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Risk management in public land development projects: Comparative case study in Finland, and the Netherlands

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ABSTRACT

Public land development is an approach where the public authority acquires land for development, services the land with public infrastructure, and transfers the serviced building plots to private building developers or self-developing end-users. Motivations to use public land development can be divided to planning goal related motivations and financial motivations. In this paper, we study management of public risks related to the use of public land development by analysing case studies located in Finland and the Netherlands, countries known to have strong tradition in public land development. Our findings indicate that, whereas public land development has efficiencies in managing the risks related to the achievement of public planning goals, the management of the financial risks related to the public land development approach can be remarkably difficult even in countries with wide experience in public land development.

1. Introduction

Land development can be described, following Needham and Verhage (1998), as an activity of producing serviced building plots for subsequent building development activities. Different approaches of land development exist (see. e.g. Dransfeld and Voss, 1993; Needham and Verhage, 1998; Samsura et al., 2010; van der Krabben and Jacobs, 2013), the main differences concerning land ownership, public infrastructure provision as well as public and private stakeholders' shares in development gain.

In public land development, public authority acts as a land developer that acquires and services the land, and transfers the serviced building plots to building developers, in contrast to various forms of more private-oriented land development. Public land development is not extensively used in many countries with private land markets (van der Krabben and Jacobs, 2013). In Europe, its extensive use seems to be limited to Finland (see e.g. Viitanen et al., 2003), the Netherlands (see e.g. Needham, 1992) and Sweden (see e.g. Caesar, 2016). While in these three countries public land development has been the dominant development strategy for long, land development strategies led by private sector can be (and are) used as well. So, local authorities in these countries choose to act as land developers.

In the existing literature, public land development has been addressed in many perspectives including the functioning of land and property markets (Needham, 1992; van der Krabben and Lambooy, 1993; Needham, 1997; Needham and Verhage, 1998; Priemus and Louw, 2003; El Araby, 2003; Turk and Korthals Altes, 2010; Yan et al., 2014), efficiency (Roberts, 1975; Lefcoe, 1977; Buitelaar, 2004; Louw, 2008; Korthals Altes, 2010; van der Krabben and Jacobs, 2013), urban governance (Louw et al., 2003; Tan et al., 2009), competition regulation (Korthals Altes, 2006; Taşan-kok and Korthals Altes, 2012; Taşan-Kok et al., 2013), connection to land-use planning (Kalbro, 2000; Verhage, 2003; van Rij and Korthals Altes, 2010; van Dijk and van der Vlist, 2015; Hartmann and Spit, 2015; Buitelaar and Bregman, 2016), employment of compulsory purchase (Korthals Altes, 2014), contextual changes (Buitelaar, 2010), provision of social housing (Buitelaar and De Kam, 2012), property rights (Havel, 2009; Muñoz-Gielen, 2014; Havel, 2014), development negotiations (Samsura et al., 2014, 2015; Glumac et al., 2015), public accountability (Kang and Korthals Altes, 2015), public value capturing (Passow, 1970; van der Krabben and Needham, 2008; Alterman, 2012), and developer selections (Caesar, 2016). The majority of the literature on public land development is

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focused on the Netherlands, while other countries have remained quite scarcely studied (however, see Lefcoe, 1977; Buitelaar, 2010; Van der Krabben and Jacobs, 2013; Buitelaar and Bregman, 2016; Caesar, 2016).

In this paper, we take a different perspective. The literature on public land development identifies a variety of motivations for the municipality to use public land development as a strategy to enable urban development. These motivations involve the increased control on plan implementation and quality, as well as the potential to capture the land development gain. The general discussion on the financial aspects of public land development often focuses on observing public land development as an income source for the public authorities, largely ignoring the financial risk involved in it.

The aim of this paper is to analyse how the municipalities acting as land developers balance their spatial planning-related and societal motivations with the financial risks involved in that role. This boils down to the questions of what kind of tools public authorities can use to control or transfer the financial risk of land development, how effective these tools are, and what are the costs of using these tools in relation to the public interests motivating the use of public land development.

We study the above matters in a setting of two case studies that are located in Finland and the Netherlands respectively. The projects are representative examples of public land development taking place in the countries involved, where it is a dominant approach with related well-established institutions and practical experience. By studying public land development in an actual project context, the necessary details concerning risk management can be revealed. Furthermore, by studying the projects with different institutional frameworks in their background, we are able to compare the effect of different institutional arrangements on the risk management.

To enable focus on risk management we analyse cases that were on their execution stage at the time of the 2007–2009 Global Financial Crisis (GFC). The GFC had a significant negative impact on the housing markets of both countries. As a result private sector demand for serviced building plots to develop new dwellings dropped dramatically, which left many municipalities with unsold building plots, increasing capital costs and lots of uncertainties about future recovery of the housing market. The two case studies particularly address the GFC-caused financial trouble for the municipalities, the extent to which they had anticipated on these risks, and the way they dealt with them after the consequences of the crisis had become clear.

Our study contributes to the discussion on the advantages and disadvantages of public land development. To our knowledge, market risk control and its trade-offs with the public interests are novel perspectives to approach this land development strategy. It provides information on practices in Finland and the Netherlands, where public land development is used extensively. However, the relevance of our study is not limited to these countries alone. Discussion concerning the potential of the public land development approach in countries relying on more private-oriented land development, such as the US and the UK, has emerged occasionally (Lefcoe, 1977; Passow, 1970; Roberts, 1975; van der Krabben and Jacobs, 2013; Adams, 2015). We believe our study provides insights also for academics and practitioners deliberating if and how public land development should be used in their countries.

The article is structured as follows. First, motivations and risks of public land development are discussed based on the existing literature providing theoretical background for the empirical analysis (Section 2). Second, the methodology and selection of the case studies (Section 3) and the results (Section 4) are presented. Section 5 provides then a comparative discussion of the case findings, while concluding comments follow in Section 6.

2. Motivations for and risks of public land development

When a public authority acts as a land developer, it takes the risk related to the achievement of land development gain. Following Needham and Verhage (1998), land development gain can be defined as the total market value of the serviced building plots from which the land development costs and value of the land in its existing use are subtracted. Land development costs consist of planning costs and building plot servicing costs including provision of both on-site and off-site public infrastructures. The institutional framework defines how land development gain and building plot servicing costs are shared between the landowner and the public authority, i.e. eventually the taxpayers, within different land development approaches.

When the public authority decides to use a public land development approach, it purposefully decides to take the financial risks related to the business of land development in exchange for the possible rewards. These rewards mainly consist of the advantages related to the additional public control of development and property markets, advantages related to the enhanced public value capturing, and expectations to create an (additional) source of income (van der Krabben and Needham, 2008). Next, we discuss these main motivations in more detail.

2.1. Additional public control by public land development

Due to the inefficiencies of land and property markets, the government should probably always have some control over the allowed uses of different land areas (Alexander, 2014). When such control is imposed via urban planning, the public authority limits the maximum amount of land that can be supplied for different uses. However, control by planning is looser than control by public landownership (Yan et al., 2014). The public authorities (in democracies) cannot control via planning when and by whom exactly the plans are implemented. These decisions remain with the landowner. Public authority can, of course, make voluntary agreements with the landowners to limit their freedom. However, by having the position of a landowner, the public authority can avoid the uncertainty of these negotiations.

Arguably, a number of market efficiencies related to public land ownership can be identified. The allocation of benefits and costs caused by planning decisions is more efficient. When the planning authority owns the land, the benefits and costs arising from the public planning decisions are internal. The same actor making the planning decisions also carries their benefits and costs (except the effects on the land values outside the plan area), whereas in private land development they are externalities (see e.g. Webster and Lai, 2003 for discussion of externalities in urban planning). Thus, when the land is owned by the public authority until a legally binding plan exists, private developers do not need to take the risk of receiving an unfavourable planning decision from the public authority when they acquire land for their development purposes. To compensate this risk the private developers would need to aim for higher profits which would lead to higher prices of serviced building plots and subsequently higher prices of developed properties (Needham and Verhage, 1998). In addition to the better position of controlling planning risks, the public authority may be in a better position to acquire land in a context of fragmented ownership and avoid the possible hold-out problems because of its statutory expropriation rights (Adams et al., 2001; van der Krabben and Needham, 2008; van der Krabben and Jacobs, 2013).

However, to reach these benefits related to public land ownership, the public authority does not have to act as a land developer also servicing the land. It could transfer the land, with additional servicing responsibilities to private land/property developers (see Needham and Verhage, 1998). Other motivations must, therefore,