership), there is a great risk of inertia. Planners will then face a negative attitude against planning and the planning system will surely experience problems to leave its infancy.

Through the historical perspective we surveyed, we also found that to purposely change the conception of individual property rights is a very difficult task, if not impossible. The balance between individual property rights and collective regulations within a land use regime is strongly rooted in society and depends on critical junctures that occur at history’s turning points. For instance, to explain the Belgian path in favour of landownership, we had to go back to the sale of state property that followed the events of the French Revolution, as well as to political strategies during the industrial revolution. For Poland, it is the fall of communism that we had to consider, that is to say, nothing less than the most abrupt change of planning and real estate institutions in living memory.

The case study of the Netherlands allows to derive a number of mechanisms that illustrates how a planning system may take advantage from an adaptively efficient

institutional framework. In the Netherlands, the shift from containment policies to compaction policies observed since the eighties testifies that contemporary planners are perfectly able to impose stronger regulation and increased spatial ambitions if they can rely on influential evolutions such as the upsurge of environmental awareness. Second, with respect to the compact-city planning goal, we also showed that the path in favour of compaction obliges to innovate in regeneration practices and planning instruments. On the other hand, as illustrated by Belgium, once abundant greenfield sites are available for construction, it is a very difficult task for planners to attract investments towards brownfield sites, where development is typically a costly and complex affair. Third, the analysis in this paper also validates the thesis of Needham and De Kam (2004) who argue that, besides price coordination mechanisms (market), imposed rules (regulation) and mutual trust (cooperation) are fundamental coordinating mechanisms that cannot be neglected when analysing land use policy. Indeed, the comparison of the Netherlands to Belgium and Poland tends to demonstrate that adaptively efficient planning systems are systems that can rely on the three coordination mechanisms. Fourth, the case study of the Netherlands also shows that adaptive efficiency requires multi-level as well as multi-sector cooperation. In this country, the “market” and the “public sector” are willing to cooperate, not only in the development process of a particular site, but also on institutional design.

### **Some concluding remarks**

To conclude, two main reflections can be drawn for a future research agenda. First, we believe that our analysis confirms that a focus on adaptive efficiency can help in the development of a theoretical framework for institutional change. Our results suggest that linking institutional changes and the efficiency of land use planning should be examined for a wide range of issues. Second, with respect to the specific topic of residential sprawl, new research should confront our findings to complementary case studies, in order to assess the extent to which the relative Dutch achievements and the relative Belgian and Polish failures illuminate certain mechanisms that can be generalised.

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