A two-dimensional model explaining the strategic behavior of Dutch housing associations in the land market

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(Work in progress – do not quote without contacting the author!)

Abstract

In order to acquire land for their social housing production Dutch housing associations have several policy options. A large survey shows that the basic pattern is a choice between buying serviced land from local authorities and commercial developers, and buying unserviced land at a much earlier stage of the development process. The paper presents the results of an analysis explaining the incidence of these choices and their outcomes in terms of an adequate supply of land for social housing at reasonable prices. The analysis will be grounded in a two-dimensional model. One of the dimensions of this model is shaped by the external conditions such as the tension on the land market and the support from local authorities, framed in transaction cost theory. The other dimension consists of the internal resources and competencies of the housing associations as actors in the market, framed in the resource based view of the firm and social capital theory. The analysis will show the relative influence of both types of factors, and the findings will be applied to assess the risk of the various policies chosen by housing associations in the current housing crisis as well as their effectiveness in more general terms.

The paper consists of two sections. After some preliminary remarks I will first position the Dutch practice of acquiring land for social housing in the analytical framework as published in de Kam et al 2008. This will help to identify the problems at stake and enable us to link these problems to some of the theoretical approaches mentioned in the framework.

The second part digs deeper into the practice of Dutch housing associations (from now on indicated as HA's). Bearing on recent research findings of Buitelaar & Sorel, and the ongoing research at the IMR in Nijmegen I will try to explain the variance in behavior of housing associations within the Dutch institutional context. This explanation is set up in a two-dimensional model. After having presented this model and its application in analyzing empirical data, I will conclude with a discussion on the Feasibility of the model, and its potential use in researching the provision of land for social housing in other (national) contexts.

Preliminary remarks: PM

Dutch practice framed

For the purpose of enabling comparative research on the provision of land for social and affordable housing De Kam et al have published an analytical framework in their paper for the ENHR 2008 conference in Dublin. In the first section this framework will be applied to describe the Dutch practice of providing land for social housing, and to highlight the role of housing associations in that provision. This means that the part of the framework related to the provision of land for affordable housing will not be used in this paper.

The first elements of the framework will be summed up only briefly, because we want to focus on specific aspects.

What we want to describe more in detail is the actual acquisition of land by housing associations. They need serviced land for construction. A decision with far reaching consequences is whether they will buy this land as serviced land, produced by other parties, or produce it themselves, i.e. the 'make or buy' decision regarding serviced land. As a background the reader should know that:

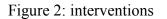
- The provision of serviced land by municipalities provision that for years used to be an essential characteristic of the Dutch housing and planning system has fallen to something like 15% of all transactions in 2008(needham, de kam, korthals altes, Buitelaar & Sorel)
- HA's are private non-profit organizations operating within a specific legal framework set in the Housing Act and its more detailed rulings. They are free to decide on acquisition of land, be it serviced or not. The only restriction is that it should serve the performance of their rather broadly defined tasks in housing, and there is a although hardly maintained ministerial decree that they should only buy land when there is certainty that it will be destined for housing construction no later than 10 years after purchase.
- In 1995, housing associations traded off their rights to future state subsidies on construction and management of social housing against their debt on the state-loans used for earlier construction, and they were able to expand their equity considerably because of the favorable development of the value of their large housing stock
- From 1995 on, no subsidies are provided for constructing new social housing, the deficit on this is financed by the (revolving) equity fund of the HA
- HAa's have (at least until the present day) sufficient means to invest in land banking, in those cases where they don't get the chance or do not want to buy serviced land.
- Ha's are free to construct dwellings for sale up to a price of € 200.000, that is slightly below the average price of all new houses sold, and .. % of the average price of all houses sold in 2008

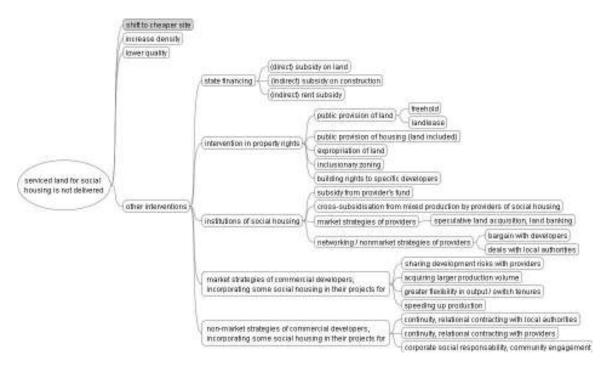
Thus, the position of Dutch housing associations is often characterized as hybrid, being part of the Dutch corporatist welfare regime.

This combination of factors explains a general inclination of housing associations to buy raw land more often. This is a gradual move, because my research shows that there is no housing association that would ignore the opportunity to buy serviced land, if only the conditions are favorable. Therefore, the strategy we found in most cases is called 'situational', meaning that the association will act according to circumstances and opportunities at hand.

Nevertheless, some associations are more 'situational' than others. And it is important to know more about what kind of associations tend to buy serviced land, and what kind of associations are prone to buying raw i.e. unserviced land.

This requires a more detailed analysis of the options open to a housing association. For that we need the part of the framework that describes the possible interventions when social housing providers are not able to pay the market price of serviced land. That are the issues 12 to 14 of the framework, which can be sketched as in figure 2:





The most interesting situation is when the association has decided not to accept the first three options of shifting to cheaper sites, higher density or lower quality. In the Dutch context, after 1995, also the options of state financing, and public provision of housing are not available. The latter, because municipal housing departments were deliberately excluded from the financial arrangements that enable housing associations to finance their deficit on new social housing.

So the lower parts of the framework remain, some of them being 'natural' combinations, others more of less excluding each other.

Public provision of land is always an interesting option, but as we have seen it has lost much of its former reliability. HA have to work hard on keeping this opportunity, and they run the risk of losing it at a change of municipal policy, or as a result of active acquisitions by commercial developers in the land market.

Nevertheless it is worthwhile for HA to invest in non-market strategies for sustaining the option of public provision of land. That is because it may come with a comfortable price (which may in a way be seen as a (legitimate) state subsidy, ref the paper presented by

Groetelaers et al at this conference) and usually has good quality. Many examples of such strategies have come up in our research. Moreover, HA's are rather content with the outcomes of this strategy, and our research indicates that HA's pursuing a serviced land strategy are able to construct more houses than those having a situational strategy.

One would expect a correlation between HA's strategies and objective indicators of either the context in which they work or their internal competencies. To investigate this, data are required. Until now, two projects have been undertaken to look for explanations of strategic behavior of HA's in the land market. The first is de Kam and Needham, ranging from 1999 till the present day. The second is the very recent report by Buitelaar & Sorel.

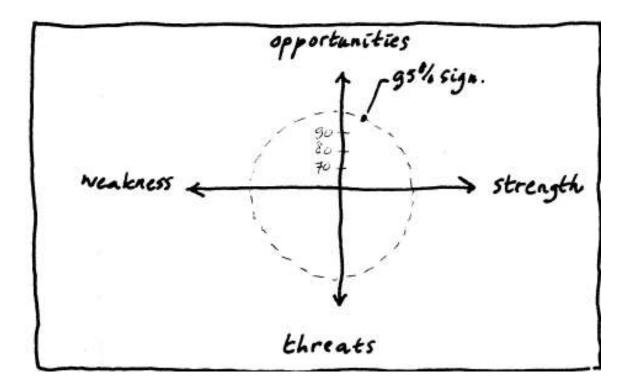
Both projects show similar tendencies. The main one is the shift from public provision of serviced land to the acquisition of raw land, and also the larger share of commercial developers in the provision of serviced land. But both have set only the first steps in explaining why HA's make choices as they do.

Consider for example the answers .HA's gave to the question: How do you decide when you have the chance to acquire a site?

Some HA's mention external considerations, for others internal arguments would be decisive. This type of findings indicate that a conceptual model for explaining choices of HA's in the land market should consist of (at least) two elements or dimensions: the nature of the circumstances in which the HA wants to operate, and the capacity of the HA to choose and execute (combinations of) specific responses to these circumstances. For example if the land market is tense, and there is much competition in that market, the HA may rely on municipal support, cooperate with certain private parties in the market, or engage itself head-on in the competition for land. All three strategies may have the same effect in terms of output. But they can not be chosen at random by every HA. The first requires a perfect network with local authority, the second the capacity to deal with commercial partners, and the last a lot of money and a professional attitude towards risk.

This has convinced us that linear explanations fail, and at least a two- dimensional model might better explain the variance in strategies. The two dimensions also echo the well-known elements of SWOT analysis of the strategic decision-making process: opportunities and threats (external) vs strengths and weaknesses (internal). Obviously, SWOT analysis as such does not explain anything. What we want to do is use the technique of SWOT analysis for structuring our assumptions that the strategy of a HA in the land market can be explained by a combination of external and internal circumstances. This can be visualized as below:

Figure 1: basic dimensions for analysis of strategic choices in the land market



Within the frame of this structure we want to explore whether there are theoretically grounded and empirically tested relations between the two types of circumstances and the strategic choices of housing associations in the land market.

Theoretical grounds: transaction costs and RBV

The two dimensions of our model build on different theories.

With regard to the external dimension we rely on what is called the 'coordination of social life' in new institutional economics. As we elaborated in earlier work, transactions between organizations regarding land can be coordinated by a mix of institutions (market, hierarchy or network) with their respective coordination mechanisms of price, rules and trust. Transaction cost economics has demonstrated that it will depend on several characteristics of the good and its transactions what mechanism would be best suited to coordinate the transactions at the least cost of price and transaction costs.

The nature of transactions that HA engage in in the land market is low frequency and high asset specificity. This would indicate that the preferred coordination would be of the network type. Only if trust is very low – for example because of fierce competition or because the HA is 'at war' with its local authority – the market and coordination by price would be the best – and often only – solution. These basic assertions of transaction cost economy will be applied in modeling our assumptions regarding the influence of external circumstances on the strategic behavior of HA's in the land market.

But in transaction cost economy there is little attention to the characteristics of the actor. Its assumption is rational economic behavior. We know, however, that in a given set of external circumstances, some firms perform better than others, even if they are comparable in several respects. Here the internal dimension of our framework is highlighted. For this dimension we will lean on concepts of the resource based view of the firm, because this theory tries to explain how some firms succeed in creating and exploiting sustainable competitive advantages over others in the same industry. The basic assumptions of RBV are that such advantages tend to exist when resources are hard to imitate, socially complex and so on (Barney).

Empirical work: the quest for data

The next step is to apply this two-dimensional approach to empirical work. For that, we need data on the variables that we want to explain as indicators of strategies chosen by housing associations, and on variables that can explain those dependent variables. Buitelaar and Sorel (2009) present the following set of dependent and independent variables in their analysis of housing production by Dutch housing associations

Dependent variable	Independent variable
Housing production	External
Share of construction for sale	Housing market
	Land market
	Municipal policy
	Internal
	Management style
	Size
	Equity

The main findings from their nation-wide statistical analysis are that size matters: large HA's build more often, and build more houses than smaller HA's. Their share of housing construction for sale is also larger. But there is no effect of size when we look at the relative production, i.e. the size of the production related to the size of the HA's stock (p 38), which can be considered as a more relevant measure of performance. More equity also relates to higher production, but again not so when we analyze the relationship between production and equity per dwelling in stock.(p 39)

The external variables indicate that higher pressure on the housing market relates to a lower chance of housing production, as well as of production for sale by HA's. This suggests that they are either pushed out of markets where commercial parties want to build, or go on building in markets where commercial parties are reluctant or retrenching. (p41). The existing local market share in social housing is a predictor of production as well, both in total volume as in the share of housing for sale. This might point at the effect of the local network of the HA, relational contracting or the like. The political color of the council has been hard to model, only a progressive council relates to higher total production of housing by the HA. (p 43)

Analysis of these data for specific issues related to the acquisition of land has not yet been completed, but the data do offer the possibility to relate the type and volume of land acquisition to the independent variables mentioned above, and to performance in housing construction.

De Kam (forthcoming) has analysed the following set for the data of a survey of about 80 housing associations:

Dependent variable	Independent variable	
Choice of strategy	External:	

Having a stated policy	Size of the municipality	٦
Motivation for buying land	Location of the municipality	
Preference for land-banking	Political 'color' of the council and Aldermen	
Size of land bank	Pressure on the housing market	
Choice of instruments	Pressure on the land market	
Performance / outcome of strategy	Market share of social housing production	
Etc.	Internal	
	Size of the housing association	
	Equity of the housing association (per dwelling)	
	Performance-level in housing production	

Although there are important differences in the data set, there is much similarity in the findings. We will illustrate this on three examples, and use these examples also to visualize the findings on the two dimensions, i.e. the external factors and the internal factors.

The first example is the analysis of the respondents who answered affirmatively to the question: does your association have a policy for dealing with land? A set of assumptions related to this question might be:

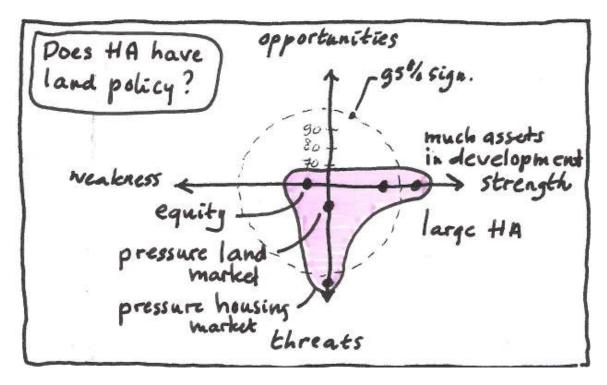
(external)

- land policy is a reaction of the HA when the tension in the land market goes up, so we expect to find such policies more often in area's where there is high demand in the land market and in the housing market
- a HA working in a large municipality or in a municipality having production covenants with the central government (VINEX-area's) will be less in need of having a land policy, because it is more self-evident that the HA will get a share of housing production

(internal)

- To develop a land policy a professional organization is necessary, so we will find land policy more often in large housing associations
- Land policy is particularly useful to HA's that develop and build a large number of houses, so it will be found more often at HA's that have a high construction performance

The first attempts of a statistical analysis of the responses to this question are sketched in figure 2: factors related to the decision to develop a strategy for dealing with land



As figure 2 illustrates, the only relationship with internal independent variables that is significant above the 95% level (in univariate testing) is the HA having much assets in development, which can be plausibly interpreted as a strength of the association. The outcome suggests that also the weakness of having relatively low equity might induce HA's to develop a land policy. On the external dimension we see that it is pressure in the housing market, and – albeit as a less significant tendency - also pressure in the land market that can explain why HA's have developed an explicit strategy for dealing with the land market.

The second example is the question whether the HA has a preference for acquiring serviced land. As we sketched in the introduction, this preference has been expressed by about 15% of the respondents in our survey.

As assumptions related to external variables we would expect this preference to exist where:

- HA's have a reliable partner in the local authority, which could be related to size of the municipality (professional qualities of the municipal departments), and to the political 'association-friendlyness' of the council
- Pressure in the land and housing markets is high and HA's have little chance of acquiring raw land because of strong competition.

On the internal dimension we would expect explanations such as:

- HA's are small and/or have a low production, so acquisition of raw land would be relatively risky and costly and HA's prefer serviced land provided by others
- HA's have low equity and cannot afford to invest in land banking

The outcome of our analysis on this issue is represented in figure 3

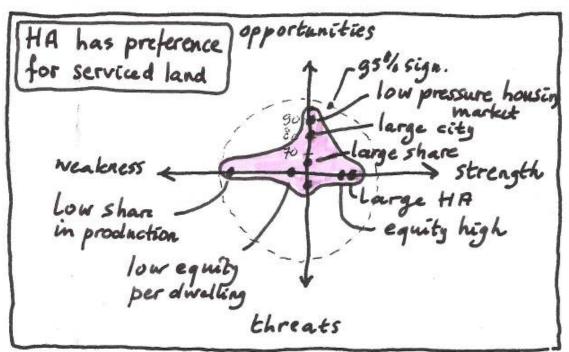


Figure 3: analysis of factors related to the preference for acquiring serviced land

As we see, on this issue no relationships above 95% significance have been found. On the external dimension the preference for serviced land seems to correlate more with opportunities than with threats. The above assumption on a positive relation with city-size, and – in addition to that as a slight tendency – with the share of production of HA's in the total local housing production, seems to be plausible. At about 90% significant is the relationship with low pressure in the housing market. It could be that HA's do not want to run the risk of land banking in such markets, perhaps also the supply of serviced land is relatively high because only HA's are willing to build in such areas (ref Buitelaar & Sorel)

On the internal dimension the picture is somewhat ambiguous: the weakness- side is in accordance with our assumptions, but there are also tendencies that large HA's, and HA's with relatively high equity (in absolute terms) have a stronger preference for serviced land than the average in the survey.

Our third and last example regards two aspects of the opposite of wanting to acquire serviced land, i.e. land banking. By buying raw land a stock is formed, making the HA less dependent on other parties in providing (commissioning) serviced land. About 60% of the respondents have declared that they think land banking is a good strategy for HA's. On the external dimension we assume that their arguments could be the following:

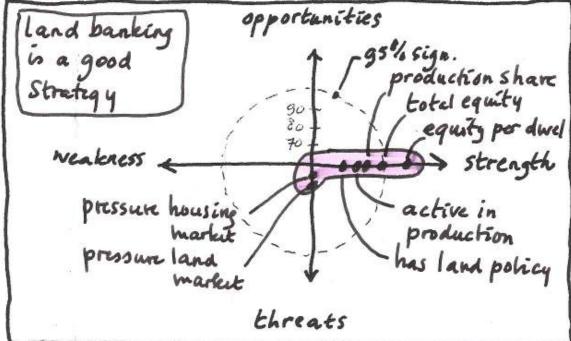
- supply of serviced land is uncertain (low municipal trust or support)
- supply of serviced land is blocked by competitors in the land market, due to high pressure in that market

Looking at the internal dimension, HA's may have specific competencies that lead them to think that land-banking is a good strategy:

- HA's with high equity can afford – and may even be tempted – to invest in a land-bank, the more so when government threatens to cream-off their surpluses

- HA's with large production need a land-bank as an instrument to contain the risk of variation in land-supply

The outcome of our analysis is presented in figure 4 Figure 4: analysis of factors related to HA's opinion that land banking is a good strategy



The picture is somewhat surprising: it is plausible that the opinion that land-banking is a good strategy relates rather strong to variables (and most significantly: equity) representing the strength of HA's, but there is no more than a tendency of a correlation with the external dimension. This indicates that HA's and their supervisors should be well aware of the risk of inefficiency in land-banking, an argument like 'we just have to..' is not sufficient in the light of the variation on the external dimension of the respondents who think that land-banking is a good strategy.

This general picture on land-banking changes when we look at the HA's in the survey who have specified that they think land-banking is a good strategy to secure social housing production, as represented in figure 5 below.

Figure 5: analysis of factors related to HA's opinion that land banking is a good strategy to secure social housing production

opportunities bank 90 80 70 100 threats

Now we see a shift on both dimensions. Respondents who consider land banking to be a good strategy to secure social housing production work in areas where pressure on the land market is relatively high, obviously wanting to increase their low share in local housing production. With the right approach, if land banking does contribute to enabling commercial production as well, they might be able to use this strategy to increase their equity as well.

Discussion:

This paper has provided information for better understanding the behaviour of Dutch HA's in their specific institutional context. It's work in progress, and the analyses will be refined in several respects:

- analyses of Buitelaar & Sorel's data with respect to transactions in land
- refining the theoretical basis of the project (TCE and RBV)
- modeling a variable for the local political climate, which can be used in both analyses
- expanding the analyses of the IMR project to include multivariate analyses
- In-depth analysis of the conclusions of the statistical tests of the findings of the survey by confronting them with the findings of some 60 interviews with HA's directors which have been held simultaneously with the survey.
- Adding longitudinal panel-research to the project, in order to better trace the internal and external dimensions of a range of strategic choices over time within a limited set of respondents

One of the points I want to bring up for discussion is how the effect of management-style and values of the HA can be integrated in the analysis. This is a potential third dimension, which is relevant for the internal and the external dimension of the explanation. Or should it be modeled as just another resource of the HA?

And finally: the relevance of these analyses for an international audience. The project certainly demonstrates that there is much variation in the behavior of one category of

actors in a national context. Explanations of this behavior may help to understand the behavior of more or less similar actors in other countries, and perhaps to predict some effects of institutional changes, both on the EU level as on a national scale.