Improving risk management of land development activities in Dutch municipalities

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- Master Thesis -

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A case study research on how Dutch municipalities can embed risk management in their land development process

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Preface

This thesis is my final fulfilment to obtain the Master degree in Systems Engineering, Policy Analysis and Management at Delft University of Technology. Subconsciously, the idea of studying the risk management process Dutch municipalities already came to me in the last year of my Bachelor. For the course “Beleid, Economie en Recht” students were assigned to write a paper. For this paper it was necessary to study a report about the cause of the financial problems in the municipality of Apeldoorn, which at that time I found very interesting.

Two years later, in the first year of my master, again the case of the municipality of Apeldoorn was highlighted. This time it was during one of the lectures of the course “Value capturing in land management”, given by Herman de Wolff. A course I followed because it was part of the domain I had chosen; “Building environment & Spatial development”. The course triggered me because it was discussed that an increasing number of Dutch municipalities faced financial problems, caused by identical issues compared to those of the municipality of Apeldoorn. The fact that the financial problems of municipalities are of great impact on society finally motivated me to explore whether this subject was suitable for a MSc. thesis research. Eventually, when it was about time to find a subject suitable for graduation, this brought me back to Herman.

In the first place I would like to thank my academic supervisors from the TU Delft Willem Korthals Altes, Herman de Wolff and Haiko van der Voort. They were of great support providing me with extremely useful feedback every time we had a meeting. It is due to their feedback that I was able to bring this thesis to a higher level. Especially the meetings with Herman, which were often quite spontaneous, were very important to me. In particular, I would like to thank Herman for his input, time and patience every time I went to his office. It was his hospitality that made me feel comfortable, which encouraged me to visit him frequently.

Furthermore I would like to thank my external supervisor from Deloitte Real Estate Maurice Schenk for his guidance during my internship. Maurice proved to be of great value during the period I worked at Deloitte Real Estate. He provided me with necessary data and the right contacts at the four Dutch municipalities at which I performed my case study research. Not only his knowledge and expertise in the field of land development, but also his sincere interest and thinking along with me made him a great supervisor. In the end I consider myself very lucky with the composition of my graduation committee. I would definitely recommend each of the four members as a supervisor to other students.

Finally, special thanks go to my girlfriend Hanneke for her patience. I realize that during my period of graduating I was not a very pleasant companion for her. Hopefully this will change after my graduation. Very special thanks go to my parents, as this thesis is the final result of what could not have been possible without them; my study at the TU Delft. Their faith and support made me of what I am today, something for which I am very grateful.

Delft, May 2016,

Jacco de Jongh

Executive summary

Introduction

Since the 1990's Dutch municipalities successfully invested in land development, which turned into a profitable undertaking (Groetelaers, 2013). Municipalities that invested a lot in land development formerly could rely on future profits from a booming housing market. The impact of the financial crisis on the land and housing markets changed this situation dramatically and brought great financial problems to a lot of Dutch municipalities. Large scale land acquisitions involve great financial risks. The financial crisis showed that generally, municipalities were not able to manage these risks sufficiently (Groetelaers, 2012, 2013).

Despite the increased risk awareness that the financial crisis raised in most municipalities, the risk management of land development activities needs improvement. The main reason is that in any case it is undesirable that municipalities face the same scenario as during the financial crisis of 2008 and once again have to take major losses on development projects that started years ago. When a municipality ends up in financial problems this could have severe financial consequences for society. An increased financial burden for local citizens through higher taxes and less financial resources that are available for social serves both are possible consequences for society. The question remains whether the increased risk awareness among most municipalities is enough to avoid a similar scenario as during the crisis. Their lies a danger that municipalities will fall into their old pattern again when the economy recovers. The risk awareness of municipalities may have increased the past few years, but has to be shaped for the future. Because of this reason, it is important to investigate the possibilities for Dutch municipalities to become more in control of their financial position. Municipalities need to embed risk management in their organization and land development processes in order to improve their risk management of land development activities and gain more control over their financial position. This led to the following research question:

> *What are the elements and requirements of good risk management that a municipality has to implement to deal knowingly and adequately with future risks concerning land development, so that they gain more control over their financial position?*

In order to answer this research question, several research methods have been used:

- A literature study to find the principles of 'good' risk management regarding land development.
- A desk research to identify the legal framework regarding risk management of land development in which municipalities currently have to operate.
- A municipality scan, consisting of a selection procedure of Dutch municipalities and a desk research, to analyze how risk management of land development activities comes to expression in the risk reporting of Dutch municipalities and find suitable municipalities for a case study research.
- A case study research at four Dutch municipalities to learn how risk management of land development is organized in practice.

The case study research forms a significant part of this research, because it gives insight in three important aspects that help to answer the main research question. First of all, the results of the case study research make it possible to reflect whether or not the current of risk management of land development activities in municipalities is consistent with the principles of 'good' risk management. Second, the case study research identifies lessons to be learnt, distinguished in areas of concern and learning points, regarding risk management of land development activities which are useful for other municipalities. Finally, the case study research provides insight in what aspects encourage and what

aspects hinder the successful implementation of measures to improve risk management in municipalities. The objective of this research is to improve the risk management within Dutch municipal land agencies in such a way that their risk assessment with respect to land development projects becomes more effective.

Theoretical framework

The literature study in order to find the principles of 'good' risk management with respect to land development resulted in three important elements:

- Two different and opposing perspectives for risk management: the risk approach and the network approach (Bruijn et al., 2014).
- A conceptual framework according to the RISMAN method that can be used to structure and describe a risk management process stepwise (Bunt et al., 2003).
- A list of principles of 'good' risk management with respect to land development (p. 30).

Both perspectives, the risk approach and the network approach, turned out to be relevant. Therefore, both are used during the design phase. From the risk approach, the principles of 'good' risk management are used as a starting point for the conceptual design to improve risk management of land development activities in municipalities. In order for risk management to be successful, also softer aspects of the network approach are taken into account, such as qualitative ways to classify risks, culture and competences. During the result analysis, the conceptual framework of the RISMAN method is used to describe the risk management process of land development activities in the four examined municipalities in a systemic way.

Initially, the principles of 'good' risk management were meant as a checklist for municipalities on which points their risk management of land development activities needs further improvement. However, the list of principles turned out to be too comprehensive to be workable for municipalities. For this reason, the idea of searching for measures to improve risk management in such a way that as much as possible principles of 'good' risk management are fulfilled was discarded. A better way to deal with the list of principles is when they are interpreted as a guidance.

Legal framework

The Dutch Gemeentewet (GW) and the BBV decree form the legal framework for municipalities according to which risk management of land development activities has to take place. The legal framework is not very strict if it comes to setting clear requirements for risk management. These are more clearly derived from the literature that was used to identify the principles of 'good' risk management. The legal framework does have implications for risk management in terms of monitoring, communication and control:

- The Municipal Council sets the framework regarding risk management for the Executive Board;
- the Executive Board has to stay within these boundaries while carrying out the risk management policy, which falls under the supervision of the Municipal Council.
- The Executive Board is obliged to actively inform the Municipal Council. This is incorporated in the regular P&C cycle in the form of both the budgetary report and annual accounts.
- Municipalities are obliged to include a risk section and section on land policy in their budgetary report and annual accounts.

Both sections from the last bullet must contain elements prescribed by the BBV decree. The risk section should at least contain an inventory for the required resistance capacity, an identification of the risks and a clear policy regarding the risk profile in relation to the financial resilience. The section on land policy should at least contain the vision of a municipality on their land policy, how they execute this land policy an elaboration of this policy in relation to the budgetary program, an overview of the estimated results of all land development projects, a substantiation of the

anticipated taking of profits and finally, policy assumptions regarding the budgetary reservations for risks. Additionally, municipalities often choose to consolidate their framework and policy regarding risk management in a memorandum on risk management, which has to be approved by the Municipal Council.

It requires more from a municipality than only the substantiation of the financial resilience to manage their risks regarding land development. However, due to its financial focus, the BBV decree is very limited on non-financial aspects and risks.

Municipality scan

The selection procedure of the municipality scan resulted in 17 municipalities (p. 51). For every selected municipality, the risk section and the section on land policy in the annual accounts were examined during a desk research. The results of the municipality scan (p. 53) were used to provide a quick overview and a first impression on how risk management of land development activities is reflected in the risk reporting of municipalities. During the municipality scan is was found that the list of principles of 'good' risk management is too comprehensive and therefore not workable for municipalities. Nevertheless, with the appropriate nuance, the municipality scan made it possible to compare between the selected municipalities to which extent risk management is reflected in the reporting of the annual budgetary and accounting cycle. This resulted in a categorization of the 17 selected municipalities in four maturity levels (p. 54). Each level corresponds to a certain degree of risk management and its maturity compared to the other selected municipalities. An important remark with respect to the results of the municipality scan is that the results are based on a first impression, which means that the results do not necessarily reflect the actual situation. Actually, the increased risk awareness formed the main reason why the results of the municipality scan had to be rectified after the case study research.

The municipality scan resulted in four municipalities that were found suitable for a case study research. Areas of concern with respect to risk management of land development activities are expected to be found in municipalities that have a less mature form of risk management. Therefore two municipalities were selected from the category that represents the lowest maturity level of risk management. Learning points with respect to risk management of land development activities are expected to be present in municipalities with a further developed risk management process. For this reason, the aim was to select the other two municipalities from the category that represents the highest maturity level of risk management. This was possible for only one of the selected municipalities. Due to certain selection criteria, the other municipality was selected from the second highest category. Municipalities in this category are still regarded as municipalities with a relatively mature form of risk management of land development activities. With respect to the risk reporting of the 17 selected municipalities, the following findings were derived from the desk research of the municipality scan:

- No clear distinction between general risks and risks concerning the land agency.
- The general absence of particular less quantifiable risks. such as strategic and political risks.
- Municipalities seldomly link measures for control to their identified risks.
- Municipalities use different definitions for 'financial resilience' and 'available resistance capacity'.
- Municipalities use the risk section mainly to substantiate on their financial resilience.

Result analysis

For a municipality it is valuable to know how risk management is organized in other municipalities that have embedded risk management in their land development process and how they can learn from it. Instead of using the principles of 'good' risk management as a checklist, it is in the interest of the a municipality to select those aspects from the principles of 'good' risk management that are feasible and manageable in other municipalities. To find the most usable elements of the principles of 'good' risk management, a case study research is performed, which consists of case studies

performed at four municipalities. Due to the degree of confidentiality of certain information, the findings of the four case studies were made anonymous.

The case study research made it possible to reflect in general on the risk management process of the four examined municipalities according to the conceptual framework of the RISMAN method. The conclusion is that the four examined municipalities generally have more difficulties with the steps of the risk control phase compared to the phase of the risk analysis. Mainly when it comes to the monitoring and communication of measures for control, the examined municipalities are less far developed. Furthermore, from the case study research became clear that, for three out of the four cases, the expected maturity level of risk management that was determined during the municipality scan did not correspond to the actual situation in practice. The difference between the maturity level of risk management in the four examined municipalities is less great than was expected based on the results of the municipality scan.

Although the principles of 'good' risk management were not applied strictly as a checklist, the findings of the case study research made it possible to identify the main points of which the four examined municipalities were inconsistent with the principles of 'good' risk management. These main inconsistencies are:

- Insufficient substantiation of risks and underlying risk parameters.
- Risk management of land development activities is not always in line with spatial policy or contributes to predefined objectives.
- Undermined transparency.
- Monitoring and control does not always take place properly.
- Measures for control are not always mentioned or linked to risks.

The main reasons for these inconsistencies can be found in an overview table on pages 83 - 84. Some notable reasons for the observed consistencies are the influence from the political level, early acquired land plots and projects with a long development time, time and capacity constraints and the level of abstraction of a land agency.

The case study research revealed several lessons of which municipalities can learn from each other. A distinction is made between areas of concern and learning points. The areas of concern and learning points that were identified during the case study are presented in the table below.

Table A | Identified areas of concern and learning points of the case study research

Areas of concern	Learning points
Municipalities have great difficulties with the estimation of land development risks and underlying parameters.	The incorporation of scenario analysis in the risk management process and ways to improve it.
Substantial influence from the political level on the risk management of land development activities and the corresponding spatial policy.	Land policy as an integral part of risk management of land development activities.
Municipalities often are committed to earn back investments from land plots acquired in the period during or before the financial crisis.	Pay attention to less quantifiable risks and use creative and innovative ways to classify them.
Early signs of municipalities that are falling back to the situation as it was before the crisis.	An interregional database to manage, monitor and share measures for control and their effects with other municipalities.
When it comes to measures for risk control, municipalities are less far developed.	Find a method to structure the risk management process that suits bests for the organization.
Efforts to increase the transparency of the land agency, do not necessarily result in the Municipal Council being more able to perform their monitoring and controlling task.	

The identified areas of concern potentially hold back the development of risk management of land development activities in municipalities. Especially when not taken into account, areas of concern can manifest themselves as future bottlenecks during the implementation and further development of risk management of land development activities in municipalities. Learning points are success factors of risk management in the examined municipalities. They are considered as possible solutions for issues regarding risk management of land development activities in municipalities. These are issues recognized in all four examined municipalities. The identified learning points are useful for other municipalities, because they serve as an important step in the development process of risk management of land development activities. Following them brings risk management of land development activities in municipalities to a higher maturity level.

Together with findings from the literature study, the findings from the case study research also resulted in aspects that encourage and aspects that hinder a successful implementation of measures to improve risk management of land development activities. These are presented in the table below.

Table B | Aspects that encourage and hinder the implementation process of risk management

Aspects that hinder	Aspects that encourage
Too complicated risk management process	Increased risk awareness
Negative influence from the political level	A broad support among staff members
External focus from the press and legislation on the financial position	Central coordination of risk management
The issue of integrality	Sense of urgency
Sensitivity of the term 'risk management'	Consider risk management as a learning process, which means a gradual implementation

The aspects listed in the table above are useful for municipalities because they provide insight to municipalities what could smoothen or hamper the implementation or improvement process of risk management.

Conceptual design of a memorandum on risk management

During the research, it was found that for municipalities the improvement of risk management of land development activities in order to gain more control over their financial position requires an institutional change. Therefore it is desirable if risk management of land development activities is strongly founded in each layer of the municipal organization, in such a way that the increased risk awareness and sense of urgency are permanently incorporated in the municipal organization. The case study research learned that the sections on risk management and land policy in the budgetary report and annual accounts of municipalities are not used to substantiate on risk management of land development activities in every detail. According to the examined municipalities in the case study research, a memorandum on risk management seems a more appropriate place to lay down a risk management policy. Therefore, for the conceptual design it was chosen to develop a guideline for municipalities for the writing a memorandum on risk management. This guideline contains aspects of what should be included in a memorandum on risk management in order to lay down a better foundation for the risk management of land development activities and further increase the risk awareness of their organization. The guideline is presented in the table below.

Table C | Guideline for a memorandum on risk management

Subject	Relevant items
Risk management policy	Risk management philosophy, including a risk management statement, the organization's perspective on risk management and a formulation of the objectives.
	The contribution of risk management to the predefined objectives and strategy of the municipality and the relation with macroeconomic trends & developments and future opportunities.
	Policy that includes soft aspects from the network approach. E.g. necessary culture and competences to embed risk management in every layer of the organization. Also specify this policy into measures to embed risk management in the organization.
	Risk acceptance level and corresponding risk appetite.
	Clearly specify what is covered and what is not covered by risk management.
The organization of risk management	Clear overview of the risk management process and the method used to shape and structure the process.
	Description of the relevant steps of the risk management process and their outcomes. Among other steps, this also includes the classification of less quantifiable risks, and the prioritization of risks.
	How risk management is incorporated and coordinated: coordinators, involved persons, teams and departments.
	Explanation of the risk management information system or database that is used.
Risk parameters	Substantiation on the used parameters and the underlying data or information. This concerns parameters such as the interest and discount rate, the increase in cost and revenues and the (expected) land sales.
	When certain parameters are not clear or cannot be estimated, an explanation why.
	Parameters that resemble reality as much as possible.
Measures for control	Measures for control that are linked to risks. This goes according to the prioritization of risks (above a certain value, score etc.).
	Appointed risk owners for every measure.
	Defined measures for control according to the SMART formulation.
	Description of a method, procedure or system that ensures the monitoring and communication of the effects from measures for control that are taken.
Financial resilience	A policy that clarifies the financial resilience and the applied norm. Including actions to maintain the financial resilience according to the applied norm.
	A substantiation on what is taken into account as the available resistance capacity.
	A substantiation or calculation on the required resistance capacity, based on the risk profile of the municipality (including the risk profile of the land agency).
	An assessment of the financial resilience. I.e. determine whether or not the buffer to cover the risks of the risk profile is sufficient (stress test, gradation table).
Land policy	A clear substantiation of the link between a particular land policy and the established risk management policy. A description how the choice for a particular land policy is in line with the current organizational objectives, risk strategy and future opportunities and the macroeconomic developments & trends.
Scenario analysis	A connection between measures for control and scenarios.
	Besides numerical parameters, also use non-numerical parameters. Such as, which (industrial) sector does a municipality expect to grow in the upcoming years and how is it currently represented in the particular municipality.
	Bandwidths that resemble reality as much as possible.
	A sensitivity analysis that calculates and tests different scenarios.

For a municipality, laying down a risk management policy in a memorandum on risk management is a very good and essential step in the right direction to become more in control of its land development process and finally, its financial position. This is due to the following reasons:

- Writing and consolidating a memorandum on risk management contributes to the internal risk control and management of the organization.
- A memorandum on risk management includes the foundation for the improvement of the risk management process, including the land development process.
- A memorandum on risk management leads to more transparency for internal stakeholders, because its describes and clarifies how the underlying risk parameters and the risk profile of the municipal organization or land agency are determined.
- A memorandum on risk management provides more insight in the risk management and land development process to external stakeholders, such as the accountant or the province.

Conclusions, recommendations and suggestions for further research

The answer to the main research question it that in order to deal knowingly and adequately with future risks concerning land development, a municipal organization must raise its risk awareness, thereby ensuring that risk management is well-founded in the municipal organization. A more permanent increase of the risk awareness of municipalities would be desirable, especially from a societal perspective. This requires a solid foundation of risk management in the municipal organization. Given the important role of a memorandum on risk management in the improvement of risk management of land development activities, municipalities are advised to write a memorandum on risk management and include the aspects that are prescribed by the guideline developed during this research. Having a memorandum on risk management is essential to embed risk management structurally in every layer of the organization. It puts risk management higher on the agenda and increases the risk awareness of the organization in a more permanent way.

However, writing a memorandum on risk management does not guarantee that a municipality becomes more in control over its financial position. Writing a memorandum on risk management is only the first step towards dealing knowingly and adequately with land development risks. The next step in the process of gaining more control over their financial position is a proper execution of and compliance with the consolidated risk policy, which lies in the hands of municipality itself. Thereby, it is essential for a municipality to know if there are any risks that might occur that can jeopardize the organization's objectives and if it is still possible to make adjustments. This should be a continuous and cyclical process that takes place during both good and bad times. An organization becomes more in control when working processes and measures for control are designed in such a way that it is possible to make adjustments during the process in order to meet the predefined objectives of the organization (Have et al., 2007). For a municipality, writing a memorandum on risk management is a very good and essential step in the right direction to become more in control of its land development process and finally, its financial position

The guideline on writing a memorandum on risk management does not always strictly describe how a municipality should act. Therefore, additional recommendations are given for municipalities to further improve their risk management of land development activities:

- Municipalities should try to learn from other municipalities that are more familiar with the use of scenario analysis.
- Focus on improving of the monitoring and communication of the effects of measures for control.
- Use external expertise to improve the estimation of risks and underlying parameters.
- Ensure that there is an memorandum on risk management which is up-to-date.
- Use the writing of a memorandum on risk management as moment and opportunity to evaluate and improve the foundation of the risk management process.

Finally, the conducted research also included aspects that require more research. These are:

- The application of the RISMAN method in other municipalities.
- An increase in the number of case studies, in order to find additional areas of concern and learning points and to verify if the if the identified areas of concern and learning points also hold for other municipalities.
- Finding ways for municipalities to overcome the issue of estimating risk parameters.
- Investigate alternative forms of land policy.

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The Dutch translations of the words in blue can be found in the glossary.

Chapter 1

Introduction

In this chapter:

This first chapter forms the introduction of this thesis. Respectively, the first two paragraphs introduce the research motive and the research problem, including the problem statement. The main research questions and sub questions are listed in paragraph 1.3. Paragraph 1.4 discusses the societal and scientific relevance of the proposed research. Subsequently, in paragraph 1.5 the research design provides a visualization of the steps of proposed research together with a short explanation for each step. The sixth and final paragraph of this chapter briefly summarizes the outline of this thesis.

1.1 Research motive

The context of land development in the Netherlands is very specific and unique (Korthals Altes, 2010). Proactive planning is well-embedded in the Dutch planning system and it has been since before the crisis of 2008. It was accepted and used as a powerful and effective tool by municipalities for realizing planning ambitions. In fact, since the 1990's the active land policy of municipalities has dominated the Dutch spatial planning system. This started around 1990 when market circumstances on the Dutch land and housing market changed and the involvement of private parties in the land market increased (Groetelaers, 2012).

Dutch municipalities play a key role in supplying land for housing. This key role is explicitly clarified by Faludi & Needham (1999, p. 485). The authors state that "national government cannot achieve its growth management strategy without the cooperation of the municipalities, for they have a large amount of formal autonomy in planning matters". But from 1990 other non-governmental parties such as private developers started to have an increasing influence on the land market by acquiring and developing land plots too. The situation on the land market changed from a single-actor process controlled by municipalities to a multi-actor process with various actors and their various goals. From a societal perspective, the main objective of municipalities is to provide qualitative and affordable housing. Private developers are mainly interested in making profits. This brought more competition between the municipalities and these private developers (Groetelaers, 2013). Due to the increasing prices of newly built houses private developers focused on acquiring large areas of land in and around the potential urban expansion locations (Groetelaers, 2004). Land development turned out to be a profitable undertaking for everyone who managed to obtain land in and around urban expansion locations. Not only Dutch municipalities started to apply active land policy in order to benefit from the land supply profits too, also they used active land policy to steer and control spatial planning. Because of the greater involvement of private parties it has become more difficult for municipalities to achieve certain spatial planning objectives. This because the plans of a private developer are not always in line with the spatial policy of a municipality.

The previous two decades Dutch municipalities relied on the revenues of land development projects as a major source of income from their land agencies. They took more and more risk to cash in on the land supply profits (Groetelaers, 2012) and large scale land acquisitions by municipalities

were not uncommon. This is even referred to as 'the money machine' (Groetelaers, 2013, p. 9). During times of economic prosperity this strategy turned out well. Municipalities that invested a lot in land development could rely on future profits from a booming housing market. But following the global financial crisis and the collapsed housing market, the land market also collapsed (Groetelaers, 2013). This brought great financial troubles to a lot of Dutch municipalities. Unable to sell their land due to postponed or even cancelled land development projects, municipalities were left behind with huge stocks of land which they cannot sell without taking major losses. The great financial problems of the municipalities of Apeldoorn (Enquêtecommissie, 2012) and Enschede (Korthals Altes et al., 2009, 2012) are striking examples of what went wrong. Both cases show that large scale land acquisition involves great financial risks. However, both cases also indicate that these municipalities were not able to manage the risks within their land agencies sufficiently (Groetelaers, 2012, 2013). When a municipality ends up in financial problems this could have severe financial consequences for society. An increased financial burden for local citizens through higher taxes and less financial resources that are available for social serves both are possible consequences for society. Because of this reason, it is important to investigate the possibilities for Dutch municipalities to become more in control of their financial position.

1.2 Research problem

1.2.1 Problem exploration

Dutch municipalities use active land policy to steer and control spatial planning (Buitelaar, 2010). However, active land policy also proved to be very efficient for value capturing and cost recovery purposes. By using an active land policy a municipality comes very close to acting as a private developer. Most Dutch municipalities used active land policy because participating actively in land development projects provided great opportunities to make profits (Have, 2008).

This entrepreneurial role on the land market included also the possibility to lose money. Using active land policy as a strategy for early and large scale land acquisition brings great financial risks. Land acquisitions do not only require large investments, but these investments are often financed through loans. The loans in their turn are serviced from the income from future land disposals several years later. As the time span of long term projects increases, so does the risk (Have, 2007; Korthals Altes, 2010). Not to mention the risks coming from the fluctuating trends of interest rates and inflation (Have, 2008).

The financial problems of municipalities caused by the financial crisis showed that the risk management within Dutch municipalities regarding large scale land acquisition leaves room for improvement. Municipalities were taking risks they were not used to take as a public body (Groetelaers, 2013). Land development activities include much more risk compared to most other routine activities of municipalities (Have, 2008). However, Dutch municipalities did not foresee the possible negative consequences of their land acquiring activities. Dealing with credit risks and operational risks goes beyond the capacity and scope of municipalities, making them unable to deal properly with risks management methodologies (Have, 2008). Besides that, municipal land agencies were often seen as a 'black box' by the Municipal Councils, which have the task to monitor and supervise them. For a municipality it would be valuable to know how risk management is organized in other municipalities that have embedded risk management in their land development process and how they can learn from it. Which elements can be translated or are useful for their own business model and how could they be implemented?

The crisis of 2008 which caused the collapse of the land and housing markets did not pass without leaving its trail. During the past few years right after the crisis municipalities became much more risk averse. As a response to the collapsed housing and land markets most municipalities switched from an active land policy to a more facilitating land policy. A facilitating land policy in general contains less financial risks for a municipality than an active land policy. Dutch municipalities also made some improvements regarding transparency concerning the risk reporting in their annual

accounts and budgetary reports. In most cases their risk reporting is far more transparent than other non-profit organizations (Binnenlands Bestuur, 2015). Some Dutch municipalities already reported on risks in their annual accounts and budgetary reports (Binnenlands Bestuur, 2015) before this was required by Dutch national law (see chapter 3).

Still, there is room for some improvement, including the (financial) transparency of land development plans. The question why certain policy goals or financial targets are not met often remains unanswered. In many cases this reserved way of reporting (policy) results can be linked to political pressure. Still, given the social responsibility and public tasks of a municipality, it would suit such a governmental organization to be as transparent as possible.

One might interpret the story so far in a way that the Dutch municipalities were to blame for their own financial troubles. As pointed out earlier, it is true there are certain (policy) mistakes made by some Dutch municipalities. However, before putting all the blame on the Dutch municipalities it is interesting to question to what extend is it possible for a municipality to anticipate on a possible future crisis. After all, crises can usually not be predicted. At least, to some extent. Furthermore, municipalities were not the only organizations that got into financial trouble. Other players on the land market such as private developers (small and large) had to face financial difficulties too. Their risk management strategies also could not foresee the impact of the financial crisis on the land and housing market. Nor their strategies could prevent them from major losses they had to take on their acquired land. To predict the precise impact of a crisis for a municipality seems rather difficult, if not impossible. If it is possible, chances are that it will be very complex. However, making scenario analyses and considering several scenarios within a chosen range could help a municipality to at least anticipate as good as possible on future risks.

1.2.2 Problem statement & research objective

Despite of the changes and renewal of the legal framework in relation to land development (Renewal of the Wro in 2003; The new land policy memorandum; the BBV decree, 2004; The introduction of the dualistic structure and the new land policy act in 2002) a lot of municipalities still ended up in financial problems. From several research reports (Deloitte Real Estate, 2012, 2013, 2014) and the cases of Apeldoorn and Enschede (Enquêtecommissie, 2012; Korthals Altes et al., 2009, 2012) it can be concluded that municipal land agencies were a major source of the financial problems within Dutch municipalities. Mainly due to the fact that these entities were very non-transparent. The Municipal Council often was not aware of how the (financial) decisions regarding land development projects were substantiated (Deloitte Real Estate, 2012; Groetelaers, 2012; Have, 2007, 2008). Therefore this research puts a particular focus on the risk management within the land agencies of Dutch municipalities.

As discussed in the previous paragraph Dutch municipalities became more risk averse after the crisis. A good example of this is the municipality of Rotterdam (Rekenkamer Rotterdam, 2012). They made significant improvements regarding the transparency of their risk reporting. However, these improvements did not have immediate effect right after the crisis and some municipalities still got into financial trouble. Among other reasons, most area development projects have a long development period: 10, 20, or even more years. Investments and contracts were often made long before the crisis, so there is not much of a return. This resulted in a considerable amount of municipalities that had to cut their losses, despite all the changes and improvements that were made.

In any case it is undesirable that municipalities face the same scenario as during the financial crisis of 2008 and once again have to take major losses on development projects that started years ago. It might be that municipalities learned from the crisis period and will continue their risk averse policies. After all, it must be said that the risk awareness under municipalities has increased the past several years. But is this enough? The housing and land markets already shows signs of recovery. After some time, when the markets are recovered, this might trigger the risk appetite of municipalities once again, but also the risk appetite of other players on the land market. I.e. will

municipalities fall into their old pattern again when the economy recovers? The risk awareness of municipalities may have increased the past few years but how to shape this for the upcoming period and the future? To do this, the risk management within Dutch municipalities needs improvement. Municipalities need to really embed risk management in their organization and land development processes.

To help municipalities gain control over their future financial position, further research could be done on how to incorporate risk management strategies specific to land development projects in the municipal organization. One prerequisite for municipalities to gain more control over their financial position is to have an adequate and transparent risk management process (Have, 2007, 2008). The following is relevant in the light of what is discussed earlier this subparagraph. What will happen when the housing and land markets recover? Will the risk appetite of municipalities return and will they fall back in their old pattern again? For example by starting to acquire strategic land plots again. If so, then by all means they need a better risk management process than in the period before the crisis.

Then the question remains: how to achieve this? What has to be taken into account is that a municipality is a complex organization which, due to its juridical, economic, political and societal nature, finds itself in a complex setting. A complex organization in terms of an organization that consists of multiple departments. These departments are comprised of employees that all work according to a hierarchical structure of layers. On top of this, many of these employees are interdependent. A complex setting because all these departments fall under the supervision of several municipal bodies, such as the Executive Board and the Municipal Council. In turn, these bodies are accountable to the Provincial Executive. This means all municipal departments and institutions are interacting with each other. Sometimes even in the form of an interdependent relationship. How to embed or improve risk management in such complex organization? Risk management, which is rather complex in itself due to its many definitions. From this knowledge gap the following problem statement is derived:

It is unclear how to improve risk management in a Dutch municipality, which is a complex organization, in such a way that the municipality gains more control over their financial position.

To overcome this problem statement, two aspects require more insight:

1. More practical knowledge is required on how the process of risk management is structured, organized and embedded throughout the organizational layers within Dutch municipalities.
2. More knowledge is required on the communication and reporting of risk management within Dutch municipalities.

This study will help to gain more insight in both aspects. The research is facilitated by and performed in cooperation with Deloitte Financial Advisory Services (FAS), Real Estate. The objective of this research is to improve the risk management within Dutch municipal land agencies in such a way that their risk assessment with respect to land development projects becomes more effective. The research goal is to develop a solution that Deloitte Real Estate can use in its advisory role towards Dutch municipalities. Ultimately, the advice has to fulfill the research objective mentioned previously. The aim of the proposed research is to provide a solution for Dutch municipalities which enables them to give more structure to their risk management process. This in order to gain more control over their financial position. With a combination of a desk research and a case study this research aims to find useful elements of risk management which can be used by a municipality to improve their risk management. The design of this research is explained more thoroughly in paragraph 1.5 of this chapter.

1.3 Research questions

The main research question following from the knowledge gaps and the problem statement defined in the previous paragraph is:

> *What are the elements and requirements of good risk management that a municipality has to implement to deal knowingly and adequately with future risks concerning land development, so that they gain more control over their financial position?*

To find a structured answer to the main research question this question is divided into several subquestions. First of all, to find the elements and requirements of 'good' risk management it is necessary to identify the principles of 'good' risk management. To narrow the research field of this subquestion, the aim is to find principles of 'good' risk management that are typical for land development. For this purpose also risks that are typical for land development projects will be identified. This leads to the first subquestion:

1. *What are the principles of 'good' risk management with respect to the characteristics and risks that are typical for land development?*

Furthermore, to be able to judge the level of risk management of Dutch municipalities, their current assessment of risks needs to be examined. Before this can be done it is important to analyze the legal framework in which Dutch municipalities currently have to operate. When it is known in which legal framework Dutch municipalities have to operate it is possible to say which implications this has for risk management within Dutch municipalities. This leads to the second subquestion:

2. *What are the implications for risk management within Dutch municipalities coming from the legal framework imposed by Dutch national law?*

After the analysis of the legal framework, the next step is to analyze how the legal framework is used by Dutch municipalities to deal with the risks of land development. This analysis is performed to find out how risk management comes to expression in Dutch municipalities. I.e. what is the influence of the legal framework on risk management in Dutch municipalities. By analyzing the current situation of a number Dutch municipalities it is possible to compare these municipalities on how the legal framework affects the expression of the earlier defined principles of 'good' risk management. From this the third subquestion follows:

3. *How does the legal framework affect risk management of land development activities within Dutch municipalities?*

The previous subquestion does not address how and if the risk management of land development activities is effectively is in line with the principles of 'good' risk management in practice. Nor does it provide insight in how the legal framework works in practice and if it actually leads to 'good' risk management. Therefore the risk management of land development activities needs to be assessed in practice. Based on this the fourth subquestion can be formulated as follows:

4. *Is the current risk management of land development activities within Dutch municipalities consistent with the principles of 'good' risk management?*

Dutch municipalities can gain more control over their financial position if they know how to reduce the possibility that they lose control over their financial position. One way of doing this is to learn from municipalities in which risk management seems less far embedded than other municipalities. The examples of these municipalities can serve as areas of concern for other municipalities where to focus on.

Municipalities can also learn from other municipalities that seem to have a far more advanced way of risk management than themselves. Despite all the negative news regarding Dutch municipalities and their risk management, there are Dutch municipalities that already made significant improvements in their risk management and their way of risk reporting (Binnenlands

bestuur, 2015). Some of these municipalities might serve as an example by providing lessons to be learnt for municipalities that are lagging behind in the field of risk management. It would help Dutch municipalities to improve their risk management by identifying these learning points. In short it would be interesting to know what Dutch municipalities can learn in the field of risk management from other Dutch municipalities. From this the fifth subquestion is derived:

5. *What lessons regarding risk management of land development activities can be learned from other Dutch municipalities?*

If a municipality wants to gain more control over their financial position it must not only know how to improve its risk management, but also how to implement these improvements. Earlier it was concluded that a municipality is a complex organization. Therefore it is expected that the improvement of risk management within municipalities will be an easy transition. From the perspective of a municipality it would be interesting know if there are any aspects that may hinder a successful implementation of measures to improve risk management. Or on the other hand, which aspects encourage the implementation process. This leads to the sixth subquestion:

6. *What aspects encourage and what aspects hinder the successful implementation of measures to improve risk management of land development activities within Dutch municipalities?*

Finally, it is important for a Dutch municipality to know how risk management can be a structural part of the land development process. With this knowledge it is possible to define which steps have to be taken and in which sequence by municipalities to improve their risk management process and gain more control over their financial position. Therefore the final subquestion is formulated as follows:

7. *How can a Dutch municipality make risk management a structural part of its land development process, in such a way that a municipality becomes more in control of its financial position?*

1.4 Research relevance

Based on the number of Dutch municipalities with financial problems, with hindsight, it can be said that the risk management within land agencies of Dutch municipalities regarding land development projects was not sufficient and transparent enough. Dutch municipalities can be more in control of their financial position, if ways can be found to improve the risk management process of their land agencies. Unexpected future financial problems might be avoided or reduced. Despite this, it should be taken into account that good risk management does not necessary means no financial problems. This research has societal relevance by helping municipalities to gain more control over their financial position. This is because in many cases society at large has to bear the costs of municipalities with financial problems. Furthermore, as concluded in paragraphs 1.1 and 1.2, problems regarding risk management of land development activities and the financial position of municipalities have occurred in more than a few municipalities. In fact, most Dutch municipalities have to cope with financial problems caused by the 2008 crisis. Up to 2013, the total financial impact on society as result of the financial crisis of all municipalities together is €2.9 billion (Deloitte Real Estate, 2013). This is public money which cannot be used for other purposes, such as investments in social services. Finding a way to improve risk management that is generally suitable for most municipalities therefore is socially relevant.

On a scientific level, this research aims to find an answer to the question if there is a general way or method in which Dutch municipalities and their land agencies can not only identify, but also assess and manage the risks of their land development activities. According to ten Have (2007, 2008) there is very little insight in how Dutch municipal land agencies asses the risks of their land development activities. The proposed research aims to find an answer to this issue, thereby providing more insight in the risk assessment of land development projects within Dutch municipal land agencies and how they can improve them by using risk management methods derived from

literature. In addition, land development projects and large engineering or infrastructure projects have some shared characteristics. For example, both involve public actors. Most of them are even (partially) funded by public parties. Also it concerns risk management in complex organizations or settings. Therefore, research on the improvement of risk management within municipalities regarding land development projects may result in valuable insights that are applicable to other large projects involving public parties.

1.5 Research design

1.5.1 Research Approach and methods

An overview of the research approach is given in Figure 1. The research consists of four phases: 1) Exploration, 2) Field research, 3) Result analysis, 4) Design and implication. The numbers in some of the smaller boxes represent the related subquestions.

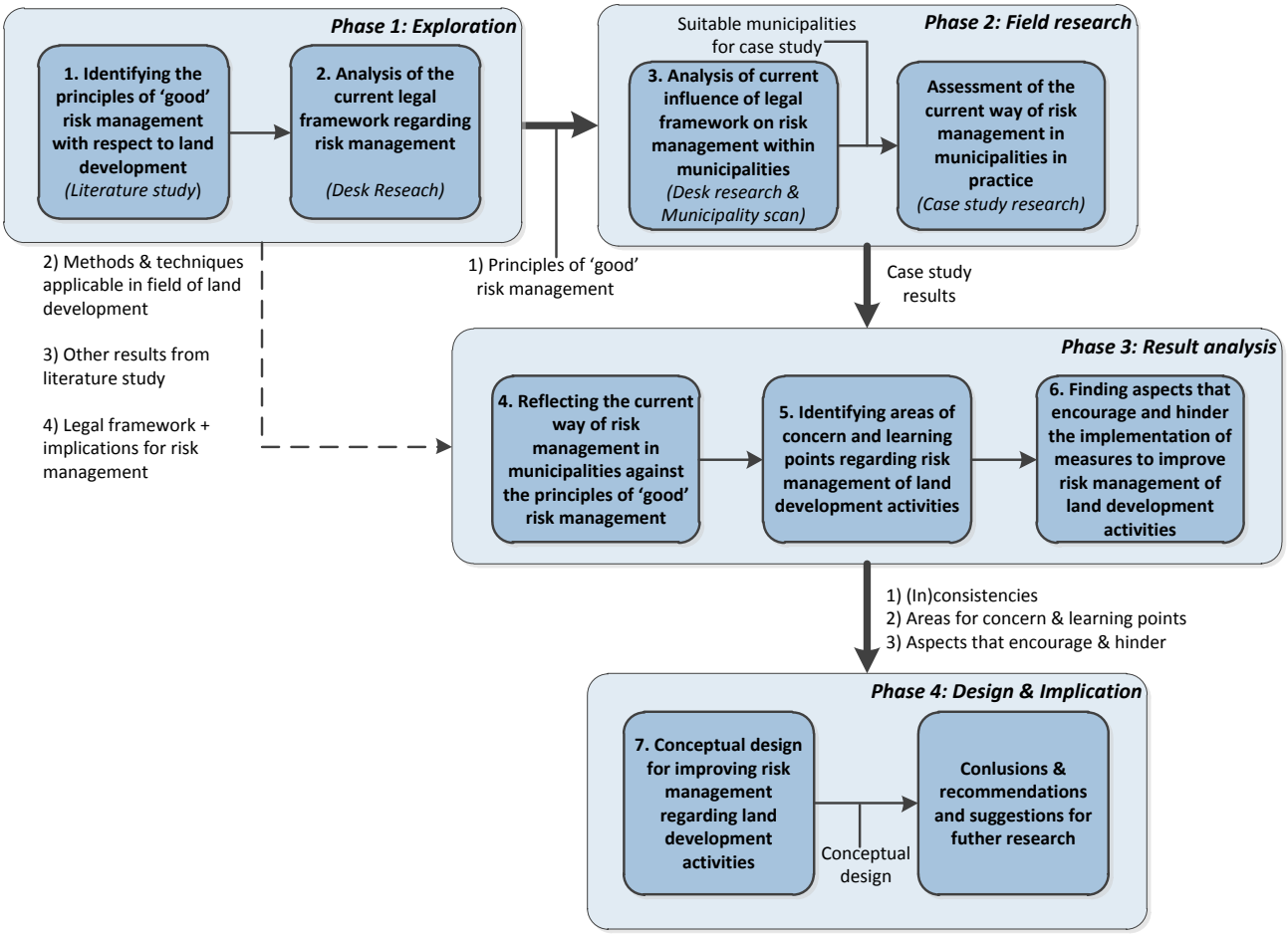

Figure 1 | Research approach

The research starts with the exploration phase that consist of two elements (Figure 1). The results of these two elements together provide a source for finding aspects that encourage and hinder the implementation of measures to improve risk management within Dutch municipalities in a later phase (Figure 1: dashed line that goes from phase 1). Subquestions 1 and 2 are answered by means of a literature study and a desk research at Deloitte Real Estate.

To answer subquestion 1 scientific literature on risk management of engineering or infrastructure projects will be used to define the concept of 'risk' (Johansen, 2010; Mun, 2006) and introduce a conceptual framework that can be used for structuring risk management. The aim is to find methods

or techniques from scientific literature on risk management that can be applied in the field of land development. Therefore it is also necessary to explore the risks that typically can be found when undertaking land development projects. Finally, the principles of 'good' risk management with respect to the special characteristics of land development are identified.

The second subquestion is answered by identifying the legal framework that comes from Dutch national law. The legal framework is expected to have certain implications for Dutch municipalities on how to manage the risks of their land development activities. A desk research is used to answer the second subquestion. In this desk research the legal framework is identified that creates the public accountability system of municipal land agencies regarding their risk assessment. This is done by analyzing the implications regarding risk management for Dutch municipalities that follow from Dutch national law.

The second phase of the research is the field research. During the field research subquestion 3 will be answered based on more desk research and a municipality scan. The municipality scan is used to get a quick impression of the risk reporting of some Dutch municipalities. For this impression the principles of 'good' risk management identified in phase 1 are used as a maturity scale regarding risk management. Chapters 2 and 4 elaborate this in more detail. During the municipality scan, municipalities are selected based on the scale of their land development activities compared to their actual size in terms of inhabitants. In chapter 4 this is further explained. For the municipalities that are selected for the municipality scan a desk research is performed. The design and object of the municipality scan are outlined in chapter 4. The purpose of the municipality scan and its related desk research is to explore how the legal framework affects risk management of land development activities. During a desk research it is explored how risk management comes to expression in the reporting of Dutch municipalities. The municipality scan makes it possible to compare the level of risk reporting between several Dutch municipalities. Which in turn leads to an expectation of how far risk management is embedded in the municipal organization of the selected municipalities.

The results of the municipality scan lead to a number of municipalities that are suitable for a case study research. The municipality scan provides information on the maturity level of risk reporting of the selected municipalities of the scan. The case study research focusses on how risk management of land development activities is organized in practice, something what is not addressed by answering subquestion 3. Along with a detailed description of its design, the reports of the case study research are outlined in chapter 5.

Together with the results of the exploration phase, the results of the case study research make it possible to answer the subquestions 4, 5 and 6. For the answering of subquestion 4, the current way of risk management of land development activities in the examined municipalities of the case study research is reflected against the principles of 'good' risk management defined in the exploration phase. I.e. is the risk management of the examined municipalities consistent with the principles of 'good' risk management? It is expected that this reflection leads to a number of (in)consistencies that show why the current way of risk management of land development activities in the examined municipalities is or is not consistent with the principles of 'good' risk management.

As described in paragraph 1.3, it is expected that municipalities can learn from other municipalities. When it comes the risk management of land development activities, municipalities can learn from both kinds of municipalities. Municipalities that have made significant improvements regarding risk management and municipalities that are still more behind in the field of risk management. The analysis of the results of the case study research allows it to identify lessons that can be learned from the examined municipalities. These lessons provide the answers to subquestion 5. From municipalities that have a more advanced risk management process can be learned how risk management is embedded in their organization. These useful elements are considered as learning points for other municipalities. Municipalities that are less far in terms of risk management provide areas of concern for other municipalities. To keep the total research within an appropriate time

span, the case study research consists of only four case studies. For each kind of the above described municipalities, two municipalities are selected. Chapter 4 and 5 provide more information regarding this selection process.

Finally, together with the results of the literature study, the results of the case study research can be used find aspects that encourage and hinder the implementation of measures to improve the risk management of land development activities in Dutch municipalities. The four case studies will reveal a number of these aspects and the same holds for the literature study that is conducted to identify the principles of 'good' risk management. These aspects form the answer to subquestion 6. The answers to the subquestions 4, 5 and 6 can be found in chapter 6.

The result analysis leads to three main results that are used as input for the conceptual design in the design phase:

- The main (in)consistencies of the examined municipalities with the principles of 'good' risk management.
- Lessons to be learnt from the examined municipalities: areas of concern and learning points.
- Aspects that encourage and hinder the implementation of measures to improve risk management in municipalities.

In the design phase, based on these results, a conceptual design is formulated. This conceptual design includes measures and recommendations for municipalities to improve their risk management regarding land development activities. It is difficult to give concrete substance on this design and its structure in advance, because the form and structure of the design are elements to be discovered and specified during this research. After the result analysis of the case study research, it is expected that it is possible to further specify the conceptual design. Therefore, in chapter 7 the conceptual design will be introduced and further specified. After the specification of the conceptual design, subquestion 7 can be answered, which is done in the same chapter.

The last step of the final phase are the conclusions, including the answer to the main research question, recommendations and finally, opportunities for further research. These can be found in chapter 8.

Not mentioned as a separate step is the validation of the conceptual design. The conceptual design to improve risk management of land development activities within Dutch municipalities will be validated along the way of the research. The fact that the conceptual design is based on the results of the case study research, i.e. based on experiences and findings from practice, makes that a part of the validation takes place already during the phase of the field research. The other part of the validation of the conceptual design takes place through interviews, meetings, or small talks with experts. These are experts in the field of risk management, land development & land policies and experts that have experience with the organization structure of Dutch municipalities. The experts are asked to give their opinion on the proposed conceptual design. In some cases the comments of the experts will lead to necessary adjustments of the conceptual design. In the proposed conceptual design, the comments made by the experts are taken into account. This does not implicitly mean a point-to-point translation of these comments to the conceptual design.

1.5.2 Data collection

This research will be executed in cooperation with the service line Real Estate of Deloitte Financial Advisory Services (FAS). Deloitte Real Estate serves clients that are actively involved in the real estate market, such as municipalities, provinces, the national government, housing associations and private developers. Deloitte Real Estate has a broad experience and network in the field of land development, land policies, municipal land agencies, risk management of land development projects and public private partnerships. The large number of Dutch municipalities in the client portfolio of Deloitte Real Estate and their broad network provides the following resources and research benefits:

- The financial situation over years of municipalities in their portfolio, useful for desk research and case study selection.
- Easy access to all relevant policy and financial documents of municipalities in their portfolio, useful for desk research.
- Access to a broad network that consists of a wide range of experts (financial, risk management, land development, concern controllers, planning economists of land agencies etc.), useful for case studies and expert validation.
- Experience and knowledge regarding the public accountability system of municipal land agencies, useful for desk research.

For the literature studies digital databases such as ScienceDirect, Scopus and Google Scholar are used. Suggested search terms (or combinations) are: Risk management, Land development projects, Municipal land agencies, Dutch municipalities, Active land policy. Since the research field of the proposed research is very specific for the Netherlands a significant part of the literature is Dutch. Therefore sometimes some of the Dutch translations of the search terms are used instead.

1.5.3 Research limitations

The following limitations should be taken into account for the proposed research. First of all, the proposed research has some potential for revealing very sensitive information of municipalities, which is not always in their favor. Especially information regarding risks and risks management. The results of the case studies may contain very sensitive information for municipalities regarding the current situation of their risk assessment within their land agencies. Therefore they could be unwilling to share relevant information. There are enough alternatives in the portfolio of Deloitte Real Estate in case a municipality is unwilling to share information. Still, one must be very careful in dealing with such sensitive data, otherwise this will harm the reputation of Deloitte Real Estate.

Second, some of the data and information of this research is gathered by literature and interviews. Sometimes, the opinion or judgment of an interviewed expert is used to validate the results or the conceptual design. When using research methods like interviews and literature studies it is important to be aware that these data could be biased. It is therefore important to not focus on one perspective, but to involve as many different perspectives as possible. Furthermore, the quality of the information derived from a case study interview depends on the willingness of the respondent to share information. Therefore, the questionnaire must be composed with due caution and interviews need to be prepared thoroughly.

Finally, one of the downsides of using a case study as a research method is that they provide only a small basis for scientific generalization when only one or a few cases are studied (Yin, 2003). This research proposal is based on four case studies, allowing for some generalization. Increasing the number of case studies would give more possibilities for generalization. However, the period of this research does not provide enough time to do so. Another way to deal with this problem is to increase the diversity in the expert panel for validation.

1.6 Thesis outline

In the next chapter the research starts with a description of the theoretical framework, which is based on a literature study. In chapter 3 the legal framework is outlined, which describes the implications for risk management in Dutch municipalities coming from Dutch national law. Together, chapter 2 and 3 form the exploration phase of this research. Next comes the field research phase, which consists of chapter 4 and 5. Chapter 4 discusses how the legal framework is applied by Dutch municipalities, by showing how the influence of the legal framework on risk management comes into manifestation in the annual budgetary and accounting cycle of municipalities. In chapter 5 it is examined whether the results of chapter 4 are representative compared to the actual situation. A case study research in four municipalities is used to assess the current way of risk management of land development activities in Dutch municipalities in practice. The results of the case study research

are analyzed in chapter 6, which forms the results analysis phase. The final phase, design & implication, consists of both chapters 7 and 8. In chapter 7 a conceptual design to improve the risk management process of land development activities in municipalities is specified. Chapter 8 concludes the research with the final conclusions, recommendations and suggestions for further research.

Chapter 2

Theoretical framework

In this chapter:

This chapter includes the literature study done in order to find the principles of 'good' risk management. In the first paragraph the definitions of both risk and risk management are clarified. The second paragraph answers the question why risk management is actually important for most organizations. In paragraph 2.3 risk management is related to land development. This is done by characterizing land development and land development projects, mentioning typical risks that occur during land development projects and finally by featuring the most important instrument of municipalities regarding risk management. Paragraph 2.4 shows two perspectives for risk management coming from literature. Furthermore a conceptual framework is selected which can be used for shaping and structuring the process of risk management. In paragraph 2.5 the principles of 'good' risk management regarding land development are listed. Paragraph 2.6, outlines bottlenecks and tips regarding the implementation of risk management. Finally, this chapter ends with a concluding paragraph.

2.1 The definitions of risk and risk management

Before the principles of 'good' risk management can be defined, it is necessary to clarify the concept of risk management and its closely related term of 'risk'. Both risk management and risk are commonly used terms in many pieces of related literature. Therefore, it is important to start by making explicit which definitions of risk and risk management are going to be used consistently throughout this thesis report. When doing this it is important to come up with definitions that are usable in the field of land development and area development projects, since this is the focus of this research.

2.1.1 Defining risk

There are many definitions of the concept of risk. However, none of these definitions is universally accepted as 'the' definition (Gehner, 2008a). Throughout literature, a common used definition of risk is to express risk in components of probability and impact. Probability is used to express the likelihood that an event will occur. The impact shows the effect or consequence of the event that causes a deviation (positive or negative) from the desired outcome. This deviation can be expressed in all kinds of metrics that are relevant for the risk owner. Common used metrics are time, financial resources, quality and information (Bunt et al., 2003). Focusing on land development, the impact is generally expressed in terms of financial loss (Gehner, 2008a). Often the term risk is put in a negative perspective, but in fact events can have both a positive and a negative impact. Taking a more managerial perspective on risk, events with a positive impact are referred to as opportunities and events with a negative impact are referred to as risks (Gehner, 2008a). Using both components probability and impact, risk then can be quantified as '*probability (or chance)* multiplied by *impact*'. When using this definition, one must realize the following. The fact that this definition includes the likelihood of an event occurring implicitly means that there is no certainty that it actually does. This

means that a certainty or an event that surely will occur falls beyond this definition of risk. In many projects or organizations, existing problems or concerns are identified as risks (Bunt et al., 2003), while they fall beyond this definition of a risk because there is no uncertainty anymore since they have actually taken place. However, uncertainty on its own does not imply a risk or an opportunity (Gehner, 2008a). This is where the component impact comes in. If a possible future event has no potential to have a negative impact on an organization's objectives, there is no risk for that organization at all. A report from the healthcare inspection (Linde et al., 2011) supports the view of Gehner (2008a) that there is only a risk when a certain amount of uncertainty exists. According to van der Linde et al. (2011), if an event has occurred it has turned consequently into an incident or a problem.

The definition given above is a quantitative definition. There are also qualitative ways to define risk. Other definitions of risk are given below.

- According to the ISO standard a risk can be defined as the effect of uncertainty on objectives (Purdy, 2010)
- According to the IRM standard a risk can be defined as the degree of probability that an event can lead to undesirable consequences (IRM, 2002)
- The chance of the occurring of an event with a positive and/or negative impact on the organization's objectives (Linde et al., 2011).
- An event that may or may not occur that can lead to budget overruns, exceeded time limits and unfulfilled quality standards (Bunt et al., 2003).

The guide of Deloitte Real Estate (Have et al., 2007) on land policy combines some of the definitions above and provides a definition of risk from a more land development orientated perspective. According to this guide a risk is a possible event that can have a negative or positive influence on the realization of a strategy, objectives or outcomes of a land development plan, such as the effects of an increased interest rate and project delays. In her doctoral thesis Gehner (2008a) points out that there is an ongoing debate about the quantitative measurability of both components probability and impact. On the one hand, there are risks that are perfectly measurable and objective when it comes to defining them by formal laws of statistical theory. On the other hand there are risks that are subjectively and inaccurately perceived by (non-) experts. According to Gehner (2008a) only a few risks can be assessed objectively because most of them are infrequent. This is when it comes down to a man's 'logical reasoning'. On this side of the field one had to deal with other difficulties such as the lack of knowledge due to inexactness, the lack of observations and the fact that some risks have a higher degree of immeasurability. Gehner (2008a) mentions that real estate developers also have to estimate risks subjectively, so the concept of risk cannot only be defined in a quantitative way. Therefore Gehner (2008a) uses the following definition of risk:
A risk is the probable negative impact on the expected value of a real estate development project caused by uncertainty about an event or events that might occur and/or the reduced ability to influence the events, after an actor has irrevocably allocated his scarce resources to that project.

The fact that Gehner (2008a) in her doctoral thesis puts a focus on the real estate sector makes her perspective and definition of risk usable in the search for a definition of risk in this research. Therefore, the definition of risk in this research is based on both quantitative and qualitative elements of definitions mentioned earlier. Furthermore, all definitions of risk mentioned in this subparagraph in some way place risk in the context of what an organization aims for: achieving its objectives. This is also reflected in one of the principles of 'good' risk management (paragraph 2.5). The fact an organization has certain objectives that it wants to achieve, plays an important role in putting together a definition for risk.

In his thesis Maat (2013) mentions that in the literature there are two perspectives on risk. One that sees risk as a two-sided approach: positive or negative. On the opposite there is the perspective that perceives risk as something that by definition has a negative impact. In this

research, market risks plays a prominent role when it comes to area development and land development plans. Since this research and that of Maat (2013) are conducted in the same research field this research follows the perspective of Maat on market risks. Market risk is perceived as a risk with a negative impact. A positive impact is defined as an opportunity. Maat (2013) argues that this perception does not exclude the two-sided approach of risk because it is intrinsically connected to composing land development plans. By overestimating future expected returns, the risk of not meeting expectations increases (negative impact). On the other hand, in case of an underestimation of future revenues, there is an increased chance of performing better than expected (positive impact).

In the guide to risk and its management of Broadleaf Capital International (2012) a broader interpretation of the concept 'event' is discussed. A risk can follow from a certain event that takes place. However, this event does not necessarily haves to be an actual event. A risk can also follow from (slowly) shifting or chronic situations and circumstances (Broadleaf Capital International, 2012). This broader interpretation is very relevant for this research because market risks can be considered as risks arising from changes in the economic conditions on the land or housing markets.

Summarizing the aspects mentioned earlier, the definition of a risk used during this research is based on the following aspects:

- It includes quantitative and qualitative aspects so that both risks, risks that only can be assessed objectively and risks that only can be assessed subjectively, fall under the same definition.
- Its takes into account the context that an organization wants to achieve its objectives.
- Risks have a negative impact on the organizations objectives. Risks with a positive impact are considered to be opportunities.
- Risks arise from the possibility of future events taking place or from changing or chronic situations and circumstances.

Based on these aspects the following definition of a risk is derived and used throughout this research:

A risk is a probable event or condition change that has a negative impact, defined quantitatively or qualitatively, on the organization's objectives caused by uncertainty about the event that it might or might not occur and by the reduced ability to influence the outcome of the event, after the organization has irrevocably allocated his scarce resources.

2.1.2 Defining risk management

Now the concept of risk is defined, it is possible to go one step further and find a proper definition for risk management. When it is about defining the concept, the same holds for risk management as it holds for risk. Again literature provides many definitions and there is no universally accepted 'right' definition. To indicate the high amount of definitions, first some definitions of risk management are listed below:

- A structured way of risk control that prematurely reveals possible bottlenecks and contributes to a more manageable project (Bunt et al., 2003).
- The total of activities and measures which are aimed at dealing with risks in order to manage a project .
- A proactive and continuous process that is embedded throughout the entire organization which provides a common reference framework to structurally manage risk in relation to the organizations objectives (Kuijck et al., 2011).
- The process of identifying and controlling risks taken into account costs and benefits (Have et al., 2007).
- A mechanism for managing exposure to risk that enables us to recognize the events that may result in unfortunate of damaging consequences in the future, their severity, and how they can be controlled (Dickson, 1995).

- A continuous process of identification, assessment and evaluation of risks and control measures (Linde et al., 2011).
- The process whereby organizations methodically address the risks attaching to their activities with the goal of achieving sustained benefit within each activity and across the portfolio of all activities (IRM, 2002).
- Identify and control risks and uncertainties during a project with the objective to increase the chance for a successful completion (Gehner, 2008b).
- Prevent or reduce the negative consequences that follow from risks that occur (Tekir, 2012).

An important aspect that is in some way included in almost every definition listed above is controlling risks. Furthermore, it is noticeable that risk management in most definitions is regarded as a process, not as a single activity. However, how this process is shaped and which steps are taken in which sequence differs per approach. Literature does not provide a single approach on this. Most of the studied literature does mention that this process must be cyclical and continuous in order to be effective. The cyclical and continuous character of a risk management process also returns as one of the principles of 'good' risk management (paragraph 2.5). Another aspect that returns is that the elements of identifying, analyzing and controlling risk are recognizable in most approaches and cycles. Along with some other terms such as risk assessment these terms are used throughout literature to mark certain steps in the risk management process. Frequently they are used as substitutes for each other in different pieces of literature. At some point this makes the literature of risk management inconsistent. Therefore, there is not a single 'right' risk management approach or risk management cycle. On the contrary, in most literature the objective of risk management can be pointed towards one single objective. An organization uses risk management to increase the chance of a successful completion of a project and to successfully fulfill its objectives.

The context of this research lies in the field of land development. Therefore risk management is taken from a general to a more land development orientated perspective. In this context, the definition that is provided by Gehner (2008b) can be considered as useful because her paper is written from a real estate perspective. Adding to that Gehner (2008b) explicitly describes risk management in the context of project management. For that reason the definitions provided by Bunt et al., (2003) are also useable. Combining the definitions of Gehner (2008b) and Bunt et al. (2003) the following definition for risk management can be derived:

A structured process of identifying and controlling risks and uncertainties in order to become more in control during a project and increase the chance for a successful completion.

In order to be able to follow this definition the part of being more 'in control' must be specified in more detail. Being more in control is about prematurely defining objectives, criteria or a framework to which the results of a project must meet in order to be successful (Have et al., 2007; Kuijck et al., 2011). The working process must be structured and organized both in design as in operation. This working process comprehends the organization as a whole, the decision making processes, working together with other stakeholders, an adequate risk management process, the process of providing up-to-date information and many more aspects (Kuijck et al., 2011). When it is about being more in control one should always guarantee that there are degrees of freedom left. Otherwise the process is over controlled instead of becoming more in control. Kuijck et al. (2011) refers to this as the well-known sword of Damocles, which in this case causes a feeling of a continuous threat and creates suboptimal conditions for a process in order to be effective and efficient.

A misconception about being in control is that having structured and organized working processes all the way is the ultimate sign of being in control (Bruijn et al., 2014). According to Bruijn et al. (Bruijn et al., 2014) there is no actual being in control. There are several reasons for this, one of them is that every time the being in control is measured reflects a snapshot from a very dynamic process. When the process proceeds, new insights regarding certain risks will be obtained, leading to new or adapted conclusions regarding risk control. Therefore, it is not always ambiguous to say

whether an organization is in control or not. Processes are of great importance and making them explicit could make a strong contribution to the control of risks. However, there is a danger that processes become false reflections of the reality. To overcome this one should not blindly follow rules and regulations. When it comes to risk management, this means that it is not a strict science but rather a craft (Bruijn et al., 2014). A craft that not only includes working with 'hard' numbers but also is about intuition and finding a balance between both. Risk management is best trained by learning by doing. That means doing it a lot. It can best be seen as a continuous search for becoming more in control, while knowing that a scenario of total control is a utopia. Therefore, risk management in any situation should be regarded as a learning process, which is one of the principles of 'good' risk management (Table 5). Adding to that, being in control might be a utopia, but there is a difference between being more or less in control.

According to Have et al. (2007) an organization becomes more in control when the working processes and measures are designed in such a way that it is possible to make adjustments during the process in order to meet the earlier defined objectives. One could say that making adjustments can be very well a part of a learning process. Therefore this definition fits with the interpretation of becoming more in control from Bruijn et al. (2014). Looking back at the definitions of risk and risk management provided earlier it can be concluded that both definitions are closely related to the organization's (predefined) set of objectives. The same goes for becoming more in control. Therefore, becoming more in control is inherently connected to risk management.

Finally, there is another reason why it is better to say that an organization is becoming more in control instead of being in control. The term 'in control' is often used in a financial context. One often speaks about whether an organisation is financially in control or not. However, the term 'in control' holds much less for non-financial objectives, such as lower unemployment. Furthermore, an organization aims for its objectives. It may even take measures to increase the chance that these objectives will be achieved. Nevertheless, an organization will never be totally in control of its objectives. Therefore, becoming more in control is a more manageable expression.

2.2 Why risk management?

This paragraph mainly answers the question why (project) organizations should use risk management. It is briefly clarified why risk management is actually important for practically any organization or project that, in case that it suffers from a failure, has a serious negative impact on the organization itself or society. Answering this question prevents us from arriving at a point at which risk management is taken for granted without knowing the underlying idea. When an organization and its employees are familiar with the underlying thought of risk management it increases the chance that the necessity of risk management will be recognized. In turn, this enhanced sense of urgency increases the chances for a successful implementation of risk management.

Starting from a very general perspective Bunt et al. (2003) mention that risk management leads to a more controllable project in terms of planning, financial resources, quality, information and organization. Risk management positively influences a project because it helps to create mutual trust between the parties within a project, it encourages communication and supports the decision making process (Bunt et al., 2003). Risk management includes forward thinking about possible future events and therefore helps an organization to anticipate for these future events (Tekir, 2012), thereby preventing negative events that will come as unexpected surprises. Knowing that certain future events with a negative impact can occur, some people might say that these risks should not be taken at all. This might not be realistic. A less rigorous point of view is provided by Bruijn et al. (2014) by saying that an organization at all times should be able to explain and defend which risks are taken and why. In other words, an organization should provide insight in when a risk becomes acceptable and in addition to that, an organization should be able to defend its 'risk appetite'. Risk management

supports an organization in clarifying which risks are acceptable and thereby can help an organization to defend its 'appetite' for risk.

Risk management is also about an organization becoming more in control. As concluded at the end of the previous paragraph, becoming more in control is inherent to the objective of risk management. Namely that an organization uses risk management to increase the chance of successful completion of a project and/or to successfully fulfill its objectives. Risk management allows an organization to anticipate and take measures during a project's processes in order to meet its predefined set of objectives. Becoming more in control allows an organization to make adjustments during the (learning)process in order to meet earlier defined objectives (Have et al., 2007). In other words, risk management increases the chance for an organization to become more in control. Which in itself forms an incentive for an organization to implement risk management.

According to the IRM (2002) risk management protects and adds value not only to an organization but also to its stakeholders by supporting the organization's objectives. This is achieved in a number of ways of which one is providing a framework for an organization. This framework enables an organization's future activity to take place in a consistent and controlled manner. In paragraph 2.4 this is shown by defining such a framework for risk management.

In his thesis, Tekir (2012) argues that risk management enables an organization to prioritize risks because risks become more comparable. As shown in paragraph 2.5, being able to prioritize risks contributes to one of the principles of 'good' risk management (principle 8.). Prioritizing risks contributes to a more deliberate and predetermined way of risk control. According to Tekir (2012) risk management also helps an organization to elaborate in a more responsible way on the decisions that are made. Finally, last but not least, risk management creates an open and (self-)learning environment within an organization. Taking risk now becomes more part of the business instead of taking risks unconsciously.

2.3 Risk management related to land development activities

In this paragraph, risk management is one step further related to land development. First the most important characteristics of land development and land development projects are discussed. Subsequently, typical risks that occur during land development projects are listed and shortly elaborated. Finally, the role of the financial resilience regarding risk management in Dutch municipalities is explained.

2.3.1 Characteristics of land development

Risk management is used for many different projects and in many fields of expertise. Due to its specific characteristics, each field has different but sometimes unique requirements and constraints when it comes to risk management. Also not every method or approach is suitable for every project or field of expertise. This also goes for land development and related land development projects.

One characteristic that distinguishes land development and land development projects from other fields of expertise is that land and housing markets vary very much per region. Each region has its own housing and land market with its very own trends. A clear example of this is the contrast between growth and shrink regions. In some cases, even a single municipality can be considered as a separate region with its own specific trends and movements on the local housing and land markets. For example the municipality of Amsterdam, of which the housing market is known for its sometimes deviating movements compared to other regions or municipalities in the Netherlands. A municipality that only takes into account the housing and land market of its own region runs the risk that it will produce an overcapacity of houses. As a consequence, the land price might drop which can lead to a financial setback for a municipality. The fact that there is no single housing or land market in the Netherlands makes it more difficult to come up with a universal risk management approach for every municipality and therefore requires some flexibility and adaptability from a risk management system.

Another aspect of land development is that risks can occur on three levels; on the project (individual), portfolio (total municipal portfolio) and on the program (both municipal and regional) level (Rekenkamer Rotterdam, 2012). Each level requires a different approach regarding risk management and puts different requirements and constraints to the risk management. An example of a risk that occurs on the project level is an archaeological finding. An example of a risk that occurs on the portfolio or even program level is the decrease of the housing price as a consequence of the economic crisis. Risk management on the portfolio or program level asks for a more integral approach than risk management on the project level.

Another aspect that is typical for land development projects is their relative long development period, often between 10-20 years. This makes land development projects vulnerable for more risks compared to projects with a shorter development period. Furthermore, the success of land development projects depends on several factors that are hard to predict for a municipality. Among others, important factors are (macroeconomic) trends on land and housing markets and collaboration with third parties, such as private developers and investors. Finally, even a relatively small change in parameters or variables of a land development project can have a very significant impact on the final project outcomes. For example a small increase of the interest rates can easily lead to much higher costs of a land development project (Rekenkamer Rotterdam, 2012).

The characteristics mentioned above do not differentiate between land development projects that are undertaken by a public or by a private organization. So what makes land development projects undertaken by a municipality different from land development projects undertaken by, for example, a private developer? A very important and influential aspect is that municipal decisions are practically always colored by underlying political motives, or even taken under severe political pressure. Not every municipality is equally transparent about its political motives and some municipalities might even operate under a hidden agenda. This makes decision making with respect to land development projects more complex for a municipality than for a private developer.

Furthermore, participating in land development projects puts a municipality in a more entrepreneurial role. In his thesis Maat (2013) describes the increased entrepreneurial role by zooming in on the role of the municipal land agency in undertaking land development activities. Thereby, a land agency is positioned in a public private framework. According to this framework a municipal land agency has both public and private aspects. On the one hand, a land agency is allowed to undertake risks, which are influenced by trends on the land market. A land agency can be considered as an autonomous body as a part of a municipal organization. A simplification of the role of a land agency is that it acquires land, makes it ready for construction by preparing the site and finally sells it. The revenues from the land sale are susceptible to the circumstances on the land market (Maat, 2013). If, due to an insufficient increase or even a decrease in the land value, revenues are not enough to cover the investments in land made earlier, a municipality runs a loss. This leads to a land agency, and thereby a municipality, being subjective to financial risk. One could argue that taking risk follows inherently from acting like an entrepreneur. On the other hand, a land agency is subjective to political authority. Due to the fact that a land agency is part of the municipal organization, it has a public law status. This results in a land agency falling under the political supervision of a government organization. In practice this means that a Municipal Council decides over the framework according to which the land agency is allowed to act. This is further explained in chapter 3 of this thesis. A land agency has certain degrees of freedom, however it is bounded to public private decision making. This requires from a municipality that it is able to find a balance between its entrepreneurial role and its societal role. Acting like an entrepreneur involves taking risks in order to make profit. In case of a municipality the earned money can be used for public ends, such as social services. From a societal perspective, making profit is not the most important objective. This might cause tensions in the decision making process. The fact that a Dutch municipality to some extent is subordinated and therefore accountable to the higher governmental

entities of the province and the central government, makes the decision making process even more complex.

2.3.2 Common risks in land development projects

In the previous subparagraph already some risks that can occur during land development projects are mentioned between the lines. The risks regarding land development projects are very divergent. As a consequence a project manager has to deal with many different types of risks (Have & Nauta, 2004). For example, on the one hand, risks can be very concrete and closely related to the project. On the other hand, a risk can be relatively abstract, standing further away from that specific project. Think of soil pollution vs. developments on the housing market. To get more grip on these risks related to land development projects are categorized under three different types. Respectively from a lower to a higher level of abstraction there are organizational risks, project risks and external risks. This distinction is used in two different guides on risk management related to land development projects (Have & Nauta, 2004; Kuijck et al., 2011) and therefore has proven to be useful when categorizing risk regarding to land development projects. A categorization of risks is important because it makes it possible to decide for each risk type which measures for control work best in a later stadium (Kuijck et al., 2011).

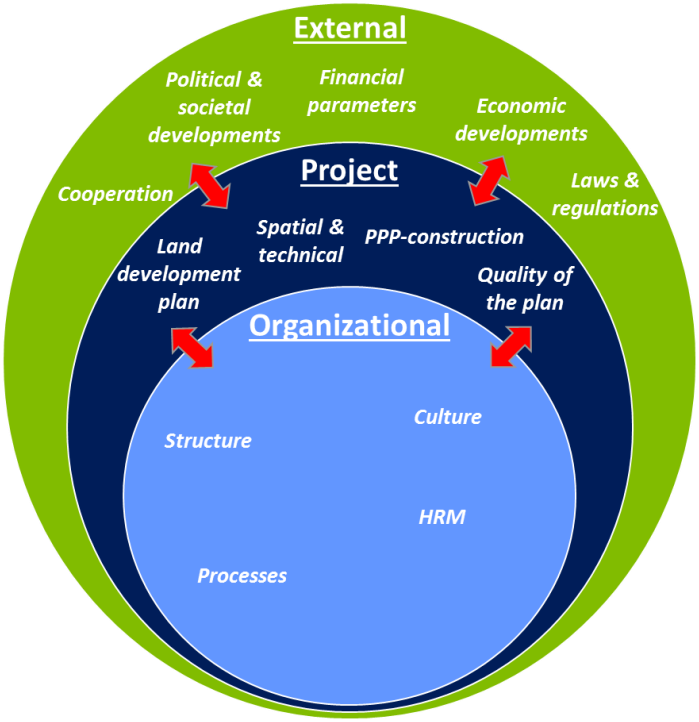

Figure 2 | Three risk types in land development projects ***(Source: Kuijck et al., 2011, p. 103; modified by author)***

External risks are risks to which the risk owner has little or no influence during the project. Most often these are risks which occur in multiple land development projects at the same time. Project risks appear in many different forms. In many cases they are related to the setting in which the project takes places and how the project plan is designed. Finally, organizational risks are risks that are determined by how an organization is structured and how it operates. These risks can be very specific to one particular (type) of organization. But still even between municipalities there can be differences on this level. Figure 2 shows an overview of the three types of land development risks according to Have & Nauta (2004) and Kuijck et al. (2011). For each type, different risks can occur, which in turn can be related to a specific aspect. Table 1 elaborates shortly on each risk type and the corresponding risks shown in Figure 2.

Table 1 | Elaboration on the three risk levels ***(Source: Have & Nauta, 2004, p. 11; modified by author)***

Level	Type of risk
External	***Risk following from cooperation with other parties*** Land development projects often involve multiple public and private parties. There is a risk that at a some point other parties lack commitment or conflicting interest are grown too big for a conjunct project plan.
	Political and societal risks Political and societal support for the project, change in government policy and resistance from society.
	Risks regarding financial parameters Land development plans depend on financial parameters such as the interest rate and inflation numbers. Changes in these parameters seriously influence the financial outcome of land development projects.
	Risks following from economic developments Cyclical trends such as the development of the land, housing and office market. Both on a national and regional level.
	Laws and regulations Risks that follow from changes in laws and regulations can affect the legal requirements and conditions of a land development project. For example changes in environmental laws. Furthermore appealing procedures or claims from other parties can obstruct the progress of a land development project.
Project	***Land development plan*** Risk following from the land development plan are risks that negatively influence the project following from adverse developments regarding costs and benefits and the underlying parameters of the land development plan.
	Spatial and technical risks Risks that follow from soil conditions, archaeological findings, cables and pipelines or risks that follow from the unlocking of an area or region.
	PPP construction risks Working with any kind of PPP construction involves risks. Conflicting interest might jeopardize the partnership or the contract shows flaws or imperfections after a certain period.
	Quality of the plan Land development projects and specific land development plans are based on certain assumptions regarding economic & financial parameters, planning, cost & benefits etc. The quality of the plan, the model used for land development plans and reliability of the assumptions all are associated with certain risks.
Organizational	***Structure*** Structure is about an appropriate division of tasks and responsibilities within the project organization and between the involved parties.
	Processes Processes include administrative, communication & information, planning & control and the quality of the project management.
	Culture Norms and values, management style and the philosophy of the employees within the project organization.
	HRM (Human Resource Management) HRM is about the quality, capacity and the knowledge of the employees.

2.3.3 The role of the financial resilience in risk management within Dutch municipalities

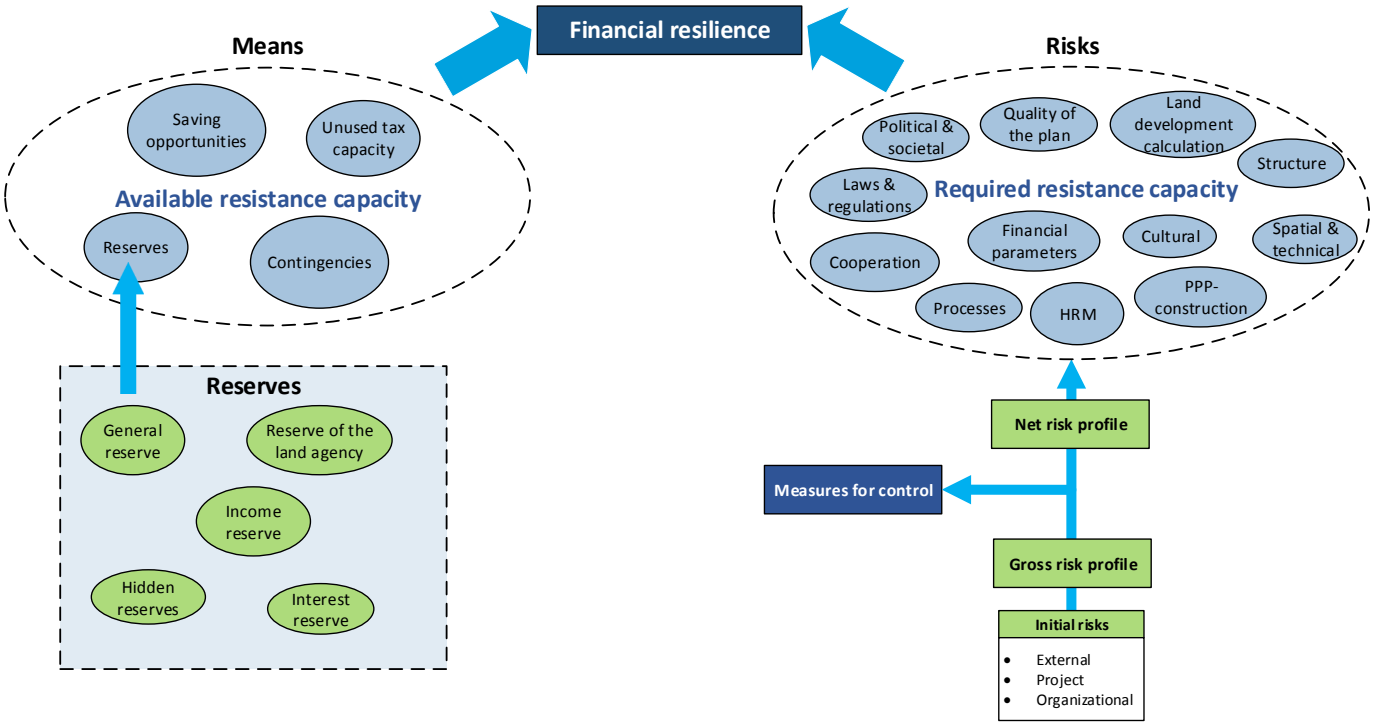

Figure 3 | Structure of the financial resilience

Currently, municipalities consider the financial resilience as the most important instrument for municipalities when it comes to risk management. Later in this thesis it is argued otherwise. The financial resilience is used as an indicator to reflect the financial position of a municipality. Therefore, the focus of the financial resilience lies purely on the financial impact of risks. The financial resilience reflects the capacity of a municipality to cover substantial unexpected costs that were not budgeted. These costs follow from the so called inherent risks. The regular risks are not included because they are not unexpected and can be measured because they often occur (Have et al., 2007). Therefore, measures to control them are taken already. Risks related to land development plans, land development and public private partnerships are inherent risks and therefore are included in the financial resilience (see Figure 3). Also risks from other domains such as organizational, political & societal and legal are included. For a municipality here lies a challenge, since these risk are not always easy to express in a quantitative way. As can be seen in Figure 3 the financial resilience comes only into play after certain measurements that are a part of risk management are already taken. Despite these measurements there are still residual risks that financially have a negative impact. This is when the financial resilience comes into use. Therefore, in the current situation the financial resilience is the capstone of risk management for Dutch municipalities (Tekir, 2012).

The financial resilience is determined by two important elements, which is shown in Figure 3; the required resistance capacity and the available resistance capacity. The means that a municipality has to cover unexpected costs are a part of the available resistance capacity. The means that are needed to cover these unexpected costs can be considered as the required resistance capacity. The required resistance capacity depends on the risk profile derived from the risk identification done by municipalities. The financial resilience represents the ratio between both the available resistance capacity and the required resistance capacity and can be presented as follows:

$$Ratio\ financial\ resilience = \frac{Available\ resistance\ capacity}{Required\ resistance\ capacity}$$

Remarkable are the results from a research done by IJland (IJland, 2013). The conclusion of this research is that the concept of financial resilience varies very much per municipality. Also the

concept of financial resilience is often confused with the concept of available resistance capacity. This makes comparison between municipalities hardly ever straightforward.

Most of the Dutch municipalities have a standard norm for the financial resilience, which often lies somewhere between 1.0 and 1.8. In any case troubles arise for a municipality when the financial resilience falls below 1.0. The difference between municipalities originates from the fact that a Municipal Council may choose her own policy regarding the ratio of the financial resilience. A Municipal Council also decides which means fall under the available resistance capacity and which risks are taken into account when computing the risk profile that determines the required resistance capacity (IJland, 2013). This significantly reduces the transparency within a municipality and again makes it more difficult to make a clear comparison between municipalities. For this reason there was no general standard for the financial resilience that is applied on the national level until recently. However, a suggestion has been done by Smorenberg (2006). Table 2 is shows that the financial resilience could fall within six marked ranges. Each range is given a gradation that goes from excellent as the very highest to the very lowest more than insufficient.

Table 2 | Gradation of the financial resilience *(Source: Smorenberg, 2006, p. 28)*

	Financial resilience ratio					Gradation (financial point of view)
A	2.0	<	x			Excellent
B	1.4	<	x	<	2.0	More than sufficient
C	1.0	<	x	<	1.4	Sufficient
D	0.8	<	x	<	1.0	Moderate
E	0.6	<	x	<	0.8	Insufficient
F			x	<	0.6	More than insufficient

The gradation of the financial resilience shown in Table 2 could help municipalities to decide whether or not their financial resilience is sufficient enough without disregarding certain conditions or situations that only go for one specific municipality in particular. Note that his table is from a financial point of view. Therefore if the financial resilience of a municipality is graded as excellent this does not necessarily mean that it is also excellent from a societal point of view. Considering Figure 3 a municipality has two options to influence the financial resilience (Smorenberg, 2006). The first is to change the risk profile. For example, by taking more or less risks, or by taking extra measures to control risks. The second is to change the available resistance capacity through budget cuts or extra investments.

The financial resilience is a good indicator to reflect the financial position of a municipality and proves to be very useful when it comes to covering non-budgeted costs following from unexpected risks. However, there are more ways to look and anticipate to certain risks than only from a financial perspective. In other words, risk management is designed for more purposes than just substantiating the financial resilience. Still at many Dutch municipalities there is too much focus on the financial perspective. A lot of municipalities use their according to the BBV decree (chapter 3) obliged risk section to determine and substantiate the financial resilience instead of taken into account matters and risks from a, for example, more organizationally oriented perspective. This is also one the conclusions coming from the municipality scan which is elaborated in more detail in chapter 4. This originates from some municipalities which are not used to work with and think in risks (Kuijck et al., 2011). At those municipalities there is very little insight in the financial resilience related to the risks that are (unconsciously) taken.

2.4 Choosing a framework for risk management

Literature on risk management provides us with many theoretical perspectives and related conceptual frameworks regarding risk management. As mentioned earlier there is no single 'right' approach or 'best' framework. To a great extent it depends on the type of organization and its size which theoretical perspective and conceptual framework are applicable. However, different perspectives and frameworks have different interpretations of how risk management should work and when it is considered to be successful. Choosing a theoretical perspective and finding a conceptual framework therefore is the last step that needs to be taken before identifying the principles of 'good' risk management.

2.4.1 Two perspectives for risk management

A very interesting view on risk management is provided by Bruijn et al. (2014). The authors of this book discuss two different perspectives (or approaches) for risk management within organizations, the risk approach and the network approach. Both look at risk management from a very different angle, however both perspectives provide valuable insights and elements for a municipal organization. It is important to notice that both perspectives are not mutually exclusive. The reason why both perspectives can be used to look at risk management in organizations is that Bruijn et al. (2014) consider them as counsellors, which allows the user to integrate suitable aspects of both perspectives.

The risk approach

Starting with the risk approach, this perspective is focused on optimizing risk management by means of a systematic approach. The 'advice' is to shape structures and processes in such a way that it results in a clear uniform and deliberate risk management process (Bruijn et al., 2014). The basic principle of this perspective is that the assessment of risks is done by and goes throughout the whole organization. Therefore, risk management should be shaped by the management top of the organization, which is responsible for creating the boundary conditions, choosing the conceptual framework and formulate the 'risk appetite'. In case of a municipality the management top of the organization is represented by the Municipal Council. The authors of the book (Bruijn et al., 2014) consider the risk approach as a guideline to bring structure to a risk management process, not as the ideal picture. One advantage of the risk approach is that it offers a multitude of concrete tools for an immediate start. These tools are operationalized and applicable to many organizations (Bruijn et al., 2014), as well as for governmental organizations such as municipalities.

Both perspectives are accompanied by some points of criticism. An important point of critique on the risk approach is that this approach suggests and aims for uniformity, however the concept of risk, despite the definition given in paragraph 2.1, still remains an ambiguous concept in a multi-actor context. Statements regarding risks are not always straightforward because they are interpreted differently by multiple individuals. For example, what does a person mean when he says that he took a risk that was too large? Again we see that risks are not merely based on quantitative information, also qualitative aspects are important. To clarify this Bruijn et al. (2014) distinguish three categories of risks. Actuarial risks that are technically measurable, socio-cultural risks that are constructs of (complex) social interactions between actors with their own interests and responsibilities and finally political risks which represent risks that can exist within the political reality irrespective of the extent to which the risks actually occur. The problem arises when organizations have to weigh the risk against each other. For a complete and objective balance between risks organizations must consider all three types of risks equally. However this is rarely the case because it is much easier for an organization to identify technical and actual properties of a risk than the more difficult socio-cultural or political aspects (Bruijn et al., 2014). The reason is that the latter two are often more ambiguous and less easily to express in quantitative parameters than the first category. As concluded in subparagraph 2.3.3 this problem is also recognized within Dutch municipalities. Summarized, the risk approach provides a clear guidance to work towards a uniform

and organized risk management process, however there is little insight into the context in which the risk management of organizations takes place. Finally, Bruijn et al. (2014) mention a paradox when it is about using the risk approach. This paradox of control is visualized in Figure 4 and shows some resemblance with the earlier mentioned sword of Damocles. Figure 4 shows that there is such a thing as too much and too less acting according to the risk approach. Too much lowers the flexibility of the organization and its employees. Too less will jeopardize the uniformity of the risk management process. In the end both extremes will negatively affect the risk management process and the control of risks.

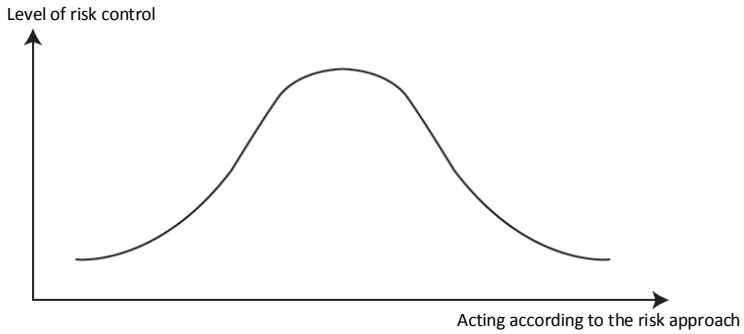

Figure 4 | Paradox of control ***(Source: Bruijn et al., 2014, p. 9)***

The network approach

According to Bruijn et al. (2014) the network approach in some cases can be an alternative for the somewhat bureaucratic perspective of the risk approach. The network approach considers organizations as a complex network of actors with their own diversity of perceptions, interests and objectives that are interdependently connected. These actors might share the same goal to identify and control risks as good as possible, however their diverse and in some case conflicting perceptions and interests make them think differently on how this goal should be achieved. This makes decision making in such complex environments rather difficult and these decisions may lead to less uniform outcomes than those pursued by the risk approach (Bruijn et al., 2014). Adding to this, all different actors strive for (a certain level of) autonomy and therefore full transparency regarding relevant processes to a person with more authority is not always to be expected. From the perspective of the network approach, an organization that consists of multiple actors cannot be compared to some software program or a machine which allows someone to program it according to his or her objective (Bruijn et al., 2014). The network approach takes into account the context of an organization. One way to describe this context is just explained above. Secondly this context also includes the surroundings of an organization in which other parties influence each other in all kinds of ways. Think of private developers, politicians, provinces and citizens. At the end, the consequences for decision making are that the process is subjected to continuous changes and therefore becomes more complex. Also the decision making process goes less structured and often more erratic than they would go in the more bureaucratic setting of the risk approach (Bruijn et al., 2014).

The main criticism on the network approach is pointed towards its relatively abstract point of view. Organizations often are expected to be clear about their risks. A municipality for example is expected to be clear about their financial position. However the principles of the network approach are far less detailed and concrete than the principles of the risk approach and therefore provide much less options for immediate action.

Combining both perspectives

Putting both perspectives next to each other it can be concluded that both perspectives differ a lot. This is shown in Table 3, which summarizes the key message of both perspectives.

Table 3 | Risk approach vs. network approach *(Source: Bruijn et al., 2014)*

Risk approach	Network approach
The risk management system brings together all risks in one total overview.	There are plenty of alternatives for a risk management system and apart from the current system there are other risks and perceptions.
The system describes formal structures and procedures that are a part of the risk management process.	Risk management is strongly and continuously influenced by a formal and informal power play between layers of the organization.
The structures and procedures are predefined and do not change simply.	The rules of the game of this power play are created during the game and change constantly.
The highest level of the organization in the end is responsible for the risk management process.	The responsibility of risk management is spread throughout the organization and lies within all layers.
Knowledge and information regarding risks is based on verifiable and well-documented measurements.	Knowledge and information regarding risks is created by alignment and negotiation.

Still, both perspectives have in common that they describe how organizations should interpret and deal with risk management. According Bruijn et al. (2014) it seems very possible for organizations to use them both. Combining both perspectives leads to three relevant questions (Bruijn et al., 2014) that can form a starting point of and are a guidance during the empirical research in the form of a case study research (chapter 5).

1. The first question is related to integrality. If risk management takes place in all layers of the organization, how does the organization manages to integrate for example all different risk assessments and weigh them against each other?
2. The second question is about creating support. Estimations and statements regarding risk are in most cases very subjective and disputable. How does the organization manage to go from subjective risk estimations to risk estimations that find a broad support among the organization, in order to weigh them against each other?
3. The third question can be linked to goal orientation. Methods to estimate and control risks can be very important to an organization. However, following these methods should not be goal. How does an organization avoid that the focus on means goes at the expense of the final goal in the end?

Bruijn et al. (2014) mention that using both perspectives sometimes can lead to tensions between both. This depends per case. One should be aware that the formal, procedural and technocratic rationality behind the risk approach in some cases could suppress the softer aspects together with the intuition of the employees of the network approach. The other way around is also possible. Once the significance of relations and power between different actors takes a prominent role, the tendency may arise to change everything hard into soft. In the end, using one of the perspectives too much might lead to blanking of the other.

The harder risk approach uses formal structures and procedures to organize the risk management system and bring risks together in one overview. Therefore, the risk approach relies on all kinds of models and methods to describe a risk management process. The use of models seems a logical consequence following from the focus of the risk approach on optimizing risk management in a very systemic way, from a top-down perspective. Its systemic approach makes that the risk approach lends itself very well for the management of financial risks and risks that are technically measurable.

However, there are also aspects regarding risk management that require a softer approach. Bruijn et al. (2014) distinguish three risk categories. Actuarial or technical measurable risks, socio-cultural risks and political risks. The latter two are less easily to express in quantitative parameters and for that end the risk approach is less suited. A municipality is situated in an ever changing and rather complex network of actors, including private developers, politicians, provinces and citizens. A municipality as an organization on its own is also very complex. Consisting of employees, departments and layers, all with their own perceptions, interests, and objectives. Socio-cultural and political risks play an important role in both the municipal organization and its context. Because of the organizational perspective and the fact that the context of an organization is taken into account, the softer network approach proves to be useful counterpart of the risk approach. It helps organizations to get more grip on risks and elements of risk management that cannot be grasped by the risk approach.

It depends on the type of risk which approach is more appropriate. One often has the feeling that the network approach provides little guidance and support (Bruijn et al., 2014). This is actually the most important downside of the network approach. Complexity in its broadest sense is inherently connected to this approach. It seems that the network approach is very capable when it comes to responding to the top-down perspective of the risk approach (Bruijn et al., 2014), pointing out that things are complex and require a more softer approach. However, in many cases the rather abstract point of view of the network approach also lacks in providing an alternative solution.

2.4.2 The conceptual framework of RISMAN

In the previous subparagraph, it is explained that the risk approach describes formal structures and procedures that are a part of the risk management process, aiming for a more organized and uniform risk management process. Earlier in this chapter was concluded that literature on risk management provides multiple conceptual frameworks to do this. In this subparagraph a conceptual framework is selected to shape and structure a risk management process. This chosen framework needs to fulfill three requirements. First of all, the framework needs to provide an overview and guideline on how to shape a risk management process. Hereby the framework must contain and distinguish relevant steps and elements which also can be found in other literature, approaches or conceptual frameworks on risk management. Secondly, considering the field of this research the framework needs to be applicable for municipalities and within municipal land agencies. Therefore, it needs to fit in organizations that are working in the field of land development. Finally, the framework must leave room for both quantitative and qualitative approaches and methods since it was concluded earlier that both are equally important within risk management.

From the extensive amount of conceptual frameworks provided by literature, for this research the conceptual framework provided by the RISMAN method is selected. According to the RISMAN method, risk management is regarded as a cyclical process that includes several steps. The risk management process according to the RISMAN method is shown in Figure 5. Each step is regarded as a process in the risk management cycle that contains its own actions. The framework shows that risk management is considered as a dynamic process-based on the continuous actualization of the risk analysis by evaluation of the new implemented risk management measures.

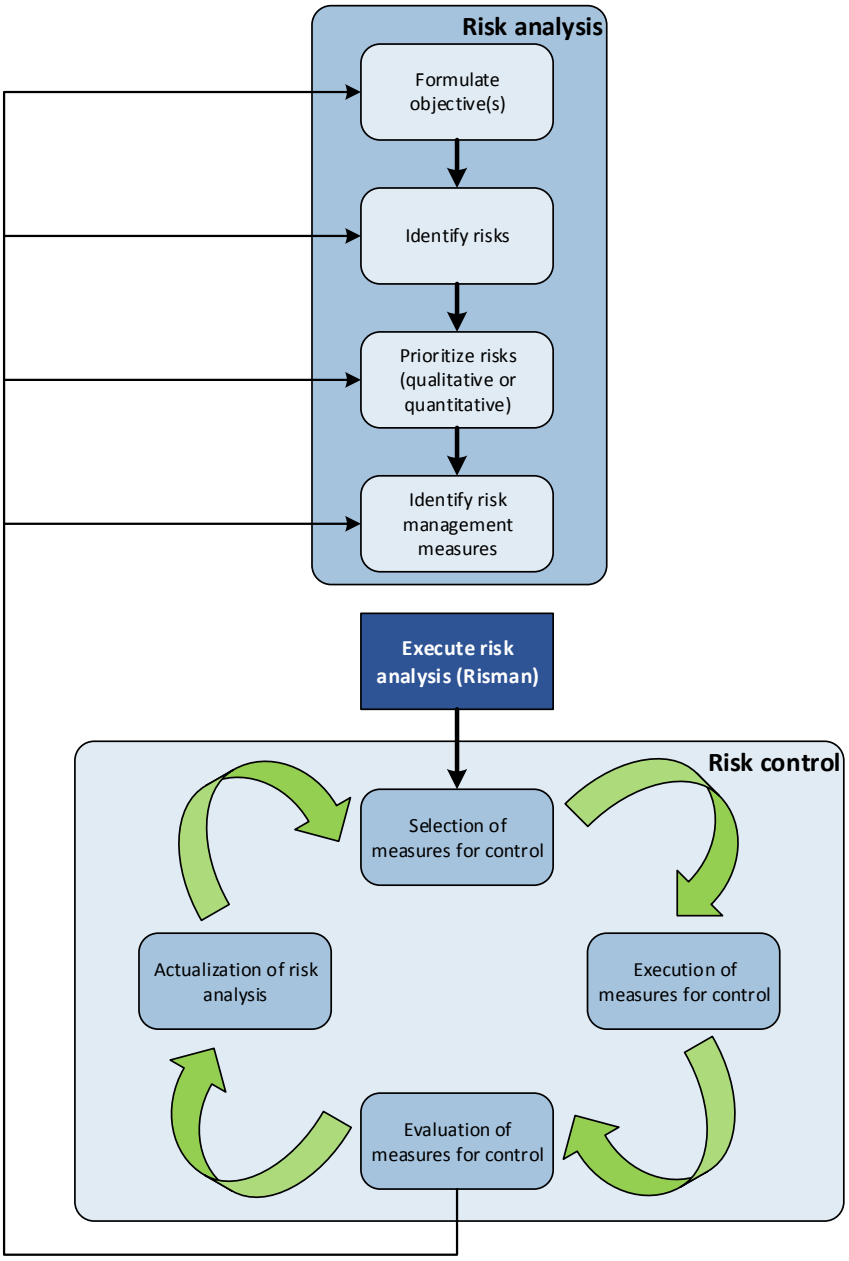

Figure 5 | Risk management process according to the RISMAN method *(Source: Bunt et al., 2003; modified by author)*

The RISMAN method is an approach that originally was developed for the risk management of large infrastructure projects in a public context. This makes the RISMAN approach also applicable for public land development projects or land development projects in a public private context (PPP construction) (Have & Nauta, 2004). According to Bunt et al. (2003) the RISMAN approach is not only applicable to projects but also to organizations as a whole. Furthermore the RISMAN approach provides for both qualitative and quantitative approaches multiple methods to identify and analyze risks. This gives an organization more options to find the method that suits best. As shown in Figure 5, the conceptual framework provided by RISMAN makes a clear distinction between risk analysis and risk control in order to give more structure to the risk management process (Bunt et al., 2003). Looking from the perspective of the risk approach this structure is important and therefore desirable.

Another aspect that makes the RISMAN method a suitable approach is that it helps organizations to be comprehensive in their risk analysis. The RISMAN method takes into account risks from very different fields, which include the following (Bunt et al., 2003):

- Political/governance
- Financial/economic
- Legal
- Technical
- Organizational
- Geographical/spatial
- Societal

When using a conceptual framework such as RISMAN to structure a risk management process one finds itself on the side of the risk approach. As mentioned earlier in the previous subparagraph the risk approach is considered as a guideline, not the ideal picture. The same can be said for the RISMAN method. Most likely the framework will not fit perfectly into an organization. More important, it would not be for the benefit of an organization when it is forced to shape its processes exactly according to one specific framework. Processes will become stiff and in the end this will lead to a rigid organization. When introduced to a new framework an organization will face some difficulties in its attempt to implement and use it from time to time. Therefore, organizations are better off when they adapt the components of the framework to their specific needs. This seems in line with Bruijn et al. (2014). In their book the authors conclude that there is no perfect form of organization to organize and control risks. A definitive form of organization would rather impose an organization to new risks and therefore is undesired.

While designing, both the risk approach and the network approach are used and taken into account. Finding ourselves on the side of the risk approach, the RISMAN method is used to bring structure to the risk management process. The RISMAN method can be considered as a conceptual framework to give more substance to the risk approach, in order to organize risk management in a uniform way. During the formation of the conceptual design, for each step of the RISMAN method can be indicated how to shape, organized and finally improve the risk management process. Both approaches are important in their own way. However, the use of models and frameworks such as the RISMAN method actually undermines the whole network approach. While composing a conceptual design suggested by the way described above is very much according to the risk approach, the network approach provides some useful sayings that help to incorporate or improve risk management in complex organizations situated in complex networks. Therefore both approaches will be integrated in the conceptual design. For now, integrating aspects from the network approach into a design that shows more affiliation with the risk approach seems a workable solution.

2.5 Principles of ‘good’ risk management regarding land development

The previous paragraphs substantiate on a definition for risk management, a clarification why it is important, its current role within municipalities and land development projects and a conceptual framework. Now it is possible to identify the principles of ‘good’ risk management regarding land development.

2.5.1 Identifying the principles

In order to find the principles of ‘good’ risk management a combination of literature is used. The used literature to find the some of the principles of ‘good’ risk management is based on two categories of sources. The first category (category 1) specifically discusses risk management in the light of land development or uses a project-based approach. Thereby being more specific for Dutch municipalities. Nevertheless, general literature on risk management also provides useful elements. This is the other category (category 2), in which risk management is seen from a more general and

organizational perspective. The latter category is also commonly known by a broader group of people than the first. An overview of the most relevant sources used is given in Table 4.

Table 4 | Sources used to identify principles of 'good' risk management

Category 1	Category 2
Gemeente Governance Projecten in Control. *Het onverwachte beheersen.* (Kuijck et al., 2011).	Within control. *Over de organisatie van risico-inschattingen.* (Bruijn et al., 2014).
Gemeente Governance Grond(ig) beleid. *Grondbeleid, grondexploitaties en grondbedrijven grondig bekeken.* (Have et al., 2007).	The ISO 31000:2009 standard. Elaborated on in the article: ISO 31000:2009 – Setting a new standard for risk management. (Purdy, 2010).
Risicomanagement voor projecten. *De RISMAN methode toegepast.* (Bunt et al., 2003).	Principles of risk management. (Dickson, 1995).
Handleiding risicomanagement bij pps-gebiedsontwikkelingsprojecten. (Have & Nauta, 2004).	Beschouwingen op risicomanagement in relatie tot veiligheidsmanagement. (Linde et al., 2011).
Knowingly taking risk. *Investment decision making in real estate development.* (Gehner, 2008a).	A Risk Management Standard. (IRM, 2002).
Risicomanagement in de interne bedrijfsvoering van projectontwikkelaars. (Gehner, 2008b).	
Toepassing van risicomanagement bij gemeenten. (Tekir, 2012).	

Furthermore, this research was conducted during an internship at Deloitte Real Estate. The field of expertise of the employees of this department is highly based on work in the area development sector. In this sector risk management also fulfills a key role. Adding to that, a large part of the client portfolio of Deloitte Real Estate consists of Dutch municipalities. The various talks and discussions about risk management with colleagues helped to identify some of the requirements for ‘good’ risk management. Some requirements were often named by more than one colleague. Thereby they were taken into consideration to incorporate them into the principles of ‘good’ risk management. The principles of ‘good’ risk management derived from the sources mentioned above are listed in Table 5. The result of the literature study requirements was a list of requirements for ‘good’ risk management. Some of these requirements were closely related by nature or in such a way that, when they are met, they all contribute to the same aspect. In Table 5 the related requirements are grouped and sorted by principle. The principle reflects the aspect to which the requirements contribute in case they are fulfilled. Nine principles were identified. Together they represent the principles of ‘good’ risk management (Table 5 on the next page).

Table 5 | Identified principles of 'good' risk management *(Source: Literature in Table 4; modified by author)*

Principle	*Description of requirements*
1) Fully integrated & embedded risk management	Risk management is embedded in every layer of the organization.
	The use of a risk management method/approach, including risk identification, control and the monitoring of the risk management process.
	Risk management supports and is fully integrated in the decision making process because decisions are made according to a certain priority and based on informed consent.
	Risk management is successfully translated in processes, methods, actions, decision making and reporting.
	Risk management is not a single activity, but has become a 'second nature' as the result of a certain level of risk awareness.
2) Adequate monitoring of risk management	It is clearly defined who is responsible for the (internal) monitoring of the risk management process.
	The way monitoring takes place is clearly specified.
	The process is monitored on a regular basis in such a way that risk management is up-to-date.
3) Structured risk management	There is a systematic overview of the (significant) risks that are associated with a project.
	Actions to control risks are explicitly stated, organized and linked to the relevant risk(s).
	There is a clear differentiation between qualitative and quantitative risks.
	There is a clear difference between the two phases of the RISMAN approach: Risk analysis (also including risk identification) and risk control.
	Risks are identified and controlled on at least both the project and the portfolio level and ideally also on the programme level.
4) Systematic risk management	Acknowledging that risks can be divided in three different categories: organizational risks, risk regarding the project and external risks.
	Thinking in scenarios: prematurely work out different scenarios and match them to specific control measures.
	The extent & type of risks that are tolerable and how unacceptable risk are to be treated are defined.
	Uncertainties are explicitly mentioned and risks management addresses uncertainty, no matter what level of uncertainty.
	Risk management takes place proactively.
5) Dynamic risk management	Reporting on (new) risks, risk control and evaluation of control measures takes place on a regular basis, not only during the preparation of the budgetary report/according to the regular P&C cycle.
	Risk management is considered as a dynamic cyclical process that has to be followed several times during a project.
	Risk management takes place continuously: it is not a picture, rather a movie.
6) Monitoring and evaluation are a part of risk management	There is a built-in mechanism that evaluates the effect of control measures that are taken.
	There is feedback regarding the predefined set of objectives and conditions of the project or organization in such a way that it is possible to conclude whether or not actions are taken accordingly.
7) Risk management is tailor made and organizationally specific	Implementation goes step by step in different phases.
	Risk management is regarded as a learning process: implementation is a time consuming process and the organization has adapt itself to think in risks and measures to control them.
	Risk management takes into account human and cultural aspects.
	Risk management fits to the organization's context and follows internal but also external changes.
8) Risk management is well-founded in the organization	Risk management creates value for the organization by contributing to the predefined objectives.
	It is clearly stated who (in the end) is responsible for risk management.
	There has to be a clear policy regarding risk management adopted in the municipal memorandum (on risk management, land policy) and budgetary reports etc.
	Underlying assumptions, certain (financial) parameters and future prospects are clearly substantiated.
	From the risk management process there follows a clear prioritization of risks, projects and/or objectives. Ideally priorities on a certain aspect are listed.
9) Risk management is transparent	Decisions are made based on the best available information.
	Decisions or the decision making process are/is recorded to avoid that municipal land agencies become a 'black box'.
	Appropriate and timely involvement of all relevant stakeholders from all levels of the organization.
	Reports are clear and give an accurate view on the expected reality.

2.5.2 A scale for risk management

One could argue that the term 'good risk management' is ambiguous due to the fact people differ in their perceptions of what 'good' actually means. This makes it complicated to weigh the principles against each other. Another complication with the list of principles is that the list of requirements presented in Table 5 is very comprehensive. The list of principles is somewhat narrowed by selecting principles that are applicable in the field of land development. Still, the list contains too many aspects for a municipality to reckon with each and every one of them. Imagine a municipality that wants to improve its risk management has to fulfill all the requirements listed in Table 5 in order to meet the principles of 'good' risk management. This rather seems unfeasible, not to mention manageable for the municipality. This might have something to do with a municipality finding itself in a complex network situation as referred to by the network approach. A municipality that aims to fulfill all the requirements might 'suffer' from the sword of Damocles, leaving itself very few degrees of freedom in doing so. In the pursuit to fulfill all the requirements lies the danger of acting too much according to the risk approach, as described by the paradox mentioned by Bruijn et al. (2014) in paragraph 2.4 of this chapter. Therefore, the principles of 'good' risk management are used as an indicator and a guidance, not as a means to judge risk management of Dutch municipalities.

The principles of 'good' risk management make it possible to rank municipalities on how far they are in the field of risk management. Of municipalities to which more requirements listed in Table 5 apply, could be said that they score higher on the principles of 'good' risk management than municipalities to which only a few of these requirements apply. Thereby the principles and their requirements function as a benchmark in the form of a scorecard. This is precisely what is done in a later stage of this research, during the municipality scan (chapter 4). It is hard to define 'good' or 'bad' risk management. However, using the principles as an indicator gives municipalities an indication about their maturity regarding risk management.

Table 6 | Maturity levels of risk management *(Source: Tekir, 2012)*

No or informal	Partially integrated	Integrated
No explicit, visible attention or procedures for risk management.	Isolated and partial approach in which different departments or functions identify and control risk separately and independently.	Unified vision, policy and strategy with respect to risk management.
Intuitive risk management that mostly takes place in the heads of the management.	Risk management is often seen from a perspective that is strongly influenced by a person's field of expertise.	Risk management is coordinated from the management top. However employees from lower layers have shared responsibilities.
Risk management is not structured or organized.	Risk analysis is focused on financial risk that are insurable.	Risk management continuously falls under the attention of the entire management top.
Ad hoc reactive risk management: it gets attention when the management sees occasion. Often in reaction to a calamity.	Risk management is still ad hoc and reactive. However less than in the stage where there is no or only informal risk management.	Risk management takes place continuously and on a proactive basis. There is a focus on both internal and external developments.
Risk analyses are based on personality (intuition, initiative and skills).	Two or more different risk management processes that work parallel in the organization.	Every layer in the organization acknowledges the importance of risk management and takes initiative in managing risks.
		Human and cultural aspects are taken into account.
		Risk management is not only about threats but also about opportunities.

To make this scale more concrete it is divided into three maturity levels. Each level corresponds to a certain degree of risk management. According to Tekir (2012) risk management can be divided into three stages of adulthood, each reflecting a different level of maturity. Table 6 shows these maturity levels of risk management and their most important features. The three risk management levels are used in the municipality scan to indicate how advanced risk management is for each examined municipality (chapter 4).

Although using a list of principles of 'good' risk management in such a way appears to be acting on the side of the risk approach, the side of the network approach is not neglected. During the conducted literature study on risk management both the risk approach and the network approach were used. The risk approach is used to come to a list of requirements to structure and organize risk management of land development in municipalities. As a consequence, the larger part of the principles and the associated requirements are systemic in nature. The network approach is integrated by adding some organizational and network aspects to the list of requirements. In Table 5 can be noticed that some of the requirements actually affiliate with the network approach. This holds for the first and the last requirement of principle 1, all requirements of principle 7 and the third requirement of principle 9.

Finally it is important to realize the following with respect to 'good' risk management. 'Good' risk management does not automatically prevent all future incidents from happening. For a municipality 'good' risk management does not mean that there will be no financial problems, or that a municipality will always be able to avoid them. 'Good' risk management does however contribute to the risk awareness of an organization and its employees. Thereby helping them to make choices more knowingly.

2.6 The implementation of risk management

In complex organizations such as municipalities implementing or improving risk management is not always straightforward. Forcing an organization to adapt its processes according to a framework will not work. Even when implementation goes according to a less rigorous approach, or an appropriate balance between both risk and network approaches is found, there are some bottlenecks that hamper a successful implementation or use of risk management. Luckily there are also ways to smoothen the process of embedding risk management into an organization. To give municipalities a bit of a heads-up, bottlenecks and tips regarding the implementation of risk management are discussed in this paragraph.

2.6.1 Tips and bottlenecks when implementing risk management

There are quite some bottlenecks and pitfalls when it is about implementing risk management. Giving these some thought could help municipalities to anticipate on most bottlenecks, or in some cases even overcome them. First, some issues that may arise in the early days of the implementation process:

- The term 'risk management' can be very sensitive: by only mentioning it the term could raise all different kinds of thoughts and emotions (Bruijn et al., 2014).
- A person's attitude towards risk management depends on multiple factors: the person itself, its personal experience and its function or role (Bruijn et al., 2014).
- For an organization it can be unattractive to acknowledge risks (Bunt et al., 2003). An organization might consider risk management as an instrument to judge its employees, or to measure the wellbeing of the organization as a whole..
- Organizations are simply unaware of the advantages of risk management (Bunt et al., 2003).
- Organizations miss the employees with the right amount of experience in the field of risk management (Have et al., 2007).

To counter these issues an organization has to become more familiar with risk management. Some municipalities organize workshops with external experts in risk management. Other municipalities actively coach their key employees or even top management functions to enhance their risk awareness. For example, by explaining their role in the daily processes. According to several national audit office reports, a municipality must bring the subject of risk management more often to the table. Starting in regular (management) meetings, but preferably in every layer of the organization. A clear and comprehensive policy on risk management helps to place risk management on the agenda. This policy should take into account both perspectives of risk management. The harder risk approach to structure the risk management process in order to make it more uniform within the organization. The softer network approach to incorporate culture and competences in this policy. The incorporation of factors such as culture and competences make it possible for an organization to translate its policy on risk management in for example job requirements for a concern controller, project managers, planning economists, a head of land management, but also for members of the Municipal Council and the Executive Board.

To tackle the above mentioned issues in an earlier stage of the implementation of risk management, Dickson (1995) makes a suggestion that lies in the extension of the risk management policy recommended by some of the Dutch national audit offices. In the context of implementing risk management into an organization, Dickson (1995) mentions the importance of 'managing risk management'. If an organization wants to manage (or implement) risk management successfully, its first task is to develop a risk management philosophy, which includes writing a clear risk management statement. The risk management statement reflects where the organization stands on the issue of risks and its management (Dickson, 1995). During the process of generating this philosophy it is important that several layers of the organization are involved, not only the management top. Deciding on a corporate risk management philosophy can bring some advantages (Dickson, 1995):

- It stimulates a proactive attitude of its employees towards risks and its management.
- In line with the first advantage, it increases the risk awareness among its employees.
- It reflects the organization's perspective on risk management, which helps with the long term planning regarding risks and is essential for the evolution of risk management.
- Using a risk management statement is a way of communicating the philosophy throughout the organization: it encourages the corporate discussion around risks and its management.

Another issue with risk management is a financial one. When implementing risk management, costs are determined in the first place, however benefits are much less defined (Bunt et al., 2003). This makes it challenging to find broad support within the organization. In contrast to what often is assumed, implementing measures to improve risk management do not necessarily have to be expensive. Instead of expensive software programs that help to analyze and manage risks there are also less expensive measures, such as the use of scenario analysis or appointing a team that coordinates risk management in the organization or department. A municipality can use the earlier mentioned workshops to explore and clarify the benefits of risk management. Making employees invest some of their time in risk management or hiring more employees might seem unattractive from a financial perspective. However, given the (financial) benefits that risk management provides (paragraph 2.2), municipalities might want to consider this. Especially when taking into account the sincere financial trouble some municipalities faced during and after the economic crisis in 2008.

In a report on patient healthcare (Linde et al., 2011) four general pitfalls regarding the implementation of risk management are discussed. These pitfalls become more relevant in a later stage of the implementation process, thereby they differentiate from the bottlenecks mentioned until so far. Despite being mentioned in the context of healthcare, some of them also apply for municipalities.

The first pitfall is that in organizations risk management is often pushed towards the person who is formally responsible. Many organizations for example employ a controller who formally is responsible for and coordinates risk management. The same holds for most municipalities, were common functions that carry the formal responsibility for risk management are project controllers and risk coordinators. Because from risks often inherently follow financial consequences there is a tendency to label them as financial risks. Even when the origin of the particular risk is not necessarily a financial one. Following this logic, risk management can easily fall in the hands of financial executives. Within the municipal organization eligible executives are the advisor operations of finance and the head of planning economists, or within the municipal land agency the head of land management. Assigning ownership to risks help to acknowledge and manage risks (Linde et al., 2011). Therefore, when applied correctly it contributes to integral and proactive risk management. However, making one person responsible for risk management without involving others in the process isolates risk management. Thereby undermining the risk awareness of the organization as a whole. A solution would be to classify risks according to their origin instead of according to their consequences. Doing this makes it easier to identify and allocate possible measures for control and to assign tasks and responsibilities (Linde et al., 2011). Risk management might be a typically assigned to the management, it will not succeed if when it is not broadly supported throughout the organization. Still, narrow participation of the (top) management also remains necessary.

The second pitfall mentioned by van der Linde et al. (2011) is actually the issue of integrality introduced by Bruijn et al. (2014). The perception of risk strongly depends on a person's position, both horizontally and vertically, within an organization. Besides that, also knowledge related to the organization, its setting, earlier experiences and not at least risk appetite influence the way risks are perceived individually. How to integrate all these different perceptions of risk and risk assessments was one the three main questions stated in subparagraph 2.4.1. Van der Linde et al. (2011) suggests to set up a multidisciplinary group of employees when identifying and analyzing risks, representing different areas of expertise and containing members of different layers of the organization.

Pitfall number three is that risk management becomes a one-off exercise. Which is even more enhanced when risk management has become isolated due to that it lies in the hands of one person (see the first pitfall). As concluded in chapter 1, currently this is an existing phenomenon within some Dutch municipalities. Risk management too often is considered to be a product (or objective) instead of a process. An annual 'trick' that is performed behind desks instead of being integrated in work- and decision making processes. Risk awareness plays an important role here. Earlier in this subparagraph possible ways to enhance the risk awareness of an organization are discussed. One of them is appointing risk owners for different risk categories, other than those who are formally responsible.

The fourth pitfall addressed by van der Linde et al. (2011) is that risks are often not specified into proper detail. Considering an unachieved objective as the ultimate risk seems logical. However, defining risks in a way like this makes them less manageable compared to risks of which the cause is made explicit by mentioning the event, circumstance and activity that threatens the organization's particular objective.

2.6.2 Settling risk management in a municipal organization: an organizational perspective

The pitfalls and ways to overcome them in the previous subparagraph were mainly about specific circumstances that hinder or favor the successful implementation of risk management. There are also ways that can smoothen the process of implementation itself. These aspects are related to how the implementation process itself is shaped. To start with, principle number 7 of the principles of 'good' risk management (Table 5) provides some guidelines for how the implementation process should be designed in order to be successful.

When it comes to implementing risk management, it is very important to realize that the implementation process takes time and asks for patience and commitment of the organization and its employees. Especially when the organization is not very familiar with risk thinking and risk management turns out to be a relatively new concept. In addition, people have to adapt themselves

to a whole new course of action, sometimes demanding significant changes in their daily working processes. In turn this may push them out of their comfort zones. Therefore, risk management is not simply implemented from one day to another. It is rather a time consuming process of trial and error (Bunt et al., 2003). Because the implementation of risk management consequently can have very drastic changes, it is preferable that its implementation goes gradually and according to different phases, one step at a time. One could say that the implementation of risk management very much looks like a learning process. Following this first point leads to the conclusion that the implementation of risk management requires a tailor made approach for each organization. There is no such a thing as 'the one right approach'. Furthermore, the implementation process can be smoothened by letting risk management take into account human and cultural factors (Bunt et al., 2003). Thereby tempering the effect the implementation has on the corporate culture of the organization. People have a variety of capabilities, perceptions and intentions that make every organization different. Ignoring these can lead to fierce resistance among employees.

2.7 Conclusion

Together with the complex setting in which municipalities make decisions regarding land development, the characteristics and common risks of land development make risk management of land development activities in municipalities a challenging task. Typical aspects that distinguish risk management of land development activities in municipalities from risk management in other organizations are:

- Land and housing markets vary very much per region.
- For municipalities land development risks occur on three levels: project, portfolio and programme.
- Land development projects are vulnerable for more risks due to their relatively long development period.
- Municipal decisions related to land development are subjected to political influences.
- When it comes to land development, municipalities have to fulfil both an entrepreneurial and societal role.
- For land development projects, a relatively small change in parameters has a large effect on the final project outcomes.

These aspects put certain requirements to the risk management of land development activities in municipalities. One example is that risks related to land development occur on three levels; the project, the portfolio and the program level. Consequently, this requires from municipal risk management that it takes into account risks and encompasses aspects of all three levels. Another example is that the significant political influence on municipal decision making requires from risk management that it is not only focussed on financial risks in relation to the financial resilience, but also on non-financial risks such as political risks. Typical characteristics of land development involve particular risks. For example, the relatively long development period of land development projects makes these projects vulnerable for more risks. An increase of the interest rate, or third parties such as private developers or investors that decide to abandon the project both are examples of risk that can occur. Especially when the development period of a project is relatively long.

In chapter 1 it was found that municipalities play a key role in land development projects. This key role in combination with the risks regarding land development sometimes requires an entrepreneurial role from municipalities. On the other hand, a municipality also fulfils a societal role. The difference between a municipality a private developer is that decisions of a municipality, while in its entrepreneurial role, should also contribute to societal objectives. In the end, the (financial) risks corresponding to land development are actually not owned by the municipality, but by society. Only it is the municipality that has to decide in name of society whether to take these risks or not. On top of that, when it is about land development projects, a relatively small change in parameters has a

large effect on the final project outcomes, especially from a financial point of view. The fact that the financing of land development involves public money, makes decision making regarding land development a responsible and complex task for municipalities.

To find out how the typical aspects of land development influence the risk management of land development activities in Dutch municipalities requires more empirical research. Furthermore, regarding the conceptual design, it is useful for a municipality to select those aspects from the principles of 'good' risk management that are feasible and manageable. In this way, municipalities can improve their risk management without losing too many degrees of freedom and being over-controlled due to the excessive use of the risk approach. Finding the most usable elements of the principles of 'good' risk management for municipalities also requires empirical research. This research will be conducted by performing case studies at four municipalities and takes into account the above mentioned aspects in the search for the most useful elements. In the design phase of this research, the selection of useful elements will be incorporated in the conceptual design to improve the risk management of land development activities within Dutch municipalities.

Chapter 3

Legal framework

In this chapter:

According to literature on risk management, the previous chapter sets the theoretical requirements for risk management. This chapter deals with the implications for Dutch municipalities regarding risk management. These implications originate from Dutch national law. Two important laws that create the legal framework for municipalities, thereby making implications for risk management, are the Municipality Act (In Dutch: Gemeentewet and hereafter GW) together with its amendment the Act for dualism and the BBV decree. Respectively, paragraph 3.1 and paragraph 3.2 outline the most important implications for risk management within municipalities coming from the GW and the BBV decree. In the end, paragraph 3.3 puts the legal framework in perspective of the theoretical framework of chapter 2.

3.1 Gemeentewet and wet dualisering gemeentebestuur

The Dutch GW and its amendment the Act for dualism influence the organization of risk management within municipalities and their land agencies. In this paragraph, the most important aspects regarding the organization of risk management from both laws are discussed.

The GW concerns the institution of Dutch municipalities. The main aspects of this law are the municipal organization and the supervision on the municipality and its finances. The implementation of the Act for dualism in 2002 imposed some direct changes for the relationship and interaction between the Municipal Council and the board of mayor and aldermen, also known as the Executive Board. Figure 6 shows the structure of a Dutch municipality since the implementation of the Act for dualism.

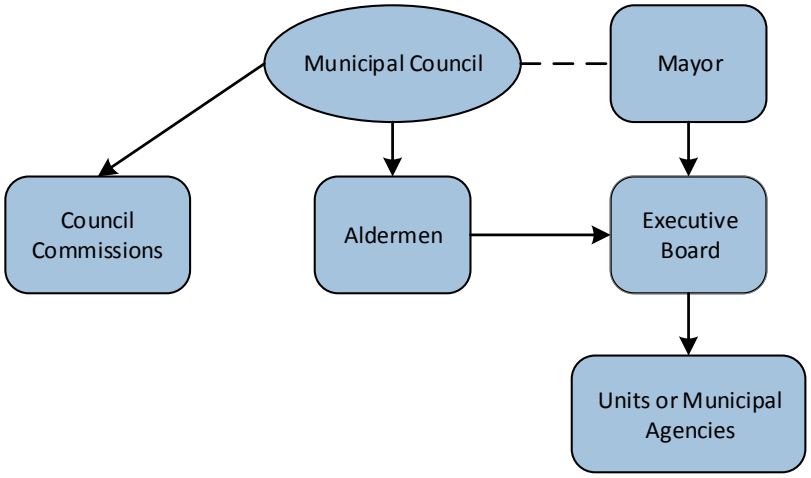

Figure 6 | Structure of a Dutch municipality ***(Source: Spikin, 2011, p. 160; modified by author)***

Since the implementation of the Act for dualism, there has been a clear separation between the tasks of the Municipal Council and the tasks of the Executive Board. The Municipal Council is assigned with the more parliamentary, framework-setting and supervising task. It is the task of the

Executive Board to execute the policy of the municipality within the framework imposed by the Municipal Council.

The Municipal Council needs insight concerning the issues regarding land development and the matters within the land agency in order to perform its supervising task. Therefore, the Municipal Council needs (accurate) information concerning used parameters, the risks of land development and whether or not the financial buffer of the municipality is sufficient to cover these risks (Have et al., 2007). Therefore, the communication regarding risks and the controlling of risks needs to be transparent. Part of the supervisory role of the Municipal Council takes place through the obligation of the Executive Board to actively inform the council when necessary[1]. For example, the Executive Board needs to inform the Council or even ask for a decision when unforeseen circumstances regarding land development emerge. The duty to actively provide the Municipal Council with the required information is partly incorporated in the regular planning & control cycle (hereafter P&C Cycle). Part of this cycle are the budgetary report and annual accounts (see also chapter 4), which are used to inform the Council on regular basis (Have et al., 2007). In the GW it is incorporated that the Municipal Council must approve both the budgetary report and annual accounts every year. In the light of this financial transparency is very important. Summarizing the roles of the Municipal Council and the Executive board, the Municipal Council is supposed to set a framework for the Executive Board regarding the organization and execution of risk management. This goes according to the Dutch national law. Furthermore, the Municipal Council has the task to supervise if the Executive Board stays within the framework. Thereby the Municipal Council and the Executive Board in the end together are responsible for the policy regarding risk management.

Regarding external supervision the GW prescribes[2] that the Municipal Council has to appoint an external accountant for the audit control on the annual accounts and to check the financial management of the municipality. The result of this audit is an accountancy statement. This statement includes the accountant's opinion on whether or not the financial management of the municipality leads to integer, reliable and accurate results.

Another form of supervision is defined by article 81 of the GW. In this article it is stated that the Municipal Council is authorized to establish a national audit office. The purpose of the national audit office is perform independent research to the legitimacy, the efficiency or effectiveness of certain subjects or issues within the municipality (Have et al., 2007). The national audit office plans the research independently. A report from the national audit office often contains valuable advice, which in turn could lead to an improvement of the supervisory role of the Municipal Council. Subjects for research of such a report may very well be risk management or land development, in which risk management plays a significant part. Therefore, the national audit office can play an important role regarding the improvement of risk management within municipalities.

Based on the GW municipalities also fall under provincial supervision. Under normal circumstances this supervision is moderated. If the province sees occasion to increase their level of supervision, the supervision becomes preventive (Have et al., 2007). From this moment on, a municipality falls under preventive supervision of the province. In many cases extensive financial problems form the occasion for the province to put municipalities under preventive provincial supervision. When a municipality is under preventive supervision of the province, the Provincial Executive has to approve the budgetary report of the municipality. The budgetary report of a municipality needs to be approved by the Provincial Executive every year. The preventive supervision of the province remains as long as it is not plausible that the budgetary report will be balanced in the following year (Have et al., 2007). Land development plans can have a significant financial influence on the financial position of municipalities due to their risk profile and project size. In some cases both size and risk profile are relatively large compared to the total balance sheet. To decide whether the budgetary report will be balanced or not it is important for the province to have insight in the risk profile and both long and short-term results of land development plans.

[1] Article 169, Gemeentewet.
[2] Article 213, Gemeentewet.

3.2 The BBV decree

The GW forms the basis for the regular P&C cycle. For the actual required content of the budgetary report and annual accounts the GW refers to the BBV decree. This paragraph addresses the legal framework coming from the BBV decree. The increased demand for financial transparency played a relevant part in the context of the adoption of the BBV decree. In this paragraph first this context and the background of the BBV decree are outlined. Thereafter, the content of the BBV decree is discussed. Regarding this resolution, there are some very recent changes proposed by the BBV committee. In the third subparagraph these changes are outlined. The final subparagraph reflects on the consequences coming from the most recent changes for municipalities.

3.2.1 Background of the BBV decree

Before the adoption of the BBV decree in 2004, the market and financial position of Dutch municipalities changed over the years. The rise of all kinds of new financial products, an increase in the amount of affiliated parties and a growing number of municipal tasks contributed to the surroundings of municipalities being more diverse. In conjunction with a more prominent entrepreneurial role of Dutch municipalities on the land market, the increasingly diverse context gave a rising importance to a municipality for being future-proof. Along with this came the increased significance of the financial position of municipalities, in particular there was a demand for proper insight in the risk profile of municipal land development plans. The underlying thought: more financial transparency (Ministerie BZK, 2015b). The growing demand for financial transparency regarding the risk profile of land development plans in the end resulted into the BBV decree. In a sense, this growing demand for more financial transparency comes to expression in the BBV decree. It states that the risks for municipalities during land development activities and the possible consequences for the position of their financial resilience are clarified.

Besides the need for more financial transparency, there was also a need for more comparability of municipal documents (VNG, 2014). Especially regarding documents that are part of the annual budgetary and accounting cycle. In order to enhance this comparability it is essential that municipalities use uniform concepts and definitions. Furthermore, a uniform structure of the content of the relevant documents can also contribute to the comparability of these documents. More financial transparency and more insight in relevant documents that are used for the reporting of the annual budgetary and accounting cycle gives more opportunity for the Municipal Council to perform their task. Because both aspects enhance the framework-setting and supervisory role of the Municipal Council. However, not only the Municipal Council benefits from more (financial) transparency and comparability of municipal documents. To a certain extent, citizens may also gain more insight in the financial situation and status of the land development activities of their municipality.

In the light of the context outlined in the previous section, the BBV decree was adopted in 2004. Mainly, this resolution contains the regulation regarding the composition of the reporting documents that are part of the annual budgetary and accounting cycle for Dutch municipalities. The execution of the BBV decree is monitored by the BBV committee. The committee is responsible for the supervision of a clear and unambiguous application of the BBV decree by municipalities. In order to punctuate its supervisory role, the committee is entitled to bring out guiding notes, which are enforced by law. The committee also provides answers to questions or issues raised by municipalities (Commissie BBV, 2003).

3.2.2 Content of the BBV decree

The BBV decree regulates the budgeting and accounting for both municipalities and provinces. It can be considered as the legal framework for municipalities and provinces that sets boundaries when it comes to the (financial) reporting of their land development activities. This subparagraph will only focus on the requirements and implications the BBV decree has for municipalities. These implications

for municipalities are related to products that have to be presented, the accounting process, the way of accounting and the information that has to be shared with the public. First the general requirements for municipalities coming from the BBV decree are discussed. Right after this, the implications derived from these requirements are outlined.

Requirements

Besides financial clarification, the adoption of the BBV decree obliged municipalities for the first time to include also non-financial information to their budgetary report and annual accounts. For example, municipalities are required to explain their goals. In order to do this, goals must be captured and defined in statements and objectives. Thereby, documents such as the budgetary report and the annual accounts became less financially focused and thereby less complex. On the contrary, now there was more room for clarification in terms of policy and governance. Thereby making them more accessible and understandable for members of the Municipal Council with a limited financial background (VNG, 2014).

The BBV decree requires from municipalities more insight in the (financial) risks of their land development activities. Therefore, since the adoption of the BBV decree municipalities are forced to focus on the risk profile of their land development activities in relation to their financial resilience (Tekir, 2012). There has to be a connection between the risks of undertaking land development activities and the financial buffer that municipalities have to anticipate on the possible financial impact of these risks.

Furthermore the BBV decree requires uniformity and unambiguity regarding the composition and interpretation of the budgetary report and annual accounts (Ministerie BZK, 2015b; VNG, 2014). The BBV decree prescribes that these documents are identical in terms of structure and design. To this end, the BBV decree provides some principles and guidelines regarding the drawing of both documents and the presented financial data. These principles and guidelines can all be brought down to requirements regarding transparency, allocation, prudence, legitimacy and the presentation of a reliable (financial) image (Cozijnsen, 2012). The first, transparency, requires that all users of the budgetary report and annual accounts should have as much insight in these documents and the underlying data as possible. An example of a requirement regarding transparency is that figures that are used for visualization should be usable, systematic, well-founded, relevant and reliable (Cozijnsen, 2012). Secondly, allocation is about the accounting of revenues and costs. All costs and revenues should be allocated to the period in which they are relevant, not the period in which they are realized. Prudence, the third requirement, also refers to the method of accounting. In case a municipality notices a loss it has to be recorded immediately. Furthermore profits can only be captured after they are actually realized, not before (Korthals Altes, 2010). Legitimacy means that data and information are only legitimate if they are presented according to all relevant rules and regulations. Finally, the budgetary report and annual accounts should give a reliable view of the financial position of the municipality.

Implications

The requirements coming from the BBV decree discussed in the previous section lead to number of implications for Dutch municipalities. According to the BBV decree municipalities must present on a yearly basis the annual accounts, a budgetary report and multi-year estimates to the Municipal Council[3]. The format of both, the budgetary report and annual accounts, must by identical[4]. To this end, the BBV decree obliges municipalities to include a number of mandatory sections (paragrafen) in the budgetary report and annual accounts. Each of these sections is related to different governance or policy aspects. All sections include a substantiation on and foundation of the underlying assumptions and chosen policies regarding these aspects. Examples of aspects with their own section as prescribed by the BBV decree are risk management and the financial resilience, land

[3] Article 3, BBV decree.
[4] Article 4, BBV decree.

policy, affiliated parties, local taxation and capital assets. In the light of this research and regarding land development the risk section and section on land policy are most relevant. Regarding the risk profile of their land development activities in relation to their financial resilience, municipalities are mandatory to elaborate on this in the risk section. According to the BBV decree this section should at least contain an inventory of the required resistance capacity, an identification of the risks and a clear policy regarding the risk profile in relation to the financial resilience[5]. This policy should substantiate on and clarify the maintained norm for the financial resilience by municipalities (Chapter 2, subparagraph 2.3.3). Furthermore, the financial resilience of municipalities has to be appropriate in relation to the risks they run, including the risks occurring from land development activities.

To get more insight in the risks that are specifically related to land development the BBV decree also prescribes that municipalities must include a section on their land policy in the budgetary report and annual accounts[6]. This section should at least include the vision of a municipality on their land policy, how they execute this land policy, an elaboration of this policy in relation to the budgetary program, an overview of the estimated results of all land development projects, a substantiation of the anticipated taking of profits and finally, policy assumptions regarding the budgetary reservations for risks[6].

Besides implying rules regulations the BBV decree also leaves room for interpretation by the Municipal Council. This degree of freedom is important in the political environment in which the budgetary report and annual accounts are drafted (Cozijnsen, 2012). According to the BBV the Municipal Council has the freedom to choose their own definitions of 'financial resilience' and 'risk'. Furthermore the Municipal Council is free to make their own policy regarding conventions in relation to the financial resilience and its size (IJland, 2013). On the one hand one could say that this degree of freedom helps the municipality to preserve its flexibility. On the other hand too much flexibility will impair uniformity. Actually, the BBV decree has to deal with the same paradox as the paradox of control introduced in paragraph 2.4 by Bruijn et al. (2014). According to a research done by IJland (2013) municipalities use multiple definitions for the financial resilience, which does not benefit the transparency.

Regarding this research, the implications mentioned in this subparagraph are the most relevant. The BBV decree also implies a number of accountancy rules regarding the balance sheet of municipalities. However, it would be of too much abundance to discuss them all in detail, taken into account the scope of this research.

3.2.3 Recent developments regarding the BBV decree

In the early months of 2016 the BBV decree is amended. Recently increased economical unrest, political changes, the ever increasing demand for financial transparency and comparability and greater international interest for reporting in the public sector gave occasion for the BBV committee to make some adjustments to the BBV decree (VNG, 2014). In this subparagraph, the most relevant developments that come into effect in the upcoming adaptation of the BBV decree are briefly discussed. At the moment of writing the BBV committee aims to amend the BBV decree as per 01/01/2016.

Maximal duration of 10 years for land development plans

With the new version of the BBV decree, initially the maximal duration for land development plans is not allowed to exceed a period of 10 years. Only when provided with a sound argumentation and if necessary, this period can be exceeded. In this case a sound argumentation means authorization from the Municipal Council and reported in the budgetary report and annual accounts. For land development plans that exceed a period of 10 years, it is required to take additional measures for control. One additional measure for control is that it is not allowed to apply indexation to revenues

[5] Article 11, BBV decree.
[6] Article 16, BBV decree.

that are expected after 10 years (Commissie BBV, 2015). In addition the BBV committee mentions complementary measures such as intentional agreements between municipalities and private developers. The idea behind this amendment is to mitigate risks and uncertainties that are associated with longer periods of development. A longer throughput time of a project means more uncertainty to earn back expenses and a higher risks of budget overruns. From a risk management perspective this seems an appropriate measure to reduce the risks that are connected to land development projects with a relatively long development period. However, for some current land development plans this measure leads to an adjustment of future expected revenues.

Abolishment of the NIEGG-category

In the upcoming version of the BBV the NIEGG-category will be abolished (Commissie BBV, 2015). Thereby, this category will be removed from the balance sheet. In the current situation municipalities have the option to label land during an early stage as future land for exploitation, NIEGG. As long as land is not categorized as land under exploitation, also known as BIE, on the balance sheet it belongs to the NIEGG-category. For land in the NIEGG-category goes the assumption that a municipality has (future) intentions to develop it. The NIEGG-category provides a municipality with more beneficial options for the valuation of their land, since there is a real and firm intention to develop it (Have, 2015). An example is the allocation of interest charges to land that falls under the NIEGG-category. It can be argued that in some cases this early categorization of land under NIEGG was too early. Due to the collapse of the land and housing markets those well-meant intentions suddenly disappeared. Due to the economic crisis, the past few years municipalities were forced to take major losses on the land that was labeled as NIEGG. A greater part of the land in this category was acquired to anticipate on future land development projects resulting from changes in the zoning plan that had yet to be made. In the revised version of the BBV decree municipalities are obliged to categorize strategic land positions as MVA-land on their balance sheet. Land in this category is now valuated based on the acquisition price. This reduces the risk of uncovered expenses in case that for some reason the development of land is put on hold, or is cancelled. The abolishment of the NIEGG-category will prevent the book value of land from rising. However, additional costs now need to be covered elsewhere in the budget. Furthermore, the no longer crediting of interest will lead to lower revenues that can be earned from interest.

Other amendments

The two former mentioned amendments of the BBV decree can be considered major changes to the BBV decree. There are also some minor changes.

First, the allocation of costs to land under exploitation (BIE) has to match with the rules for the allocation of costs mentioned in the Wro and Bro. This brings limitations to the options for the recovering of costs. The aim is to bring more uniformity to the allocation of costs to the BIE-category. The aim is to decrease the administrative burden for municipalities (Have, 2015).

Secondly, the requirements for the allocation of interest and the applied discount rate are tightened. One amplification of these stricter rules is that the discount rate has to be equal to the interest rate that is used in the land development plan. This interest rate has to be based on the actual interest rate over borrowed funds. In case of project financing, it is the directly related interest rate. The other option is the average weighted interest rate of the total portfolio of loans (Have, 2015). Again, the underlying thought is to decrease the administrative burden for municipalities by means of alignment to the fiscal rules from the tax authorities.

Finally, an amendment that already has come into force as per may 2015. This amendment prescribes that some new uniform indices and parameters have to be included in the budgetary report and annual accounts. The aim is to increase the (financial) transparency in order to enable the municipal and provincial Councils to get a quicker and clearer view on the financial position of municipalities. Thereby enhancing the framework-setting and supervisory role of both, Municipal and Provincial Councils. The financial indices and parameters are the net debt ratio (including the net

debt ratio adjusted for all granted loans), the solvency ratio, land development plans, structural capacity for exploitation and the tax capacity (Ministerie BZK, 2015a).

3.2.4 Consequences for municipalities

The proposed amendments of the BBV decree by the BBV committee require some tightening from municipalities on financial and accounting aspects (Have, 2015). Underlying thoughts are financial transparency and comparability. Looking back to the principles of 'good' risk management from paragraph 2.5 it can be concluded that the underlying thoughts of the proposed amendments of the BBV decree match with principle 9. Therefore the actual results coming from the changes in the BBV decree might be positive if seen from this angle. Another occasion to amend the current BBV decree are the extensive losses some municipalities had to take in the past few years (Have, 2015). However, it seems that these losses do not increase any further, starting from 2013 (Deloitte Real Estate, 2014). The proposed changes of the BBV decree mentioned in the previous subparagraph are expected to have significant impact on the (short term) financial position of municipalities (Have, 2015). The upcoming section explains why.

First, the ten year term for land development plans carries the risk of increased remittance to corporate income tax in the near future. Thereby, expectations for future revenues have to be adjusted downwards. However, there is a problem with the ten year term. Some land development plans with development periods smaller than ten years know as much uncertainties regarding costs and revenues as plans that exceed the ten year term. Uncertainty regarding future costs and revenues is inherently connected to land development, irrespective whether their development period is larger or smaller than ten years (Have, 2015). Even with an intentional agreement these uncertainties will not always be eliminated. The cancellation of the NIEGG-category will have some negative consequences for the financial positions of municipalities (Commissie BBV, 2015). Especially for those municipalities with sizable NIEGG-positions significant short-term losses can be expected. Another reaction might be that interest charges will be shifted to the general service of the municipality. On the other hand, the abolishment of the NIEGG-category will reduce future losses coming from land development plans that for example due to an economic recession cannot be exploited (Commissie BBV, 2015). Finally, the stricter rules regarding the interest and discount rates also result into short term financing problems for municipalities. Due to the fact that in case of project financing the directly related interest rate may be applied, it is possible that there will be a future shift towards this method of financing. This shift will negatively influence projects or future projects that are corporately financed (Have, 2015). To conclude, the proposed amendments of the BBV decree turn out to be financially bad news for municipalities. Especially in this recent period of time, which many municipalities use for financial recovery.

3.3 The legal framework compared to the theoretical framework

The GW and the BBV decree are important elements of the Dutch national law. Together they form the legal framework for municipalities according to which the risk management has to take place. This paragraph puts the legal framework in perspective of the principles of 'good' risk management, together with the view on risk management (risk approach vs. network approach) of Bruijn et al. (2014), from the previous chapter. The legal framework is not very strict if it comes to setting clear requirements for risk management, which can be more clearly found in literature in the form of principles of 'good' risk management. However, the legal framework does have implications for risk management in terms of monitoring, communication and control.

Concerning the GW, the Municipal Council sets the framework regarding risk management for the Executive Board according to this law. The Executive Board has to stay within these boundaries while carrying out the risk management policy. This falls under the supervision of the Municipal Council. Thereby both bodies formally hold the responsibility for the risk management policy. In practice municipalities often choose to consolidate their framework and policy regarding risk management in

a memorandum; the memorandum on risk management. This memorandum needs the approval from the Municipal Council. A memorandum on risk management forms the basis for a solid risk management policy for a municipality. Thereby, drafting a memorandum on risk management is an important step towards a successful implementation and the development of risk management in Dutch municipalities. This is also prescribed according to the principles of 'good' risk management (principle 8).

In order to perform its supervising task, the communication towards the Municipal Council regarding risks and the controlling of risks needs to be transparent. Accurate information about used parameters, the risks of land development and the capacity of the financial buffer to cover these risks are underlying to transparent communication. Part of this communication is the duty of the Executive Board to actively inform the Municipal Council, which is partly incorporated in the regular P&C cycle in the form of both the budgetary report and annual accounts. In the light of the principles of 'good' risk management, transparency is also required. Principle 9 requires that decisions are made based on the best available information. According to principle 5, the reporting on aspects such as risks and risk control should take place on a more regular basis than only according to the regular P&C cycle. So regarding the frequency of risk reporting, the requirements derived from the principles of 'good' risk management are stricter than those imposed by the GW.

According to literature, there are some issues that arise from the dualistic structure imposed by the Act for dualism. Kang & Korthals Altes (2014) mention 'grey areas of responsibility' and 'blurred lines of accountability' between the Municipal Council and the Executive Board. Regarding the principles of 'good' risk management, it can be concluded that these issues, which are also related to monitoring and the responsibility for it, negatively contribute to principle 2 and principle 8 and to a lesser extent to principle 9. Therefore, from a risk management perspective, it is questionable whether the dualistic structure arising from the Act for dualism can be considered as positive. Kang & Korthals Altes (2014) also point out that the communication and control within municipalities leaves room for improvement. When land development plans are changed, the Municipal Council often is not informed. On the other hand, "there appears to be a blind trust of the Council that the Executive Board is making sound decisions" (Kang & Korthals Altes, 2014, p. 14) and the Municipal Council often chooses a more 'hands off approach'. As concluded in chapter 2 and by Cozijnsen (2012), the process of communication affects the level of risk management. Without effective and adequate communication regarding risks risk management cannot take place properly.

With respect to the BBV decree, the aim for more transparency and the comparability of documents seems in line with the principles of 'good' risk management. The comparability of documents requires the use of uniform concepts, definitions and parameters. To this end, according to the BBV decree, for municipalities it is mandatory to include a risk section and a section on land policy in their budgetary report and annual accounts. The BBV requirement for uniformity and unambiguity regarding composition and interpretation of documents enters the side of the risk approach. This is based on the advice, coming from the side of the risk approach (Bruijn et al., 2014), to shape structures in such a way that they result in a uniform risk management process. The requirement from the BBV decree that also non-financial information must be included (such as the explanation of goals) in the budgetary report and annual accounts, resulted in a lower financial complexity of both documents. Still, the focus of the BBV decree is for a larger part on improving the financial transparency. Increasing the financial transparency and comparability from a risk management perspective can be considered as positive development. However, due to its financial focus, the BBV decree (including the recently proposed amendments) is very limited on non-financial aspects and risks. Despite the intention of the BBV committee to incorporate non-financial aspects in the BBV decree, both sections on risk management and land policy still seem to have a high financial focus. This might be not entirely inappropriate, since the budgetary report and annual accounts in the end are financially orientated documents. On the other hand, from a risk management perspective can be argued that risk management encompasses more than only financial aspects. It requires more

from a municipality than only the substantiation of the financial resilience to manage their risks. This similar to the conclusion made in chapter 2 and in line with the third requirement of principle 3 (Table 5), which is more on the side of the network approach.

Chapter 4

Application of the legal framework: a municipality scan

In this chapter:

The previous chapter describes the legal framework that sets the context in which risk management within Dutch municipalities takes place. Part of this context are the requirements for municipalities with respect to risk management, following from the GW and the BBV decree adopted in 2004. Furthermore the most relevant recent developments concerning this resolution were discussed. The previous chapter clarifies that these changes have a significant influence on the context in which risk management within Dutch municipalities takes place. This chapter elaborates on the research done to the application of the legal framework by Dutch municipalities. More explicitly, it shows how the influence of the legal framework on risk management comes into manifestation in the annual budgetary and accounting cycle. The first paragraph describes the set-up of the municipality scan. The second paragraph includes the results of the municipality scan. The third paragraph discusses the observations that were done during the desk research as a part of the municipality scan. The corresponding conclusions are presented in the final paragraph.

4.1 Components of the municipality scan

This paragraph elaborates on the municipality scan. First it is explained why the municipality scan is important for this research. I.e. the actual idea behind the scan that forms the research motive. Thereafter the municipality scan is explained in more detail by discussing the data that is used for the scan and the documents to be scanned, i.e. the research object. Finally the selection criteria that are used to generate a list of municipalities are clarified.

4.1.1 Explanation of the municipality scan and its research motive

Insight in how risk management is organized within municipalities and to what extent it is embedded in the organization helps to answer the main research question. Ideally for this would be to know the maturity level of risk management for each municipality. Simply due to the fact that there are currently approximately 400 municipalities in the Netherlands, this seems rather impossible. Furthermore, to obtain the relevant information that is required in order to gain this insight, field research needs to be done. However, before diving into the practical research of a case study it is necessary to know which municipalities seem to be interesting, but above all which seem to be suitable for a case study. To that end, during this research first a municipality scan is conducted. The municipality scan is performed on a selection of municipalities from the total amount of Dutch municipalities. The scan itself is done by means of a desk research. During this desk research, each of the selected municipalities is examined on how explicitly risk management is reflected in terms of reporting. Respectively, subparagraphs 4.1.2 and 4.1.3 elaborate on the research object and the selection criteria in more detail.

Besides providing insight into how the legal framework defined in chapter 3 affects risk management within the selected municipalities, the municipality scan gives more information. The municipality scan also makes it possible to compare between the selected municipalities to which extent risk management is reflected in the reporting of the annual budgetary and accounting cycle. This comparison could give a conservative indication of the maturity level of risk management within

the scanned municipalities, i.e. its adulthood. However, this indication only stands when given in conjunction with the right nuances and without making any hard assumptions or drawing binding conclusions. The indication of the adulthood of risk management is based on the following argumentation. According to the principles of 'good' risk management, one of the requirements of fully integrated and embedded risk management is; that it is reflected in documents that are used for reporting. Of course, by no means this gives complete insight to what extent risk management is organized in municipalities. However, municipalities of which the risk reporting is more consistent with the principles of 'good' risk management are expected to have a more mature form of risk management than municipalities of which the risk reporting is not very consistent with the principles of 'good' risk management.

In the end, the results of the municipality scan can be used for the case selection that is needed for the case study research (chapter 5). Therefore, the municipality scan is a very useful and important part of this research.

4.1.2 Research data and research object

For the municipality scan a total of 17 Dutch municipalities are selected (see subparagraph 4.1.3 for selection criteria and paragraph 4.2 for the list of 17 municipalities). On forehand, the target for the amount of municipalities was set somewhere between 15 and 20 municipalities. By putting a certain limit to the amount of selected municipalities it was possible to keep the research within an acceptable timespan. Thereby, the research time of the municipality was properly adjusted to the final planning of the entire research. Still, a number somewhere between 15 and 20 municipalities is large enough for a quick first impression of the reporting on risk management by Dutch municipalities.

For the selection of the municipalities a spreadsheet containing (financial) data of all current Dutch municipalities over the year 2014 was used. This spreadsheet contained the data that was necessary to make a selection of municipalities for the municipality scan. Important data were the number of inhabitants, the balance sheet total, the invested capital in land and the general reserve for each[7-8] municipality in the Netherlands. Based on these numbers it was possible to compute some of the parameters that were part of the selection criteria of the municipality scan (subparagraph 4.1.3). This dataset was accessible during the period of internship at Deloitte Real Estate.

During the municipality scan, relevant documentation regarding the reporting of municipalities on risk management was incorporated into a desk research. This was done for each of the selected municipalities. As a consequence of conducting the municipality scan by means of a desk research, it was required that the documentation to be scanned was publically accessible. Another very important requirement was that the information derived from the documentation was comparable for the selected municipalities. Therefore documentation that is useable for the municipality scan has to fulfill one other criterion before it can be incorporated into the desk research. It has to reflect the way municipalities periodically report on and are publically accountable for their policy regarding risk management. Including the risk management regarding land development activities. This leads to documentation which is a part of the reporting of the annual budgetary and accounting cycle. Two very important documents with respect to this cycle are the budgetary report and the annual accounts. As explained earlier in chapter 3, the BBV decree obligates Dutch municipalities to include a section on their land policy and a risk section in both reports. At the time this research was conducted, the most actual reporting of the annual budgetary and accounting cycle were the annual

[7] The spreadsheet only shows data over the year 2014. Due to annual (land) mutations among and between municipalities the list of municipalities is updated every year.

[8] Due to a delay in the information supply the numbers of some municipalities were still missing. This did not negatively affect the usability of the data, since the missing numbers were all related to recent mutations and/or very small municipalities that fall beyond the scope of this research.

accounts over 2014. Therefore, the annual accounts over 2014 of the 17 selected municipalities were chosen as the main document of interest for this municipality scan. Thereby, the focus was on both the risk section and the section on land policy. The Documents of secondary interest are the memorandum on risk management and the memorandum on land policy, MPG's and reports of the national audit office. However, these documents were only included if they were explicitly referred to in the annual accounts of the specific municipality. For example, when the annual accounts 2014 of a particular municipality states that the policy regarding risk management is annually updated and reported on in the memorandum on risk management of the particular municipality.

4.1.3 Selection criteria

Table 7 shows an overview of the selection criteria that are used to compose the list of municipalities for the municipality scan. The criteria are sorted from high to low, starting with the most relevant and influential at the top of Table 7. Based on the datasheet provided by Deloitte Real Estate it was possible to compute criteria 5 and 7. Furthermore, the datasheet enabled to categorize municipalities based on their population number, which made the selection process a lot easier.

Table 7 | Selection criteria used for the municipality scan

Criteria	Reason to include
1) Municipalities with a population number > 50.000, including the G32-municipalities[9].	Size of the organization that is considered to be complex enough to fall within the scope of this research.
2) No G4-municipalities[10].	Peculiar organizational complexity due to their size. This brings issues or implementations regarding risk management that are not necessarily applicable in other municipalities, or the other way around.
3) A maximum of two municipalities per province, unless criterion 6*.	To enhance the geographic distribution. Municipalities fall under supervision of the province. Effects of provincial supervision and management may differ for each province.
4) A maximum of one G32-municipality (population > 70.000) per province, unless criterion 6*.	To bring differentiation in the size of municipalities included in the scan.
5) The invested capital in land per inhabitant.	This indicates whether the land agency plays an important role compared to other municipal expenses. A high number indicates a land agency with a significant financial relevance.
6)* Relevant sources or documentation that indicate that risk management is broadly integrated in the municipal organization.	For the purpose of the case study, to increase the chance to find municipalities with risk management that can be typed as integrated.
7) The size of the general reserve as a percentage of the budgetary inventory of land.	For the purpose of the case study. This can be seen as an indicator of the risk profile of a municipality (Deloitte Real Estate, 2014).

The following sections explain the selection criteria of the municipality scan more thoroughly.

[9] G32 stands for "Grotestedenbeleid 32". This network of municipalities consist of members with comparable urban and spatial issues and which are not a member of the G4-municipalities. All current members have a population number bigger than 70.000. This network currently consists of more than 32 municipalities (37). To avoid perplexity and for the sake of consistency regarding the name of this network, the label of "G32-municipalities" has been maintained ever since. In appendix II a list of the current G32-municipalities can be found.

[10] G4 stands for "Grotestedenbeleid 4". This is a network of the four biggest municipalities in terms of population numbers. From large to small these are: Amsterdam, Rotterdam, Den Haag, and Utrecht.

1) Municipalities with a population number > 50.000 (including G32-municipalities[9])

Municipalities in this category vary from small-medium sized to medium-large sized organizations. Thereby making them organizationally complex enough to fall within the scope of this research. Municipalities with a population number < 50.000 are considered small municipalities, in which organizing and embedding risk management differs significantly compared to municipalities with a higher number of inhabitants. For example, in chapter 2 it is discussed that it is more challenging to embed risk management in a larger organization than a smaller one. The reason is that generally the hierarchy in terms of organizational layers and the number of departments increases as the size of the organization increases. The same goes for municipalities. On the contrary, larger municipalities generally have more financial resources and labor capacity compared to smaller municipalities. Because this criterion makes a coarse distinction it is considered as the starting point of the selection process. In the category of municipalities with more than 50.000 inhabitants a further distinction can be made between G32-municipalities and municipalities with a population number between 50.000 – 70.000 inhabitants. All G32-municipalities have more than 70.000 inhabitants.

2) No G4-municipalities[10]

The very large G4-municipalities are excluded from the selection process due to their size and peculiarly organizational complexity. Organizational aspects and issues regarding the implementation and organization of risk management that are typical for such large and complex organizations might not be found in smaller municipalities. Some of these aspects are in line with the organizational complexity that earlier gave reason to exclude (very) small municipalities. Furthermore, this peculiar organizational complexity comes to expression in the general size of departments, the availability of all kinds of resources, the extensiveness of a risk management policy or the fact that work is done by a whole department instead of by one or two persons. This particular organizational complexity makes it that the G4-municipalities are excluded from the list of selected municipalities for the municipality scan.

3) A maximum of two municipalities per province (unless criterion 6*)

To secure the geographic distribution in the list of selected municipalities, a maximum of two municipalities per province is maintained. The main reason to maintain this criterion is that Dutch municipalities fall under the supervision of a province. Because not every provincial organization is exactly the same, as concluded in paragraph 3.1 of chapter 3, it might be that the effects of provincial supervision and guidance on financial and risk management issues differ per province, or even per municipality. The aim is to keep a maximum of two municipalities per province. However, the overall geographic distribution is not disordered when adding one or two municipalities to the list results in a exceeding of this maximum for a particular province. Therefore, with appropriate degree this criterion can be overruled by criterion 6*.

4) A maximum of one G32-municipality (population > 70.000) per province (unless criterion 6*)

Municipalities differ in their size in terms of organization and population number. In general the size of the municipal organization and its complexity increases as the population number increases. Hence, a municipality with 100.000 inhabitants brings more and other societal, organizational and political issues than a municipality with 50.000 inhabitants. This requires more from the municipal organization in terms of management and coordination. Also as discussed earlier, the size of an organization influences the way risk management is organized and executed. To ensure that there is enough differentiation in the size of municipalities that are selected for the municipality scan a maximum of only one G32-municipality is maintained. In the end, this differentiation in size influences the applicability of the findings resulting from this research. With respect to the exceeding of this maximum, the same holds for this criterion as for criterion 3. The composition of the list of selected municipalities sorted by their size is not disordered when there would be one particular

province from which two G32-municipalities are selected. Therefore, also this criterion can be overruled by criterion 6*.

5) Invested capital in land per inhabitant

Since the research field of this research is related to land development it is relevant to know whether there is a significant activity in terms of land development projects. A good indicator for this would be to look at the financial size of the land agency as a percentage of the total balance. However, each municipality interprets the accounting rules differently, which results in municipalities having their own specific methods and calculations when it comes to accounting. This makes this indicator less suitable to compare the actual financial size of land agencies by means of this indicator. Therefore, another more transparent indicator is chosen. Municipalities are now selected based on their amount of invested capital in land per inhabitant. The choice for this indicator is based on the advice of experts from Deloitte Real Estate. Despite that it does not show the actual size of a municipality's land agency, it still gives an indication of the relative importance of land development between municipalities. Therefore, it is an appropriate indicator to determine whether land development in a particular municipality is significant or not. It needs no further explanation that a higher amount of invested capital per inhabitant means a higher significance of land development. In appendix III, the invested capital in land per inhabitant for each selected municipality can be found.

6)* *Relevant sources that imply a broadly integrated risk management process*

Based on relevant sources or interesting documentation regarding risk management, municipalities can be added to the list. This is only done based on sources or documentation that specifically indicate that risk management within a particular municipality is well-embedded in the organization. As a result, it might be that criteria 3 or 4 are not met for one or two provinces, or that criterion 5 is not as high as possible for a particular municipality. This is done for the purpose of the case study. Because it is expected that it is more difficult to find municipalities with risk management in the integrated-stage (chapter 2, subparagraph 2.5.2) before the municipality scan is actually conducted. However, for the case study it is important that at least two municipalities with risk management in the integrated-stage are selected. Adding municipalities to the municipality scan based on this more softer criterion enhances the possibility that municipalities with integrated risk management are actually found. It is important to note explicitly that these municipalities are added to the list. Thereby, they do not occupy a place on the list that otherwise would be reserved for another municipality.

7) The size of the general reserve as a percentage of the budgetary inventory of land

An indicator that specifically shows the risk profile of a municipality is the size of the general reserve as a percentage of the budgetary inventory of land (Deloitte Real Estate, 2014). This indicator is not very strictly maintained because it is added for the purpose of the case study. Actually, the indicator becomes more relevant later on, during the selection process of the four municipalities for the case study. Therefore, its relevance for the selection of municipalities for the municipality scan is limited. The idea behind this is that it might be interesting to select municipalities for the case study with a risk profile as high as possible. In this case, a lower number represents a higher risk profile. The exact risk profile for each selected municipality can be found in appendix III.

4.2 Results of the municipality scan

In this paragraph first the results of the municipality scan are discussed. The results are presented by means of a comparison table. The second subparagraph discusses how these results can be interpret.

4.2.1 Results

Based on the selection criteria from the previous paragraph, the following municipalities are selected for the municipality scan:

Table 8 | Selected municipalities for the municipality scan

Nr.	Municipality	Province	G32
1.	Lansingerland	Zuid-Holland	-
2.	Westland	Zuid-Holland	-
3.	Barneveld	Gelderland	-
4.	Almere	Flevoland	G32
5.	Nijmegen	Gelderland	G32
6.	Kampen	Overijssel	-
7.	Leeuwarden	Friesland	G32
8.	Almelo	Overijssel	G32
9.	Heerhugowaard	Noord-Holland	-
10.	Helmond	Noord-Brabant	G32
11.	Haarlemmermeer	Noord-Holland	G32
12.	Assen	Drenthe	-
13.	Groningen	Groningen	G32
14.	Bergen op Zoom	Noord-Brabant	-
15.	Amersfoort	Utrecht	G32
16.	Deventer*	Overijssel	G32
17.	Dordrecht*	Zuid-Holland	G32

Table 8 only provides the list of municipalities selected for the municipality scan. In appendix III the exact results with respect to the selection criteria can be found for each municipality. For each of the 17 selected municipalities relevant documents used in the annual budgetary and accounting cycle were incorporated into a desk research. During this desk research all these documents were scanned. Which documents are considered relevant and why is explained in the previous paragraph. Initially, the list included only 15 municipalities. Based on criterion 6* (subparagraph 4.1.3) the municipalities of Deventer and Dordrecht were added to this list. Conclusions from a research done by Tjerk Budding, professor at the VU University of Amsterdam, gave occasion to add both municipalities. In a news item reporting on these conclusions (Binnenlands bestuur, 2015), the municipalities of Dordrecht, Deventer and Haarlem are explicitly mentioned as good examples of risk reporting. They were referred to as municipalities that succeeded in reporting sound and transparently on risks in their annual accounts and budgetary reports. In order to investigate these conclusions, two out of the three mentioned municipalities were added to the list in Table 8. The municipality of Haarlem was not added to the list because the invested capital in land per inhabitant was too low to be relevant for this research.

The results of the desk research as a part of the municipality scan are presented in a comparison table (Table 9). This table gives a quick overview to which extent risk management in the 17 selected municipalities is reflected in the reporting of the annual budgetary and accounting cycle. The

comparison table includes the nine identified principles of ‘good’ risk management from paragraph 2.5 in the most left column. Initially, the starting point of the desk research is to look for the 17 selected municipalities how the principles of ‘good’ risk management are expressed in the reporting of the annual budgetary and accounting cycle. Mainly by scanning risk sections and sections on land policy of annual accounts over 2014. The scanning was focused on finding requirements that contribute to the principles of ‘good’ risk management. These are the same requirements as presented in paragraph 2.5. As discussed in paragraph 2.5, every principle has several requirements which, when they are met, contribute to that particular principle of ‘good’ risk management. During the desk research it was found that some of the requirements were actually not very suitable. The reason is that some of the requirements simply cannot be answered by scanning annual accounts. The set-up of the municipality scan is to provide a quick overview by means of questions that are related to the requirements. These questions should be to be easy to answer by ‘yes’ or ‘no’. However, this is not possible for all requirements. A good example of a requirement that is hard to answer by only ‘yes’ or ‘no’ is the one that says that all relevant stakeholders from all levels of the organization should be appropriate and timely involved, which belongs to principle 9 (paragraph 2.5). Due to this difficulty, not all requirements are reflected in the comparison table (Table 9). Instead, only those requirements that are suitable and easy to answer are used during the desk research. These requirements are included in the second most left column of the comparison table in the form of a question. For each question/requirement is indicated to which principle of ‘good’ risk management it contributes.

Finally, the problem that not every requirement was suitable for the desk research lies in the extension of what was concluded earlier in subparagraph 2.5.2. Namely, that the list of principles of ‘good’ risk management itself is too comprehensive. For a municipality, it is neither feasible nor manageable to fulfill them all.

Table 9 | Overview of the results from the municipality scan in a comparison table

Principle	Includes	Gemeente	Almere	Amersfoort	Assen	Barneveld	Bergen op Zoom	Deventer	Dordrecht	Westland	Haarlemmermeer
1) Fully integrated & embedded risk management	Actions to incorporate risk management organization wide?		No	Yes	Yes	Yes	Yes	Yes	Yes	No	No
	Is a method or approach used for risk management?		Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
2) Adequate monitoring of risk	Clearly stated who is responsible for monitoring?		No	No	No	No	No	No	No	Yes	Yes
3) Structured risk management	Is there a risk inventarization?		Yes, structured	Yes, structured	Yes, structured	Yes, modest	Yes, structured	Yes, structured	Yes, modest	Yes, modest	Yes, structured
	Distinction of project and portfolio level?		No	No	Yes	No	No	No	Yes	No	No
	Are there concrete measures for control, linked to risks?		Yes, concrete	No	Yes, simplistic	No	Yes, simplistic	Yes, simplistic	Yes, simplistic	Yes, simplistic	No
	Distinction between quantitative and qualitative risks?		No	No	Yes	No	Yes	Yes	Yes	No	No
4) Systematic risk management	Distinction between 3 risk categories?		Different	Different	Yes	No	No	Different	Different	No	No
	Does scenario thinking or analysis takes place?		No	No	No	No	No	No	No	Yes	No
5) Dynamic risk management	Contious cyclical process of risk management?		No	Yes	Yes	No	Yes	Yes	Yes	No	Yes
	Reporting on risks, control, evaluation beyond P&C cycle?		Modest	Yes	No	Modest	Yes	No	Modest	Modest	No
6) Monitoring & evaluation?	Monitoring and evaluation are part of the RM process?		No	Yes	Yes	No	Yes	Modest	Yes	Modest	Yes
7) Risk management is tailor made and organizationally specific	Is risk management regarded as a learning process?		No	Yes	Yes	Yes	Yes	Yes	Yes	No	No
	Are human and cultural factors taken into account?		Yes	Yes	No	No	No	Yes	Yes	No	No
8) Risk management is well-founded in the organization	Prioritization of risks and projects?		Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
	Clearly stated who is responsible for risk management?		Yes	No	Yes	Yes	No	Yes	Yes	No	Yes
	Are risks connected to the organizations' objectives?		No	Yes	Modest	Yes	Yes	Yes	Yes	Yes	Yes
	Existing risk management statement/policy document?		No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9) Risk management is transparent	Uniform way of reporting?		No	Yes	No	No	Yes	Yes	Yes	No	No
Other	Form of land policy?		Mixed form	Mixed form	Facilitating	Active	Mixed form	Facilitating	Mixed form	Mixed form	Active
	Available resistance capacity sufficient?		Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
	Report on risk management of national audit office?		No	No	No	No	Yes	Yes	Yes	No	No
Adulthood of risk management	Stage of risk management		No/informal	Partially integrated - Integrated	Partially integrated - Integrated	No/informal	Partially integrated - Integrated	Integrated	Integrated	Partially Integrated	Partially Integrated

Principle	Includes	Gemeente	Nijmegen	Heerhugowaard	Kampen	Lansingerland	Leeuwarden	Almelo	Helmond	Groningen
1) Fully integrated & embedded risk management	Actions to incorporate risk management organization wide?		Yes	No	No	No	No	No	No	Yes
	Is a method or approach used for risk management?		Yes	No	No	Yes	Yes	No	No	Yes
2) Adequate monitoring of risk	Clearly stated who is responsible for monitoring?		Yes	No	No	No	Yes	No	No	No
3) Structured risk management	Is there a risk inventarization?		Yes, structured	Yes, modest	Yes, structured	Yes, modest	Yes, structured	Yes, structured	Yes, modest	Yes, structured
	Distinction of project and portfolio level?		Yes	No	No	No	No	No	Yes	No
	Are there concrete measures for control, linked to risks?		Yes, simplistic	No	Yes, simplistic	No	Yes, concrete	Yes, concrete	No	Yes, concrete
	Distinction between quantitative and qualitative risks?		Yes	No	Yes	No	No	Yes	No	No
4) Systematic risk management	Distinction between 3 risk categories?		Different	No	Different	No	Different	Different	Different	Different
	Does scenario thinking or analysis takes place?		No	Yes	No	No	No	No	No	No
5) Dynamic risk management	Contious cyclical process of risk management?		Yes	No	No	No	Yes	No	No	Yes
	Reporting on risks, control, evaluation beyond P&C cycle?		Yes	No	No	No	No	No	No	Modest
6) Monitoring & evaluation?	Monitoring and evaluation are part of the RM process?		Yes	No	No	No	Modest	Modest	No	Modest
7) Risk management is tailor made and organizationally specific	Is risk management regarded as a learning process?		Yes	No	No	No	No	No	No	No
	Are human and cultural factors taken into account?		Yes	No	No	No	No	Yes	No	No
8) Risk management is well-founded in the organization	Prioritization of risks and projects?		Yes	No	Yes	No	No	Yes	Yes	Yes
	Clearly stated who is responsible for risk management?		Yes	No	No	No	Yes	No	No	No
	Are risks connected to the organizations' objectives?		Modest	No	No	No	Yes	No	No	Yes
	Existing risk management statement/policy document?		Yes	No	Yes	Yes	No	Yes	No	Yes
9) Risk management is transparent	Uniform way of reporting?		No	No	No	No	No	No	No	No
Other	Form of land policy?		Mixed form	Mixed form	Mixed form	Active	Active	Facilitating	Mixed form	Active
	Available resistance capacity sufficient?		No	Yes	No	No	Yes	No	Yes	No
	Report on risk management of national audit office?		No	No	Yes	Yes	Yes	No	No	No
Adulthood of risk management	Stage of risk management		Integrated	No/informal	No/informal	No/informal	Partially integrated	Partially integrated	No/informal	Partially integrated

The comparison table makes it possible to compare between the selected municipalities to which extent risk management is reflected in the reporting of the annual budgetary and accounting cycle. The score of each municipality on the requirements and corresponding principles is linked to a maturity level (i.e. stage of adulthood) or risk management. The different stages of adulthood are introduced in chapter 2 (subparagraph 2.5.2). Note that these findings are based on the expression derived from the municipality scan, which means that this is not necessarily the actual situation. Initially, in chapter 2 three maturity levels of risk management were identified (Tekir, 2012). However, after the desk research was done, it appeared that not every municipality matched with one of the levels. This problem mainly was related to the "Partially integrated" level. Municipalities with a more developed form of risk management, causing them to be mismatched if placed in the category "No/Informal", but lack a certain degree of adulthood to put them under the category "Integrated", automatically fall in the category "Partially integrated". Results of the municipality scan showed significantly better scores on the requirements for the municipalities Amersfoort, Assen and Bergen op Zoom compared to other municipalities in this category. However, placing them in the "Integrated" category would give a false impression and expectation. Therefore, a fourth category is added. Based on the desk research and with an appropriate subtlety towards the interpretation of the results, this category represents municipalities with a maturity level regarding risk management that falls somewhere in between "Partially integrated" and "Integrated". It is expected that municipalities in the "Integrated" category are more risk aware than other municipalities. Municipalities that fall somewhere in between "Partially integrated" and "Integrated" are expected to be in a process towards being more risk aware. Table 10 below shows for each of the 17 selected municipalities the expected maturity level regarding their risk management, based on how risk management is reflected in the reporting of the annual budgetary and accounting cycle. Note that this is only a first indication and that it does not necessarily reflects the actual situation.

Table 10 | Expected maturity level per municipality

No/Informal	Partially integrated	Between partially integrated and Integrated	Integrated
Almere	Westland	Amersfoort	Deventer
Barneveld	Haarlemmermeer	Assen	Dordrecht
Heerhugowaard	Leeuwarden	Bergen op Zoom	Nijmegen
Kampen	Almelo		
Lansingerland	Groningen		
Helmond			

According to the results of the municipality scan, only three of the 17 municipalities are expected to be fully risk aware, or somewhere close. Furthermore, three others are expected to be somewhere in the process of growing towards risk awareness. For the remaining other 11 municipalities it is expected that their risk management is not very integrated in the municipal organization. To a greater extent this goes for the six municipalities that are in the "No/Informal" category. The result that most of the municipalities are expected to have a less far developed risk management process corresponds with the overall impression previously outlined in chapter 1 & 2. Namely, that there is still room for improvement when it comes to the risk management in municipalities and their land agencies.

4.2.2 Interpretation of the results

Before drawing the conclusions it is important to know how to deal with the results from the previous subparagraph. The results from the municipalities are considered to be an indicator of the maturity level of risk management within the scanned municipalities. Still, the results of the

municipality scan cannot be interpreted in a proper way without due caution. That is to say, without making any hard assumptions or drawing binding conclusions. Therefore, regarding the results of the municipality scan, the following nuances and remarks have to be taken into account.

First of all, the municipality scan is supposed to give a first impression of how risk management is reflected in the risk reporting of municipalities in the annual budgetary and accounting cycle. This first impression does not necessarily reflect the actual degree to which risk management is integrated into the municipal organization of the selected municipalities. Nor does it completely represent how risk management processes are organized within these municipalities. It does however provide a first indication of the reporting of the selected municipalities on risk management and allows for a comparison between these municipalities. To this first indication one could carefully link a suspicion, or at the most, an expectation. Carefully, because expectations could turn out to be false. In fact, a municipality can have a far more advanced risk management process, can be much more risk aware or risk management is more thoroughly integrated into the organization than expressed in the results of the municipality scan. Therefore, the impression given by the results of the municipality scan does not always corresponds to the actual situation.

Another reason why the results in Table 9 cannot be used to judge on the actual degree of risk management of the selected municipalities is that it is not clear how the principles and their requirements are weighted against each other. Actually, weighing them seems rather difficult. This is illustrated by the following example. Consider a municipality that only fulfills a few requirements (requirements answered with 'yes' in Table 9), for example the municipality of Lansingerland. It might be the case that Lansingerland excels on those aspects compared to other municipalities with more fulfilled requirements. How exactly the quality of risk management in Lansingerland relates to the quality of risk management in other municipalities is not to say. Still, it would seem somewhat premature to consider that the quality of risk management in Lansingerland is lower than in other municipalities. For this reason, it is not desirable to put a weight on each of the principles and their requirements. The purpose of the municipality scan, explained in the previous subparagraph, also makes that it is unnecessarily to do so.

Finally, as a general remark, one has to keep in mind that risk management can be a though and complex exercise. Estimating risks (quantitatively and qualitatively), but also controlling and communicating them is not always straightforward. Especially not in an organization such as a municipality, containing many different departments and hierarchical layers, all with their own perceptions, interests and knowledge.

With respect to the dataset provided by Deloitte Real Estate, it has to be notified that its interpretation needs to be done with care. Each municipality interprets the accounting rules differently, leading to methods and calculations which sometimes are specific for one municipality. The consequence is that numbers cannot always be interpreted or used in the same way. This is the reason why the comparing of the financial size of a municipal land agency to the total balance, which was considered to be a correct indicator in advance, was reconsidered later. It turned out to be that the invested capital in land per inhabitant was a better indicator because these numbers are been established equally for each municipality.

4.3 Observations from the desk research

The observations that were done during the desk research are reflected in the light of the theoretical framework (chapter 2) and the legal framework (chapter 3) in respectively the subparagraphs 4.3.1 and 4.3.2.

4.3.1 Observations related to the theoretical framework

During the municipality scan it was found that municipalities do not use a uniform categorization of risks. In their documentation municipalities use multiple types or categorizations to group risks. This holds for different documents, for example annual accounts and a memorandum on risk management, as well as it holds for one and the same document. This raises a lot of perplexity. In order to make risk management more uniform, according to the risk approach (chapter 2) more consistency regarding this aspect is desirable. Also according to the principles of 'good' risk management a uniform and consistent categorization of risks is one of the requirements of systematic risk management. From this perspective municipalities are suggested to categorize risks in organizational, project and external risks.

Somewhat in line with the first observation is the observation that in general there is no clear distinction between general risks and risks concerning the land agency. The reason for this is that some risks that apply to the municipal organization as a whole also apply to the land agency. Vice versa, risks concerning the land agency are risks that concern the municipal organization. In the annual accounts it is not always clear in which light the risks are mentioned. Are they dealt with by the land agency or by the municipal organization as a whole? Again, more consistency would make this distinction more clear. For example, by explicitly linking the risk to a risk category and whether a risk specifically concerns the land agency, the municipal organization as a whole or both.

Another observation is the absence of particular non-quantifiable risks. The comparison table shows that most of the annual accounts of municipalities do not distinguish between qualitative and quantitative risks. Some annual accounts even seem to completely disregard qualitative risks. This holds in particular for political risks and risks that jeopardize the municipality's image. In case of political risks, it might be very well that municipalities are cautious to mention them in reports that are publically accessible. Something for which they have a very grounded reason. It might be that municipalities consider that annual accounts are not the right place to elaborate on non-quantifiable risks, or that it is not in their mindset to do so. The general absence of qualitative risks is inconsistent with the third principle of 'good' risk management (Table 5). Furthermore, throughout this thesis the importance of assessing risks both in a qualitative and a quantitative way is emphasized. Taking into account qualitative risks better suits the network approach, because it involves aspects such as political, cultural and strategic.

Finally, during the scanning of the annual accounts a lot of aspects regarding risk management remain unclear or, are only mentioned superficially without any follow-up. For example, some municipalities mention in their annual accounts that they link measures for control to every identified risk. However, this is not expressed in the risk section nor in the section on land policy of the annual accounts. This seems notable, because in most literature corresponding measures for control to the identified risks is an important step that is clearly described. The same holds for mentioning that risk identification, analysis or control are done, but are not explicitly stated in the annual accounts. One can imagine that, making every aspect very clear by explicitly stating it or going into depth costs a lot of time, or makes a risk section very though to read quickly. However, some municipalities manage to be more explicit on risk management aspects than others. Thereby it can be concluded that there is room for improvement regarding the reporting on risk management. Due to time issues it also is expected that some municipalities in the field of risk management are actually far more advanced than expressed in the municipality scan. As indicated in chapter 1, it falls within the scope of this research to find aspects regarding risk management from which municipalities can learn from each other.

4.3.2 Observations related to the legal framework

Municipalities use different definitions for 'financial resilience' and 'available resistance capacity'. For a greater part this is due to the freedom of interpretation that the BBV decree provides for the concept 'financial resilience' (chapter 3, subparagraph 3.2.2.). Furthermore, often both terms 'financial resilience' and 'available resistance' capacity are replaced by each other, which leads to more perplexity. This observation is in line with the conclusion drawn by IJland (2013) (see chapter 2, subparagraph 2.3.3.). The result of this freedom of interpretation seems inconsistent with the requirement of the BBV decree that budgetary report and annual accounts are uniform and unambiguous in their interpretation (subparagraph 3.2.2) and the aim of the BBV decree to make municipal documents more comparable (paragraph 3.2.1).

Municipalities also use the risk section mainly to substantiate the financial resilience. The argumentation of why a particular parameter of a certain risk is chosen that way remains absent in most annual accounts. As a general result risks are very poorly substantiated throughout the larger part of the annual accounts that were used in the desk research of the municipality scan. According to Tekir (2012) and others (Have et al., 2007; IJland, 2013), the observation that municipalities use the risk section only to substantiate the financial resilience seems not uncommon. Due to the obligation enforced by the BBV decree, municipalities are obliged to include a risk section and a section on their land policy in their budgetary report and annual accounts. With regard to what is required to be included in this section according to the BBV decree (chapter 3, subparagraph 3.2.2), it is very understandable that municipalities use the risk section mainly to substantiate the financial resilience. The result is that often municipalities include no more than that.

4.4 Conclusion

The requirements and implications from the BBV decree seem not too complicated for municipalities to meet. The aspects that should be included in the risk section according to the BBV decree are clearly described for municipalities and appear to be quite straightforward. During the desk research no indications were found that municipalities were having trouble meeting the requirements from the BBV decree. By explicitly giving municipalities certain degrees of freedom regarding the choosing of their own definitions of 'financial resilience' and 'risk' (subparagraph 3.2.2), the BBV decree lowers the chance over-controlling. Thereby avoiding that municipalities getting trapped in the paradox of control (Bruijn et al., 2014). On the other hand, the results of this freedom of interpretation in some cases lead to inconsistency with the BBV requirements of uniformity and unambiguity, because it resulted in municipalities using different definitions for 'financial resilience'.

The BBV decree only prescribes what must be included in both the risk section and the section on land policy. This leaves municipalities free in their choice when it comes to other aspects, such as adding extra relevant information and the way information is presented. This freedom resulted in a great difference between municipalities in their reporting on risks. This varies from simple aspects as length and layout to how explicit municipalities are in mentioning risks, linking measures for control to these risks and having a clear policy on risk management. Due to the difference in reporting on risks it is expected that municipalities can learn from each other when it comes to risk reporting, but also when it comes to risk management in practice.

Finally, it was found during the desk research that municipalities use the risk section mainly to substantiate the financial resilience. This can be seen as a result of municipalities interpreting the rules coming from the BBV decree, considering what has to be included in a risk section. This financial focus impairs to some of the principles of 'good' risk management.

In the end it remains a matter of how things are reported. Comprehensive reporting is not the same as good risk management. A municipality can be very comprehensive in its reporting on risk management. This does not necessarily mean that this policy is also carried out. To find out how risk management comes to expression and to what extent it is embedded in the organization, more research needs to be done. A case study, in which employees that deal a lot with risk management

in their daily work are interviewed, could give more insight in the organization of risk management in municipalities. For the purpose of this case study, two selection criteria are added to the total list of selection criteria of the municipality scan. According to the first (criteria 6. in the total list, sub paragraph 4.1.3) the municipalities of Dordrecht and Deventer can be interesting for a case study. Since these municipalities are considered to be examples of sound and transparent risk reporting (Binnenlands bestuur, 2015), it might be interesting to do research in practice in order to see whether or not this comes to expression in how risk management is embedded in the organization.

The second criteria that was added for the purpose of a case study (criteria 7 in the total list, sub paragraph 4.1.3) is an indicator that reflects the risk profile of a municipality. Namely, the size of the general reserve as a percentage of the budgetary inventory of land. Regarding risk management, municipalities with a relatively high risk profile compared to other municipalities are interesting subjects for a case study.

Chapter 5

Case study research

In this chapter:

In the previous chapter, a municipality scan was used to determine the maturity level of risk reporting in 17 selected municipalities. This maturity level was based on principles of 'good' risk management that came to expression in P&C-documents of the selected municipalities. According to this maturity level, municipalities are expected to be more, or less mature in the field of risk management compared to other selected municipalities. Based on the expected level of maturity and on two other criteria discussed in this chapter, four municipalities from the municipality scan are selected for a case study in practice. Together they form the case study research of this research. Among other things, the case study research provides insight in whether or not the expected maturity level of risk management in municipalities, derived from the results of the municipality scan, is representative when compared to the situation in practice.

Paragraph 5.1 outlines the design of the case study research and its research motive. Subsequently, paragraph 5.2 describes the selection process of the municipalities for the case study research. The findings derived from the case study interviews are presented for each selected municipality in paragraph 5.3. Finally, paragraph 5.4 discusses how the case study results are used in the next chapter.

5.1 Case study design

This paragraph focuses on the research motive and the design of the case study research.

5.1.1 Research motive

Before going deeper into the case studies, a short recap is provided of the research up to this point. The recap will introduce the research motive for the case studies.

In chapter 1 it was found that, in order to overcome the problem statement, more practical knowledge is required on how risk management is structured, organized and embedded in Dutch municipalities. This problem statement resulted in a main research question, which in turn was divided into seven subquestions. The first, second and third subquestion are respectively answered in chapter 2, 3 and 4. The research conducted until this point can be summarized as follows. First, the theoretical framework for risk management was established. This framework consists of the identified principles of 'good' risk management with respect to land development and the two perspectives on risk management, the risk approach and the network approach. Part of the theoretical framework is also the RISMAN method, which is used to give more substance to the risk approach. Second, the implications for risk management coming from the legal framework are determined. These implications are derived from Dutch national law. The legal framework consists of the GW and the BBV decree. Finally, a municipality scan is conducted to explore how the legal framework affects risk management of land development activities in 17 selected municipalities. By means of a desk research it is explored how risk management comes to expression in terms of reporting in these municipalities. The municipality scan resulted in 17 municipalities that were categorized in maturity levels of risk management.

As concluded in the end of the previous chapter, it is not possible to conclude how mature risk management actually is in those 17 selected municipalities, based on solely the reporting on risk management. There might be reasons, or particular circumstances, why the reporting on risk management does not reflect the actual level of risk management within a municipality. For this purpose, the municipality scan alone does not provide enough and also not the right information. There is an actual chance that the expectations coming from the results of the municipality scan require some nuance. However, this nuance can only be made based on knowledge of how risk management is embedded in municipalities. To find out how risk management is embedded in the municipal organization requires insight in and understanding of the actual situation in municipalities. For this purpose, a case study can be a helpful research method. A case study research provides the opportunity to do in-depth research, thereby exploring possible nuances that need to be made regarding the maturity level of risk management in municipalities. The case study research forms an important part of this research because it helps to answer subquestions 4, 5 and 6. The insights gained from the case studies contain valuable information, which can be used to answer these subquestions. This information contains the following aspects:

- Regarding subquestion 4, with the insights from the case study research it is possible to determine whether or not the current risk management of land development activities in municipalities is consistent with the principles of 'good' risk management.
- Regarding subquestions 5 and with respect to risk management of land development activities, the case study research identifies areas of concern and learning points that municipalities can learn from other municipalities.
- Regarding subquestion 6, the case study research provides insight in what aspects encourage and what aspects hinder the successful implementation of measures to improve risk management in municipalities.

Finally, with the insights obtained from the case study research, it becomes possible to point out the feasible and manageable elements of the principles of 'good' risk management for municipalities. In chapter 2 and 4 it was concluded that the list of principles of 'good' risk management is not workable for municipalities, because it is too comprehensive. However, if it is possible to indicate which elements of 'good' risk management are workable for municipalities, these elements can be included in the conceptual design. Therefore, the case study research is an important step in working towards a conceptual design for improving risk management of land development activities in municipalities.

5.1.2 Design

Each of the four case studies is based on two interviews. The interviews were held with staff members of the selected municipalities that play a key role in the risk management process. In chapter 2 three levels on which land development risks can occur were distinguished; the project, the portfolio and the program level. During the period of internship at Deloitte Real Estate it was found that in practice risk management on the portfolio and on the program level often is placed with the same person or staff group. Therefore, for the case studies interviews the portfolio and the program level are integrated. As a consequence, at each of the four municipalities a staff member on the project level and a staff member on the portfolio level are interviewed. The interview on the project level is mainly about risk management of particular land development projects. The interview on the portfolio level is focused on risk management on the concern level of the municipal organization. Besides risk management at the organizational level, this includes also risk management of land development projects, only then from a macroeconomic perspective. Based on the opinion of experts working at Deloitte Real Estate, staff members in the function of project manager, planning economist and concern controller are considered to be key persons in the municipal organization when it comes to risk management of land development projects. On the portfolio level, the same holds for staff members with functions that are related to the financial resilience, land affairs, real estate and financial advice regarding area development. In each of the

four case studies staff members are interviewed with functions similar as mentioned above, or somewhere close to these functions. Depending on the situation, both interviews with staff members on the project and on the portfolio level are combined in the same interview.

The focus of the questionnaire depends on whether a particular staff member is from the project or the portfolio level. For both levels different questionnaires are composed. The questionnaires are mainly based on aspects derived from the principles of 'good' risk management. This is related to subquestion 4, which aims to find out whether or not risk management of land development activities in municipalities is consistent with the principles of 'good' risk management. Using the principles of 'good' risk management as a starting point to compose the questionnaires provides more insight in whether the actual risk management process in municipalities is in line with the principles of 'good' risk management. Furthermore, the questionnaires cover aspects that can be related to the legal framework described in chapter 3. Such as whether or not the changes imposed by the recent amendment of the BBV decree are applicable and workable for municipalities.

In chapter 1 it was pointed out that the questionnaire must be composed carefully, otherwise it might lower the quality of the information. A lower quality of information means that the results of the interview will be less useable. The quality of information depends on the willingness of the respondent to share information. The type of questions and the way they are inquired are of great influence to this. A question that is inquired in the wrong way might bring a respondent out of his comfort zone. In order to reduce the possibility that respondents will be unwilling to share relevant information and to enhance the quality of the questionnaire, first the questionnaires were evaluated by experts. These are experts experienced in conducting interviews as well as experts that have experience in working with or at municipalities and in the field of land development. In appendix IV all the experts consulted for this research are listed.

5.2 Case study selection

This paragraph describes the selection of the municipalities for a case study. Given the degree of confidentiality of certain information, the findings of the four case studies are made anonymous. This ensures that the findings of a case study interview cannot be directly attributed to a single municipality. As a consequence the exact steps taken during selection process are not described extensively because otherwise this could harm the reputation of a particular municipality.

For the case study research, only four out of the 17 municipalities from the municipality scan are selected for a case study. Four municipalities, because that is a feasible number in proportion with the amount of time available for this research.

In chapter 1 it was argued that municipalities can learn from other municipalities when it comes to risk management of land development activities. This is reflected in subquestion 5. It is expected that municipalities can learn from both municipalities in which risk management seems less far embedded (areas of concern) and municipalities that seem to have a far more advanced risk management process compared to other municipalities (learning points). The selection of a particular municipality is based on the results of the municipality scan (chapter 4). The results of the municipality scan are presented in Table 9 (p. 53). This table shows for the 17 selected municipalities the expected maturity level of risk management, based on how risk management was reflected in the reporting of the annual budgetary and accounting cycle. In order to answer subquestion 5, from the four selected municipalities for a case study, two municipalities are selected from the category that includes municipalities with the highest expected maturity level of risk management, which is from the "Integrated" category. Because of the highest expected maturity level, municipalities in the "Integrated" category are expected to be the closest to fully risk awareness. For this research it is assumed that most of the learning points can be found in municipalities that are closest to be fully risk aware. Therefore two municipalities are selected from the "Integrated" category.

For the remaining two municipalities the same argumentation holds as described above, only now it concerns municipalities that, according to the results of the municipality scan, are

expected to have a less far developed risk management process. These are the municipalities that, in Table 10, are listed under the "No/Informal" category. It is expected that the municipalities with the most areas of concern can be found in this category.

In chapter 4 it was found that the size of the organization influences the way risk management is organized. To enhance the differentiation in size of municipalities, from each category one G32-municipality and one municipality with a population number between 50.000 – 70.000 inhabitants (hereafter medium-sized municipality) are selected. However, for the "Integrated" category this is not possible because the municipalities in this category are all G32-municipalities. Therefore, the medium-sized municipality is selected from the category "Between partially integrated and integrated".

In subparagraph 4.1.3 the selection criteria for the municipality scan were listed. One of the criteria that was added was the risk profile of a municipality. For the selection of municipalities for a case study, the aim was to select municipalities with a risk profile as high as possible. This because, with respect to risk management, municipalities with a higher risk profile are expected to be more interesting for a case study. Appendix III shows for each of the 17 municipalities from the municipality scan the exact risk profile.

Other aspects that played a role in the selection procedure were reachability and accessibility. Reachability terms of travelling time. Accessibility in terms of how easy contact with a municipality was made via the client portfolio of Deloitte Real Estate.

5.3 Results of the case study research

In this paragraph the results of the four case studies are presented. Each subparagraph covers one case study. For each case study the most important findings and results from the interview report are discussed. The findings are sorted by discussion topic. A full report of each of the four case study interviews is enclosed in appendix V. As mentioned in the previous paragraph, the results of the case studies are anonymised. The municipalities included in the case study research are selected from Table 10. The selected municipalities for the case study research are:

- Municipality A, which is a G32-municipality selected from the category "No/Informal".
- Municipality B, which is a municipality with a population between 50.000 – 70.000 selected from the category "No/Informal".
- Municipality C, which is a G32-municipality selected from the category "Integrated".
- Municipality D, which is a municipality with a population between 50.000 – 70.000 selected from the category "Between partially integrated and integrated".

5.3.1 Case study 1: Municipality A

Municipality A is a G32-municipality selected from the category "No/Informal". Based on the results of the municipality scan, this municipality is expected to have a less mature risk management process according to the principles of 'good' risk management compared to other municipalities. Also municipality A is expected to have a relatively low risk awareness.

Risk management in the municipal organization

The issue of integrality (subparagraph 2.4.1) also holds for municipality A. Risks and related issues are interpreted and assessed differently by various staff members, depending on their function. Consider a project manager and a planning economist. A project manager must assess risks in an integral way, thereby also trying to solve control issues. A planning economist is more interested in the financial situation and tends to act from a balanced budget. However, not every decision taken by the project manager is most favorable from a financial perspective.

Risks estimated by the project manager are verified by a staff member on the concern level in order to determine the impact on the land agency as a whole. Risks on the macroeconomic level, such as risk concerning the development on the land market and land sales, are estimated by staff

members of the concern level. Still, even for staff members on the concern level this is not always straightforward:

> One issue that arises when estimating macroeconomic risks comes from the accountant, who often gives advice according to the most prudent scenario. I.e. estimations should be as cautious as possible. This may result in a false impression of the financial position, which is more negative than actually the case. Furthermore, municipalities are often in a conflict between the advice of their accountants and the upcoming changes concerning the new corporate income tax rules (chapter 3). According to the new taxation rules, for municipalities it now has become beneficial to present estimations as positively as possible. Which is also advised by the same accountants that formerly emphasized that municipalities should make estimations as prudent as possible. Another issue is that municipalities have difficulties in determining certain parameters, e.g. the interest rate. It is hard to fix the interest rate for a land development plan in such a way that it remains accurate over the years. Five or ten years, or even longer, the interest rate is an ever changing parameter. Concluding, for municipalities it is not always straightforward to determine whether an estimation is accurate and robust over the years. Also the accountants and consultants that give advice to municipalities have different interpretations of prudence.

A part of the risk policy of Municipality A consist of when a certain risk has a 75% chance or higher to occur, it is considered likely that the risk eventually will occur. For these risks a budgetary provision must be made. This is for a greater part how risks are prioritized in municipality A. The estimation whether or not a particular risk has a chance of occurring above or under 75% is made with the use of models and software programs.

The influence of the financial crisis and risk awareness

After the financial crisis, municipality A took several measures to increase the risk awareness within the organization. The first is that project teams and staff members from the concern level of the land agency organize interim meetings to discuss the most important current affairs, including risks. Second is the establishment of two committees with a controlling task, the investment committee and the deal committee. When a project manager requests for an investment, the requests first has to be approved by the investment committee. This helps project managers to make investments more knowingly, because they are required to add a detailed explanation of why the investment should be made to their request. The investment committee consists of several staff members from the concern level, such as the concern controller and the manager of the financial resilience. Besides the investment committee there is the deal committee, which works according to the same procedures as the investment committee. The deal committee stimulates project managers to think more on the concern level. Before they may take a decision, project managers have to think and point out the consequences of their decisions for other projects in the same region. The fact that project managers are now held accountable in front of a committee forces them to think more on the concern level and of the consequences for the organization as a whole. The establishment of both committees resulted in a situation in which project managers are more aware of aspects such as the point in time of their investment and the alignment of their project with other projects.

After the financial crisis, municipality A lowered its ambition to realize new housing projects. Still, adjusting the production program downwards is not for every municipality an option:

> The housing program of municipality A is not downgraded because in the years before the financial crisis many land plots were acquired. Plans for adjusting the housing program downwards turned out to be politically sensitive. These plans lead to a yearly debate in which the Council, the Executive Board and also the accountant were involved. From a political perspective, lowering the ambition of the housing program was out of the question. At some point and due to the ongoing problems on the land and housing markets, politicians were forced to accept the downgrading of the housing program. Simply, because otherwise it was not possible to close the budget.

As a result of the financial crisis, municipality A changed their spatial policy. Due to the large supply of land, municipality A will not acquire new lands nor will it make plans for new developments, for the upcoming 10 years. As long as the land supply remains, municipality A will maintain a facilitating land policy. Also investments that are not directly followed by revenues will not be made. However, when markets are recovered it is not totally ruled out that municipality A will switch back to a more active land policy:

> The financial crisis lead to severe financial problems in most Dutch municipalities. Due to the crisis, municipalities became more aware that their former land policy was somewhat absurd. Currently, land development plans are much more conservative and also more realistic. However, there are signals from adjacent growth municipalities that land development plans and corresponding land policies slowly change back to the situation as it was before the financial crisis. Whether the effect of the financial crisis on the land policy of municipalities is permanently remains uncertain.

Risk communication

Risk communication in municipality A mainly takes place according to the P&C cycle. Per land development plan risks are identified by the project manager in cooperation with the planning economist. Once every two weeks there is a meeting between the project manager and the planning economist. Risks are however not a permanent item on the agenda. Only when they occur risks are disused. Therefore, risks are not always defined in advance, but risk profiles are mainly updated at the annual revision of the land development plan. The updating takes place during the update of the annual accounts. This is also the moment that risks are communicated towards the Municipal Council. However, only a very few members of the Council see through the risk sections of the documents that are presented to them, which is due to time aspects.

General risks concerning the land agency are also communicated through the regular P&C cycle. Every year, all land development plans are consolidated to provide insight into the total risk profile of the land agency. This is a more general view that shows the risk profile of the land agency on the concern level.

Monitoring and control

On the project level, the project manager is responsible for reporting and managing of risks, this includes risks that are less quantifiable. Thereby, he is also responsible to monitor and communicate measures for control, if any. Not every risk is linked to a measure for control because there are too many risks, especially on the project level. On the project level, risks are mainly controlled by acting adequately and only when risks occur. Only the most important risks are provided with a report. Risk with a low (financial) impact, or risks that are commonly known in such a way that control takes place automatically, are not reported. Monitoring and reporting of these risks would take more time and resources than their actual financial impact.

By means of a steering model that is attached every year to the budgetary report, municipality A monitors whether or not their ambitions regarding the realization of new houses are achieved. The steering model is part of the P&C cycle and shows the expected sale of houses for the upcoming 4 – 5 years for municipality A. This steering model is adopted by the Municipal Council and actualized every year according to the ambition of the municipality. By means of the steering model, the Municipal Council is informed about the most important developments on the land and housing markets and which land development plans should be cancelled.

The past few years after the financial crisis, new control measures coming from law and regulations resulted in better and more open information from the land agency towards the Municipal Council (chapter 3). Information towards the Municipal Council is now more transparent and the former ‘black box’ image that designated many Dutch municipal land agencies mostly disappeared. Still, there are reasons why it remains difficult for a Municipal Council to perform their monitoring and controlling task:

> The increased transparency of the land agency did not necessarily resulted in the Municipal Council being more able to monitor and subsequently, control the land agency. Despite the increased transparency, the knowledge and expertise of the members of the Council with respect to land agency matters practically remained the same. The complexity of the land agency is not equally susceptible for every member of the Council. This is why most Council members are struggling to fully grasp the functioning of the land agency and more direct monitoring and control rather seems challenging. One of the reasons why Council members are having a hard time to grasp the complexity of the land agency is its level of abstraction. Think of land development plans which, easily said, consist of lots of paperwork, including tables and numbers etc. Less abstract issues are easier to grasp because they can be imagined. Due to the higher level of abstraction, Council members are less critical when it comes to asking questions to monitor land agency issues compared to less abstract issues, such as the placement of a new bus stop. Furthermore, issues that directly affect society and its citizens receive more attention from the Municipal Council, especially when compared to the abstract matters within a land agency.

To raise the attention of the Municipal Council with respect to the land agency and its land development plans, the Council should be pointed on the societal relevance of a healthy land agency. Furthermore, a closer and more open relation between the Municipal Council, the Executive Board and the staff members of the civil service could lower the abstraction level of the land agency. However, the new dualistic structure changed both the supervising role of the Municipal Council and the relationship between the Municipal Council and members of the Executive Board. Before the current dualistic structure, the relation between both bodies was more open and informal. This allowed for more interaction and a more profound exchange of information. Issues concerning land development were discussed more thoroughly, which lowered the level of abstraction of the land agency. The current dualistic structure made a clear division of tasks and responsibilities between the Municipal Council and the Executive Board. However, their relationship is now more distanced and interaction mainly takes place in a formal way.

Conclusions in the light of the principles of 'good' risk management and the municipality scan

According to the results of the municipality scan, municipality A was expected to have a less mature form of risk management compared to other municipalities. In the particular case of municipality A, the findings from the case study to a large extent correspond to the results of the municipality scan. Risk management in municipality A still is relatively intuitive, informal and in many circumstances takes place heads-on. Regarding the consistency with the principles of 'good' risk management, in municipality A the following points leave room for improvement:

- Risk communication, but also the monitoring and control of measures for control, goes mainly according to the regular P&C cycle.
- Especially on the project level, risk management is mainly reactive of nature. Actions are taken when risks occur and problems are countered heads-on.
- The substantiation of underlying parameters and estimations of risks are not always clear.
- On the project level, measures for control mainly are not linked to risks. Furthermore it is uncertain whether or not this happens on the portfolio level. Also monitoring and reporting control measures does not actively takes place.

During the case study several reasons were found why risk management in municipality A is not always consistent with the principles of 'good' risk management. First of all, risk management in municipality A mainly is reactive of nature due to time constraints. Simply because there is no time to report on each individual risk, link measures for control to these risks and finally, monitor them. For some risks this would take more time and resources than their actual financial impact. Therefore, no particular procedure is followed and on the project level risks are mainly countered heads-on. When it comes to monitoring and control by the Municipal Council, the main obstacles are the abstraction level and complexity of the land agency that are difficult to grasp for the members of the Council.

Second, the case study showed that municipality A has difficulties with choosing parameters such as the interest rate. The quantification of such parameters is not always straightforward. Apart from the naturally difficult task of accurately estimating the interest rate over a longer period, municipality A also receives conflicting advice from its accountant and consultants regarding this aspect.

Finally, the large-scale purchase of land in the period before the crisis have led to a situation in which municipality A cannot simply downgrade the housing program. The main reason for this are political motives.

Although risk management in municipality A shows quite a few inconsistencies with the principles of 'good' risk management, there are two aspects that came forward during the case study in municipality A that are in line with the principles. The first is that the past few years after the financial crisis the land agency became much more transparent, thereby it is no longer referred to as a 'black box' by the Municipal Council. The second is that municipality A took measures to increase the risk awareness of the organization and was effective in doing so.

Taken into account that it is very unlikely that a municipality is able to meet all the principles of 'good' risk management and the efforts of municipality A to increase the risk awareness, one could argue to place municipality A in a slightly higher maturity level. However, when it comes to improving risk management of land development activities, municipality A can still draw a significant amount of important lessons from other municipalities. Therefore, no category higher than "partially integrated" would be appropriate for municipality A.

5.3.2 Case study 2: Municipality B

Municipality B is a municipality with a population between 50.000 – 70.000, selected from the category "No/Informal". Just as municipality A, this municipality is expected to have a less mature risk management process due to a relatively low risk awareness compared to other municipalities.

Risk management in the municipal organization

Compared to most other municipalities that were examined during the municipality scan, risk management in municipality B is organized informally. In case of municipality B this means that procedures on risk management are not always structured or documented in every detail. However, that risk management is not always visible from 'the outside' does not mean necessarily that it does not take place. Risk management in municipality B is largely based on factors such as culture and collaboration. This makes risk management in this municipality partially dependent from the persons that are involved during the process and softer aspects like common sense:

> Risk communication and the therewith the assurance of risks, partly depends on the person in a particular function. Currently, the lines are short between most staff members and there are very few obstacles when it comes to risk communication. If the occupation of staff members changes in the future, communication again will have to find its way. Thereby it will be uncertain if risk communication goes without obstacles. This is dedicated to the fact that the human factor is involved.

An advantage of risk management that is organized partially in an informal way is that issues often are better manageable, because communication goes often faster and less procedures have to be followed. On the other hand, decision making in many cases is insufficiently documented. This might cause trouble during an audit, or when particular underlying information that formed the basis of the decision is requested by others.

When it comes to risk management of land development activities it is important to distinguish risk management on the project level and on the concern (or portfolio) level. Both levels use a different focus. On the concern level, risks from the project level in most cases are not relevant enough to pay attention in every detail, also due to time constraints. The responsibility for this lies with the project managers and from the concern perspective, this is considered to be more related

to project management than to risk management. For this reason, municipality B does not link control measures to every risk, because most of the risks that concern land development plans fall within project management.

The responsibility of risk management on the concern level lies with the concern controller. However, in order for risk management to land throughout the whole organization, risk awareness among other staff members is very important:

> Important for risk management are the attitude and behaviour of all staff members. In other words, risk awareness. The role of the staff members on the concern level is to stimulate other employees to incorporate risk management on a constant basis in their daily work. In general, this work best when one person or team takes the initiative to put risk management more on the agenda.

Besides risk awareness, a broad support among all layers of the organization is also a critical factor in order for risk management to be successful. Aspects that contributed to an organization wide establishment of risk management were:

- Front teams that took the initiative to develop a new risk management policy.
- Central coordination of risk management.
- A workable and not too complex risk management system.
- Clearly specify what is covered, but also what is not covered by risk management.

The influence of the financial crisis and risk awareness

The effect of the financial crisis on the risk management policy of municipality B was influential. A consequence of the financial crisis was the introduction of new procedures and methods, such as NARIS to compute risk estimations. Furthermore, scenario analysis is gradually being used more to anticipate on future scenarios. The subsequent step, the formulation of measures for control for each scenario, remains difficult for municipalities. It would be beneficial for municipalities if they can develop this in the upcoming years. The financial crisis also influenced the policy of municipality B regarding spatial planning. Housing programs and targets were adjusted downwards in the years after the financial crisis.

Altogether, the importance of risk management in municipality B increased after the impact of the financial crisis. Nevertheless, for municipality B this does not imply thinking and anticipating in particular on a future crisis:

> The focus of municipality B is not so much on how to use risk management to anticipate on a future crisis. It rather uses risk management to create budgetary flexibility and for the application of alternative ways of budgeting. For example, by reducing the overhead costs that is related to a land development plan.

To conclude, the period of time and the influence of the financial crisis were the most important factors that contributed to the increased risk awareness of municipality B.

Risk communication

The communication of risks towards the Municipal Council goes according to the regular P&C cycle, in which on a yearly basis the most relevant risks concerning land development plans are reported. Within the municipal organization, risk communication takes place via several ways. First of all, every decision above a certain threshold value must be provided with a risk paragraph. This paragraph must be approved by an authorized internal body. Second, communication on risks takes place through NARIS, a software program that supports the risk management process. Finally, in the memorandum on risk management the financial resilience and the available resistance capacity are substantiated.

Confidentiality issues regarding land development plans and area development hamper the risk communication towards the Municipal Council. Not every risk can be discussed in detail with the

Municipal Council. For example, if particular risks become publically known, this jeopardizes the competitiveness of the municipality towards other parties. However, over the past few years a growing number of issues are discussed in public. Furthermore, the difficult financial position of municipality B contributed to improved information towards the Municipal Council in the past few years after the financial crisis. The Municipal Council could improve risk communication and its supervising role by posing subject related questions regarding risk management. Questions such as; 'is there a risk management policy?', or 'how is it ensured that the risk analysis is complete?' will contribute to a more open form of risk communication. However, the Municipal Council is not always used to think in this way.

Monitoring and control

The identified risks are reviewed by the staff members of the concern level such as the concern controller. The concern staff poses critical questions regarding the identified risks back to the staff members who identified the particular risks. When considered necessary, they also enter into dialogue. This organized countervailing power offsets the issue of integrality and forms the foundation of integral decision making.

Municipality B does not actively report on whether or not certain objectives are achieved, or will be achieved in the future:

> To avoid issues with respect to capacity, municipality B knowingly chooses to not report the progress around certain objectives. Instead the focus lies on what can be done in the (near) future in case a particular objective will not be achieved. A great example is the development of a target plan for the sale of land over the next upcoming years in case of a declining land market and disappointing land sales. How to react hereby is the underlying question. The emphasis is on taking action instead of losing effort to the reporting of achieved or unachieved objectives. The basis assumption is that providing information is not a goal, but rather a means.

One general issue regarding to the risk control of land development projects is that municipality B is beyond the point that risks can be avoided by taking the right measures for control. Due to the long development time of land development project, investments in land plots were made a long time ago, in the years before the financial crisis. Many other municipalities have the same problem. Municipalities can however take measures for control and try to limit the financial impact of risks.

In the formulation of control measures, political influence plays a significant role:

> With respect to the formulation of measures for control, tensions between political parties may arise due to different political backgrounds and preferences. For example, when severe cutbacks on social services are required in order to cover risks that might possibly occur. In the political arena there will be a tough situation when cutbacks on social services are made, but the risks for which the cutbacks were made did not occur. When it is about risks and the formulation of control measures on the political level, decision making can be very complex.

Conclusions in the light of the principles of 'good' risk management and the municipality scan

Based on the results of the municipality scan, it was expected that municipality B has a less mature form of risk management compared to other municipalities. Adding the findings and impressions of the case study makes it necessary to slightly adapt this impression. From results of the case study can be derived that risk management in municipality B is more consistent with the principles of 'good' risk management than was observed during the municipality scan. Requirements from the principles of 'good' risk management that were recognized during the case study, but not during the municipality scan are:

- Although not fully developed yet, working with scenarios is slowly becoming part of the risk management process.
- Despite being relatively informal, the risk management process in municipality B takes into account human and cultural factors.
- Municipality B clearly has taken actions to incorporate risk management throughout the organization.
- By clearly distinguishing risk management on the project and on the portfolio level, municipality B prioritizes risks.

Despite having a more mature form of risk management than expected in advance, municipality B still has points which could be improved in accordance with the principles of 'good' risk management. These are:

- Due to the relatively informal organized risk management process, documentation and reporting on risk management compared to other municipalities takes place to a lesser extent.
- On the project level, measures for control mainly are not linked to risks. It is also unclear whether or not this happens on the portfolio level.
- Risk communication towards the Municipal Council goes mainly through the P&C cycle.
- Particular choices of municipality B result in a somewhat reactive appearance of risk management. For example, municipality B uses risk management to create budgetary flexibility instead of anticipating on a future crisis. Municipality B also does not actively report on whether or not certain objectives are achieved, or will be achieved in the future.

The case study showed that there are several reasons why municipality B does not always meet the requirements of the principles of 'good' risk management. First of all, due to time constraints and focus (project vs. portfolio), risk management often takes place heads-on instead of following a particular procedure and reporting it. Second, political tensions sometimes lead to difficulties in the formulation of control measures and linking them to particular risks. Third, risk communication towards the Municipal Council is not always optimal because some information is confidential and cannot be discussed publically. Finally, investments in land for a greater part were made in the period before the crisis. For now, this means that a municipality can only react in attempt to lower the financial impact of risks. However, it can never completely cover the financial impact of the risk.

During the municipality scan, municipality B was assigned to a maturity level of "No/Informal". Despite its relative informal risk management process, the case study gave the impression that municipality B has a significantly more mature form of risk management than showed by the municipality scan. Especially when considering the comprehensiveness of the principles of 'good' risk management, the category "No/Informal" seems not the appropriate category. Adding to that the conclusion that informal risk management does not necessarily means that risk management does not takes place properly. Combining both conclusions justifies to place municipality B in a higher category of maturity level. The category "Partially integrated" gives a more accurate reflection of the actual maturity level of risk management in municipality B. The reason is that the previous maturity level, to which municipality B was assigned to, was too low. However, regarding aspects to improve risk management of land development activities, municipality B can still learn from risk management processes in other municipalities.

5.3.3 Case study 3: Municipality C

Municipality C is a G32-municipality selected from the category “Integrated”. This means that, based on the results of the municipality scan, this municipality is expected to be relatively risk aware compared to municipalities from other maturity levels. Risk management in this municipality is expected to be mature of its form and integrated throughout every layer of the organization.

Risk management in the municipal organization

Risk management in this municipality is well-documented in a policy document, which describes each step in the risk management process. Also the responsibilities of each staff member are laid down in this document. Risk management is organized bottom-up, because risk have to be identified on the project level by the project team. The next step is to determine which risk can be quantified. Quantifiable risk are registered in a risk management database (RIS). Based on the data in RIS, a risk analysis on the portfolio level is made and risk are translated to concern level. The issue of integrality (subparagraph 2.4.1) is partly obviated by the use of this database. Standardization of risks takes places when staff members add risks to the database. Thereby it is the intention that risks are assessed by more than one staff member. By means of progress reports risks are communicated to the official client and the portfolio manager. Both quantitative and qualitative risks are identified by the project team. The next step is to analyse the identified risks. This done by the project manager, in consultation with the planning economist. Staff members from higher hierarchical layers are mainly involved after the results of the risk identification and analysis. Furthermore, once in a while there is a meeting between the project manager, the official client and the portfolio manager in which among other things the risks of a project are discussed. Basically, for municipality C it holds that risks have to be identified and communicated on the project level. On the portfolio level they are tested and placed into an organization-wide perspective.

When it comes to risk management, prioritizing is very important:

> For some part, a municipality is also an entrepreneur. Being an entrepreneur involves taking risk. However, considering every risk to be equally relevant leads to an overabundance of risk management. As a result an organization may become rigid. The focus should be on anticipating to unforeseen circumstances with a high impact on the organization. The interest rate and the sale of land are aspects that play a central role. However, the quantification of classification of these aspects remains difficult. On the other hand, risk management can only further develop in the municipal organization when it is considered to be more than giving substance to the financial resilience.

The priority of a risk depends on its financial impact on the organization. When it turns out to be difficult to quantify a risk, alternative ways are tried to be found. An example is that municipality C works with a classification table. According to this table risks are estimated in an alternative way so that it is still possible to rank or prioritize them according to a scale. Both quantitative and qualitative estimations of risks are reviewed by staff members on the concern level. Risks that exceed a certain score have to be reported to the Municipal Council.

The substantiation of the underlying parameters of certain risks often is unclear, or is even missing in its entirety:

> The underlying estimation or substantiation of certain risk parameters is often missing. The reason is that in practice it is not always possible to provide a clear estimation of risks. For example, why the chance on a particular risk is assumed to be X%. Another reason is that project managers do not always want to mention every risk of their project, because this might harm the reputation of their project. They expect that projects, for which a lot of risks are identified, might not make it through the decision making process. This expectation is based on situations in which the interest on the project level (to continue the project) conflicts with the interests on the portfolio level (the overall financial position of the municipality).

It is not necessarily negative when a project manager identifies the risks of his project, as long as the final decision is based on a broad assessment, both project and the portfolio level, supported by a complete risk file and accurate risk profile.

The influence of the financial crisis and risk awareness

The financial crisis was of great influence on the financial position of municipality C. Like many other municipalities, municipality C suffered from declining values of their land development plans and had to take their loss on most of their land positions. Due to its vulnerable financial position, but also due to the increased risk awareness, municipality C is currently in search of the (new) role they can and want to fulfil in land development. An alternative form of land policy, in which municipalities create the right environment for private parties to invest in and collaborate to land development projects, becomes more and more attractive for municipalities. However, in order for a municipality to permanently change its role in land development requires a sense of urgency:

> To change the role of municipalities regarding land development and how they deal with it requires a more problematic situation. There has to be a certain sense of urgency. In a way, the financial crisis and the situation on the land market right after the crisis provided the right amount of problems to create this sense of urgency. However, whether or not the effect of the crisis is permanent remains uncertain. There are signals, also from other municipalities, that the effect of the crisis gradually fades and that slowly one is becoming less cautious when it comes to land development and its risks.

This sense of urgency has also influenced the risk awareness of the municipality. The past five years not only the risk awareness but also the risk-intelligence of the municipality increased significantly. Within the organization risk management was used more and more to structure and control processes. An important measure that lead to the increased risk awareness was the writing of a policy document on risk management. Adding to that a Municipal Council that puts more focus on risk management by posing more questions that can be related to risk management resulted in that municipality C is now much more risk aware than before the financial crisis.

One of the results of the increased risk awareness of municipality C is the upcoming use of scenario analysis. Still, in the use of scenarios to support decision making there is room for improvement. Currently scenarios are mainly based on numerical parameters and bandwidths. Scenarios are developed by changing parameters within the fixed bandwidths, for example lowering the land price. What could be improved to the current scenario analysis is that parameters are chosen in a way that they reflect the actual situation as much as possible. I.e. is it likely that the scenario will occur? Another way to improve scenario analysis is to, besides numerical parameters, also use parameters that are not or less numerical. For example, how important is the land price in the choice of location of industries and businesses.

The worsened conditions on the land and housing market have a limited influence on the planning of new land development projects. This is due to the fact that many municipalities acquired land (long) before the financial crisis. At the time, in many cases municipalities made great investments in these lands. Now they want to earn back their investments as much as possible, leading to for example housing programs that seem somewhat optimistic for the current situation on the market.

Risk communication

In municipality C internal communication on risks on the project and the portfolio level primarily takes place through conversations and meetings. Staff members from every layer of the municipal organization are involved.

On both the project and the portfolio level, risk communication towards the Municipal Council mainly goes according the P&C cycle. For the Municipal Council, in order to make decisions based on the best available information it is of great importance that the administrative decision making is well-organized. This means that there is enough insight in both risks on the project and on

the portfolio level. One way of doing this is to provide insight in significant changes and new insights when a land development plan is revised compared to the earlier version of the land development plan. Another way is that municipality C uses a risk database to support the administrative decision making. Furthermore, risk communication towards the Municipal Council needs to be open and transparent. In the past few years after the financial crisis, municipality C made significant steps for improvement and the process of providing information towards the Municipal Council is now considered to be open and transparent. However, there are certain circumstances in which municipality C has its reasons for not giving the Municipal Council complete access to all information:

> Municipality C uses a database for risk communication. Currently, the Municipal Council has no access to the database. If the Municipal Council has access to the risk management database this would raise a barrier for project and program managers to identify all the risk and possible measures for control. During risk management meetings and brainstorm sessions there has to be an open and transparent ambiance. This stimulates people to come up with and share less obvious risks and measures for control. In the end, some of these risks and measures for control are registered in the risk management database. With the Municipal Council having access to this database, people are less inclined to share all their thoughts regarding the risks and possible measures for control of the projects in which they are involved. This might result in unmentioned risks or measures for control.

Although risk communication goes mainly according to the P&C cycle, there are particular circumstances in which communication towards the Municipal Council takes place separately from the P&C cycle. For example during the adoption and revision of land development plans or when risks have a financial impact that lies above a certain threshold value. Also significant qualitative risks were used to be reported to the Municipal Council outside the P&C cycle. However, past few years the focus shifted more towards financial risks due to the financial crisis. The result is that in the current situation communication regarding organizational risk such as political and strategical risks is insufficient. In the most recent policy memorandum this issue is addressed. Though, improvement has yet to be made.

Monitoring and control

The progress of a project, its risks and the effect of control measures is reported and communicated in a progress report four times a year, which is also outside the P&C cycle. Still, for municipality C monitoring and communication regarding the effect of control measures remains a difficult process:

> Within municipality C, the aim is to identify, select and also register measures for control. Registering measures for control becomes useful when the effect of a measure only comes to expression during a later period in time. However, to the question whether a measure for control has the desired effect or not there is not always a single answer. Like many other municipalities, the risk management system of municipality C is not fully developed yet when it comes to the monitoring and communication of control measures. Communication of the effect of control measures in municipality C leaves room for improvement. Currently, measures for control in subsequent order are identified, quantified, selected, registered in a database and finally communicated mainly according to the P&C cycle.

To improve the process of monitoring and communication of control measures, municipality C has the idea of a shared database with other municipalities from the same region. In this interregional database, control measures used in other connected municipalities are registered. This allows other municipalities to monitor the effect of control measures in other municipalities, learn from it and when the situation allows it, use the same measure.

Conclusions in the light of the principles of 'good' risk management and the municipality scan

When comparing the findings and impressions from the case study with the results from the municipality scan, it can be concluded that municipality C has indeed a more mature form of risk management than most of the other municipalities that were observed in the municipality scan. Given the findings of the case study in municipality C, some requirements from the principles of 'good' risk management can be clearly recognized:

- The risk management process is structured according to the RISMAN method.
- There is a clear policy on risk management, well-documented in a policy memorandum.
- Qualitative risks such as political and strategic risks are also recognized.
- Although not fully developed yet, working with scenarios is slowly becoming part of the risk management process.
- Still leaving room for improvement, risk communication and reporting does takes place separately from the P&C cycle.
- Communication on risks towards the Municipal Council has become more transparent since the financial crisis took place.
- The importance of the prioritization of risk is recognized.
- Risk management is embedded in multiple layers of the organization.
- For most staff members, their role and responsibilities are clearly described.

The list above shows some points for which municipality C is consistent with the principles of 'good' risk management. However, this list is not exclusive. Since the list of principles of 'good' risk management from paragraph 2.5 is considered to be very comprehensive, there are more requirements for which it holds that risk management in municipality C is consistent with the principles.

During the case study in municipality C, it was also found that there are aspects of the risk management process that are not as mature as expected, based on the results of the municipality scan. The most important in municipality C concerned the monitoring and communication of the control measures. How the effects of control measures are monitored did not became clear during the case study. On the other hand, the fact that municipality C is aware of this and thinks of ways to improve the monitoring and communication of control measures, even beyond its own organization (interregional database). This shows that municipality C has a strong will to improve its risk management process, something which does not hold for an organization without featuring a certain degree of risk awareness.

Another point for which municipality C showed some inconsistency with the principles of 'good' risk management is the substantiation of underlying parameters and estimation of risks. By some of the staff members it was acknowledged that the estimation and substantiation of certain parameters and risks is not always clear, or even missing. It turned out to be that municipalities in general in some situations have difficulties to provide a clear estimation of risks. Also the quantification of parameters such as interest rate and the sale of land is not always straightforward.

Regarding the consistency of municipality C with the principles of 'good' risk management, it is found that this municipality is quite consistent. However, during the case study is was also found that there are a few relevant risk management aspects that leave room for improvement, or are not fully developed yet. Risk management in municipality C therefore is somewhat less mature than expected based on the results of the municipality scan. With respect to the maturity level that was assigned after the municipality scan, the impression would have been more accurate when municipality C was placed in the category "Between partially integrated and integrated". Despite having a less mature form of risk management than expected, when compared to other municipalities, municipality C can still be considered as a municipality with a relatively high risk awareness.

5.3.4 Case study 4: Municipality D

Municipality D is a medium-sized municipality with a population between 50.000 – 70.000, selected from the category "Between partially integrated and integrated". Municipality D is chosen from this category, because the "Integrated" category contains no medium-sized municipalities. Despite a lower maturity level than municipality C, municipality D is still expected to have relatively mature form of risk management compared to most other municipalities from the municipality scan.

Risk management in the municipal organization

For the estimation of risks that are part of the risk profile of the land agency, municipality D uses a separate method. Recently, municipality D adapted a new method. It turned out that the calculation of risks according to the old method was too complex for some staff members and the Municipal Council:

> Formerly, the RISMAN method was used for the estimation of project risks. Despite the effort of municipality D to enhance the understanding of the Municipal Council in the risk profile of the land agency, it remained difficult for the Municipal Council to grasp this. Therefore, municipality D switched to an alternative method, the IFLO-method. It was found that the IFLO-method was more suitable for providing insight in risks and communicating them to the Municipal Council. The IFLO-method also turned out to be more compatible with the risks that are relevant for municipality D. With the use of the IFLO-method, the Municipal Council has more understanding of the risk profile of the land agency.

The IFLO-method is mainly focussed on quantifiable risks related to land development. The identified risks are merged together into a joint risk profile of the land agency. The IFLO-method disregards less quantifiable risks, such as political or strategic risks. Less quantifiable risks are identified through meetings between project managers and team managers. In addition, municipality D uses progress reports to inform the Municipal Council on qualitative risks.

The integrality issue also holds for municipality D. This issue is partly offset by letting a staff member with an coordinating function monitor the input and management of risks in the risk management database (NARIS). This leads to some standardization of risks, however the issue of integrality is not completely overcome. The quantification of risks by different persons remains a challenging task for municipalities. A completely realistic assessment is not always straightforward. For staff members that insert the risks in NARIS, but also for the staff members that monitor them, the impact or chance of a particular risk is often unclear. In some cases, this leads to rough estimations, which sometimes are based on the interpretation and intuition of an individual.

Despite that municipality D pays attention to describing and controlling quantitative risks, the external emphasis is mainly on the quantification of risks and the financial resilience:

> The press and legal entities mainly are interested in the financial resilience and the quantification of risks. This is mainly where they put the emphasis on and where a municipality is held accountable for. It would be more workable for a municipality if there was a fair balance between the focus on the qualification and the quantification of risks. This holds for both the internal municipal organization and the focus that is imposed on the municipality by external bodies. The question how and by whom (politics or a municipal collective) this balance should be organized is one that remains unanswered.

Risk management in municipality D also depends on what plays on the political level. An example is the (political) influence of a portfolio manager in the Executive Board. His or her personal attitude and political background can have a possible influence on the risk management policy of a municipality. Regarding a municipality's land policy there can be an issue between two portfolio managers of the Executive Board. For example, when the manager of the land development portfolio directs towards a facilitating land policy in order to reduce the risks involved with land development projects, the manager of the urban development portfolio calls for a more active form of land policy for the purpose of economic growth. In the end, political motives play a decisive role.

The influence of the financial crisis and risk awareness

In municipality D, the financial crisis lead to an increased focus on identifying and providing insight into risks. This resulted into a change in the format of proposals towards the Municipal Council and Executive Board. In the new situation, every decision must be provided with a separate paragraph. This paragraph must contain every identified risk of a decision or project, together with the possible alternatives if any. With the new format of proposals, staff members are now forced to think thoroughly about risks. This resulted into an increased risk awareness throughout every layer of the organization.

The financial crisis also influenced the spatial policy of municipality D:

> After the financial crisis there was a shift in the land policy of municipalities, from an active land policy towards a facilitating land policy. In the current situation, now the focus is on smaller projects with a shorter development time instead of larger projects that have a longer development time. However, the shift in land policy is still politically sensitive. There are situations in which municipalities are stimulated by politicians to involve themselves more in area development than having only a facilitating role. For example, to enhance the city's economic development. The latter makes that it is not unlikely for municipalities to, when markets are even more recovered, fall back to a more active form of land policy in the future.

Regarding the focus on projects with a shorter development time, for municipalities this focus is not always straightforward. Many municipalities are involved with larger projects with a longer development time, that started even before the financial crisis. Investments were made long ago, so a municipality does not always has the choice to commit itself only to smaller projects.

Risk communication, monitoring and control

Once every two or three weeks team managers and project managers meet to discuss for every land development plan the progress, the actual risks and possible changes regarding these risks. The team manager also discusses the financial risks with the planning economist every week and on the portfolio level the team manager has a weekly meeting with a portfolio manager from the Executive Board.

On the project level, for every risk there is made an estimation (N/A, low, medium, high). In case of a high risk, one is required to mention which control measures are taken, or will be taken in the future. Thereby linking control measures to particular risks. Initially, risks are estimated by the author of the proposal. Whenever necessary, he or she consults others, for example a legal expert, an urban planner or a planning economist. Finally, the proposal is revised by subsequently a team manager and financial advisor, the head of the department and in the end the portfolio manager. Staff members from every layer have the opportunity to critically revise the identified risks and selected measures for control. However, opinions on the extent of certain risks are sometimes divided. Risk communication is sometimes hampered because in some cases project managers have problems with mentioning every risk of their project:

> Project managers assume that, projects for which many risks are identified cause uncertainty at the members of the Municipal Council when they have to decide whether or not to approve the project. Because they are afraid that their project will not be approved by the Municipal Council, project managers find it hard to mention every risk. Mentioning every risk makes them visible. They think that projects with more identified risk have a smaller chance for being approved by the Municipal Council.

Conclusions in the light of the principles of 'good' risk management and the municipality scan

Based on the municipality scan, it was expected that municipality D has a relatively mature form of risk management. Comparing the results of the municipality scan to what was found during the case study, it can be concluded that municipality D is placed in a maturity level that matches with the findings from the case study. During the case study, the following requirements from the principles of 'good' risk management were clearly recognized:

- Communication on risks towards the Municipal Council has become more transparent since the financial crisis took place, partly due to the use of the IFLO-method.
- Municipality D clearly took measures to increase the risk awareness of the organization, such as modifying the format of proposals towards the Municipal Council and Executive Board. In the current situation there is more attention to risks and clarifying them.
- Both qualitative and quantitative risks are taken into account. Municipality D also reports qualitative risks, such as political and strategic risks, to the Municipal Council.
- The risk management process is structured according to the IFLO-method.
- Measures for control are explicitly linked to risks that are identified as high risks.

The list above shows the requirements of the principles of 'good' risk management that were explicitly recognized during the case study in municipality D. However as indicated earlier, this list is not exclusive. This means there are more requirements for which it holds that risk management in municipality D is consistent with the principles.

During the case study it was found that the estimation of risk parameters, such as impact and chance, remains a challenging task. For the involved staff members, the parameters are often unclear and therefore a complete realistic substantiation is not always possible. The result is that sometimes estimations are very rough and based on the assessment of individuals. The main reason for this is that the estimation and substantiation of risk parameters, especially over longer periods, remains a difficult task due to the continuously changing circumstances on the land and housing markets.

Another interesting finding is that the reporting on qualitative risks is undermined by influence from legal entities and the media. Both are more interested in the financial resilience and the quantification of risks. In general, municipalities externally are held accountable for the status of their financial resilience. Municipality D thereby ended in a sort of duality. On the one hand, according to the principles of 'good' risk management, it is supposed to take into account qualitative risks. On the other hand, externally the focus is put on the financial resilience by among others the media, the BBV decree and higher governmental bodies such as the province.

Like municipality C, it was found that risk management of land development in Municipality D is quite consistent with the principles of 'good' risk management. Still, the case study showed that there are some aspects related to risk management that could be improved. As a result, risk management of land development activities in municipality D is not fully mature yet. The maturity level that was assigned after the municipality scan, "Between partially integrated and integrated", therefore seems appropriate.

5.4 Use of the findings from the case study research

This paragraph shortly explains how the findings of the case study research will be used for answering the subquestions 4, 5 and 6 in the next chapter.

Each of the four case study reports in the previous paragraph ends with a concluding section. Every concluding section contains elements of the principles of 'good' risk management that were recognized as being present, missing, or were found not to be fully implemented or properly complied to. For a greater part, these elements were found not only in a single but in multiple examined municipalities. Together, the four concluding sections indicate which elements, related to the principles of 'good' risk management, could possibly be improved in or potentially could work for other municipalities. In paragraph 5.1 of this chapter it was mentioned that these insights could help to shape the conceptual design, by including those elements related to the principles of 'good' risk management from which was found that they are potentially workable for municipalities. By pointing out elements that have the most potential for improvement, the case study research actually made the list of principles of 'good' risk management less comprehensive and thereby more workable for municipalities. Following this approach in the end prevents that municipalities end up in an endless pursuit in order to fulfil the all-encompassing list of principles of 'good' risk management. Looking forward, in the next chapter the findings of the case study research will be analysed. Among other results, there are lessons to be learnt for other municipalities, distinguished in areas of concern and learning points. These lessons to be learnt are based on aspects related to the principles of 'good' risk management that were found to be potentially workable for other municipalities. The aspects are considered to be potentially workable because they were examined during the case study research. Lessons to be learnt were found to be potentially workable for municipalities because they came forward during the case study research if they were indicated or recognized by more than one of the examined municipalities. Aspects are considered as areas of concern when they are present or indicated by all four examined municipalities. Aspects are considered as learning points when they provide a possible solution for issues regarding risk management of land development activities. These are issues recognized in all four examined municipalities. The possible solution is mentioned by at least one of the examined municipalities.

Chapter 6

Result analysis

In this chapter:

This chapter analyses and reflects upon the findings of the case study research. To a lesser extent, also on some of the findings derived from the literature study outlined in chapter 2. In both paragraphs 6.1 and 6.2 the findings of the case study research are analysed. Paragraph 6.1 generally reflects on the risk management process of the examined municipalities, according to the steps described by the RISMAN method. In paragraph 6.2 the subquestions 4, 5 and 6 are answered. The answers to these subquestions are mainly based on the findings of the case study research and partly on findings that were done during the literature study. Finally, in paragraph 6.3 the chapter ends with a short reflection on the results of the case study research.

6.1 Risk management in the 4 selected municipalities according to RISMAN

This paragraph generally reflects on the risk management process of the four selected municipalities for the case study research. This reflection goes according to the steps of the risk management process as described by the RISMAN method. The purpose of this step by step analysis is to indicate which steps of the risk management process in the four examined municipalities require more attention and leave room for improvement. Furthermore, this analysis presents a general picture of how far each step of the risk management process is developed in the four examined municipalities. The findings in this paragraph are based on the four case study reports of the previous chapter.

With respect to the use of the RISMAN method, there is one important notice. During the case study it was found that for one of the municipalities, that were selected from a higher maturity level, the RISMAN method turned out to be less suitable for providing insight in risks and communicating them. This is noteworthy, because the other municipality that was selected from a higher maturity level did not recognized this problem. Since the issue is experienced by one of the municipalities mainly when it comes to risk communication, the RISMAN method is still considered useful for the purpose of this research. In this research, the focus of the use of the RISMAN method is more on the structuring of the risk management process, not so much on risk communication. A visualization of the risk management process according to the RISMAN method is shown in Figure 5 (p. 27). The risk management process described by the RISMAN method is divided into two main parts: risk analysis and risk control.

6.1.1 Risk analysis

According to the RISMAN method, the risk analysis includes the following steps: formulate objectives, identify risks, prioritize of risks and identify measures for control.

Formulate objectives

The formulation of objectives forms an important first step to determine the purpose and the design of the risk analysis (bunt et al., 2003). This step also contains the underlying thought behind the risk analysis and finally, risk management. Questions such as; ‘what is the purpose of the risk analysis?’ and ‘is the risk analysis focussed on qualitative, quantitative or both aspects?’ are answered during this step.

During the case study it was found that basically every municipality understood the essence of risk management. The underlying idea of risk management and the purposes for which it is and is not suitable are generally recognized by most of the staff members on the concern level. This holds for each of the four municipalities. However, not every municipality explicitly mentions its perspective towards risk management or has formulated clear risk management objectives. Which is something what could be expected to be included in policy documents such as a memorandum on risk management. Especially the two municipalities in which risk management is organized more informally are somewhat behind in clarifying were their organization stands on the issue of risks and its management. The suggestion of Dickson (1995), to decide on corporate risk management philosophy and write a risk management statement, can be helpful for a municipality to clarify its attitude and perception towards risk management, but also to determine the objectives of risk management. By doing this, a municipality can clarify the purpose of risk management throughout municipal organization, thereby being more explicit about the underlying thought of risk management.

Identify risks

The second step is the identification of possible risks that might occur. This step is characterized by its inventorying and brainstorming nature.

In general, for all four municipalities holds that they are consistent with the principles of 'good' risk management and risks are identified properly and both quantitative and qualitative risks are taken into account. The process of risk identification in these municipalities has developed significantly since the financial crisis took place. Some municipalities even organize several brainstorm sessions in a year to identify and actualize risks.

Prioritize risks

During the risk identification many risks may have emerged. However, it is not useful and probably, due to time and resource constraints, also not possible to equally focus the attention to all identified risks. Therefore the identified risks have to be prioritized. Since the prioritization of risks can only take place when risks are defined in terms of chance and impact, this step also includes the qualification and quantification of risks.

In all four municipalities there follows a clear prioritization of risks from the risk management process, especially on the project level. Risks are mainly prioritized based on their financial impact. Most municipalities use threshold values, above which risks are considered to be of significant financial influence. The prioritization of risks is not where the problem lies in the examined municipalities. As shown by the case study research, the bottleneck lies in the estimation of risks and the substantiation of the underlying parameters. Even in the two municipalities that in advance were expected to have a more mature process of risk management, it turned out that the estimation of risks is not always clear and the substantiation of risks is not always straightforward.

Identify measures for control

After the identified risks are prioritized the next step is to come up with measures to control them. Roughly, measures for control can be divided into four categories: avoid, reduce, transfer and accept.

Regarding this step, there is a clear distinction between the two municipalities with a more mature form of risk management and the municipalities of which the risk management process is less far developed. The case study research showed that, especially the municipalities in the latter category do not always think of measures of control in advance. Partly, this is a result coming from the prioritization of risks as a consequence of a particular focus on the project level, or due to time

constraints. These are reasons that are not necessarily contrary to the principles of 'good' risk management. However, reasons that do undermine the principles of 'good' risk management are tensions between political parties and heads-on or intuitive risk management. The process of identifying risk management measures is a process that is currently developing, but still requires attention.

6.1.2 Risk control

According to the RISMAN method, risk control includes the following steps: selection of measures for control, execution of measures for control, evaluation of measures for control and actualization of risk analysis.

Selection of measures for control

Part of the result of this step is always a list of selected measures for control linked to the most important risks and for every measure of control it is indicated who is responsible.

Following on the previous step, the selection of measures for control and specifically linking them to risks also leaves room for improvement. At least this holds for the two municipalities of which the risk management process is less far developed. Both municipalities indicated that, on the project level, this is not always necessary, but also not always feasible due to earlier mentioned constraints. Again, political preferences play a decisive role in the formulation and selection of measures for control. On the portfolio level, the case study research at both municipalities showed no clear evidence of measures for control that are linked to land development risks on the macro level. For the two municipalities with a more mature form of risk management holds that measures to control risks are specifically mentioned for each important risk.

Execution of measures for control

Subsequently to the selection of measures for control they can be put to execution.

When it comes to the execution of measures for control, during the case study research it was found that in some municipalities measures for control are taken heads-on or impulsively. Mainly this holds for the two municipalities in which risk management is less far developed. Their philosophy is that risks can also be controlled adequately the moment they occur. On the project level, in some situations there is something to be said for this policy. Identifying and selecting measures for control for every project risk in advance rather seems an impossible task, because there are countless project risks. On the other hand, during the case study research both municipalities did not gave the impression that on the portfolio or concern level measures for control are taken less impulsive. One remark that should be made is that it might very well be that the processes of identifying, selecting and executing measures for control in these municipalities is routine based on earlier experiences of some of the staff members. Although this might argue a little in favour of their policy to not identify and select measures for control for every risk, risk management in both municipalities thereby becomes less visible to the outside world.

With respect to measures for control, risk management in the other two municipalities is more structured. Because both municipalities explicitly identify measures for control and link them to the identified risks, according to a certain priority. Thereby, more structure in the identification and selection process of measures for control, results in risk management being less reactive when it comes to the execution of these measures.

Evaluation of measures for control

After the execution of the selected measures for control, it has to be evaluated whether or not the measures had the desired effect. The monitoring of measures for control can increase the effectiveness of the risk management process in the future (Bunt et al., 2003).

The monitoring of measures for control also requires communication on the effect of the taken measures. The case study research indicated that the monitoring and communication of measures for control is less far developed in all four municipalities. Even in the two municipalities with a relatively mature risk management process the monitoring and communication is still in its infancy. In the current situation it is not always clear how the effects of measures for control are monitored and to what extent this is communicated to other governmental bodies, such as the Municipal Council or Executive Board. Regarding this step, there is still a lot of improvement that can be made in the four examined municipalities. Worth mentioning it that, currently one of the municipalities is actively in search of ways to improve their process of monitoring and communication concerning the effect of measures for control. Their intention is also to involve other municipalities in this process.

Actualization of risk analysis

According to the RISMAN method the actualization of the risk analysis is the final step of the risk management cycle. After the evaluation of the measures for control the risk analysis, if necessary, needs to be actualized. Due to ever changing circumstances, e.g. on the land and housing markets, the lapse of time, or the effect of particular measures of control, risks may have increased or decreased. The risk management cycle starts form the beginning and possible new risk must be added to the list, while expired risks can be removed.

In most of the examined municipalities, the actualization of risks goes according to the regular P&C cycle. There is one municipality that, beyond the P&C cycle, reports on the progress of a project by using progress reports. Furthermore, during the case study research municipalities did not mention much about the feedback of measures for control and the actualization of risks. A possible reason might be that the previous steps showed that the communication and monitoring of measures for control leave room for improvement.

6.1.3 Short reflection on RISMAN

The downside of the RISMAN method, that was discussed at the beginning of this paragraph, turned out to be not so much of a problem considering the purpose of which the RISMAN method was used in this paragraph. However, during the case study it was generally found that, communication on risks and the monitoring of the effects of measures for control can be improved in most of the examined municipalities. Since the two municipalities that (formerly) used the RISMAN method together were inconclusive on whether or not the RISMAN method is suitable for the purpose of providing insight in risks and communicating them, more research to the use of the RISMAN method needs to be done. The case study research in its current form as described in this thesis turned out to be inappropriate to examine this.

What can be concluded with respect to the RISMAN method, is that it mentions very little about risk communication and how interaction between different staff members, departments, governmental bodies and external parties should take place. The RISMAN method also does not solve the issue of integrality. Therefore, it is quite possible that the municipality, which has stopped using the RISMAN method, actually had a grounded reason to do so.

Finally, from this paragraph can be concluded that, considering the risk management process as it is described by the RISMAN method, in the four examined municipalities generally have more difficulties with the steps of the risk control than with the steps of the risk analysis. Risk analysis according to the RISMAN method seems more developed in the four municipalities than the risk control. Mainly when it comes to the monitoring and communication of measures for control, the examined municipalities are less far developed.

6.2 Conclusions from the case study research

In paragraph 5.3 of the previous chapter, findings and impressions derived from research done in practice were disclosed in four case study reports. Information was gathered from four municipalities through a case study research. In order to identify which part of the risk management process in municipalities is relatively less far developed, paragraph 6.1 reflected upon these findings. This was done according to the steps of the risk management process as described by the RISMAN method. Although the findings from the case study research do not directly lead to a new model for risk management, according to the respondents of the interviews, some of the findings contain particular aspects that are essential for a proper application of risk management of land development activities in municipalities. The findings form the case study research also show which aspects of the principles of 'good' risk management are applicable and workable for Dutch municipalities. In turn, these aspects could be incorporated in the conceptual design in order to improve the risk management process of land development activities. Based on the findings from the case study research, in the subparagraphs of this paragraph subquestions 4, 5 and 6 are answered.

6.2.1 General findings from the case study research

Before pointing out which particular aspects from the case study research are relevant and applicable for other Dutch municipalities and therefore should be incorporated in the conceptual design, first some general findings from the case study research are discussed.

Inconsistencies with the principles of 'good' risk management

From the findings of the case study research done at four municipalities became clear that, for three out of the four cases, the expected maturity level of risk management that was determined during the municipality scan, does not correspond to the actual situation in practice. For the two municipalities selected from the lowest maturity level holds that, the maturity of their risk management process and the risk awareness of the municipal organization are more developed than was expected based on only the results of the municipality scan. For the two municipalities that were expected to be relatively risk aware and having a considerably more mature form of risk management it was found that for both municipalities this was indeed the case compared to the other two municipalities. However, it turned out that both municipalities that were expected to have a relatively far developed risk management process also lacked relevant risk management aspects. Among other things, one important aspect was that both municipalities have problems with the estimation of risks and the substantiation of underlying parameters, such as the interest rate and the sale of land. This holds even more when estimations have to be made over longer periods. Therefore, it was concluded that both municipalities cannot be placed in the highest maturity level "Integrated", resulting in one municipality for which the municipality scan did not provide an accurate view on the actual situation. The case study research showed that, regarding the maturity level of risk management, the difference between the four examined municipalities in fact is less great than was expected based on the results of the municipality scan. The findings from the case study research allow it to conclude on subquestion 4:

> *Is the current risk management of land development activities within Dutch municipal land agencies consistent with the principles of 'good' risk management?*

With respect to the answering of this question it is important to realize that, due to the approach of this research, the answer is solely based on the results of a case study research, conducted at only four municipalities. The extent to which the results of the case study research apply to most other Dutch municipalities remains uncertain. The reason for this it that, due to the large amount of municipalities, all with their own characteristics such as size and location, it is difficult to come to one prevalent national view. Therefore this question cannot be answered in its current form. It is

however possible to pronounce a general expectation, based on the case study results. This is what has been done.

A general impression from the case study research is that, according to the principles of 'good' risk management in every examined municipality points of inconsistency can be found. For each of the four municipalities holds that there are several points for which the risk management process does not met the requirements from the principles of 'good' risk management. Actually this is in the line of what was concluded earlier with respect to the principles of 'good' risk management. Considering the comprehensiveness of all the principles together, it is no surprise that municipalities lack several points in their risk management process, how mature their risk management might even be. Therefore, it is expected that risk management of land development activities in municipalities never will be completely consistent with the principles of 'good' risk management. Besides this, it is also expected that it differs for each municipality how consistent their risk management process is with the principles of 'good' risk management.

Table 11 | Municipal inconsistencies with principles of 'good' risk management

Inconsistency	Reasons
Insufficient substantiation of risks and underlying risk parameters	Project managers protect the reputation of the project and do not always want to mention every risk or be completely open about it. Therefore, risks and underlying parameters are not always (completely) substantiated.
	Municipalities cannot always give a clear estimation of risks expressed in chance or impact because there is not enough knowledge or information, resulting in rough estimations of risks or underlying parameters based on the intuitive assessment of individuals.
	Due to fluctuating trends on the land and housing markets, it is hard to determine whether or not an estimation is accurate and robust over the years. Especially over longer periods.
	Municipalities receive contrary advice from other parties that consult them (accountants, consultants). This might suggest that not only municipalities are facing issues regarding the estimation of risks and underlying parameters.
Risk management of land development activities is not always in line with spatial policy or contributes to predefined objectives	Municipalities want to earn back the investments in land they made long ago, often resulting in optimistic housing programs.
	Risk management in municipalities depends on what plays on the political level. The shift from an active land policy towards a more facilitating one is still politically sensitive. An example is the political focus on economic growth. For some politicians, adjusting a housing program downwards is out of the question, because in the years before the financial crisis many land plots were acquired.
	Due to their commitment to projects and the required investments before the financial crisis, municipalities are still bounded to projects with a longer development time. Even when the focus is only on smaller projects. The longer development time of these projects in many cases also means that a municipality is beyond the point that risks can be avoided by taking the right measures for control.
Undermined transparency	Due to confidentiality issues, not every risk can be discussed in detail with the Municipal Council.
	Project managers protect the reputation of the project and often do not mention every risk. In one of the examined municipalities the Municipal Council does not have complete access to the risk management database. This would raise a barrier for project and program managers to identify all the risks and possible measures for control.

Monitoring and control does not always take place properly	To avoid time and capacity issues, some municipalities knowingly choose not to report the progress or status of their predefined objectives.
	The complexity and level of abstraction of a land agency make it hard for a Municipal Council to fully grasp its functioning. More direct monitoring and control seems rather challenging. Also the current dualistic structure leads to a more distanced relationship and formal interaction between the Municipal Council and the Executive Board.
	Monitoring and control mainly goes according to the P&C cycle. To keep the risk management process up-to-date, monitoring and control must take place on a more regular basis.
	The monitoring and communication of the effect of control measures is not fully developed yet in most municipalities. Municipalities need more time to improve this part of their risk management process.
Measures for control are not always mentioned or linked to risks	Time and capacity constraints: there is not enough time to report on each risk, link measures for control to these risks and finally, monitor them.
	Regarding the formulation of measures for control, tensions between political parties may arise due to different political backgrounds and preferences. When it is about risks and the formulation of control measures on the political level, decision making can be very complex.

During the case study research, several reasons were found that are a cause of risk management in the examined municipalities being inconsistent with the principles of 'good' risk management. The inconsistencies and their main reasons are presented in Table 11.

The inconsistencies in Table 11 are actually attributable to a number of institutional barriers. These institutional barriers are the main cause that risk management of land development activities in some municipalities is not always consistent with the principles of 'good' risk management. Some of these institutional barriers are related to the typical aspects that distinguish risk management of land development activities in municipalities from risk management in other organizations (paragraph 2.3 and 2.7). The most important institutional barriers that lead to the inconsistencies in Table 11 are:

- Political influence on decision making: choice of land policy and measures for control.
- Path dependency of municipalities: commitment to early investments in land development projects with a long development time.
- Knowledge of land development on the operational level: A Municipal Council does not fully grasp the functioning of a land agency.
- Not enough time and capacity: sometimes predefined objectives are not monitored or evaluated, also not every risk is reported, linked to a measures for control and monitored.
- Poor reputation of risk management: project managers project the reputation of their project.

These institutional barriers are part of the context in which decision making and risk management of land development activities takes place in municipalities. This makes them hard to change or to overcome. In fact, for most institutional barriers it is questionable whether they can be overcome at all. Because these institutional barriers form part of the organizational context in municipalities, they should be taken into account when trying to improve the risk management process of land development activities.

General findings with respect to the legal framework

The case study research also resulted in a few general findings with respect to the legal framework and the changes of the BBV decree as described in chapter 3.

During the case study research it was found that the implications for Dutch municipalities with respect to risk management, coming from the legal framework, are not very numerous, influential or necessarily lead to 'good' risk management. As was outlined in chapter 3, the Municipal Council is supposed to set a framework for the Executive Board regarding the organization and execution of risk management. Thereby the Municipal Council and the Executive Board in the end together are responsible for the policy regarding risk management. A practical example is that in one of the examined municipalities the Municipal Council determined a threshold value. Risks that exceed this threshold value must be reported on to the Municipal Council. However, the past few years after the financial crisis the current legal framework did not result in municipalities being remarkable consistent with the principles of 'good' risk management. The case study research pointed out that in some cases it even lead to the undermining of some of the principles. For example, the new dualistic structure lead to a more formal interaction between the Municipal Council and the Executive Board. The result was that the Municipal Council received less detailed information and explanation about issues concerning the land agency and its functioning, making it harder for the Municipal Council to grasp its complexity. On the other hand, in the same municipality new control measures coming from law and regulations resulted in an increased risk awareness and better and more open information from the land agency towards the Municipal Council. The past few years after the financial crisis, most of the land agencies of Dutch municipalities got rid of their 'black box' label.

Currently, in most Dutch municipalities the changes coming from the BBV decree (chapter 3, subparagraph 3.2.3) are about to be implemented. During the case study research, municipalities indicated that at first glance the new arrangements from the amended BBV decree are manageable. However, the period in time in which the changes are proposed is less favorable for municipalities. Precisely now, when most municipalities are recovering from their financial problems caused by the financial crisis, the amended BBV decree again appeals on the financial capacity of municipalities. Despite this, at the moment municipalities do not expect that the amendment of the BBV decree will impose new risks. The reason is that the changes of the BBV decree are mainly on the accounting level, but are of little effect on the cash flows of land development plans. It would be a different story if the changes regarding the BBV decree would coincide with the planned changes concerning new arrangements with respect to corporate income tax. Add to this the possibility of a decrease in land sales, and some municipalities again would get into financial trouble.

6.2.2 Lessons to be learnt regarding the risk management of land development activities

This subparagraph addresses the most workable elements of the principles of 'good' risk management in the form of lessons to be learnt for other municipalities. These lessons to be learnt are divided into areas of concern and learning points that are relevant for other municipalities. Both are based on the findings of the case study research, derived from issues or situations that were recognized in one or more of the examined municipalities. Elements are considered workable and identified as relevant areas of concern when they are present in or indicated by all four examined municipalities. Elements are considered as learning points when they provide a possible solution for issues with respect to risk management of land development activities that play a role in all four examined municipalities. The findings of the case study research make it possible to answer subquestion 5:

> *What lessons regarding risk management of land development activities can be learned from other Dutch municipalities?*

At the time this research proposal was written, the idea was to identify areas of concern from municipalities in which risk management seemed less far embedded than other municipalities. Learning points were supposed to come from municipalities that were expected to have a more

advanced risk management process. However, during the case study it was found that both aspects, areas of concern and learning points, were present in all four of the examined municipalities. Areas of concern are also found in the two municipalities that were expected to have a more advanced risk management process. Vice versa, learning points are found in the two municipalities that were expected to have a less mature form of risk management. Nevertheless, the findings of the case study research allow it to answer subquestion 5 in its current form. The upcoming sections subsequently outline the areas of concern and the learning points derived from the four examined municipalities, thereby answering subquestion 5.

Areas of concern

Below, the main areas of concern derived from the case study research are outlined.

Municipalities have great difficulties with the estimation of land development risks and underlying parameters.

The main reasons for this are mentioned throughout this and the previous chapter and are summarized in Table 11 (subparagraph 6.2.1). During the case study research it was observed that even the two municipalities with a more mature form of risk management were having difficulties with the risk estimation and substantiation of underlying parameters. Some municipalities indicated that they do not have the required knowledge and expertise to deal adequately with complex risk estimations or substantiations of underlying parameters. This might indicate that municipalities can use help from others to improve their risk management process. One could think of other organizations, also non-governmental, that have to deal with likewise macroeconomic issues and corresponding risks as municipalities. Think of banks, private developers and investors. Potential help could also come from experts in real estate and land development matters in the form of consultancy agencies. Finally, there are accountants that support municipalities in solving financial issues. However, a situation similar as found in municipality A, were the consultant and accountant provided the municipality with contradictory advice regarding the choosing of the discount rate, should be avoided. External parties that consult municipalities should align their advice with each other and prevent that municipalities are entangled by conflicting advice.

Substantial influence from the political level on the risk management of land development activities and the corresponding spatial policy.

Due to influences from politics, risk management policy is not always consistent with decisions that follow from spatial policy. A municipality cannot always lower its ambitions and simply adjust its housing program downwards. The reasons is that this is politically sensitive due to the fact that many land plots were acquired in the years before the crisis and still wait for development. With respect to the maintained form of land policy, from a political perspective, the switch from an active to a more facilitating land policy is not self-evident. The ambition for economic growth is a common reason for politicians to insist on an active land policy. In the end, in many cases political motives are decisive. Finally, political backgrounds and preferences play a role in the formulation of measures for control. The difference between political parties often leads to complex decision making when it comes to the identification or selection of measures for control regarding risk management of land development activities.

Municipalities often are committed to earn back investments from land plots acquired during or in the period before the financial crisis.

In general, municipalities are not very willing to lower the ambition of their housing programs. Not only due to political pressure, but also because they want to lower their land supplies and eagerly earn back investments. The early acquired land plots and the relatively long development period of land development projects made that municipalities are beyond the point that risks can be avoided by taking the right measures for control. Instead of avoiding or easily transferring risks,

municipalities now only can reduce or accept the financial impact of a risk. This makes their risk management somewhat reactive. Even when municipalities have the intention to focus only on smaller projects with a shorter development time, they are still bounded to larger projects that started in the years before the crisis.

Early signs of municipalities that are falling back to the situation as it was before the crisis.

This means an excessive use of active land policy without being fully aware of the financial risks, thereby using the revenues of land development projects as a major source of income. Besides that the financial crisis brought severe financial problems to most Dutch municipalities, the crisis also came along with the sense of urgency to improve risk management. Many municipalities were brought back down to earth again with respect to their land policy. Currently, land development plans are much more conservative and also more realistic. On a large scale, municipalities switched from an active land policy to a facilitating one. In the current situation, only when there is an absolute need and no other option, municipalities consider to use an active land policy. Whenever possible, the focus is on smaller projects with a relatively short development time. Still, it remains questionable whether or not the increased risk awareness among municipalities is permanent. Some municipalities indicated that already there are early signs of falling back to the way things were before the financial crisis. Due to the political preference for an active land policy and a slowly decaying sense of urgency it is not unlikely that, in the future when financial problems are dealt with and land and housing markets are recovered, municipalities will switch back to their former active land policy. Whether or not this goes with the appropriate risk awareness and risk appetite remains to be seen. Although the financial crisis hit most municipalities like a sledgehammer, maybe this was still not hard enough to raise a permanently increased risk awareness.

When it comes to measures for risk control, municipalities are less far developed.

At the end of the previous paragraph it was concluded that the process of risk control, according to the RISMAN method, is less far developed in the four examined municipalities. Mainly the monitoring and communication regarding the effect of control measures that are taken is not fully developed yet. How and if the effects of control measures are monitored and communicated is often unclear. The case study research showed that there are municipalities that have plans to improve this process, but they need more time. These municipalities also indicated that there are still many improvements to be made and that thereby they are willing to learn from other municipalities. Maybe here lies a chance for other parties to assist municipalities in their improvement process.

Efforts to increase the transparency of the land agency, do not necessary result in the Municipal Council being more able to perform their monitoring and controlling task.

Over the years after the financial crisis, municipal land agencies slowly became more transparent. However the case study research showed that, despite the increased transparency, a land agency remains a relatively complex and abstract entity for the Council. To increase the knowledge and expertise of a Municipal Council would take time and effort. Still, it is questionable whether or not a Municipal Council will ever be able to fully grasp the functioning of the land agency. Due to its higher hierarchical status, a Municipal Council has more to focus on than only the land agency. Therefore time and the ability to learn of the Municipal Council are limited. The fact that after four years the Municipal Council is re-elected undermines the continuity and security of knowledge and information. In some municipalities, an accountant is hired to support the Municipal Council and helps to critically examine the land agency. Instead of learning the Municipal Council all ins and outs concerning the land agency, another option is to train the Municipal Council to think in a systemic way and ask subject related questions. A Municipal Council could enhance its supervising role by posing the right questions with respect to risk management. However, the Municipal Council is not always trained or used to think in this way.

Learning points

Below the most important learning points derived from the case study research are outlined.

The incorporation of scenario analysis in the risk management process and ways to improve it.

After the crisis, some municipalities started to use scenario analysis to anticipate more on future scenarios and possible risks. For example, a scenario that shows a decrease of 50% in the sale of land for the upcoming five years. Municipalities that were examined during the case study research indicated that the use of scenario analysis still has to develop itself in the upcoming years. In the current use of scenario analysis, scenarios are mainly created by changing parameters. What could be improved is that parameters are chosen in such a way that they resemble reality as much as possible. I.e. how likely is it that the scenario actually will occur? This step has yet to be made. Furthermore, the parameters that define the bandwidths of the scenarios now mainly are numerical of nature. The use of other, non-numerical parameters, could further improve a scenario analysis. For example, which (industrial) sector does a municipality expect to grow in the upcoming years and how is it currently represented in the particular municipality. Finally, measures of control need to be linked to the developed scenarios. One of the municipalities that currently is in the process of improving their working with scenarios has indicated during the case study that, once a scenario is determined, they are still struggling to formulate and link measures for control to this scenario. Again, this is something that has to develop in the next upcoming years. Still, not every municipality is convinced by the use of scenario analysis. Partly due to the fact that some municipalities are relatively unfamiliar with the use of scenarios. Another reason is that the use of scenario analysis is still under development in most municipalities that use it already. Therefore, it has not yet fully come to its own and proven its value.

Land policy as an integral part of risk management of land development activities.

After the impact of the financial crisis, almost every municipality switched from an active to a facilitating land policy. Their main reason is that they do not want to be involved on a large scale in land development projects anymore, because at the moment, they are no longer willing to carry the financial risks of land development projects. However, in some municipalities there is a high pressure coming from the political level to stimulate economic growth and if necessary, achieve this by means of an active land policy. The change of their land policy was not so much based on what was included in their risk management policy or strategy, but rather on the increased sense of urgency that large financial risks should be avoided whenever possible, a declining land and housing market and the large accumulated land supply in most municipalities. This resulted in municipalities that were less willing to carry the financial risks of land development projects. During the case study interviews with the two municipalities that were expected to have a more mature form of risk management, it was found that a land policy should be an integral part of the risk management of land development projects. The choice for a particular land policy in the end influences the amount of financial risks that a municipality has to carry. Therefore, the choice of a municipality for a particular land policy should be knowingly and in line with the risk management policy. This implies that a land policy is reflected clearly in the execution strategy of land development projects, in such a way that decisions are a result of this particular land policy, but also can be justified according to the established risk management policy. In the end, a municipality must be able to explain why decisions or measures taken resulting from a certain land policy are in line with the land development strategy that follows from the risk management policy.

Pay attention to less quantifiable risks and use creative and innovative ways to classify them.

The relevance of this learning point is based on an issue that was indicated by the three other examined municipalities. Some risks, such as political and strategic risks, are not easy to express in terms of financial impact. Nor are they easily expressed in other quantitative parameters. One of the municipalities that was found to be relatively mature in the field of risk management, emphasized

the importance of taking into account less quantifiable risks. This particular municipality found alternative and creative ways to classify less quantifiable risks. In their memorandum on risk management this municipality included a table, which shows the classification of political, societal and juridical risks. A modified example that is derived from the particular memorandum is presented in Table 12. Risks that exceed a certain score have to be reported to the Municipal Council.

Table 12 | Classification of less quantifiable risks ***(Source: Dutch municipality, 2014; modified by author)***

Score	Political	Societal	Juridical
1 = Very limited	Very limited	No consequences	No consequences
2 = Limited	Anxiety at the portfolio manager	Anxiety within the municipal organization	Possibility for losing reputation
3 = Modest	Anxiety within the Executive Board	Anxiety/outrage among citizens or institutions	Legal procedures and possible claims
4 = Significant	Anxiety within the Municipal Council	Anxiety/outrage among larger groups from society (regional press)	Long lasting legal procedures and claims
5 = Serious	Serious trouble for a city councillor	Serious anxiety/outrage (national press and other media)	Large and long lasting legal procedures and claims

An interregional database to manage, monitor and share measures for control and their effects with other municipalities.

One of the examined municipalities came up with the idea of an interregional database. This database is shared with municipalities from the same region to improve the process of monitoring and communication of control measures. Measures for control used in other connected municipalities are registered, which allows other municipalities to monitor and learn from the effects of control measures used in other municipalities. By registering measures for risk control in an interregional database, municipalities can help each other. The idea behind this interregional database is that municipalities, especially when situated in the same region, share a lot of identical problems. Think of social housing, employment, but also land development related issues. A similar interregional database could work for risk identification. This allows municipalities to gain insight in each other's risks. In order for such an interregional database to work, there is an important prerequisite. Municipalities must to be willing to share information regarding risks and measures for control with other municipalities. It is expected that, to a certain extent, municipalities are indeed willing to share the necessary information with each other. This because every municipality plays an identical role in society and shares an appreciable number of societal objectives similar to those of other municipalities. To start with, municipalities could first set up their own database in which they manage and monitor their own measures for control. The idea of such a database is the same as the interregional database, only then on a smaller scale.

Find a method to structure the risk management process that suits best for the organization.

A municipality does not have to bound itself strictly to the use of one particular method to structure its risk management process. It is possible to switch between alternative methods, combine the useful elements of two or more methods, or incorporate useful elements from an alternative method in their own method. Regarding this aspect, municipality D serves as an example. In this municipality it was found that the RISMAN method did not worked well in terms of providing insight in risk and communicate them to the Municipal Council. Their choice was to adopt an alternative method and combine its most useful elements with their own procedures regarding risk management. In the end it is important that a municipality finds and uses a method that suits best for their organization.

6.2.3 Aspects that encourage and hinder the successful implementation of risk management

In the previous subparagraph, lessons to be learnt regarding the improvement of risk management of land development activities in four examined municipalities were listed. Besides lessons to be learnt, the case study research also revealed aspects that could smoothen of hamper the process of applying these lessons. These are the so called aspects that encourage or hinder the successful implementation of measures to improve risk management of land development activities. Addressing these aspects leads to the answer of subquestion 6:

> *What aspects encourage and what aspects hinder the successful implementation of measures to improve risk management of land development activities within Dutch municipalities?*

Subquestion 6 is answered based on the findings of the case study research and on findings that were made earlier in chapter 2. Furthermore the findings of the case study research allow it to answer this subquestion in its current form. In the sections below, subsequently the aspects that encourage and that hinder a successful implementation of risk management regarding land development activities are discussed.

Aspects that encourage a successful implementation of risk management

Mentioned by all examined municipalities and also listed in paragraph 2.6 is risk awareness. According to all the respondents, this a prerequisite of a successful implementation of risk management. In addition, in order to implement or improve risk management throughout the whole organization, an increased risk awareness is utmost essential. Regarding risk awareness, responsibility and commitment are two important aspects. Dealing with risk management on a daily basis helps to increase the risk awareness of the involved staff members and in the end, the organization. During the case study research, the following points were mentioned by the examined municipalities as measures that raised the risk awareness of the organization:

- *The writing of a memorandum on risk management:*
  In order to increase the risk awareness, risk management as a topic must be brought to the table. A clear policy on risk management helps to place risk management higher on the agenda. Including a risk management philosophy as suggested by Dickson (1995) (paragraph 2.6) reflects were the organization stands with respect to risk management and may even contribute to a proactive attitude among employees (Dickson, 1995).
- *The establishment of two committees with a controlling task:*
  Project managers are required to substantiate their investment request in detail and point out the consequences of their decisions for other projects. Both committees stimulate and help project managers to make investments more knowingly and think more on the concern level.
- *Adaptation of the proposal format towards the Municipal Council and Executive Board:*
  The new proposal format implies that every decision must be provided with a risk paragraph. This paragraph must contain every identified risk of a decision or project, together with the possible alternatives if any. Staff members are now forced to think thoroughly about risks.
- *Organize risk management sessions:*
  Risk management sessions help to actively involve staff members and make them familiar with the concept of risk management. As pointed out in paragraph 2.6, it is difficult to implement or improve risk management properly in an organization that is relatively unfamiliar with risk management and its use. During these sessions it is important that there is an open atmosphere. This causes people earlier to mention also less obvious risks or measures for control.

The increased risk awareness in some municipalities lead to the upcoming use of scenario analysis, which further increases the intelligence of the organization with respect to risk management.

Ensuring that there is a broad support for risk management among staff members can be considered as the following step. Obviously, an increased risk awareness will contribute to a broader support among staff members. However, an increased risk awareness is not the only factor that contributes to a broad support for risk management. It is also important how risk management is promoted, both internally and externally, by the organization. For example, that risk management can be useful to structure and control processes, but also that in the end it can help to gain more control over the financial position of a municipality. Promoting a risk management policy also includes mentioning for which purposes risk management cannot be used. One way to enhance the support among employees is to appoint initiators that coordinate risk management. Which leads to the following point: the central coordination of risk management.

Concerning the central coordination of risk management, the term coordination should be clearly differentiated from organization. A central coordination implies a bottom-up organization of risk management, something which is mentioned by some of the examined municipalities as a successful way of organizing risk management. However, a central organization implies that there is one responsible person, team or department for the risk management process. In paragraph 2.6 it was pointed out that, if it happens to be that others staff members are poorly involved in the process, there lies the danger of risk management becoming isolated. Thereby undermining the risk awareness of the whole organization. In case of a central coordination of risk management, the role of the staff members on the concern level is to stimulate other employees to incorporate risk management on a constant basis in their daily work. For this purpose one person, team or department could be appointed to take the initiative to promote risk management and put it more on the agenda. Still, it remains everyone's own responsibility to incorporate risk management in their daily working processes.

Another important point that was raised by the examined municipalities is the sense of urgency. In order to really improve risk management of land development activities the problem has to be sufficiently large enough. There has to be a certain sense of urgency. In a certain sense, the financial crisis also had a positive influence on municipalities, because in many municipalities it greatly contributed to this sense of urgency and raised the financial awareness. As a result, the role of risk management became more prominent in most municipalities.

Finally, when it comes to implementing risk management it is important to realize that the implementation process can be time consuming and askes for patience and commitment of the organization and its staff members. As pointed out in paragraph 2.6, risk management cannot be simply implemented or improved from one day to another. It is a learning process of trial and error (Bunt et al., 2003). Because the implementation of risk management consequently can have very drastic changes, it is preferable that its implementation goes gradually and according through different phases, one step at a time.

Aspects that hinder a successful implementation of risk management

The first point that can hinder a successful implementation of risk management is when risk management is too complicated. When a risk management process is too complicated this creates a barrier for staff members to commit themselves to the risk management process. In paragraph 2.4 it was shown that it is possible to create an overabundance of risk management, which makes that an organization becomes rigid. For example, when a municipality finds itself in endless procedures of reporting of every risk on the project level. Considering each risk equally relevant and extensively reporting on it lowers the flexibility of the organization. Instead, the focus should be on anticipating to unforeseen circumstances with a high impact on the organization. The interest rate and the sale of land are aspects that play a central role. An overabundance of risk management is also were the problem lies with respect to the principles of 'good' risk management. In paragraph 2.5 it was pointed out that the aim to fulfil all the principles of 'good' risk management lowers the degree of

freedom and a municipality could find itself 'suffering' from the earlier mentioned sword of Damocles. In the pursuit to fulfill all the principles lies the danger of acting too much according to the risk approach, as described by the control paradox mentioned in paragraph 2.4. Also this issue is related to the problem of goal orientation, introduced in paragraph 2.4. Methods to estimate and control risks can be very important to an organization. However, following these methods should not be the goal and go at the expense of the flexibility of an organization.

A very important aspect that may hinder or conflict with the successful implementation is the influence on risk management coming from the political level. The case study research showed that there are several reasons why the political influence can be considered as an area of concern (subparagraph 6.2.2). Besides having an inhibiting effect on the successful execution of risk management, the political level also influences the implementation process of risk management. The difference in political background results in politicians having a variety of preferences regarding the implementation of a risk management policy and its corresponding measures. Therefore, for a municipality it is not always straightforward to adopt a certain risk management policy or measure, especially not when it is conflicting to political ambitions such as economic growth.

During the case study research, one of the examined municipalities indicated that there is a lot of external focus from the press and legislation on whether or not a municipality is able to maintain an acceptable financial resilience. In chapter 4, which describes the municipality scan, it was found that most municipalities use the risk management section in their budgetary report and annual accounts only to substantiate on the financial resilience. The focus is mainly on the financial impact of risks. In this lies the danger that measures to improve risk management, which are not directly related to the consolidation of the financial resilience, are considered less important and therefore are less likely to be implemented.

Then there is the issue of integrality, introduced by Bruijn et al. (2014). Risk management is supposed to take place in every layer of an organization and depends on many persons and different risk perceptions and assessments. Therefore, when implementing or improving risk management, the new or adapted risk management policy has to be workable for every person and department. The more bigger and complex the organization will be, the more difficult it will be to implement or improve risk management while making it workable for everyone.

Finally, in paragraph 2.6 it was discussed that some issues in the early days of the implementation process are caused by the sensitivity of the term 'risk management'. Something which was also found during one of the case studies. This is the reason why in some municipalities project managers are not very eager to mention every risk of their project. Too many negative associations with risk management that dominate the working environment in the organization decrease the support and in the end hamper the successful implementation of risk management.

6.3 Reflection on the case study research

This paragraph includes a short reflection on the current state of risk management within Dutch municipalities, based on the findings coming from the four case studies.

The case study research showed that, as a consequence of the financial crisis, in most municipalities risk management and the corresponding provision of information are improved. Both internally and towards the Executive Board and the Municipal Council. These developments also contributed to an increased risk awareness. Every municipality that was examined during the case study research realized that risk awareness is a key factor when it comes to 'good' risk management.

This increased risk awareness resulted made that, after the case study research was conducted, the results from the municipality scan needed to be rectified. It turned out that the municipality scan did not provide a good impression of the actual maturity level of risk management. This holds for three out of the four examined municipalities. In fact, the difference in the actual maturity level between the four examined municipalities is less great than expected. Apparently, the

sections on risk management and land policy are, according to municipalities, not the place were risk management is laid down in every detail.

In the past few years after the financial crisis, the result of this increased risk awareness lead to municipalities that became more intelligent when it comes to risk management of land development activities. Think of the upcoming use of scenario analysis that begins to form a part of the risk management process in some municipalities. Also municipalities developed or adjusted their own method or model for risk management in such a way that it fits to their organization and working processes. Compared to the situation as it was before the financial crisis, municipalities also made a significant improvement in adjusting their spatial policy and land development process. Spatial policies are now more aligned with the actual situation on land and housing markets and land development takes place more knowingly when it comes to investments in land development projects and risk taking. Also plans for land development projects now are more realistic. Nevertheless, changing the risk management process of land development activities is not always straightforward due to institutional barriers. For example, there is a path dependency for most municipalities, since they are bounded by their earlier investments in land that were made in the period before the crisis. This makes lowering the ambitions for housing programs not always straightforward, also due to the influences from the political level. Therefore, not in every municipality it holds that land development plans are always realistic and adapted to the economic situation. Still, land development projects are undertaken with more caution and risk awareness by municipalities than in the situation before the financial crisis.

From the case studies can be concluded that, risk management in most municipalities currently is a 'hot' item. This is mainly the result of the sense of urgency that is caused by the impact of the financial crisis. However, this sense of urgency seems only temporarily. Several municipalities indicated that there are already early signs of a falling back to the situation as it was before the financial crisis. From a societal perspective this is highly undesirable, since the severe financial problems in some municipalities resulted in fierce cutbacks on social services. The spirit of time seems very changing. However, it would be beneficial, for both municipalities and society, if the increased sense of urgency and risk awareness were to be something of all times. In order to achieve this, it requires a strong foundation in the municipal organization when it comes to risk management of land development activities. Laying down this foundation is the starting point of the conceptual design, which is described in the next chapter.

The case study research raised the impression that municipalities can use help from others in laying such a foundation and radically change their risk management policy. One example that gave rise to this presumption is that municipalities still are having great difficulties with the estimation of risks and substantiation of underlying parameters. However, the fact that other parties such as accountants and consultancy agencies are struggling with the same issues as municipalities, suggests that the estimation of risks is difficult from its nature. Apparently, this is not something which can be left to municipalities to struggle on their own.

Chapter 7

Conceptual design of a memorandum on risk management

In this chapter:	
Specification of the conceptual design	§7.1
Suggestions for the content of a memorandum on risk management	§7.2

This chapter marks the beginning of the design phase. The first step in the design phase is formulation of the conceptual design. The conceptual design holds how risk management of land development activities in municipalities can be improved, in order to increase the risk awareness in their organization more permanently. In chapter 1 it was explained that the form and structure of the conceptual design had to be discovered during this research. The combined results of the literature study, the municipality scan and the case study research, provided all the required elements in order to start with the creation of the conceptual design. However, first the conceptual design must be further specified. This is done in paragraph 7.1. Subsequently, in paragraph 7.2 the conceptual design is presented, which leads to the answer to subquestion 7.

7.1 Specification of the conceptual design

This paragraph further specifies the conceptual design and describes the iterative exploration process towards the eventual specification of the conceptual design.

In the earlier phase of this research, the principles of 'good' risk management were identified. The original underlying idea behind identifying the principles of 'good' risk management was to use them as a guideline for the improvement of risk management of land development in Dutch municipalities. This starting point lead to the proposal of a municipality scan to find out for which requirements the selected municipalities for the scan were inconsistent with the principles of 'good' risk management. After the identification of the principles and during the municipality scan, it was found that using the list of principles of 'good' risk management as a checklist to determine the maturity level of risk management is not workable for municipalities. A complication with the principles of 'good' risk management is that the list of requirements presented in Table 5 is very comprehensive. For a municipality it is unfeasible to fulfill them all. Trying to do so probably may result in a municipality leaving itself very few degrees of freedom, in the end leading to a rigid and inflexible risk management process. In their pursuit to meet all the principles of 'good' risk management, municipalities act too much according to the risk approach. Thereby they will find themselves at the right end of the control paradox (Figure 4, paragraph 2.4). Therefore, a better way to deal with the list of principles of 'good' risk management is to interpret them as a rough guidance. Searching for measures to improve risk management of land development activities, in order to fulfil as much as possible principles, therefore seems not a feasible and workable solution for municipalities.

Still, the research objective remains unchanged: to find a way for municipalities how they could improve their risk management regarding to land development and finally, gain more control over their financial position. During this research it became clear that this actually requires some sort of institutional change from municipalities. Risk management is not something what is implemented or changed from one day to another. It is a learning process of trial and error that takes time, askes for patience and commitment of the organization and its employees and requires a tailor made approach. The fact that employees sometimes are out of their comfort zones because a new risk management process could mean significant changes in their daily working process, makes that the implementation or change of a risk management policy is on the institutional level.

In the last paragraph of the previous chapter it was mentioned that it would be desirable for municipalities and society if risk management of land development activities were to be strongly founded in each layer of the municipal organization. This in such a way that, the increased risk awareness and sense of urgency are permanently incorporated in the municipal organization. It was also found that, as a starting point, this requires a clear vision and comprehensive substantiation of a risk management policy. In particular, such a policy could comprehend the risk management philosophy suggested by Dickson (1995), which includes writing a clear risk management statement. The risk management statement reflects the perspective of the municipality on risk management and helps to communicate the risk management philosophy throughout the organization. However, during this research it was found that municipalities do not substantiate their risk management process or policy to its full extent. At least that is to say, not in the policy documents that were examined during the municipality scan and the corresponding desk research. During the case study research, it turned out that the sections on risk management and land policy in the budgetary report and annual accounts, according to the examined municipalities, are not suitable to substantiate on risk management in every detail. The case study research also learned that there is another policy document used to define the risk management policy of a municipality: the memorandum on risk management. According to the examined municipalities in the case study research, a memorandum on risk management seems a more appropriate place to lay down a risk management policy and substantiate on it in more detail than the risk management section in the budgetary report or annual accounts. Actually, the memorandum on risk management, and not the budgetary report or annual accounts, is the policy document for municipalities that holds the foundation of risk management within the organization. Therefore, with respect to the conceptual design, the choice is made to focus on the improvement of a memorandum on risk management. Before going into depth on the actual design of a memorandum on risk management, first the role of a memorandum on risk management in the municipal organization further explained in the upcoming section.

The role of a memorandum on risk management

In chapter 3 it was explained that the Municipal Council sets the framework regarding risk management for the Executive Board and supervises the Executive Board while carrying out the risk management policy. Formally, both entities hold the responsibility for the risk management policy. In the same chapter it was also found that, in practice municipalities often choose to consolidate their risk management policy and framework in the memorandum on risk management and that this memorandum needs approval from the Municipal Council.

The role of a memorandum on risk management is to provide a framework-setting policy for managing and controlling risks on the organizational level. Among other things, this includes the structuring of both the processes of risk analysis and risk control and defining and substantiating the financial resilience. The memorandum on risk management also provides insight to what extent a Municipal Council can perform its monitoring and supervising task properly. The consolidation of a risk management policy in a memorandum on risk management is an important step towards a successful implementation and development of risk management in municipalities, because it forms the basis for a clear and solid risk management policy. This is also reflected in the principles of 'good' risk management (Table 5, principle 8). Writing a memorandum on risk management stimulates a municipality to think about a risk management policy and make risk management a daily business. This puts risk management higher on the agenda and increases the visibility for the staff members of the organization. According to the memorandum on risk management of one of the municipalities that was selected from a higher maturity level, a memorandum on risk management contributes to the following points on risk management:

- The internal risk control and management of the organization.
- The improvement of the risk management process.
- Determine the risk profile of the municipal organization or land agency.

The memorandum on risk management could fulfil the role of a policy document in which a project manager of planning economist substantiates on estimated risks and underlying parameters. Thereby, a memorandum on risk management gives an accountant more insight in the risk estimations and which parameters and data are underlying to these estimations. Referring back to the case study report of municipality A, in which it was pointed out that issues may emerge during an audit if risk management is organized more informally, a memorandum on risk management can prove its usefulness by lowering the chance of difficult discussions with the accountant.

To conclude this section, in a memorandum on risk management it is very well possible to incorporate the suggestion done by Dickson (1995): laying down a clear risk management philosophy. Now the role of a memorandum on risk management is clarified, the formulation of the actual conceptual design, in the form of a memorandum on risk management, is the next step.

7.2 Conceptual design of a memorandum on risk management

This paragraph focuses on the design of a memorandum on risk management. Throughout this thesis it was found that the list of principles of 'good' risk management is too comprehensive for municipalities to fulfil them all. Searching for ways that help municipalities to fulfil as much as possible of the principles therefore is not considered as a workable solution for municipalities. The in paragraph 6.2 defined areas of concern and aspects that hinder the implementation of risk management, showed multiple reasons why municipalities cannot or knowingly do not fulfil particular principles of 'good' risk management. Using the principles of 'good' risk management as a starting point of the conceptual design seems more logical for the top-down approach of the risk approach. However, in chapter 2 of this thesis it was emphasized that, in order for risk management to be successful, also softer aspects of the network approach should be taken into account. Staff members have to enter into dialogue with each other on risk management in order to make risk management subject of discussion. In the previous paragraph it was discussed that a memorandum on risk management can stimulate this. A memorandum on risk management also leaves room to combine aspects from both perspectives, the risk and the network approach. Furthermore it was found in the previous paragraph that a memorandum on risk management can be very useful in laying down a solid foundation for risk management of land development activities in municipal organizations. Now the question remains, which aspects should a municipality include in a memorandum on risk management? The conducted literature study and case study research have resulted in a number of useful suggestions, which are listed in the upcoming subparagraph.

7.2.1 Suggestions for the content of a memorandum on risk management

The writing of a complete memorandum of risk management is something that should be done by the municipalities themselves. Therefore, the focus is not on structuring and dictating the content of a risk management memorandum in every detail, but more on providing a guideline.

When designing a memorandum on risk management, a possible pitfall might be the tendency to include mainly aspects that correspond with the starting points of the risk approach. The risk approach seems very workable, because its key message and more harder aspects are often very clear and specific. This makes a memorandum on risk management clear, concrete and workable for every staff member. The network approach uses softer aspects, which are on a higher level of abstraction. It provides much less options for immediate action and generally is considered to result in less workable and more vague solutions. However, chapter 2 showed that the network approach can be of important use in the implementation process of risk management. This is why in the design of a memorandum on risk management elements from both perspectives, the risk approach and the network approach, are combined and incorporated in the conceptual design. For the conceptual design, the format and structure of a memorandum on risk management are used as a model basis for a guideline, thereby following the risk approach. In this guideline, some more softer aspects from the network approach are integrated, in a similar way as was done with the principles of 'good' risk management. Furthermore, considering the designing of a memorandum on

risk management, it can be useful for a municipality to select the usable aspects from the principles of 'good' risk management derived from the case study research and incorporate those aspects in the memorandum on risk management. For the suggestions on the content of a memorandum on risk management, the following elements and parts of this research are used as input:

- Findings from the literature study in chapter 2, including elements of the principles of 'good' risk management that turned out to be useful for municipalities.
- The areas of concern and learning points regarding risk management of land development activities that were identified during the case study research, outlined in chapter 6.
- Aspects that encourage and hinder the implementation of risk management derived from the case study and listed in chapter 6 and the literature study in chapter 2.
- Memoranda on risk management of municipalities from the "integrated" category of the municipality scan.

Table 13 shows the suggestions for the content of a memorandum on risk management, which represent the conceptual design. For each suggested subject, the most relevant items which help to cover and support the particular subject are provided.

The purpose of Table 13 is to help municipalities give more substance to a memorandum on risk management, serving as a guideline. By following this guideline while writing a memorandum on risk management, municipalities lay down a better foundation for the risk management of land development activities and increase the risk awareness of the organization. With respect to Table 13, it must be notified that it is not exclusive. Municipalities are free to include other aspects that they consider to be relevant for laying down a foundation for and the improvement of risk management. In general lines, the subjects and related items included in the guideline are considered to be the most relevant. This is further explained in the upcoming subparagraph.

Table 13 | Guideline for a memorandum on risk management

Subject	Relevant items
Risk management policy	Risk management philosophy, including a risk management statement, the organization's perspective on risk management and a formulation of the objectives.
	The contribution of risk management to the predefined objectives and strategy of the municipality and the relation with macroeconomic trends & developments and future opportunities.
	Policy that includes soft aspects from the network approach. E.g. necessary culture and competences to embed risk management in every layer of the organization. Also specify this policy into measures to embed risk management in the organization.
	Risk acceptance level and corresponding risk appetite.
	Clearly specify what is covered and what is not covered by risk management.
The organization of risk management	Clear overview of the risk management process and the method used to shape and structure the process.
	Description of the relevant steps of the risk management process and their outcomes. Among other steps, this also includes the classification of less quantifiable risks, and the prioritization of risks.
	How risk management is incorporated and coordinated: coordinators, involved persons, teams and departments.
	Explanation of the risk management information system or database that is used.
Risk parameters	Substantiation on the used parameters and the underlying data or information. This concerns parameters such as the interest and discount rate, the increase in cost and revenues and the (expected) land sales.
	When certain parameters are not clear or cannot be estimated, an explanation why.
	Parameters that resemble reality as much as possible.
Measures for control	Measures for control that are linked to risks. This goes according to the prioritization of risks (above a certain value, score etc.).
	Appointed risk owners for every measure.
	Defined measures for control according to the SMART formulation.
	Description of a method, procedure or system that ensures the monitoring and communication of the effects from measures for control that are taken.
Financial resilience	A policy that clarifies the financial resilience and the applied norm. Including actions to maintain the financial resilience according to the applied norm.
	A substantiation on what is taken into account as the available resistance capacity.
	A substantiation or calculation on the required resistance capacity, based on the risk profile of the municipality (including the risk profile of the land agency).
	An assessment of the financial resilience. I.e. determine whether or not the buffer to cover the risks of the risk profile is sufficient (stress test, gradation table).
Land policy	A clear substantiation of the link between a particular land policy and the established risk management policy. A description how the choice for a particular land policy is in line with the current organizational objectives, risk strategy and future opportunities and the macroeconomic developments & trends.
Scenario analysis	A connection between measures for control and scenarios.
	Besides numerical parameters, also use non-numerical parameters. Such as, which (industrial) sector does a municipality expect to grow in the upcoming years and how is it currently represented in the particular municipality.
	Bandwidths that resemble reality as much as possible.
	A sensitivity analysis that calculates and tests different scenarios.

7.2.2 Substantiation of the conceptual design

For each suggested subject, Table 13 shows which aspects could be included in memorandum on risk management. To provide a little more substance on Table 13, this subparagraph discusses briefly per subject which part of the research it is based on or derived from, why it should be included in a memorandum on risk management and how it could come into practice for a municipality.

Risk management policy

During the municipality scan it was found that, of the memoranda on risk management that were examined, most were relatively brief on a risk management policy and only a very few discussed the underlying thought behind risk management of land development activities. However, throughout this thesis it was also found that a clear policy on risk management helps an organization to become more risk aware and communicate the organization's perspective on risk management throughout the organization. This could be done by making use of the suggestion of Dickson (1995), to formulate a risk management philosophy including a statement on risk management. For a municipality, a sample of such a risk management statement could be something close to the following sample of a risk management statement.

Sample risk management statement

It is in the policy of municipality X to take all necessary and reasonable steps in the managing of land development risks to ensure that the municipal organization is not financially or operationally disrupted, or that society suffers in any way whatsoever from undertaken land development activities.

By implementing this general statement, it is in the philosophy of the municipality to:

1. Identify those land development activities and risks that jeopardise or may threat the financial position of the land agency and therewith that of the municipality.
2. Measure and analyse the impact of (potential) land development risks on the municipal organization.
3. Take reasonable steps to avoid or reduce the impact of (potential) risks regarding land development activities.

The risk statement above only serves as an example of what the idea is of a risk management statement. A municipality could include other or more aspects, as long as its general perspective on risk management is clear towards the organization. This in such a way that the risk management statement corresponds with the formulated objectives and daily decision making and working processes. For this purpose, a municipality could include in its risk management policy how this policy contributes to the predefined objectives and strategy of the organization. For example by describing how the risk management of land development activities lead to a strategy to deal with macroeconomic trends and future opportunities. For a municipality this could involve trends and developments on the land and housing markets.

The risk awareness of an organization is related to certain level of risk acceptance, which in turn is expressed in a corresponding risk appetite. To support the decision making process of land development projects, a municipality could define its risk acceptance level and corresponding risk appetite. This helps to avoid discussions, also in later stages, on whether or not certain risks should be or should have been taken, or are taken knowingly. If a particular risk occurs, its impact could have consequences on different levels. Think of consequences on the political, societal, organizational, juridical or on the financial level. To indicate its risk acceptance level, for each identified level a municipality could set a clear boundary. For example a certain threshold value, or in case of a less quantifiable risk, a limit on a non-numerical scale. Thereby it is possible that a different risk acceptance level is used for each level.

Besides formulating a risk management policy by hard elements that are clearly measurable, such as defining a risk acceptance level, according to the network approach discussed in chapter 2, a risk management policy should also include soft aspects. One way of doing this is to describe the necessary culture and competences of employees to embed risk management in every layer of the organization. An example for a municipality is that it translate its policy on risk management in job requirements for functions that play a key role in risk management of land development activities. Such as, the concern controller, project managers, planning economists and the head of land management. Another important step regarding the execution of a risk management policy is that a municipality specifies its policy into measures to embed risk management in the organization. Examples from the case study research are the establishment of two controlling committees and including a risk paragraph in the format of project proposals towards the Municipal Council and Executive Board.

Finally, a clear risk management policy not only involves mentioning what is covered by risk management. It also includes a clear boundary of what is not covered by risk management. During the case study research it was found that, on the project level, it is not necessary to report in detail on or link measures for control to every project risk. This in contrast with macroeconomic risks on the programme or concern level. By explicitly clarifying what does not fall under risk management, but for this particular case could be better referred to as project management, a municipality can manage the expectations of its employees regarding to what is meant and covered by risk management of land development activities.

Risk management in the municipal organization

During the municipality scan it was also found that the annual accounts, but also additional examined memoranda on risk management, in general do not go deep into or even lack to describe how risk management is organized and structured in the municipal organization. Therefore, municipalities are advised to include a clear overview of the risk management process and the method used to shape and structure the process in their memorandum on risk management. This is where the side of the risk approach becomes useful. One way to structure a risk management process is according to the RISMAN method. However, there are other methods available too, for example the ILFO method. One of the learning points from the case study research was that a municipality should always use the method that suits best for their organization.

Along with a clear overview of the risk management process comes a description of the relevant steps of this process and their outcomes. Among other steps, this also includes the quantification, classification and prioritization of land development risks. Examples of elements to include in a memorandum on risk management are scorecards and classification tables that help to prioritize the identified land development risks. Clear insight and understanding of the risk management process, its relevant steps and their outcome is not only useful for the involved staff members, but also helps to communicate risk management towards the accountant. Thereby reducing the likelihood of ending up in an endless debate.

Furthermore, it was found during the case study research that a success factor that contributed to an organization wide establishment of risk management is the central coordination of risk management. In order to make this more concrete, a municipality could set up a front team that takes the initiative to coordinate the risk management process. Tasks that are assigned to such a team are the development of a (new) risk management policy and raising the risk awareness among other staff members. The risk awareness among the staff members could be raised by involving them in the process of developing a risk management policy or strategy. For example during risk management sessions, or placing risk management on the agenda of the periodical staff meetings.

Finally, during the case study research it was found that every examined municipality uses a risk management information system or database for their risk analysis and calculations. If it is mentioned at all which information system or database is used, then in most cases only the outcomes are presented. It remains unclear why this particular system or database is used, which

persons have access to it and what type of risks are in entered in the system or database and why. The answers to these questions cannot be found in the annual accounts or even most memoranda on risk management of the selected municipalities of the municipality scan, but could only be answered after the case study research. It would be more clear if these aspects are outlined in a memorandum on risk management.

Risk parameters

This subject clearly came forward during the case study research and was pointed out in subparagraph 6.2.2 as one of the main areas of concern in the four examined municipalities. For this reason, municipalities are suggested to contain more information about the estimation of risks and underlying parameters. With respect to land development risks, municipalities could include more information on their expectations of future macroeconomic trends and developments on the land and housing markets. Examples are the effects of an increased interest rate in combination with a project delay, how the maintained interest rate and corresponding discount rate are estimated over the years and expectations regarding future land sales and prices based on location studies. In the memorandum on risk management, these parameters could be included in a separate section, or attached to the relevant part of the risk analysis.

Now here lies a problem. The case study research showed that the examined municipalities are having great difficulties with the estimation of risk and underlying parameters. Therefore it is expected that being clear and plenary about risk parameters in a memorandum on risk management is not going to be straightforward for every municipality. Nevertheless, municipalities are suggested to make estimations as accurate as possible, provided with a thorough explanation why and based. Ideally not only based on expectations, but also on chosen parameters that resemble reality as much as possible, e.g. a land price that actually represents the current value of a particular land plot. Perhaps in the current situation this is somewhat asked too much from municipalities. The case study research also showed that municipalities need more time to further develop their risk management process, which includes this aspect. Still, whenever possible, municipalities are suggested to be as clear and substantial as possible in their risk estimations. This also includes that when certain parameters are not clear or cannot be estimated, it is explained why.

Measures for control

Like the previous subject, this subject was pointed out as one of the areas of concern for municipalities as a result from the case study research. Also, during the municipality scan it was found that most of the selected municipalities were very short spoken when it came to measures for control. According to one of the principles of 'good' risk management, municipalities could improve their risk control by linking measures for control to specific risks. Of course linking measures for control to every risk is far too complicated and time consuming for municipalities. Therefore risks must be properly prioritized. For example, measures for control are only linked to risks with an impact above a certain value, limit or score. Furthermore risk owners could be appointed for every linked measure. Their task is not only look after the execution of the measure for control, but also to monitor and communicate its effects. Whenever necessary on the project level, potential staff members that could be a risk owner are project or team managers. On the concern level these are a portfolio manager or a concern controller. The result of this step is a clear overview of the allocation of risks and linked measures for control among various departments and responsible staff members.

The monitoring and communicating of the effect of measures for control is an important step in the risk management process of land development activities, because the information that is gained during this step forms the feedback towards the risk analysis, which allows for its actualization (Figure 5). Therefore, municipalities are suggested to include and describe the method, system or procedure which ensures the monitoring and communication of the effects from measures for control that are taken. The case study research showed that this particular step has yet to further develop itself in the examined municipalities. However, including this as a subject in the

guideline for writing a memorandum on risk management stimulates municipalities to work on the development of the process of risk control. An alternative for a system that ensures the monitoring and communication of the effects from measures for control is provide in the form an interregional database, a learning point suggested by one of the municipalities that was examined during the case study research. How this comes to practise can be read in the subparagraphs 5.3.3 and 6.2.2.

Finally, during the municipality scan it was found that, in the rare case that measures for control were mentioned specifically by municipalities, still their formulation was rather vague or only superficial. Therefore municipalities are suggested to write down measures for control according to a SMART formulation. This forces a municipality to think of measures for control that are concrete, specifically linked to risks, measurable, acceptable and realistic in terms of costs and capacity and finally, are also bounded by time.

Financial resilience

As concluded in paragraph 2.3 of chapter 2, the financial resilience is an important instrument for municipalities when it comes to risk management of land development activities. In the current situation, often the greater part of the risk section in the annual accounts is devoted to the elaboration of the financial resilience. This seems a logical result regarding to what is mandatory for municipalities to include in the risk section according to the BBV decree. In chapter 3 it was discussed that, according to the BBV decree, municipalities are obliged to elaborate on the risk profile of their land development activities in relation to the financial resilience. However, during the municipality scan it was found that the result of the implications coming from the BBV decree is that in the current situation, municipalities often use the risk section solely for the substantiation of their financial resilience. To prevent that the same will apply for a memorandum on risk management, other subjects related to risk management of land development activities are added to the guideline as well. Nevertheless, the financial resilience still remains an important instrument for municipalities to control land development risks. Therefore it is included as a subject in the guideline for a memorandum on risk management. The relevant items that are related to this subject are based on what is mandatory to include in a risk section according to the BBV decree. What is added is an assessment of the financial resilience. This assessment should determine whether or not the buffer of the financial resilience is sufficient to cover the risk profile, including the risk profile of the land agency. A simple assessment could be the gradation table introduced by Smorenberg (2006). Another way to assess the financial resilience of a municipality is a stress test. A stress test provides insight in the possible consequences of macroeconomic developments on the financial position of municipalities. During this test, the most important macroeconomic factors that form a threat for the financial position of a municipality are identified and used to examine the effect on the financial position of a municipality. This could be done by changing parameters, such as the interest rate. A stress test very much resembles a scenario analysis, only its focus is solely on financial parameters.

Land policy

Although some municipalities maintain a separate memorandum on land policy and in the annual accounts and budgetary report there is a distinction between a risk section and a section on land policy, this subject is included in the guideline. Land policy is included as a subject because one the learning points of the case study research is that the land policy of a municipality should be an integral part of the risk management policy. However, during the municipality scan it was found that not every municipality has a memorandum on risk management or memorandum on land policy, or the section on land policy is poorly connected to the risk section in the annual accounts. By actively referring in the risk section to the land policy section and indicating in the land policy section why the chosen land policy is in line with the established risk management policy, a municipality can integrate both aspects. The same goes for a memorandum on risk management. In a memorandum on risk management, a municipality could explain why their land policy is in line with their risk management policy. For example, by mentioning the relation of the maintained land policy with the

current organizational objectives, risk strategy and future opportunities and macroeconomic developments. In case a municipality has a separate memorandum on land policy it is not necessary to discuss the choice for a particular land policy in every detail. Still, at least a municipality could refer to this memorandum on land policy in their memorandum on risk management and summarize the most important arguments that support their choice for a particular land policy.

Scenario analysis

The literature study showed that, according to the principles of 'good' risk management, municipalities are advised to think in scenarios and incorporate scenario analysis in their risk management process. During the case study research it was found that some of the examined municipalities already were in the process of incorporating scenario analysis into their risk management process. For this reason, the use scenario analysis was designated as one of the learning points of the case study research and added to the guideline for a memorandum on risk management. However, the case study research also showed that in the upcoming years the use of scenario analysis still has to develop. The relevant items related to this subject, listed in Table 13, can be considered as suggestions for municipalities to further improve scenario analysis. How these points come into practice is illustrated in subparagraph 6.2.2, under learning points. What is added to the list of relevant items is a sensitivity analysis that calculates and tests different scenarios by changing parameters slightly in a certain range between bandwidths. Besides that scenario analysis can be used to calculate the financial impact of different scenarios, also scenarios based on non-numerical parameters can be developed. This is where scenario analysis differs from the earlier described stress test of the financial resilience. It allows for including parameters or variables that are related to political and strategic risks. For a municipality it could be possible to examine which industrial sector is expected to grow in the upcoming years, or how a certain political decision could affect the area development strategy of a municipality.

7.2.3 How the guideline deals with institutional barriers

In paragraph 6.2 the most important institutional barriers that influence risk management of land development activities in municipalities were introduced. It would be for the benefit of the quality of risk management when a municipality is able to overcome or change these institutional barriers. Making changes or overcoming barriers on the institutional level can be difficult. Institutions give a municipality its typical characteristics and shape the complex setting in which land development activities in municipalities take place. Both are not so easily altered.

The guideline for a memorandum on risk management helps municipalities to overcome some of the institutional barriers, or at least provide a basis for a change on the institutional level. For example, regarding the issue of time and capacity constraints, the guideline suggest municipalities to make a clear prioritization of risks. This helps municipalities to focus on the most important risks, thereby allocating their time and capacity as efficient as possible. Another example is that writing a memorandum on risk management according to the presented guideline helps to make a municipality more familiar with risk management. This enhances the reputation of risk management in the organization, increasing the chance that project now are more willing to talk about the risks of their project.

Other institutional barriers are less likely to overcome, even with the help of the guideline for a memorandum on risk management. In a municipality, political motives will always influence decision making and the risk management process of land development activities. However, regarding the political preference for an active land policy, a municipality might find less resistance among politicians when its choice for a particular form of land policy is clearly substantiated and in line with the established risk management policy. The path dependency of municipalities that are committed to earlier investments in land development projects with a long development time is also a given fact that cannot be changed. Nevertheless, the guideline for writing a memorandum on risk management can play a role in laying a new and better foundation of risk management of land development activities. Municipalities can make a fresh start by writing a memorandum on risk

management that is of greater substance than only the substantiation of the financial resilience. Laying a new or improved foundation for risk management of land development activities is the first step for a change in the risk management process on the management level. This might change the way how municipalities enter into land development projects in the near future. Dealing more knowingly with future land development projects and their risks might not erase the path dependency of municipalities. However, it does help municipalities to prevent themselves from future path dependencies in which they are surrendered to the long development time of land development projects and again are committed to early investments. Although some institutional barriers can be considered as fact of life and cannot simply be taken, still it is useful to realize that they are present when trying to improve the risk management process of land development activities in a municipality.

7.2.4 Short conclusion

With the specification of the conceptual design subquestion 7 can be answered:

> *How can a Dutch municipality make risk management a structural part of its land development process, in such a way that a municipality becomes more in control of its financial position?*

Earlier in this chapter and in chapter 3 it was found that the writing of a memorandum on risk management holds the foundation of risk management of a municipality. Writing a memorandum on risk management therefore is an important first step in order to increase the risk awareness and start the conversation around risk management in the municipal organization. Having a clear and up-to-date policy on risk management is essential for a successful implementation and further development of risk management in municipalities. On top of that, the fact that a memorandum on risk management needs approval from the Municipal Council gives the Municipal Council a better idea of the content of the risk management policy and how it is executed. Especially when it is updated frequently.

Although a memorandum on risk management can be considered as a necessary first step for the improvement of risk management, it requires more than only a written memorandum on risk management to make risk management a structural part of the organization. Whether risk management is actually embedded in the daily working processes of the organization, still depends on how the risk management policy is executed and complied by the staff members of the municipal organization. Is risk management in the heads of the staff members and if not, are there any efforts made to achieve this? At all times, a municipality is responsible to look critically to the working of its own processes, performances and the achievement of its predefined objectives. Thereby, it is essential for a municipality to know if there are any risks that might occur that can jeopardize the organization's objectives and if it is still possible to make adjustments. This should be a continuous and cyclical process that takes place during both good and bad times. Looking back to the definition of becoming more in control that was provided by Have et al. (2007), an organization becomes more in control when working processes and measures for control are designed in such a way that it is possible to make adjustments during the process in order to meet the predefined objectives. For a municipality, laying down a risk management policy in a memorandum on risk management is a very good and essential step in the right direction to become more in control of its land development process and finally, its financial position. This is due to the following reasons:

- Writing and consolidating a memorandum on risk management contributes to the internal risk control and management of the organization.
- A memorandum on risk management includes the foundation for the improvement of the risk management process, including the land development process.
- A memorandum on risk management leads to more transparency for internal stakeholders, because its describes and clarifies how the underlying risk parameters and the risk profile of the municipal organization or land agency are determined.

- A memorandum on risk management provides more insight in the risk management and land development process to external stakeholders, such as the accountant or the province.

A memorandum on risk management does not guarantee that a municipality becomes more in control over its financial position. Nor does it overcome all institutional barriers that make risk management of land development activities complex. However, for a municipality it can be a solid foundation for risk management, an essential step towards making risk management a structural part of the land development process and finally, it can be a significant contribution to the process of becoming more in control over its financial position.

Chapter 8

Conclusions and recommendations

In this chapter:

This final chapter forms the closing chapter of this thesis. The first paragraph of this chapter provides a short recap of the research, including the problem statement. In paragraph 8.2, the final conclusions are stated together with the answers to the seven sub questions and the main research question. The final paragraph includes recommendations for municipalities to improve their risk management process and suggestions for further research.

8.1 Introduction

The aim of this research is to improve risk management regarding land development activities in Dutch municipalities. In particular, the focus is on how municipalities can embed risk management fundamentally in their land development process. The research motive was based on a number of observations, among which the most important was that the financial crisis revealed that risk management of land development activities in Dutch municipalities leaves room for improvement. Furthermore, it was found that in any case it is undesirable that municipalities again will have to take major losses on land development plans. Not only for the municipality as an organization, but also from a societal perspective. Compared to the situation as it was before the financial crisis, from municipalities this requires a permanent increase of the risk awareness in their organization together with an improvement of the risk management process of land development activities. This has led to the following problem statement:

It is unclear how to improve risk management in a Dutch municipality, which is a complex organization, in such a way that the municipality gains more control over their financial position.

To overcome this problem statement, a research was set up. In order to answer the main research question, the research started off with a literature study on risk management in search for principles of 'good' risk management with respect to land development activities. Also a desk research on the current legal framework of risk management in Dutch municipalities was performed. Thereafter, by means of a municipality scan, it was examined how the influence of the legal framework on risk management comes into manifestation in the reporting of the annual budgetary and accounting cycle. The results of the municipality scan were used as a starting point for the case study. A case study research in four municipalities was performed to do in depth research on how risk management is actually embedded in the municipal organization in practice and to draw some findings about its maturity. Based on the results of the municipality scan and the case study research a conceptual design is proposed. The conceptual design contains valuable suggestions on what a municipality could include in its memorandum on risk management to consolidate the foundation of risk management in the organization. In the next paragraph the answers to the subquestions and the main research question are presented.

8.2 Final conclusions

In this paragraph the final conclusions of this research are presented by providing answers to all the subquestions and finally, the main research question.

1. *What are the principles of 'good' risk management with respect to the characteristics and risks that are typical for land development?*

In chapter 2 the principles of 'good' risk management are identified, based on general scientific literature on risk management and literature that is more related to land development. Table 5 (p. 30) shows the list of principles and their requirements. After the principles of 'good' risk management were identified, it turned out that the list of principles is too comprehensive to be workable for municipalities. Something that was also found during the municipality scan. For this reason, the idea of searching for measures to improve risk management in such a way that as much as possible principles of 'good' risk management are fulfilled was discarded.

However, the principles of 'good' risk management showed that becoming financially more in control requires more than only substantiation of the financial resilience, e.g. also a substantiation of risk parameters, estimations and underlying assumptions. During this research it was also found that risk assessment can be done both quantitatively and qualitatively. The literature study and municipality scan showed that most municipalities focus on a quantitative approach. The results of the case study research show municipalities still are having difficulties with determining risk parameters and estimating risks. To what extent the outcome of the risk analysis represents the reality therefore remains unclear. In addition, some risks are not that easily quantified. Think of political and strategic risks. However, it is quite possible that that in the end, non-financial or less quantifiable risks influence the financial position of a municipality. Therefore, qualitative aspects and risks are just as important as the quantification of risks, also because a qualitative risk assessment provides insight in the particular risk. For this reason, it is necessary to integrate aspects from both the risk and the network approach in the conceptual design.

2. *What are the implications for risk management within Dutch municipalities coming from the legal framework imposed by Dutch national law?*

From chapter 3 can be concluded that the requirements and implications from the BBV decree are not very complicated and therefore, for municipalities they relatively easy to meet. According to the BBV decree, municipalities are obliged to include a risk section and a section on land policy to their budgetary report and annual accounts. What should be included in these sections is also prescribed by the BBV decree. For example, municipalities are mandatory to elaborate on the establishment of the risk profile of their land development activities in relation to their financial resilience.

Furthermore, according to the GW, in the end the Municipal Council and Executive Board are together responsible for the policy of risk management. The Municipal Council sets the framework for the Executive Board regarding the organization and execution of risk management and the Executive Board has to stay within these boundaries while carrying out the risk management policy. Many municipalities consolidate their risk management framework and policy in a memorandum on risk management. This memorandum needs approval from the Municipal council and forms an essential step towards a successful implementation and further development of risk management in the municipal organization.

3. *How does the legal framework affect risk management of land development activities within Dutch municipalities?*

With respect to the legal framework coming from the GW and the BBV decree, the conclusion based on the municipality scan is that the implications coming from the legal framework do not influence

the risk management of land development activities that much. What can be said is that the focus of the BBV decree is mainly on improving the financial transparency. This resulted in many municipalities using their risk section mainly for the substantiation on the financial resilience. In chapter 3 the changes coming from the most recent amendment of the BBV decree were discussed. In most municipalities these changes are about to be implemented. As expected, during the case study research municipalities indicated that, at first glance, the new arrangements coming from the amended BBV decree are not too difficult for municipalities to implement. Despite the unfortunate timing, at the moment municipalities do not expect that new risks will emerge from the amendment of the BBV decree. The reason for this is that the changes of the BBV decree are mainly effective on the accounting level.

4. *Is the current risk management of land development activities within Dutch municipalities consistent with the principles of 'good' risk management?*

Because the answer to this subquestion can only be based on four case studies, it is given in the form of a general expectation. What was generally found during the case study research is that, due to the comprehensiveness of the principles of 'good' risk management, in every examined municipality inconsistencies with the principles were found. Even in the municipalities with a relatively mature risk management process, several points of inconsistency were found. Therefore, it is expected that risk management of land development activities in municipalities never will be completely consistent with the principles of 'good' risk management. The main inconsistencies with the principles of 'good' risk management that were found during the case studies are:

- Insufficient substantiation of risks and underlying parameters.
- Risk management of land development activities is not always in line with spatial policy or contributes to predefined objectives.
- Undermined transparency.
- Monitoring and control does not always take place properly.
- Measures for control are not always mentioned or linked to risks.

The main reasons for these inconsistencies are given in Table 11 (p. 83). It was found that these inconsistencies are actually caused by institutional barriers that are part of the complex setting in which municipal decision making with respect to land development takes place. The fact that these institutional barriers are part of the complex setting makes them hard to overcome. Some notable reasons for the observed inconsistencies are the influence from the political level, early acquired land plots and projects with a long development time, time and capacity constraints and the level of abstraction of a land agency. It remains questionable whether these given inconsistencies can be overcome. At least they must be taken into account when trying to improve the risk management process of land development activities. Finally, based on the results of the municipality scan and the case study research, it is expected that the consistency of a risk management process with the list of principles of 'good' risk management can differ very much per municipality.

5. *What lessons regarding risk management of land development activities can be learned from other Dutch municipalities?*

The case study research revealed several lessons of which municipalities can learn from each other. A distinction is made between areas of concern and learning points. The identified areas of concern potentially hold back the development of risk management of land development activities in municipalities. Especially when not taken into account, areas of concern can manifest themselves as future bottlenecks during the implementation and further development of risk management of land development activities in municipalities. Learning points are success factors of risk management in the examined municipalities. They are considered as possible solutions for issues regarding risk

management of land development activities in municipalities. These are issues recognized in all four examined municipalities. The identified learning points are useful for other municipalities, because they serve as an important step in the development process of risk management of land development activities. Following them brings risk management of land development activities in municipalities to a higher maturity level. The areas of concern and learning points that were identified during the case study are presented in Table 14.

Table 14 | Identified areas of concern and learning points of the case study research

Areas of concern	Learning points
Municipalities have great difficulties with the estimation of land development risks and underlying parameters.	The incorporation of scenario analysis in the risk management process and ways to improve it.
Substantial influence from the political level on the risk management of land development activities and the corresponding spatial policy.	Land policy as an integral part of risk management of land development activities.
Municipalities often are committed to earn back investments from land plots acquired in the period during or before the financial crisis.	Pay attention to less quantifiable risks and use creative and innovative ways to classify them.
Early signs of municipalities that are falling back to the situation as it was before the crisis.	An interregional database to manage, monitor and share measures for control and their effects with other municipalities.
When it comes to measures for risk control, municipalities are less far developed.	Find a method to structure the risk management process that suits bests for the organization.
Efforts to increase the transparency of the land agency, do not necessarily result in the Municipal Council being more able to perform their monitoring and controlling task.	

6. *What aspects encourage and what aspects hinder the successful implementation of measures to improve risk management of land development activities within Dutch municipalities?*

This subquestion particularly focuses on the implementation of risk management. Besides the findings from the case study research, the answer to this subquestion is also based on the results of the literature study outlined in paragraph 2.6. Table 15 presents the main aspects that encourage and the main aspects that hinder a successful implementation of risk management.

Table 15 | Aspects that encourage and hinder the implementation process of risk management

Aspects that hinder	Aspects that encourage
Too complicated risk management process	Increased risk awareness
Negative influence from the political level	A broad support among staff members
External focus from the press and legislation on the financial position	Central coordination of risk management
The issue of integrality	Sense of urgency
Sensitivity of the term ‘risk management’	Consider risk management as a learning process, which means a gradual implementation

The aspects listed in Table 15 are useful for municipalities because they provide insight to municipalities what could smoothen or hamper the implementation or improvement process of risk management. With this knowledge, municipalities now are able to focus (aspects that encourage) or anticipate (aspects that hinder) on certain aspects when they take measures to improve their risk

management process. Thereby they can enhance a smooth and successful implementation process of risk management. Subparagraph 6.2.3 explains in more detail how municipalities can enhance or anticipate on the aspects listed in Table 15.

7. *How can a Dutch municipality make risk management a structural part of its land development process, in such a way that a municipality becomes more in control of its financial position?*

In the last paragraph of the previous chapter it was found that, consolidating a risk management policy in a memorandum on risk management and keeping it up-to-date by revising it every year is an essential step for a municipality to gain more control over its land development processes. A memorandum on risk management holds the foundation of risk management and therefore forms the basis of making risk management a structural part of the land development process. It was also found that a memorandum on risk management does not guarantee that a municipality becomes more in control over its financial position. This because a risk management policy also has to be executed and complied properly, which is the responsibility of the municipality itself. Still, for a municipality, a memorandum on risk management can be valuable in terms of laying down a solid foundation for risk management, being an essential step towards making risk management a structural part of the land development process and finally, making a significant contribution to the process of becoming more in control over its financial position.

With the answers to all the seven subquestions, the main research question can be answered:

> *What are the elements and requirements of good risk management that a municipality has to implement to deal knowingly and adequately with future risks concerning land development, so that they gain more control over their financial position?*

To deal knowingly and adequately with future risks concerning land development, a municipal organization must raise its risk awareness, thereby ensuring that risk management is well-founded in the municipal organization. Only when risk management has a solid foundation, in the form of a clear policy and is embedded in the daily working processes of the staff members, risk management will stimulate and guide a municipality to deal knowingly and adequately with risks concerning land development. A more permanent increase of the risk awareness of municipalities would be desirable, especially from a societal perspective. This requires a solid foundation of risk management in the municipal organization, which is the aim of the conceptual design. In order to lay a solid foundation, municipalities are advised to write a memorandum on risk management in which their risk management policy is consolidated. To provide municipalities some guidance, suggestions are given for the content of a memorandum on risk management in the form of a guideline (Table 13, p. 98). Having a memorandum on risk management is essential to embed risk management structurally in every layer of the organization. It puts risk management higher on the agenda and increases the risk awareness of the organization in a more permanent way.

The guideline for the content of a memorandum on risk management proved to be a suitable conceptual design, because it allowed a combination of elements from both the risk approach and the network approach. Thereby, it was possible to integrate hard and soft elements from both approaches, which turned out to be equally essential for ‘good’ risk management. Furthermore it was found that municipalities in a memorandum on risk management substantiate their risk management policy and process in more detail compared to how they report on risk management in the annual budgetary and accounting cycle.

The elements and requirements for ‘good’ risk management are partly covered by the guideline for a memorandum on risk management. Partly, because writing a memorandum on risk management is only the first step towards dealing knowingly and adequately with land development

risks. Nevertheless, it is an essential step which is necessary for laying down a solid foundation for risk management in the municipal organization. The other part of being risk aware and dealing knowingly and adequately with land development risks lies in the hands of the municipality itself. Only consolidating a risk management policy by writing a memorandum on risk management is by far not enough to speak of a risk management process being more mature. Although this is an important first step for municipalities, the next step in the process of gaining more control over their financial position is a proper execution of and compliance with the consolidated risk policy. However, writing a memorandum on risk management according to the presented guideline in Table 13 can be considered as a required step that will help municipalities in the process towards becoming more in control over their financial position.

8.3 Recommendations and suggestions for further research

The research enclosed in this thesis resulted in a number of recommendations for municipalities to further improve their risk management process of land development activities. Together with a few elements that require further research, these recommendations are discussed in this paragraph.

8.3.1 Recommendations for municipalities to improve risk management

The subjects that are included in the guideline for the writing of a memorandum on risk management encourage and stimulate municipalities and their staff members to proactively work with risks and the management thereof. By including certain subjects in a memorandum on risk management, staff members are forced to work with and take measures to implement or improve certain aspects or procedures of the risk management process. For example, writing a risk management policy, the substantiation of risk parameters and working with scenarios. The guideline does not always strictly prescribe how municipalities should do this. This leaves them a certain degree of freedom, but possibly also some questions how to cover a certain subject or item of the guideline (Table 13) precisely. Therefore, the recommendations in the upcoming section are intended to give municipalities additional advice that could help to improve the risk management process regarding land development activities.

The use of scenario analysis

The first recommendation concerns the use of scenario analysis. With respect to the use of scenario analysis, there are already municipalities that actively work with and think in scenarios. Other municipalities should try to learn from municipalities that are more familiar with scenario analysis. In turn, municipalities that already work with scenarios should be willing to share their knowledge with other municipalities. In the end, all municipalities share the same social responsibility. Municipalities that already have incorporated scenario analysis in their risk management process are recommended to further develop scenario analysis.

Suggestions for the further improvement of scenario analysis are provided by the guideline for writing a memorandum on risk management (Table 13):

- Actively linking measures for control to scenarios.
- Choose bandwidths that resemble reality as much as possible.
- Also use non-numerical parameters.
- Include a sensitivity analysis that calculates and tests different scenarios.

If other municipalities cannot help, or are unwilling, municipalities could ask help from other parties, such as real estate or land development experts.

Improve the monitoring and communication of the effects of measures for control

The third recommendation concerns measures for control. During the case study research it was found that, when it comes to measures for control, municipalities are generally less mature in their risk management process. Especially on the concern level, for the upcoming years municipalities are advised to focus on the improvement of the monitoring and communication of the effects of measures for control. The suggestion, done by one of the examined municipalities, to set up an interregional database with other adjacent municipalities in order to manage, monitor and share measures for control and their effects with each other might be one of great potential.

Use external expertise to improve the estimation of risks and underlying parameters if necessary

During this research it was found that municipalities generally have great difficulties with the estimation of risks and underlying parameters. It was also found that these difficulties are not only experienced by municipalities and that the estimation of risks and the substantiation of underlying parameters is difficult from its nature. Nevertheless, municipalities are required to pay sufficient and adequate attention to this matter. Not only it helps external stakeholders such as the accountant and province, it also makes the risk management process more transparent and provides a more solid foundation for the outcomes of the risk analysis. The fact that the estimation of risk remains difficult for municipalities, should not be a reason for municipalities to make only rough estimations which are solely based on the interpretation and intuition of an individual. Municipalities that are facing difficulties in this matter and cannot solve this problem internally, are advised to search for external help and expertise. Municipalities could look for other municipalities and share ideas, or search for help from organizations that have to deal with likewise macroeconomic risks. Another solution might be to set up a group of experts that are experienced in risks regarding land development. The idea is that a group of various experts, possibly from different organizations, support a municipality with the estimation of risks and the choosing of parameters and bandwidths.

A memorandum on risk management that is up-to-date

In order to execute a risk management policy and its corresponding strategy adequately, a municipality must keep its risk management up-to-date. This means that once written, a memorandum on risk management must be updated frequently. Once every four years, the Municipal Council is re-elected. Since a memorandum on risk management must be approved by the Municipal Council, the start of a new tenure of the Municipal Council is considered as an appropriate moment for a municipality to update its memorandum on risk management. This implies that a memorandum on risk management is updated at least once every four years. A significant improvement compared to some municipalities, in which the memorandum on risk management was revised only after seven years. There are even municipalities in which a revision of the memorandum on risk management takes place only after ten years. The question remains if a period of four years is always frequent enough to keep the memorandum on risk management really up-to-date. Sudden events that have a severe influence on how land development takes place require an adequate change in the risk management policy and corresponding spatial policy of a municipality. Examples, respectively on a larger and smaller scale, are the influence of the financial crisis on the land and housing markets and regional developments on the market for industrial land and office space on a local scale. In case of such events, a memorandum of risk management can be outdated within a period of one or two years. Under these circumstances it is necessary for a municipality to update their memorandum on risk management every one or two years. Therefore, municipalities are advised to, whenever possible, actualize their memorandum on risk management every one or two years. On top of that, municipalities are advised to ensure that a memorandum on risk management is revised at least every four years. An important remark with respect to this advice is that municipalities should prevent themselves from ending up in revising a memorandum on risk management for every minor detail. Municipalities should rather focus on ensuring that their risk management policy is up-to-date in general terms.

Use the writing of a memorandum on risk management as an evaluation moment

The guideline for writing a memorandum on risk management plays a role in laying a new and better foundation of risk management of land development activities. It might not overcome all identified institutional barriers, because their institutional embeddedness makes some of them hard to overcome. Still, the guideline provides a basis for changes on the institutional level. The guideline for writing a memorandum on risk management helps municipalities to deal more knowingly with future land development projects and risks by improving the risk management of land development activities on the management level. Writing a memorandum on risk management according to the presented guideline helps municipalities to prevent themselves from future path dependencies, such as being financially committed to land developments with a long development time where the costs exceed far above the return on investments.

Municipalities are suggested to use the guideline and the writing of a memorandum on risk management as a moment and opportunity to evaluate and improve the foundation of their risk management process of land development activities. Laying a new or improved foundation for risk management of land development activities is the first step for a change in the risk management process on the management level. A change of the risk management process on the management level is required to deal with the institutional barriers, or at least with the ones that can be overcome. Among other things, the role of the guideline in the risk management process also is to make the municipal organization more familiar with risk management. For example, by including a risk management policy in the memorandum on risk management. This further enhances the chance of a successful improvement of the risk management process of land development activities. In the end it is certain that not all institutional barriers can be dealt with directly. However, indirectly on the management level, the guideline helps a municipality to write a memorandum on risk management that creates an organizational setting in which future risks concerning land development activities are knowingly taken and are adequately dealt with.

8.3.2 Suggestions for further research

The conducted case study research also leads to a number of aspects that require further research, discussed in the sections below.

Application of the RISMAN method

First there is the application of the RISMAN method. The case study research showed that in one of the examined municipalities, the RISMAN method was found unsuitable for providing insight in risks and communicate them to the Municipal Council. The fact that a second examined municipality, that also uses the RISMAN method, did not recognize this issue, indicates that four case studies are not enough to determine whether or not the RISMAN method is a recommendable method for municipalities. More research needs to be done in order to determine whether or not the RISMAN method is a workable method for municipalities. It is important to keep in mind that municipalities should choose a method that suits their organization the best, i.e. a tailor made approach. Therefore, municipalities should not be pinned down to the RISMAN method if it turns out that the RISMAN method does not work for some municipalities.

Increase the number of case studies

A part of this research was conducted in the form of case study research. A downside of this research method is its small basis for scientific generalization when only a few cases are studied. The case study research outlined in this thesis only consists of four cases. This allows for some generalization, but not too much. Efforts have been made to ensure that the case study research provides an impression, of how risk management is organized and how far it is developed in Dutch municipalities, that is as accurate and realistic as possible. Increasing the number of case studies gives more possibilities for generalization. In a follow up study, more cases could be added. For example to identify more areas of concern or learning points in other municipalities, but also to verify if the areas of concern and learning points identified in this research also hold for other municipalities.

Finding ways to overcome the issue of estimating risk parameters

One of the areas of concern identified during the case study research was that the examined municipalities were having trouble with the estimation of risks and substantiation of underlying parameters. It turned out that this issue is not easily to be solved and most likely, municipalities need help from outside. Thereby an important next step is to support and advise municipalities with the estimation of risks and underlying parameters. Although, this research brought to light several bottlenecks for municipalities with respect to the estimation of land development risks, no concrete suggestions or solutions were provided to overcome these issues. In order to help municipalities with their risk estimations more research is required. A potential further study could be one on finding a general method that helps municipalities to make accurate estimations on risks parameters concerning macroeconomic developments. In extension of such a study lies a research that examines what and if municipalities could learn from other parties or organizations, such as banks, housing associations or private investors, regarding the estimation of macroeconomic related risks.

Investigate alternative forms of land policy

One of the learning points that was found during the case study is that risk management in municipalities can be improved if a land policy forms an integral part of the risk management of land development activities. Because the situation is somewhat unique for each municipality (political, attractiveness of the location, amount of private parties involved), municipalities are not advised to choose for a specific form of land policy. Instead municipalities are recommended to look for alternative forms of land policy. During the case study research, an alternative form of a land policy was raised by one of the municipalities: an initiating land policy. This is a form of land policy that lies between active and facilitating. The focus lies on finding private parties, such as investors and private developers, that are willing to participate and cooperate in land development projects. In the end, these parties are mainly responsible for and carrying the financial risks of a land development project. The difference between initiating and facilitating land policy is that, besides that municipalities create and facilitate the prerequisites for area development, a municipality is also actively involved in finding other parties that are willing to participate in a land development project. Thereby, for a municipality it is important to find and set the conditions that stimulate private parties to participate in a land development project. Herewith, municipalities seek for innovative and smart alliances, investment options or PPP constructions together with private parties. In the end, it is the intention of the municipality to put the financial risk of the project in the hands of the private parties. It is not unthinkable that, when these alliances or collaboration bonds turn out to be trustworthy, a municipality will also be financially involved and carry a smaller part of the risks.

Due to the potential of this type of land policy that was found during the case study research, further research may prove whether or not this alternative form of land policy indeed has potential for other municipalities. This includes consulting other municipalities in their experiences with an initiating form of land policy, if there are any. Again, here lies a role for other parties, for example consultancy agencies, to help municipalities with exploring the opportunities for smart

alliances, investment options or PPP constructions. An initiating land policy might provide an outcome and may be a nice middle ground for both municipalities and politics. On the one hand for municipalities, because they are not fully exposed to the financial risks of a land development project. On the other hand politicians might be satisfied, because a municipality shows its intentions to attract private parties and stimulate area development and economic growth within the region. Still, in the end it depends on the specific situation of the municipality whether an initiating land policy will work or not. A possible downside of maintaining an initiating land policy is that it might include other risks, such as strategic risks that arise from municipalities operating in various networks consisting of all different kinds of actors and alliances. Further research may reveal whether or not these risks are manageable for municipalities. Based on the results, a municipality can choose a land policy that suits best in relation to their risk management policy.

Epilogue

Reflection of the author

This report describes my MSc. thesis research for which I have done a eight month internship at Deloitte Real Estate in Utrecht. My internship at Deloitte Real Estate has been helpful in several ways. It helped me to gain more knowledge about how a municipal organization works in practice, as well as the working of a land agency as an entity on its own. Furthermore my internship provided me easy access to obtain the necessary research data for the municipality scan. Last but not least, it helped me to quickly find the right contacts in the four municipalities for the interviews of the case study research.

The people I interviewed for the case studies were very willing to cooperate and share relevant information, which in some cases turned out to be sensitive information. In advance, I did not expect this. Therefore I put a lot of effort in composing the questionnaires and ensured that they were double checked by several experts before going into the interviews. Afterwards this effort turned out to be well spent, since the interviews went smoothly and were of great value.

Most complicating of this research was the municipality scan. I turned out that the results of the municipality scan were not suitable to show how risk management of land development activities is organized in practice. Therefore, the results required some nuance with respect to how they can be used. Another complication with the municipality scan is that the findings done during the desk research are based on own observations. Although I tried to be as plenary as possible, still the findings partly depend on own interpretation. This makes it difficult to assign scientific value to these results. I have overcome this problem by making the right nuances and using the municipality scan as a basis for the selection for the case study research, instead of giving a value judgement on the risk management process of municipalities based on only the results of the municipality scan.

Furthermore this research is based on a case study research in four municipalities. This was done in an exploratory way to assess good practices of risk management of land development activities and to identify the main areas of concern that should be taken into account when trying to improve the risk management process. The case study research turned out to be very suitable for an exploratory research, on the other hand it makes scientific generalization more difficult. In order to make the results as generalizable as possible, the case studies are selected in such a way that together they form a good representation of how risk management of land development activities is organized in an average municipality.

Finally, it has become clear that municipalities have both a societal and entrepreneurial role. The undertaking of land development projects involves risks. At first sight, running these risks is not always in the best interest of the society. On the other hand society can also benefit from successful land development projects. Given the fact that municipalities continue to play an important role in land development, it is important that future land development projects and their related risks are undertaken knowingly by municipalities. The financial crisis of 2008 revealed that in the period before the crisis, this was not always the case, resulting in financial problems in a lot of Dutch municipalities. However, the financial crisis also raised the risk awareness of municipalities and nowadays risk management is a hot topic in most municipalities. Whether or not this is enough to improve the risk management of land development activities in municipalities fundamentally is something to be revealed in the near future. From a societal perspective, a similar scenario as in 2008 should be avoided at all costs. This thesis provides a start for municipalities to improve their risk management of land development activities in a more permanent way, by providing a way to embed risk management in the land development process more fundamentally.

Glossary

The list below shows the Dutch translation of the blue words from the body of this thesis. The list is sorted alphabetically.

	Word	*Dutch translation*	*Page*
A	Act for dualism	Wet dualisering gemeentebestuur	37
	Active land policy	Actief grondbeleid	1
	Advisor operations of finance	Adviseur bedrijfsvoering van financiën	34
	Annual accounts	Jaarrekening	2
	Available resistance capacity	Beschikbare of aanwezige weerstandscapaciteit	21
B	BBV committee	Commissie BBV	39
	BBV decree	BBV-besluit (Besluit Begroting en Verantwoording)	3
	BIE	BIE (Bouwgrond In Exploitatie)	42
	Borrowed funds	Vreemd vermogen	42
	Bro	Bro (Besluit ruimtelijke ordening)	42
	Budgetary report	Begroting	3
C	Crediting of interest	Toerekenen van rente	42
E	Executive Board	College van Burgemeester en Wethouders	4
F	Facilitating land policy	Faciliterend grondbeleid	2
	Financial resilience	Weerstandsvermogen	17
G	General reserve	Algemene reserve	47
	General service	Algemene dienst	43
	GW	Gemeentewet	37
H	Head of land management	Hoofd grondzaken	33
I	Initiating land policy	initiërend (of activerend) grondbeleid	114
	Integrality	Integraliteit	25
	Intentional agreement	Intentieovereenkomst	42
L	Land agency	Grondbedrijf	18
	Land development plan	Grondexploitatie	3
M	Memorandum on land policy	Nota grondbeleid	48
	Memorandum on risk management	Nota risicomanagement & weerstandsvermogen	44
	MPG	MPG (Meerjaren Prognose Grondbedrijf)	48
	Municipal Council	Gemeenteraad	2
	MVA-land	Gronden onder MVA (Materiële Vaste Activa)	42
N	National audit office	Rekenkamer	33
	National audit office report	Rekenkamerrapport	33
	NIEGG	NIEGG (Niet in exploitatie genomen gronden)	42
O	Official client	Ambtelijk opdrachtgever	70

P	Planning economist	Planeconoom	10
	Preparing the site	Bouwrijp maken	18
	Preventive supervision of the province	Preventief provinciaal toezicht	38
	Progress report	Voortgangsrapportage	70
	Provincial Executive	Gedeputeerde Staten	4
R	Required resistance capacity	Benodigde weerstandscapaciteit	21
	Risk section	Paragraaf risicomanagement en weerstandsvermogen	22
S	Section on land policy	Paragraaf grondbeleid	41
	SMART	SMART (Specifiek, Meetbaar, Acceptabel, Realistisch en Tijdsgebonden)	102
W	Wro	Wro (Wet ruimtelijke ordening)	3

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List of figures and tables

Appendix I

Scientific article

How to improve risk management of land development activities in four Dutch municipalities?

An explorative case study research in four Dutch municipalities to identify areas of concern and learning points that help municipalities to improve their risk management of land development activities

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ABSTRACT – The financial crisis of 2008 had a great impact on land and housing markets in the Netherlands. Many Dutch municipalities got into financial trouble because they had to take major losses on land plots that were acquired in the period before the crisis. The financial crisis revealed that risk management of land development activities in most municipalities was too immature to manage land development risks sufficiently. Despite the increased risk awareness that the financial crisis raised in most municipalities, the risk management of land development activities needs improvement. Because of the increased financial burden for society when a municipality has great financial problems, it is important to investigate the possibilities for municipalities to improve their risk management process in order to become more in control of their financial position. A case study research is conducted to find out how municipalities can learn from other municipalities in the field of risk management of land development activities. The results are six main areas of concern and five important learning points that help municipalities to improve their risk management process of land development activities. The results are summarized in a table in the final section of this article. Further research on methods for estimating macroeconomic risk parameters, additional lessons to be learnt and alternative forms of land policy could help municipalities to improve their risk management of land development activities.

1. Introduction

Short after the financial crisis of 2008, a lot of Dutch municipalities got into financial trouble. Up to 2013, the financial impact on society as result of the total loss taken by all municipalities together is €2.9 billion (Deloitte Real Estate, 2013).

Since the 1990's Dutch municipalities successfully invested in land development, which turned into a profitable undertaking (Groetelaers, 2013). Actually, Dutch municipalities used their revenues of urban land development as a source of income (Needham, 1997; Hartmann & Spit, 2014). Municipalities that invested a lot in land development formerly could rely on future profits from a booming housing market. The impact of the financial crisis on the land and housing markets made that these profits disappeared. This brought great financial troubles to a lot of Dutch municipalities. Municipal costs were exceeding benefits and some municipalities took major losses on land development projects (Groetelaers, 2012). Unable to sell their land due to postponed or even cancelled land development projects, municipalities were left behind with large stocks of land they cannot sell without taking significant losses. Large scale land acquisitions, that were done by some municipalities in the period before the financial crisis, involve great financial risks. The financial crisis showed that in general, municipalities were not able to manage these risks sufficiently (Groetelaers, 2012, 2013).

However, municipalities were not the only organizations that got into financial trouble (Jongh, 2016). Other players on the land market such as private developers (small and large) had to face financial difficulties too. Their risk management strategies also could not foresee the impact of the financial crisis on the land and housing market. Nor their strategies could prevent them from major losses they had to take on their acquired land.

The financial crisis of 2008 left its trail. Due to an increased sense of urgency, municipalities became much more risk averse in the years after the crisis (Jongh, 2016). On a large scale, municipalities switched from an active land policy (actief grondbeleid) to a more facilitating land policy (faciliterend grondbeleid). Compared to an active land policy, a facilitating land policy is financially less risky. Nevertheless, the financial problems of municipalities caused by the financial crisis showed that the risk management of land development activities within Dutch municipalities can be improved. Municipalities were taking risks they were not used to take as a public body (Groetelaers, 2013). Land development activities include much more risk compared to most other routine activities of municipalities (Have, 2008). However, municipalities did not

foresee the possible negative consequences of their land acquiring activities.

When a municipality ends up in financial problems this could have severe financial consequences for society. An increased financial burden for local citizens through higher taxes and less financial resources that are available for social serves both are possible consequences for society. Because of this reason it is important to investigate the possibilities for municipalities to become more in control of their financial position. Municipalities are able to gain more control over their financial position if they know how to reduce the possibility that they lose control over their financial position. Regarding this aspect, a municipality could learn from municipalities in which risk management seems relatively less far embedded compared to other municipalities. Municipalities can also learn from other municipalities that seem to have a more advanced risk management process than themselves. Some Dutch municipalities already made significant improvements in their risk management process and their way of risk reporting (Binnenlands bestuur, 2015).
In short, for Dutch municipalities it is valuable to know what can be learned from other municipalities in the field of risk management of land development activities. This leads to the following research question:
What lessons regarding risk management of land development activities can be learned from other Dutch municipalities?

These lessons to be learnt are distinguished in areas of concern and learning points. This makes that the main research question can be divided into two subquestions:

1. What are the areas of concern regarding risk management of land development activities, found in municipalities that are expected to have a less mature form of risk management?
2. Which learning points with respect to risk management of land development activities can be drawn from municipalities that are expected to have a more mature form of risk management?

The aim of this article is to identify relevant aspects of risk management of land development activities of which Dutch municipalities can learn from each other, thereby helping to improve their risk management process. To answer both subquestions and the main research question, a case study research is used. Section 2 describes how the case study research is performed. In section 3, the characteristics of land development are discussed, together with the complex setting that applies to a Dutch municipality. Section 4 includes the results of the case study research. Both subquestions are answered by listing the areas of concern and learning points regarding risk management of land development activities, derived from the case study research. In section 5 this article concludes with summarizing the lessons to be learnt from risk management of land development activities for Dutch municipalities. The result of the case study research consists of six main areas of concern and five important learning points. Both aspects help municipalities to improve their risk management process of land development activities. The final section ends with suggestions for further research.

2. Land development in a complex setting

Before answering the first subquestion, first the most important characteristics of land development are discussed. Furthermore, insight is provided in the complex setting that applies to a municipal organization when it comes to land development.

General characteristics of land development
What characterizes land development is that land and housing markets vary very much per region and do not always abide municipal borders. A clear example of this is the contrast between growth and shrink regions. Sometimes even a single municipality can be considered as a separate region with its own specific trends on the local housing and land markets. For example the municipality of Amsterdam, of which the housing market is known for its sometimes deviating movements compared to other regions or municipalities in the Netherlands. A municipality that only takes into account the housing and land market of its own city region runs the risk that it will produce an overcapacity of houses. As a consequence, the land price might drop which can lead to a financial setback for a municipality.
A second characteristic of land development is that land development risks can occur on three different levels; on the project (individual), portfolio (total municipal portfolio) and on the program (both municipal and regional) level (Rekenkamer Rotterdam, 2012). Each level requires a different approach regarding risk management and puts different requirements and constraints to risk management. Think of a risk that occurs on the project level, such as an archaeological finding, versus a risk that occurs on the portfolio or even the program level, such as the decrease of the housing price as a consequence of the financial crisis. Furthermore, common risks related to single land development projects can be categorized in three risk types (Figure 1).

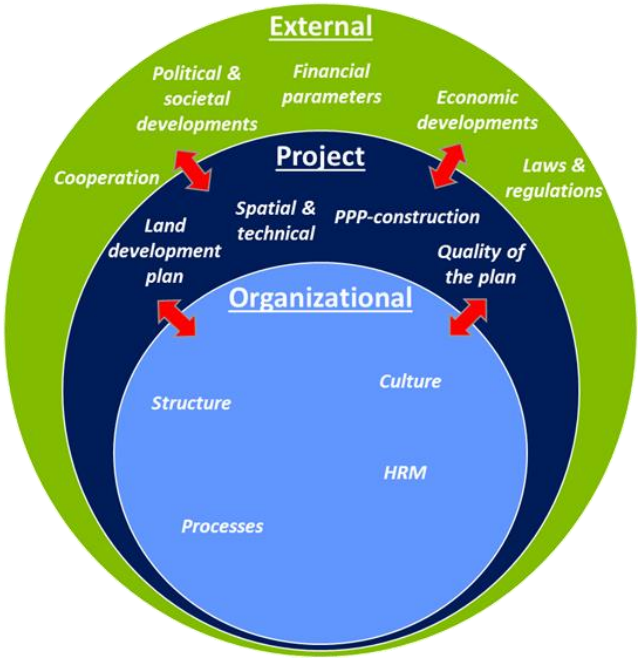

Figure 7 | Three risk types in land development ***(Source: Kuijck et al, 2011, p. 103; modified by author)***

Another aspect that is typical for land development projects is their relative long development period, often between 10-20 years. This makes land development projects vulnerable for more risks compared to projects with a shorter development period. Municipalities often made investments and contracts long before the crisis, so in many cases there is not much of a return. This resulted in a considerable amount of municipalities that had to take their losses, despite their increased risk awareness.

Furthermore, the success of land development projects depends on several factors that are hard to predict for a municipality. Among others, important factors are (macroeconomic) trends on land and housing markets and collaboration with third parties, such as private developers and investors. Finally there is the effect that even a slight change in parameters or variables of a land development project can have a very significant impact on the final project outcomes. A small increase of the interest rates can easily lead to much higher costs of a land development project (Rekenkamer Rotterdam, 2012).

The complex setting of a municipality

The characteristics mentioned above do not differentiate between land development projects that are undertaken by a public or by a private organization. So what makes land development projects undertaken by a municipality different from land development projects undertaken by, for example, a private developer? One aspect is that municipal decisions are practically always colored by underlying political motives, or even taken under severe political pressure (Jongh, 2016). Not every municipality is equally transparent about its political motives. Some municipalities might even operate under a hidden agenda. This makes decision making with respect to land development projects more complex for a municipality than for a private developer.

Furthermore, participating in land development projects puts a municipality in a more entrepreneurial role. Maat (2013) describes the increased entrepreneurial role by zooming in on the role of the municipal land agency (grondbedrijf) in undertaking land development activities. According to Maat (2013), a land agency is positioned in a public private framework and therefore has both public and private aspects. On the one hand, a land agency is allowed to undertake risks. These risks are influenced by land market trends. A land agency can be considered as an autonomous body as a part of a municipal organization. A simplification of its role is that it acquires land, makes it ready for construction by preparing the site (bouwrijp maken) and finally sells it. The revenues from the land sale are susceptible to the circumstances on the land market (Maat, 2013). If, due to an insufficient increase or even a decrease in the land value land, revenues are not enough to cover the investments in land made earlier, a municipality runs a loss. This leads to a land agency, and thereby a municipality, being subjective to financial risk. One could argue that taking risk follows inherently from acting like an entrepreneur. On the other hand, a land agency is subjective to political authority. Due to the fact that a land agency is part of the municipal organization, it has a public law status. In practice this means that a Municipal Council decides over the framework according to which the land agency is allowed to act. A land agency has certain degrees of freedom, however it is bounded to public private decision making. This requires from a municipality that it is able to find a balance between its entrepreneurial role and its societal role. Acting like an entrepreneur involves taking risks in order to make profit. In case of a municipality the earned money can be used for public ends, such as social services. From a societal perspective, making profit is not the most important objective. This might cause tensions in the decision making process. The fact that a Dutch municipality to some extent is subordinated and therefore accountable to the higher governmental entities of the province and the central government, makes the decision making process even more complex.

Finally, a municipality can be considered as a complex organization which, due to its juridical, economic, political and societal nature, it finds itself in a complex setting (Jongh, 2016). A complex organization in terms of an organization that consists of multiple departments. These departments are comprised of employees that all work according to a hierarchical structure of layers. On top of this, many of these employees are interdependent. A complex setting because all these departments fall under the supervision of several municipal bodies, such as the Executive Board and the Municipal Council. In turn, these bodies are accountable to the Provincial Executive. This means all municipal departments and institutions are interacting with each other, in some cases even interdependently.

3. Research method

This article stands in relation with a MSc. thesis research (Jongh, 2016). The research is individually conducted by the author, under supervision from academics from Delft University of Technology and a professional in land development working for Deloitte Real Estate.

For this article, findings and results of a case study research held at four different Dutch municipalities are used to answer the research question. For each of the four municipalities holds that the case study is based on two interviews that were held with staff members that play a key role in the risk management process of land development projects. Which are the key functions in a municipality when it comes to risk management of land development projects, is based on the opinion of experts in land development. Examples of municipal staff members with a key function are a project manager, a planning economist and a concern controller. For the composition of the questionnaires, principles of ‘good’ risk management served as a guideline. These principles were derived from a literature study that was conducted as a part of the MSc. thesis research. This literature research also showed that land development risks can occur on three levels; the project, the portfolio and the program level (Have & Nauta, 2004; Kuijck et al., 2011). During the MSc. thesis research, it was also found that in practice risk management of land development activities on the portfolio and program level falls under the same person or staff group. For this reason, at each of the four municipalities a staff member on the project level and a staff member on the portfolio level are interviewed. The interview on the project level is mainly about risk management of particular land development projects. The interview on the portfolio level is focused at risk management on the concern level of the municipal organization. The latter includes risk management on the organizational level and from a macroeconomic perspective. Before the interviews were held, first the questionnaires were evaluated by experts to enhance the quality of the retrieved information. These are experts experienced in conducting interviews as well as experts that have experience in working with or at municipalities and in the field of land development. Given the degree of confidentiality of certain information, the results of the four case studies are made anonymous.

The selection of a particular municipality is based on the results of a municipality scan. During the MSc. thesis research, a municipality scan was conducted to explore how risk management of land development activities comes to expression in the risk reporting of Dutch municipalities. The selection procedure of the municipality scan resulted in 17

municipalities, of which the annual accounts were examined in a desk research. The desk research focused on the risk section (risicoparagraaf) and section on land policy (paragraaf grondbeleid) of the annual accounts. The municipality scan allowed for an categorization of the 17 selected municipalities in four maturity levels. These maturity levels each represent the expected maturity of the risk management process of the municipalities that are placed in that particular category, based on how risk management of land development activities was reflected in the annual accounts. For the case study research, out of the 17 examined municipalities four municipalities were selected for a case study. In order to identify learning points, two municipalities are selected from the category that includes municipalities with the highest expected maturity level of risk management. To find areas of concern, the other two are selected from the category that represents the municipalities with the lowest expected maturity level of risk management.

Compared to the municipality scan, the case study research allows for more in-depth research, thereby exploring possible nuances that need to be made regarding the maturity level of risk management in municipalities. To find out how risk management is embedded in the municipal organization requires insight in and understanding of the actual situation in municipalities. For this purpose, a case study can be a helpful research method. In the light of the MSc. thesis research, the case study research is an important step in working towards a conceptual design for improving risk management of land development activities in municipalities.

4. Results of the case study research

This section includes the answers to both subquestions presented in the introduction of this article. An important remark with respect to the answers to both subquestions is that during the case study research it turned out that both aspects, areas of concern and learning points, were present in all four of the examined municipalities. Areas of concern are also found in the two municipalities that were expected to have a more advanced risk management process. Vice versa, learning points are found in the two municipalities that were expected to have a less mature form of risk management. Nevertheless, the results of the case study research allow it to answer both subquestions in their current form. In the upcoming two subsections, subsequently the areas of concern and learning points with respect to risk management of land development activities are outlined. These results are based on the findings of case studies performed at four Dutch municipalities (Jongh, 2016).

Areas of concern

Elements are considered as relevant areas of concern when they are present in or indicated by all four examined municipalities. The case study research revealed six main areas of concern.

The first area of concern is that the four municipalities all are having great difficulties with the estimation of land development risks and underlying parameters. Four main reasons underlying to this problem were identified during the case study research (Jongh, 2016):

- Project managers protect the reputation of the project and are cautious to mention every risk.
- Municipalities cannot always provide clear estimations of risks expressed in chance or impact, resulting in rough estimations based on the intuitive assessment of individuals.
- Due to fluctuating trends on the land and housing markets, it is hard to make accurate and robust estimations over the years.
- Municipalities receive contrary advice from other parties that consult them (accountants, consultants).

The characteristics of land development can be clearly recognized in the second and the third bullet, namely factors that are hard to predict for a municipality (fluctuating trends on land and housing markets) play an important role in land development projects. The fact that land and housing markets vary very much per region and do not take into account municipal borders makes it even more difficult for municipalities to come with clear and robust estimations over the years. However, municipalities do not stand alone in these issues. The fourth bullet suggests that other parties have to deal with issues regarding the estimation of land development risks too.

The second area of concern is that in all four examined municipalities the political level substantially influences risk management of land development activities and the corresponding spatial policy. This goes through various ways.

First of all, political influences are a cause of a risk management policy being inconsistent with decisions that follow from spatial policy. A practical example that a municipality cannot lower its ambitions and simply adjust its housing program downwards. The reasons is that this is politically sensitive due to the fact that many land plots were acquired in the years before the crisis and still wait for development.

Secondly, the switch from an active to a more facilitating land policy is not self-evident on the political level. The ambition for economic growth is a common reason for politicians to insist on an active land policy. In the end, in many cases political motives are decisive.

Finally, political backgrounds and preferences play a role in the formulation of measures for control. The difference between political parties often leads to complex decision making when it comes to the identification or selection of measures for control regarding risk management of land development activities.

This second area of concern clearly illustrates a part of the complex setting, described in section 2, in which muni-cipal decision making regarding land development takes place. It shows that municipal decisions indeed are often influenced by underlying political motives.

During the case study research it was found that all four examined municipalities are in some way committed to earn back investments from earlier acquired land plots. These land plots were mainly acquired during the financial crisis, or in the period before. This is considered as the third area of concern and is related to the relatively long development period that is typical for land development projects. Generally, municipalities are not very willing to lower the ambition of their housing programs. Not only due to political pressure, but also due to their eagerness to lower the land supply and earn back investments. The early acquired land plots and the relatively long development period of land development projects made that municipalities are beyond the point that risks can be avoided by taking the right measures for control. Instead of avoiding or easily transferring risks, municipalities now only can reduce or accept the financial impact. This makes their risk management somewhat reactive. Even when municipalities have the intention to focus only on smaller projects with a shorter development time, they are still bounded to larger projects that started in the years before the crisis.

The fourth area of concern is derived from early detected signs of municipalities that are falling back to the situation as it was before the crisis. This implies municipalities that excessively use active land policy without being fully aware of the financial risks, thereby using the revenues of land development projects as major source of income. The financial crisis increased the sense of urgency among municipalities to improve their risk management process. The increased risk awareness made that risk management became hot topic. Not only for municipalities, but also for other private parties (Jongh, 2016).

Currently, land development plans are much more conservative and also more realistic. On a large scale, municipalities switched from an active land policy to a facilitating one. Whenever possible, the focus is on smaller projects with a relatively short development time. However, there are two main reasons to question the permanency of the increased risk awareness. These are the political preference for an active land policy and a slowly decaying sense of urgency among municipalities. All four examined municipalities consider that it is not unlikely when financial problems are dealt with and land and housing markets are recovered, municipalities will switch back to their former active land policy. Whether or not this goes with the appropriate risk awareness and risk appetite remains to be seen.

The fifth area of concern is related to measures for risk control of land development activities. The case study research showed that, when it comes to measures for risk control, the risk management process of the four examined municipalities is less far developed (Jongh, 2016). Mainly at the two municipalities that were expected to have a less mature form of risk management, it was found that the selection of measures for control and specifically linking them to risks can be improved. Especially on the project level, measures for control often are taken heads-on or impulsively. What argues in favour of this policy is that identifying and selecting measures for control for every project risk in advance seems an impossible task. Especially in larger municipalities, because there are countless project risks. On the contrary, heads-on risk management is less visible to the outside world, which might play a role during audits.

In order to raise their effectiveness, measures for control require monitoring and evaluation (Bunt et al., 2003). For all four examined municipalities holds that the monitoring and communication regarding the effect of measures for control is not fully developed yet. In the current situation it is not always clear how the effects of measures for control are monitored and to what extent this is communicated to other governmental bodies, such as the Municipal Council or the Executive Board. Some municipalities are about to improve their process of risk control. However, they are just recovered, or still recovering from the financial crisis. Therefore municipalities need more time.

The sixth and final area of concern are the efforts of a municipal organization to increase the transparency of the land agency. These efforts do not necessarily result in the Municipal Council being more able to perform their monitoring and controlling task. Over the years after the financial crisis, municipal land agencies slowly became more transparent. Despite the increased transparency, a land agency remains a relatively complex and abstract entity for the Municipal Council. The complexity and level of abstraction of a land agency make it hard for a Municipal Council to fully grasp its functioning. Due to its higher hierarchical status, a Municipal Council has more to focus on than only the land agency. Think of societal, juridical or political issues. Therefore, time and the ability to learn of the Municipal Council are limited. The fact that after four years the Municipal Council is re-elected undermines the continuity and security of knowledge and information. A Municipal Council could enhance its supervising role by posing the right questions with respect to risk management during a council meeting. However, the Municipal Council is not always trained or used to think in this way. A possible solution is to train the Municipal Council to think in a systemic way and ask subject related questions during a council meeting. The sixth area of concern is a result of a municipality, being a complex organization consisting of multiple bodies and hierarchical structures subordinated to higher governmental entities, situated in a complex setting of juridical, economic, political and societal issues.

Learning points

Elements are considered as learning points when they provide a possible solution for issues with respect to risk management of land development activities that play a role in all four examined municipalities. This subsection discusses the five main learning points that were identified during the case study research (Jongh, 2016).

The first learning point concerns the incorporation of scenario analysis in the risk management process of land development activities. After the crisis, some municipalities started to use scenario analysis to anticipate more on future scenarios and possible risks (Jongh, 2016). A practical example is a scenario that shows a decrease of 50% in the sale of land for the upcoming five years. The case study research indicated that the use of scenario analysis for risk management of land development activities is still in its infancy. Currently, scenarios are mainly created by changing parameters between a certain defined bandwidth. During the case study research, the following suggestions for the improvement of scenario analysis were found (Jongh, 2016):

- Choose parameters in such a way that they resemble reality as much as possible.
- Link measures for control to the developed scenarios.
- Include a sensitivity analysis that calculates and test different scenarios.
- The use of non-numerical parameters besides only numerical parameters.

An example of a scenario that uses non-numerical parameters is a scenario that shows which (industrial) sector is expected to grow in the upcoming years and how is it currently represented in the particular municipality. Currently, municipalities are relatively unfamiliar with the use of scenario analysis. The reason is that scenario analysis has not yet fully come to its own and proven its value. This has to develop in the upcoming years. When further developed, scenario analysis can help municipalities to make better and more robust risk estimations. This allows municipalities to deal more adequately with changing parameters that have a significant impact on the project outcomes, such as the interest rate.

The second learning point is that a municipality ensures that its land policy is an integral part of the risk management of land development activities. The introduction of this article mentions that, after the impact of the financial crisis, on a large scale municipalities switched from an active to a facilitating land policy. The main reason for this change in land policy is that at the moment, municipalities no longer want to carry the financial risks of a land development project. However, changing their

land policy was not so much based on what was included in their risk management policy or strategy. It was rather based on an increased sense of urgency to avoid large financial risks whenever possible, declining land and housing markets and their large accumulated land supply (Jongh, 2016).

In the end, the choice for a particular land policy influences the amount of financial risks that a municipality has to carry. Therefore, the choice for a particular land policy should be knowingly and in line with the risk management policy. This implies that a land policy is clearly reflected in the execution strategy of land development projects. In turn, this means decisions regarding land development not only follow from this particular land policy, but also can be justified according to the established risk management policy. In the end, a municipality must be able to explain why decisions or measures taken resulting from a certain land policy are in line with the land development strategy that follows from the risk management policy. Therefore, a land policy must be an integral part of the risk management of land development activities (Jongh, 2016).

Paying attention to less quantifiable risks and use creative ways to classify them is the third learning point that was identified during the case study research. The relevance of this learning point is based on an issue that was indicated by the three other examined municipalities. Some risks, such as political and strategic risks, are not easy to express in terms of financial impact. Nor are they easily expressed in other quantitative parameters. One of the municipalities that was found to be relatively mature in the field of risk management, emphasized the importance of taking into account less quantifiable risks. This particular municipality found alternative and creative ways to classify less quantifiable risks. An example is shown in Table 1, which presents the classification of political, societal and juridical risks.

Table 16 | Classification of less quantifiable risks ***(Source: Dutch municipality, 2014; Jongh, 2016, p. 89)***

Score	Political	Societal	Juridical
1 = Very limited	Very limited	No consequences	No consequences
2 = Limited	Anxiety at the portfolio manager	Anxiety within the municipal organization	Possibility for losing reputation
3 = Modest	Anxiety within the Executive Board	Anxiety or outrage among citizens or institutions	Legal procedures and possible claims
4 = Significant	Anxiety within the Municipal Council	Anxiety or outrage among larger groups from society (regional press)	Long lasting legal procedures and claims
5 = Serious	Serious trouble for a city councillor	Serious anxiety or outrage (national press and other media)	Large and long lasting legal procedures and claims

Paying attention to less quantifiable risks and use creative ways to classify them helps municipalities to counter the issue described in section 2, where it was found that some risks are hard to predict. It provides more insight in complex factors, such as political societal and juridical. This allows municipalities to make better and more reliable risk estimations.

The fourth learning point provides a solution for the earlier mentioned area of concern regarding the relatively underdeveloped process of risk control. One of the examined municipalities came up with the idea of an interregional database. This database is shared with municipalities from the same region to improve the process of monitoring and communication of control measures. Measures for control used in other connected municipalities are registered, which allows other municipalities to monitor and learn from the effects of control measures used in other municipalities. The idea behind this interregional database is that municipalities, especially when situated in the same region, share a lot of identical problems. Think of social housing, employment, but also land development related issues. This allows municipalities to gain insight in each other's risks and measures to control these risks.

In order for such an interregional database to work, there is an important prerequisite. Municipalities must to be willing to share information regarding risks and measures for control with other municipalities. To a certain extent, it is expected that municipalities indeed are willing to share the necessary information. Every municipality has an identical role in society and shares an appreciable number of societal objectives similar to those of other municipalities.

Finally, the fifth learning point is that a municipality should find a method to structure risk management that suits best for the organization. A municipality does not have to bound itself strictly to the use of one particular method to structure its risk management process. It is possible to switch between alternative methods, combine the useful elements of two or more methods, or incorporate useful elements from an alternative method in their own method. Regarding this aspect, one municipality served as an example. In this municipality it was found that the RISMAN method (Bunt et al., 2013) did not worked well in terms of providing insight in risk and communicate them to the Municipal Council. The choice of this particular municipality was to adopt an alternative method and combine its most useful elements with their own procedures regarding risk management.

5. Conclusions and further research

By means of a case study research both subquestions are answered. Now the main research question of this article can be addressed: *What lessons regarding risk management of land development activities can be learned from other Dutch municipalities?*

The case study research revealed eleven lessons to be learnt for municipalities, distinguished in areas of concern and learning points (Table 2).

Table 17 | Identified areas of concern and learning points ***(Jongh, 2016, p. 109)***

Areas of concern	Learning points
Municipalities have difficulties with the estimation of land development risks and underlying parameters.	The incorporation of scenario analysis in the risk management process and ways to improve it.
Substantial influence from the political level on risk management of land development activities and corresponding spatial policy.	Land policy as an integral part of risk management of land development activities.
Municipalities often are committed to earn back investments from land plots acquired in the period during or before the financial crisis.	Pay attention to less quantifiable risks and use creative and innovative ways to classify them.
Early signs of municipalities that are falling back to the situation as it was before the crisis.	An interregional database to manage, monitor and share measures for control and their effects with other municipalities.
When it comes to measures for risk control, municipalities are less far developed.	Find a method to structure the risk management process that suits best for the organization.
Efforts to increase the transparency of the land agency do not necessarily result in the Municipal Council being more able to perform their monitoring and controlling task.	

The identified areas of concern potentially hold back the development of risk management of land development activities in municipalities. Especially when not taken into account, areas of concern can manifest themselves as future bottlenecks during the further development of risk management in municipalities.

Learning points are success factors of risk management, identified in one or more of the examined municipalities. Learning points are considered to be possible solutions for issues regarding risk management of land development activities in municipalities. These are issues recognized in all four examined municipalities. The identified learning points are useful for other municipalities, because they serve as an important step in the development process of risk management of land development activities.

The case study research revealed several bottlenecks with respect to the estimation of land development risks. To help municipalities with improving their risk management, a suggestion for further research is to find a method that helps municipalities to make accurate estimations on risk parameters related to macroeconomic developments. In extension of such a study lies a research that examines what and if municipalities could learn from other parties or organizations regarding the estimation of macroeconomic related risks. For example banks, housing associations or private investors.

When only a few cases are studied, a case study research only has a small basis for scientific generalization. The case study research described in this article consists of four cases, therefore scientific generalization is limited. Efforts have been made to ensure that the case study research provides an impression that is as accurate and realistic as possible. Increasing the number of case studies gives more possibilities for generalization. In a follow up study, more cases could be added. For example to identify more areas of concern or learning points in other municipalities, but also to verify if the areas of concern and learning points identified in this research also hold for other municipalities.

During the case study research, it was found that risk management in municipalities can be improved if a land policy forms an integral part of the risk management of land development activities. Because the situation is unique for each municipality (political, attractiveness of the location, amount of private parties involved), municipalities are not advised to choose for a specific form of land policy. Instead municipalities are recommended to look for alternative forms of land policy. It depends on the specific situation of the municipality whether a particular land policy will work or not. Each land policy has its own risks. A particular land policy may seem attractive for its limited financial risk, while on the other hand strategic or political risks are considerably higher. Further research may reveal whether or not these different kinds of risks are manageable for municipalities. Based on this a municipality can choose a land policy that matches with their risk management policy.

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Appendix II

List of G32-municipalities

Table I | List of G32-municipalities *(Source: www.g32.nl, visited on 28-02-2016)*

G32-Municipalities			
Alkmaar	Dordrecht	Heerlen	Oss
Almelo	Ede	Helmond	Roosendaal
Almere	Eindhoven	Hengelo	Sittard-Geleen
Alphen aan den Rijn	Emmen	's-Hertogenbosch	Schiedam
Amersfoort	Enschede	Leeuwarden	Tilburg
Apeldoorn	Gouda	Leiden	Venlo
Arnhem	Groningen	Lelystad	Zaanstad
Breda	Haarlem	Maastricht	Zoetermeer
Delft	Haarlemmermeer	Nijmegen	Zwolle
Deventer			

Appendix III

Selected municipalities for the municipality scan

Table II | Information selected municipalities for the municipality scan ***(Source: data set 2015, Deloitte Real Estate)***

Municipality	Province	Invested capital in land per inhabitant	Amount of Inhabitants (inhabitant)	General reserve /budgetary inventory of land (%)*	Category
Lansingerland	Zuid-Holland	€2694	57.122	13,4	
Westland	Zuid-Holland	€2499,4	103.241	2,2	G32
Barneveld	Gelderland	€2232,6	54.152	18,3	
Almere	Flevoland	€2218,3	196.013	27,8	G32
Nijmegen	Gelderland	€1894,6	168.292	21,5	G32
Kampen	Overijssel	€1663,9	51.092	31,1	
Leeuwarden	Friesland	€1466,1	107.342	9,6	G32
Almelo	Overijssel	€1439,7	72.459	9,3	G32
Heerhugowaard	Noord-Holland	€1344,6	53.307	33,7	
Helmond	Noord-Brabant	€1335,4	89.256	111,5	G32
Haarlemmermeer	Noord-Holland	€1211,6	144.061	110,9	G32
Assen	Drenthe	€1090,6	67.190	34,4	
Groningen	Groningen	€955,1	198.317	20,8	G32
Bergen op Zoom	Noord-Brabant	€924,9	66.419	5,9	
Amersfoort	Utrecht	€758,1	150.897	12,7	G32
Deventer	Overijssel	€1098,8	98.322	14,2	G32
Dordrecht	Zuid-Holland	€613,3	118.691	34,8	G32

*The risk profile represents the size of the general reserve as a percentage of the total budgetary inventory of land. A lower percentage general reserve of the budgetary inventory of land means a higher risk profile.

Appendix IV

Consulted experts

Table III | List of consulted experts

Expert	Function	Organization & Department/Section
Arnold Joost	Manager	Deloitte Financial Advisory Services *Real Estate*
Frank ten Have	Partner	Deloitte Financial Advisory Services *Real Estate*
Haiko van der Voort	Assistant professor in Policy, Organization Law and Gaming	TU Delft – Faculty of Technology, Policy and Management *Section Policy, Organization Law and Gaming*
Herman de Wolff	Assistant professor in Land Development	OTB Research Institute – TU Delft *Section Geo-information and Land Development*
Jan-Willem Santing	Manager	Deloitte Financial Advisory Services *Real Estate*
Maurice Schenk	Senior Manager	Deloitte Financial Advisory Services *Real Estate*

Appendix V

Interview reports

Note the interview reports are in Dutch, since the interviews were held in Dutch.

Interview report municipality A

Datum interview: 20-11-2015
Respondenten: Planeconoom
Manager weerstandsvermogen

Risicomanagement in de gemeentelijke organisatie

- Met betrekking tot risicomanagement ligt de focus van de planeconoom vooral op de financiële impact van risico's. Voor de minder kwantificeerbare risico's ligt de verantwoordelijkheid bij de projectleider om deze te identificeren. Wel is er afstemming tussen de planeconoom en de projectleider. Eens in de 2 weken vindt er overleg plaats tussen beiden. Risicomanagement is hierbij niet een vast agendapunt, maar zodra risico's zich voordoen worden ze in teamverband besproken.
- Beheersmaatregelen worden niet altijd bewust aan risico's gekoppeld. Wellicht dat er op dit gebied in sommige gevallen wat te winnen valt. Aan de andere kant zijn er te veel risico's om overal expliciet een beheersmaatregel aan te koppelen. Met name bij risico's op projectniveau. Risico's worden beheerst door adequaat te handelen bij en te reageren op risico's die zich op dat moment voordoen. Het wordt in ieder geval niet aan het toeval overgelaten hoe risico's zich kunnen ontwikkelen.
- De prioritering van risico's zie je terug in de gemeente in dusdanige zin dat niet ieder risico voorzien is van een uitgebreide rapportage, maar alleen de allerbelangrijkste. Over sommige risico's (risico's met een lage impact of dusdanig algemeen bekend dat beheersing automatisch plaatsvindt) wordt niet gerapporteerd. Het rapporteren en monitoren hiervan zou meer tijd en capaciteit kosten dan de daadwerkelijke (financiële) impact. Een voorbeeld is een archeologische vondst. Hier wordt naar gehandeld op het moment dat deze zich voordoet. Een mogelijke beheersmaatregel zou dan kunnen zijn om te kijken of deze vondst in het openbaar gebied ingepast zou kunnen worden.
- De projectleider is verantwoordelijk voor het beheersen en waar nodig het rapporteren van risico's op projectniveau. Hij is daarmee ook verantwoordelijk voor het monitoren en communiceren van het eventuele effect van een genomen beheersmaatregel. Wel is het zo dat risicomanagement deel uit zou moeten maken van de handelingen en werkwijzen van in principe iedere medewerker. Je bent immers in het dagelijks leven als persoon ook continu bezig met het managen van risico's, bewust maar ook onbewust. Bijvoorbeeld bij het oversteken van een weg. Daarbij maakt een persoon ook niet vooraf een checklist van de risico's of 'wat te doen als….'? Deze werkwijze kan vergeleken worden met de wijze waarop sommige risico's op projectniveau worden beheerst.
- Een grondbedrijf kan deels worden vergeleken met een onderneming. Daarbij horen ook risico's. Het omgaan met risico's en deze binnen de perken houden is daarbij de 'core business'. Dit betekent echter niet dat er voor ieder risico vooraf beheersmaatregelen worden opgesteld.
- De projectleider is verantwoordelijk voor het management voor zijn project/gebied. Daaronder valt ook het beleid omtrent risicomanagement. De planeconoom heeft de rol om de financiële zaken te waarborgen. Waarbij, als het om risicomanagement gaat, de focus vooral ligt op financiële risico's. Een belangrijke vraag die daarbij een rol speelt is hoe de

planeconoom de financiële positie van het project zo kan neerzetten en waarborgen dat de projectleider daar ook gehoor aan geeft. Om dit te bereiken is de eerste stap het opstellen van duidelijke doelen, financiële kaders en duidelijke afspraken. Zo ontstaat er een duidelijke afbakening waarbinnen dan gehandeld dient te worden.

- Risico's en vraagstukken die daaromheen spelen worden door verschillende personen in de gemeentelijke organisatie anders geïnterpreteerd en afgewogen. Dit is mede afhankelijk van de functie van de persoon. Een voorbeeld van het verschil tussen een projectleider en een planeconoom is dat een projectleider dingen integraal moet afwegen en daarbij ook bezig is met het oplossen van control-vraagstukken. Een planeconoom kijkt meer naar het financiële plaatje en heeft de neiging om te handelen naar en te denken vanuit een financieel sluitende begroting. Het komt voor dat een projectleider een beslissing wil nemen die financieel gezien niet altijd het meest gunstig is. Hierdoor kan er een spanningsveld ontstaan. Gemeente A is op dit moment bezig om te kijken naar de verhouding tussen de planeconoom en de projectleiding, hoe die nu is en hoe die eigenlijk zou moeten zijn. Een conclusie is dat de planeconoom nog te weinig (financiële) tegenkracht levert aan de projectleider en vaak meegaat met de beslissing van projectleider in wat voor het project of plan als collectief de beste beslissing is. Dit geldt niet alleen voor de gemeente A maar ook in het algemeen. Meer financiële tegenkracht van de planeconoom zou wenselijk zijn. Gemeente A is aan het onderzoeken hoe deze tegenkracht beter georganiseerd kan worden.
- Risico's die samenhangen met marktontwikkelingen, grondprijzen, afzet van grond etc. liggen niet bij de projectontwikkelaar. De rede hiervoor is dat gemeente A te groot is (ook qua aantal grexen) om dit bij iedere projectontwikkelaar neer te leggen. Dit ligt meer op concernniveau binnen het grondbedrijf bij medewerkers met een wat bredere en overkoepelende functie.
- Een deel van het risicobeleid van gemeente A (voor zowel het grondbedrijf als de algemene dienst) is dat als de kans op een bepaald risico meer dan 75% is, het waarschijnlijk geacht wordt dat dit risico zich ook gaat voordoen. Voor deze risico's dient dan een voorziening getroffen te zijn. Onder een bepaalde grens hoeft het risico niet te worden gemeld en wordt er vanuit gegaan dat dit budgettair opgelost kan worden. De inschatting of een risico zich boven of onder een bepaalde grens begeeft wordt ingeschat met behulp van modellen en risicoprogramma's (monte Carlo etc.). Het is belangrijk dat er in ieder geval een inschatting is en hierbij speelt de (mogelijke) financiële impact een grote rol.
- Als het om risicomanagement gaat is het belangrijk om onderscheid te maken tussen de omgang binnen de organisatie en hoe je dit als organisatie naar buiten uitdraagt. Beleid om risicobewust en risicomijdend te handelen in de gemeentelijke organisatie is niet altijd vanzelfsprekend voor iedere organisatie. Ook niet na de crisis. De afgelopen jaren heeft gemeente A een aantal maatregelen genomen om risicomanagement breder te laten landen in de gemeentelijke organisatie. Een maatregel is een tussentijdse bijeenkomst tussen de projectteams en de concernstaf van het grondbedrijf (zie *communicatie* laatste punt). Een andere maatregel is het aanstellen van een investeringscommissie. Projectleiders zijn dan nog steeds bevoegd om een aanvraag voor een investering te doen. Deze aanvraag moet wel eerst ter goedkeuring langs de investeringscommissie. Dit is een hulpmiddel om mensen bewuster investeringen te laten maken. Projectleiders moeten in detail toelichten waarom ze juist nu willen investeren. In deze commissie zitten onder andere de manager weerstandsvermogen, de dienstcontroller, een grondprijstoetser, een projectdirecteur en iemand van een ingenieursbureau. Dit heeft ertoe geleid dat de investeringsstroom op een gegeven moment nog maar een kwart was van het niveau van voor de crisis. Het gevolg was dat projectleiders beter na gingen denken over aspecten als het tijdstip van investeren en afstemming met andere lopende projecten. Naast de investeringscommissie is er ook nog een commissie (de Deal-commissie) die projectleiders stimuleert om na te denken over het beleid dat ze voeren. Deze commissie werkt op dezelfde manier als de

investeringscommissie. Voordat projectleiders een belangrijk besluit nemen dienen ze bijvoorbeeld na te denken wat het gevolg is voor andere projecten. Wat heeft een bepaald grondprijsbeleid voor een invloed op andere lopende projecten binnen dezelfde gemeente? M.a.w. concurreer je intern niet te veel? Gemeente A heeft zoveel projecten dat het overzicht bewaakt dient te worden. Dit is de taak van beide commissies. Het feit dat mensen nu verantwoording moeten afleggen aan een commissie geeft ze meer verantwoording. Daarnaast dwingt het ze ook om buiten hun eigen straatje te kijken naar de gevolgen en na te denken over hun eigen handelingen en de gevolgen daarvan op concernniveau (niet nadenken over alleen je eigen grex maar ook over die van de buurman). Mensen krijgen zo meer bewustzijn dat ze onderdeel zijn van een geheel/organisatie. Verantwoordelijkheid en betrokkenheid zijn twee belangrijke aspecten om een organisatie en haar mensen meer risicobewust te maken. Dagelijks er mee bezig zijn hoort hier ook bij. Risicomanagement lijkt soms te veel op modellen gebaseerd te zijn, terwijl het juist draait om risicobewust zijn van de organisatie en haar medewerkers. Het stellen van confronterende vragen kan hier een belangrijke bijdragen in leveren.

Invloed van de crisis op de gemeente

- De crisis heeft de ondernemende rol van de gemeente veranderd.
- De ambitie voor het realiseren van nieuwe woningen is na de economische crisis naar beneden bijgesteld. Het programma werd nog niet eerder naar beneden bijgesteld omdat in de jaren voor de crisis veel gronden al verworven waren. Wel is er een realiteitsplanning gemaakt. Deze planning bestaat uit de volgende aspecten:
    1. Hanteren van een ambitiescenario en een voorzichtigheidscenario: Vanuit politiek oogpunt blijft er ambitie en wil men de potentie en de wil van gemeente A om te groeien laten zien. Er is wel rekening mee gehouden dat deze ambitie vertaalt naar afzet niet noodzakelijk dezelfde uitkomsten hoeft te geven. Vanuit financieel oogpunt werd het als een risico gezien dat de mogelijkheid bestond dat de ambitie niet gehaald zou worden. Het steven naar die ambitie vergt echter wel veel investeringen en brengt plankosten met zich mee. In het geval dat de afzet in werkelijkheid achterblijft op de ambitie is het wel zo dat er een ambtelijk apparaat is dat jaarlijks onderhouden en gefinancierd moet blijven worden, waardoor de kosten blijven oplopen. Een bijkomstig aspect is ook nog tijd en het feit dat plannen/ambities vaak al binnen 2-3 jaar onderhevig zijn aan veranderingen (economische, demografische) waardoor programma's en planningen al snel niet meer actueel zijn. Door de relatieve logheid van het ambtelijk apparaat is het soms lastig om als gemeente zo snel mee te bewegen. Er hebben zich in gemeente A situaties voorgedaan waarbij de ontstane plannen achterhaald werden door de realiteit, met als gevolg dat niet alle gemaakte kosten en investeringen tot hun recht zijn gekomen. Het feit dat de gemeentelijke organisatie de ambitie en ook het programma naar beneden wilde bijstellen vanwege achterblijvende afzet was een politiek gevoelig punt. Dit leverde op een zeker moment een jaarlijkse discussie op waarbij het college, de raad en ook de accountant betrokken waren. Het bijstellen van cijfers (bijv. geen 2500 woningen maar 1500) was politiek gezien onbespreekbaar. Daarom heeft de gemeente op een gegeven moment een financiële buffer opgebouwd, zodat de tegenvallende afzet voor een deel kon worden opgevangen. Dit maakte deel uit van het voorzichtigheidscenario. Door de aanhoudende problemen op de grond- en huizenmarkten moest de politiek uiteindelijk wel toegeven om programma's en ambities naar beneden bij te stellen, simpelweg omdat er anders gaten ontstonden in de begroting.
    2. De tweede stap was dat alle investeringen die niet direct gevolgd zouden worden door opbrengsten niet meer gemaakt zouden worden. Dit deed echter niets af aan de vooraf opgestelde ambitie. Deze is pas sinds een jaar of 3 – 4 naar beneden bijgesteld.

Communicatie, monitoring & rapportage

- De risico-inventarisatie en risicoanalyse worden ieder jaar bij de herziening van de projectrapportage doorlopen. Verder vindt er eens in de 4 maanden een voortgangsrapportage plaats waarin risico's waar nodig worden geactualiseerd.
- Het meten en monitoren hoe gemeente A ervoor staat ten aanzien van het halen van de (bijgestelde) ambities gebeurt doordat ieder jaar bij de programmabegroting als onderdeel van de Planning en Control cyclus een sturingsmodel wordt gemaakt. Dit sturingsmodel geeft aan wat de gemeente de komende 4 à 5 jaar ongeveer aan woningen denkt af te zetten. Dit wordt in hoofdlijnen door de raad vastgesteld. Dit sturingsmodel wordt ook ieder jaar geactualiseerd en bijgesteld aan de hand van de ambitie. Inmiddels is het wel zo dat de verwachte afzet de afgelopen jaren dichter bij de ambitie is komen te liggen. Het ambitiescenario en het voorzichtigheidscenario zijn naar elkaar toegegroeid. Ieder jaar wordt de raad geïnformeerd over de belangrijkste bewegingen op de markt en welke gebieden bijvoorbeeld uit exploitatie moeten worden gehaald. Ook worden voor sommige (bedrijven)terreinen alternatieve exploitatiemogelijkheden opgezet, zoals een park met zonnepanelen.
- Per grondexploitatie stellen de planeconoom en de projectleider samen een risicoprofiel op. Risico's worden niet altijd vooraf gedefinieerd maar jaarlijks geactualiseerd tijdens de herziening van de grondexploitatie. Actualisatie vindt plaats tijdens het opstellen van de jaarrekening. Dit is ook het moment dat risico's die tijdens het projectwerk zijn opgedoken naar de raad gecommuniceerd worden. Wel is het zo dat van de stukken die ter inzage liggen voor de raad de risicoparagraaf door weinig raadsleden uitvoerig wordt bestudeerd. Dit heeft er wellicht ook mee te maken dat het voor de raad te veel tijd kost om per project door alle risico's heen te lopen. Alle grexen tezamen worden geconsolideerd om inzicht te geven in een totaal risicoprofiel van het grondbedrijf. M.a.w.: wat zijn de totale risico's van het grondbedrijf. Dit is een meer algemeen beeld, wat dan ook op een hoger niveau beeld geeft van de risico's binnen het grondbedrijf. Daarom wordt niet in detail ingegaan op risico's die spelen op projectniveau. Over de algemene risico's van het grondbedrijf wordt gerapporteerd in de jaarlijkse P&C-cyclus.
- Op grondexploitatie-/projectniveau is het voor de gemeenteraad van gemeente A lastig om te controleren op risico's. Dit komt doordat gemeente A een groot aantal grondexploitaties kent. Het is de taak van de raad om te sturen en controleren op hoofdlijnen. Vanuit dit oogpunt is het voor de raad niet interessant om de risico's van elke grex door te lichten. De gemeenteraad heeft meer aandacht voor macro-economische risico's. Hier zit vaak een politieke motivatie achter. Voor risico's op projectniveau geldt dat de jaarlijkse P&C-cyclus voldoende is voor de gemeenteraad om te sturen.
- De sturingsmechanismen die de afgelopen jaren verplicht gesteld zijn vanuit de wet & regelgeving hebben ertoe geleid dat de gemeenteraad nu meer en betere informatie krijgt vanuit het grondbedrijf. Bijvoorbeeld dat een gemeente een MPG moet opstellen en jaarlijks moet actualiseren. Hiermee is het grondbedrijf transparanter geworden, het 'black box' idee er wel een beetje vanaf. De raad is daardoor beter in staat om te sturen.
- Deze sturing blijft voor de raad soms lastig. Dit komt doordat meer inzicht er niet per se toe heeft geleid dat de raad nu ook beter in staat is om te kunnen oordelen en daarop volgend te sturen op het grondbedrijf. De reden hiervan is dat de kennis en expertise van de raad omtrent de zaken die spelen in het grondbedrijf hetzelfde is gebleven. De complexiteit van het grondbedrijf is namelijk niet voor ieder raadslid even vatbaar, waardoor concreet aansturen en controleren lastig is. Gemeente A heeft getracht de basiskennis van het grondbedrijf bij de raad te vergroten door het geven van lezingen. Hierin wordt onder andere verteld hoe rapportages gelezen kunnen worden. Daarnaast heeft de gemeente gevraagd aan de accountant om aandacht te besteden aan het vergroten van de kennis van

grondzaken binnen de raad. Een van de redenen dat het voor de raad lastig is om grip te krijgen op het grondbedrijf is het abstractieniveau. Simpel uitgedrukt is een grondexploitatie een pak papier met daarin cijfers en tabellen. Minder abstracte zaken zijn makkelijker te begrijpen omdat men er een beeld bij heeft, of een beeld bij kan vormen. Een voorbeeld hiervan is dat zaken, zoals de plaatsing van een bushokje of het aangaan van een abonnement, uitvoerig worden besproken. Terwijl als er aangegeven zou worden dat het grondbedrijf bij wijze van spreken morgen 50 miljoen nodig zou hebben, er geen discussie zou zijn over of dit nou 49,2 miljoen of 50 miljoen is. In orde van grote gaat het in het grondbedrijf vaker om meer geld ten opzichte van andere zaken. Toch worden er minder vragen gesteld vanwege het grotere abstractieniveau.

- Er wordt ook genoemd dat problematiek die direct van invloed is op of samenhangt met de bevolking en maatschappij vaak meer aandacht krijgt van de raad. Problemen in het grondbedrijf zijn dat vaak niet of minder. Bijvoorbeeld bij gebiedsontwikkeling in een uitleglocatie ten opzichte van stedelijke herontwikkeling. Bij de laatste zijn er in veel gevallen meer mensen bij betrokken. Daarmee krijgt het automatisch meer aandacht van de raad omdat de kans op maatschappelijke problemen groter is. Een manier om het grondbedrijf en de grondexploitaties meer onder de aandacht te brengen bij de raad zou zijn om de raad de (indirecte) maatschappelijk relevantie van een gezond grondbedrijf te laten inzien. Een oplossing voor dit probleem zou kunnen liggen in de bestuurlijke organisatie van een gemeente. In het vorige duale stelsel (voor 2003) was er meer ruimte voor interactie tussen de wethouders en de personen in de raad. Beide gingen minder formeel en meer als echte collega's met elkaar om. Daarbij werd er ook meer informatie gedeeld en op een andere manier. Er werd inhoudelijker gesproken over zaken waaronder ook het grondbedrijf. Een voorbeeld in de gemeente hiervan is dat wethouders en raadsleden vlak voor de belangrijke momenten in de P&C-cyclus een dag op de heide doorbrachten. Hier werden alle belangrijke zaken van het grondbedrijf diepgaand, inhoudelijk en technisch besproken en uitgelegd. De wethouders wilden dat ze op hetzelfde niveau met de raadleden over het grondbedrijf konden praten als met hun collega's uit het college. Het nieuwe dualistische stelsel heeft de scheiding tussen de raad en het college vergroot. Beide zijn verder van elkaar komen te staan en de interactie is vooral formeel van aard. De toezichthoudende rol van de raad heeft daardoor ook een andere invulling gekregen. Binnen gemeente A probeert de raad nu op een andere manier aan haar toezichthoudende rol te verbeteren. Namelijk door een accountant kritische vragen te laten stellen en in te zoomen op relevante en actuele zaken. Toch blijft er een verschil tussen de accountant inschakelen en zelf begrijpen waar het over gaat: controlerende rol vs. meedenkrol.
- Zou je de rol en de kennis van de raad structureel willen veranderen dan is er meer nodig dan de soms wat oppervlakkige sessies rondom de belangrijke momenten in de P&C-cyclus.
- Twee aspecten die het lastig maken om de kennis van de raad fundamenteel te veranderen zijn:
    1. De raad wordt eens in de 4 jaar herkozen.
    2. Het feit dat er veel meer zaken zijn, vooral ook buiten het grondbedrijf, waar de raad zicht op moet hebben/verkrijgen. Het is vanwege tijdsgebrek voor de raad gewoonweg niet mogelijk om op alle de dossiers van het grondbedrijf in te zoomen.
- Het schrijven van een paragraaf grondbeleid is dan ook erg lastig. Het complex technische verhaal van het grondbedrijf moet niet alleen te snappen zijn voor de raad, maar het is bovendien een openbaar stuk. Het verhaal moet dus ook te begrijpen zijn voor 'de burger'.
- Eens in de zoveel tijd moeten alle projectleiders bij elkaar komen in een tussentijdse bijeenkomst. Vanuit de concernstaf van het grondbedrijf zijn onder andere de directeur, de dienstcontroller en de manager weerstandsvermogen hierbij aanwezig. Tijdens dit overleg worden de belangrijkste lopende zaken voorgelegd en toegelicht. Ook de risico's. Zo

voorkomt men dat belangrijke zaken pas aan het licht komen tijdens de rapportage momenten van de P&C-cyclus.

Weerstandsvermogen & Risico inventarisatie

- Bij gemeente A zijn er twee soorten weerstandsvermogen. Die van het grondbedrijf en die van de algemene organisatie. Het betreft hier die van het grondbedrijf. Binnen het grondbedrijf hanteert gemeente A ook twee soorten weerstandsvermogen: het 'harde' weerstandsvermogen en het 'zachte' weerstandsvermogen. Het harde weerstandsvermogen zijn alle geldposities die de gemeente vanuit winsten en andere verkregen middelen heeft en die direct aan het vermogen kunnen worden toegevoegd. Dit kan gezien worden als een soort verzameling van reserves waaruit een aantal buffers worden gecreëerd. Deze kunnen worden aangewend om financiële tegenvallers te dekken die niet direct door de begroting kunnen worden opgevangen en ook niet ingecalculeerd zijn als risico bij individuele projecten. Het 'zachte' weerstandsvermogen bestaat uit de verwachte opbrengsten uit positieve grexen. Stel dat bij ontwikkeling de opbrengst lager blijkt te zijn dan verwacht, maar de grex nog steeds positief is, dan hoeft daar niet direct geld voor vrijgemaakt te worden. Doelstelling is dat de saldo's van beide soorten weerstandsvermogen 0 zijn.
- Risico's op projectniveau worden ingeschat door het projectteam/projectleider. Deze risico's worden getoetst door bijvoorbeeld de manager weerstandsvermogen en er wordt gekeken hoe invloedrijk ze zijn in het totale grondbedrijf. Risico's op macroniveau worden ingeschat door de manager weerstandsvermogen/werknemers op concernniveau van het grondbedrijf. Een spanningsveld bij het inschatten van macro-economische risico's is dat de accountant vaak adviseert vanuit het grootste voorzichtigheidsprincipe. M.a.w. ramingen dienen zo conservatief mogelijk te zijn. Dit kan echter wel tot gevolg hebben dat het beeld van de werkelijke financiële positie niet helemaal juist is/negatiever is dan werkelijk het geval. Ook zitten gemeenten af en toe in een tweestrijd. De komst van de nieuwe vpb-regeling maakt dat gemeenten er nu vpb-technisch gezien belang bij hebben om ramingen zo positief mogelijk uit te laten vallen. Dit wordt dan ook geadviseerd door dezelfde accountants, wat het voor een gemeente dus tegenstrijdig maakt.
- Met betrekking tot het inschatten/hanteren van parameters in grondexploitaties kan het volgende worden gezegd. Het is voor een gemeente niet altijd eenvoudig om te beargumenteren waarom een bepaalde parameter zo gekozen is. Zoals aangegeven in het punt hierboven krijgt een gemeente vaak van meerdere partijen verschillend en tegenstrijdig advies. Bijvoorbeeld ten aanzien van de rentestand. Het is lastig om de rentestand zo te kiezen dat een grondexploitatie over 5 – 10 jaar ook nog betrouwbaar is, omdat deze continu onderhevig is aan veranderingen. Daarnaast zijn niet alle partijen die de gemeente adviseren het hierover eens. Ook bij andere gemeenten verschilt het enorm welk percentage ze hanteren. Het dus lastig om te bepalen of een inschatting realistisch is en robuust over meerdere jaren. Daarnaast betekent ook de term voorzichtigheid niet voor iedereen hetzelfde. Gemeente A worstelt nog steeds hoe hiermee om te gaan.
- Ten aanzien van risicomanagement en communicatie wordt geconcludeerd dat het wenselijk is dat er veel interactie plaatsvindt, ook buiten de P&C-cyclus om. Belangrijk hierbij is dat zowel raad als het ambtelijk apparaat open staan voor communicatie en geen hindernissen ondervinden om elkaar te benaderen. Een deel van het hele 'black box'/ambtenaren op afstand verhaal zou ook ondervangen kunnen worden door een meer open relatie tussen de raad, wethouders en het ambtelijk apparaat. De huidige dualistische structuur draagt hier echter niet aan bij. Tijdsgebrek en de hoeveelheid te verwerken informatie blijft wel altijd een beperkende factor. Bij een gemeente met een beperkte hoeveelheid grondexploitaties is het al een stuk eenvoudiger om de raad, naast het op de hoogte brengen van de belangrijkste zaken binnen het grondbedrijf, echt te laten snappen hoe een grondbedrijf werkt. De vraagt blijft wel hoe de raad hier in staat. Willen zij wel nog meer informatie uit

het grondbedrijf en exact weten hoe een grondbedrijf werkt? Wellicht liggen de speerpunten van de raad heel ergens anders.

Marktonderzoek bij locatieontwikkeling/regionaal beleid

- In eigen regio/kleiner regionaal verband geldt dat gemeente A zelf erg bepalend en invloedrijk is voor de regionale woningvraag. Gemeente A heeft de rol als trendsetter en wat er in kleinere omliggende regio's gebeurt daar merkt gemeente A niet erg veel van. De omliggende gemeenten houden dus eerder rekening met gemeente A dan andersom. In groter regionaal verband geldt dat voor gemeente A de ontwikkelingen van de randstadregio in Noord-Holland erg belangrijk zijn. Gemeente A fungeert hierbij deels als opvangnet voor mensen die in/vlakbij de randstad willen wonen, maar daar niet direct terecht kunnen omdat er geen plek is.
- Om de woningproductie af te stemmen met de regio Amsterdam wordt er gebruikt gemaakt van een database. Hierin wordt informatie bijgehouden, zoals de vraag naar een bepaald type woning, bevolkingsgroei, verhuisbeweging etc.
- Van grote invloed op de woningproductie en woningvoorraad in gemeente A zijn de voor de crisis verworven gronden. Deze zijn verworven in een tijd dat de ambitie voor het aantal te realiseren woningen veel hoger lag dan nu. De gronden zijn verworven en de woningen moeten worden gerealiseerd. Er valt hierin niet veel af te stemmen met andere regio's. De gemeente heeft namelijk ongeacht wat er in omliggende regio's gebeurd maar één doel: het kwijtraken van de voorraad. Wel wordt het type woningen afgestemd met de marktvraag. De oorspronkelijke verdeling was 70% duur 30% goedkoop. Nu is dat bijgesteld naar 50%-50%. De grote voorraad aan gronden maakt dat gemeente A de komende 10 jaar geen behoefte heeft aan nieuwe gronden/plannen.

Grondbeleid

- Voor gemeente A geldt dat in ieder geval totdat de grote voorraad gronden volledig verwerkt is er geen actief grondbeleid wordt gevoerd, maar vooral faciliterend en voorzichtig grondbeleid. Daarna is het niet uitgesloten dat, in een aangetrokken markt, de gemeente weer opnieuw gronden gaat verwerven door middel van actief grondbeleid. Wel zal dit op een andere, meer bewuste en enigszins behoudende manier gaan dan in de periode voorafgaand aan de crisis.
- De crisis heeft bij veel gemeenten financiële problemen opgeleverd. Gemeenten, maar ook mensen zijn hierdoor meer tot bezinning gekomen en zien nu in dat het (grond)beleid van de jaren voor de crisis enigszins absurd was. Momenteel zit de ratio weer in de plannen en zijn deze een stuk behoudender en ook realistischer. Wel is het zo dat vanuit omliggende groeigemeenten alweer signalen opvangen worden dat het (grond)beleid en de plannen langzaam weer terugschuiven naar de situatie van voor de crisis. Of het bewustzijn en het remmende effect van de crisis blijvend zijn is nog maar de vraag.

Interview report municipality B

Datum interview: 20-11-2015
Respondenten: Concerncontroller

Invloed van de crisis op de gemeente

- Een ontwikkeling die binnen de gemeente heeft plaatsgevonden is het beleid omtrent het anticiperen op en het beheersen van risico's. Naast dat risico inschattingen in NARIS worden ingevoerd is het beleid sinds afgelopen jaar dat daarnaast ook scenario's worden geschetst. Bijvoorbeeld, een scenario waarin de grondverkopen de komende 5 jaar dalen met 50%. Wat is de impact hiervan op de begroting, de waardering van grexen, de leningspositie enz. Hierbij ligt de focus op hoe er geanticipeerd kan worden op een dergelijke situatie. Dit gaat dieper dan bijvoorbeeld een vraag als hoe groot moet een algemene reserve zijn voor de komende 5 jaar om risico's die optreden op te vangen.
- Het monitoren van doelstellingen gebeurde in het verleden in sommige gevallen te laat. Een voorbeeld hiervan is het monitoren van grondverkopen. Hierbij werd alleen tijdens de jaarrekeningcontrole teruggekeken naar het verloop. Een gevolg hiervan was dat als er geconcludeerd werd dat het target niet gehaald werd er nog geen plan was over hoe het target in de toekomst wel gehaald kon worden. In de huidige situatie vindt deze monitoring frequenter plaats. Namelijk ook bij het opstellen van de na- en voorjaarsnota. Ook wordt er nu niet meer alleen gekeken naar het financiële plaatje, maar ook of de aannames en doelstellingen die hieraan ten grondslag liggen realistisch zijn. Daarnaast vinden er marktonderzoeken plaats die een uitgangspunt vormen voor het opstellen van doelen ten aanzien van locatieontwikkeling en grondverkoop. De verantwoordelijkheid voor het doen van aannames ligt vooral bij de desbetreffende afdeling zelf en in mindere mate bij de concernstaf.
- De crisis heeft invloed gehad op de werkwijze en methoden rondom risicomanagement. Een voorbeeld hiervan is het gebruik van NARIS, wat in de gemeente geïntroduceerd is ergens in 2009-2010. De werkwijze van nu had in sommige gevallen misschien wel gezorgd voor een aangepast financieel beleid. Bijvoorbeeld bij een omvangrijk samenwerkingsverband voor gebiedsexploitatie. Een van de constateringen van de rekenkamer was dat er destijds onvoldoende rekening gehouden was met mogelijke vertraging van het project. De huidige vorm van risicomanagement en de nieuwe methoden hadden misschien niet geleidt tot een ander besluit, maar wellicht wel tot een meer robuuste vorm van financieel beleid, bijvoorbeeld in het aanhouden van hogere reserves of meer ruimte in de jaarschijven van de begroting.
- De invloed van de crisis op het ruimtelijk beleid van gemeente B is groot. Bijvoorbeeld, woningbouwopgaven zijn zwaar naar beneden bijgesteld. Daarnaast zijn woningbouwprogramma's voor de komende jaren ook naar beneden aangepast. Een ander zichtbaar effect is de capaciteit van de afdeling projecten. Deze is enorm geslonken in de jaren vlak na de crisis. De invloed van de crisis gaat verder dan alleen het aanpassen van het grondbeleid of de locatieontwikkelingsstrategie, maar heeft ook invloed op de organisatie zelf. Verder zie je dat grond pas wordt aangekocht op het moment dat het nodig is om een ontwikkeling te doen. Uitgaven voor bouw- en woonrijp maken worden pas gedaan als er zicht is op een overeenkomst met een ontwikkelaar. Ook wordt er rekening gehouden met het feit dat de prijzen voor woningen lager kunnen uitvallen dan verwacht, door in de grex-marges in de prijzen te hanteren. En bij grondverkoop steeds een goede afweging te maken tussen prijs en risicobeperking van de grondexploitatie.
- Risicomanagement is in 'gemeenteland' een grotere rol gaan spelen na de economische crisis. Binnen gemeente B is men niet zozeer gaan nadenken over hoe nu met behulp van risicomanagement exact te anticiperen op een onvoorspelbare gebeurtenis als vorige economische crisis. Wat er wel gedaan wordt is bijvoorbeeld meer flexibiliteit in de

begroting te hanteren en het toepassen van andere begrotingssystemen (reële rente doorbelasten naar de grondexploitatie en verminderen van de overhead die ten laste van de grondexploitatie komt).

Integraliteit

- De integraliteitskwestie wordt in gemeente B ondervangen doordat de concerncontroller de risico inschattingen gedaan door de afdelingen kritisch bekijkt en waar nodig teruglegt bij de afdelingen en daarmee in gesprek gaat. Deze intern georganiseerde tegenkracht vormt de basis om vervolgens tot een integrale afweging te kunnen komen. Deze tegenkracht is informeel georganiseerd en is daarom ook niet vastgelegd in een procedure of bepaalde werkwijze. Wel is in de nota risicomanagement 2015 deze rolverdeling binnen de organisatie benoemd.

Risicomanagement in de gemeentelijke organisatie

- De verantwoordelijkheid van het beleid omtrent risicomanagement is belegd bij de concerncontroller. Het inventariseren van de risico's wordt gedaan door de personen van de desbetreffende afdeling. De geïnventariseerde risico's worden neergelegd bij de concerncontroller die hier vervolgens kritisch naar kijkt. Waar nodig worden kritische vragen teruggespeeld bij de afdelingen of gaat de concerncontroller in gesprek met de personen die de risicoanalyse hebben gemaakt. Dit kan gaan over de hoogte van een bepaald risico of waarom een bepaald risico wel of niet is opgenomen in de analyse. Voor de gemeente is dit de manier om de risicoanalyse te verrijken en van een bepaalde robuustheid te voorzien.
- Het drempelbedrag (zie *Communicatie, monitoring en rapportage)* dat bepaalt wanneer een besluit voorzien dient te zijn van een door de concernstaf goedgekeurde risicoparagraaf gaat niet volgens vaste richtlijnen. In plaats daarvan is er gekeken naar wanneer besluiten over het algemeen risicovol gaan worden. Grondexploitaties bijvoorbeeld komen in de gemeente niet vaak onder een bepaald drempelbedrag. Daarnaast wordt er gelet op hoe het drempelbedrag zich verhoudt tot de totale begroting. Informeel en op basis van goed verstand dragen medewerkers/afdelingen zelf de verantwoordelijkheid om te beslissen wanneer het toch noodzakelijk is om een verrijkte risicoparagraaf op te stellen. Bijvoorbeeld wanneer een project net onder deze drempelwaarde valt. Ongeacht de omvang van het bedrag dient ieder project alsnog financieel te zijn doorgelicht.
- Risicomanagement binnen de gemeente is deels ook gebaseerd op informele controles die plaatsvinden binnen de afdelingen zelf, of door bijvoorbeeld interactie tussen de concernstaf en de afdeling. Daarmee is risicomanagement ook deels afhankelijk van de personen die betrokken zijn bij het risicomanagement proces.
- Een aanvulling op bovenstaand punt is dat risicomanagement niet per se zichtbaar hoeft te zijn aan 'de buitenkant'. Een belangrijk deel van risicomanagement binnen de gemeente is informeel georganiseerd. Dat wil zeggen dat procedures omtrent risicomanagement niet altijd zijn gestructureerd of vastgelegd. Dat risicomanagement niet zichtbaar is aan 'de buitenkant' wil namelijk niet zeggen dat het niet gebeurd.
- De tijdsgeest en de invloed van de crisis waren het belangrijkste bij het risicobewust worden van de gemeente. Hierdoor is risicomanagement meer tot uiting gekomen in de gemeentelijke organisatie.
- Voor het creëren van draagvlak was een succesfactor dat alle lagen van de organisatie bij de implementatie van risicomanagement betrokken waren(de raad, de afdelingshoofden, het college, de projectleiders). Er zijn ook speciale 'voorhoedeteams' gevormd die het initiatief ten aangezien van een nieuw risicomanagementbeleid op zich namen. Andere factoren die hebben bijgedragen aan een brede landing van risicomanagement in de organisatie zijn:
    1. Centrale organisatie van risicomanagement.
    2. Een niet te ingewikkeld systeem.

3. Ook vertellen wat risicomanagement niet is: Als je risico's financieel vertaalt wil het niet zeggen dat je ze vervolgens ook beheerst. Ook al schat je een risico in, op het moment dat het zich voordoet ontstaat er nog steeds een financieel tekort. Bijvoorbeeld een risico van €10 miljoen wordt niet 1-op-1 vertaald naar de begroting. Je houdt namelijk ook rekening met de kans dat het risico zich voordoet. Het gaat er vooral om dat je als organisatie een scherpte krijgt in wat je moet doen en hoe.

- Ten aanzien van het meten en toetsen van de voortgang van beheersmaatregelen kan het volgende worden gezegd: Gemeente B benoemt niet hele specifieke beheersmaatregelen per risico. Dit komt omdat het merendeel van de risico's van grondexploitaties valt onder de algemene risico's ten aanzien van grondexploitaties. Hier vindt verder geen hele actieve informatie uitwisseling over plaats tussen personen of afdelingen. De beheersing van deze risico's maakt namelijk al deel uit van de dagelijkse werkprocessen van de gemeente. Bijvoorbeeld dat er voorafgaand aan de aankoop van grond getoetst wordt wat er gebeurd als de grondprijzen plotseling dalen. Verder is er een onderscheid gemaakt tussen risicomanagement op concernniveau en projectmanagement. Hierbij spelen focus en tijdsgebrek een rol. Vanuit concernperspectief zijn de risico's die spelen op projectniveau vaak van onvoldoende niveau om in detail aandacht aan te besteden. Deze verantwoordelijkheid ligt bij de projectmanagers en dit valt dan ook meer onder projectmanagement in plaats van risicomanagement.
- Belangrijk voor goed risicomanagement zijn houding en gedrag van de medewerkers binnen de organisatie. Met andere woorden risicobewustzijn. Hierbij is het de rol van de concernstaf om mensen continu te aan te zetten en te stimuleren om hier mee bezig te zijn. In het algemeen is het belangrijk dat er binnen een organisatie iemand/een afdeling is die hier het voortouw in neemt.
- Om risicomanagement binnen gemeenten te verbeteren kunnen gemeente ook van elkaar leren. Gemeenten zouden kunnen leren van zowel gemeenten die 'slecht weer' hebben gehad als gemeenten die minder financiële problemen hadden.
- Voor gemeenten zou het goed zijn om wat meer te doen met scenario-/impactanalyse. Bijvoorbeeld, rapporteren wat er zou gebeuren als de top 5 van de belangrijkste risico's zich voor zou doen. Dit is een stap waar veel gemeenten en ook gemeente B momenteel mee bezig zijn. Wel is het voor de meeste gemeenten nog lastig om vervolgens ook opvolging te geven of beheersmaatregelen te formuleren voor een dergelijk scenario. Dit is iets wat zich de komende jaren in "gemeenteland" nog verder moet ontwikkelen. Een lastig punt voor een gemeente is wel dat bij het formuleren van beheersmaatregelen de politiek altijd een grote rol speelt. Partijen hebben namelijk verschillende voorkeuren voor beheersmaatregelen, waardoor spanningsvelden kunnen ontstaan. Bijvoorbeeld, wanneer er eventueel bezuinigd moet gaan worden op voorzieningen om risico's die zich mogelijk voor gaan doen af te dekken. Als voorzieningen zijn wegbezuinigd en het risico blijkt zich niet voor te doen, dan ontstaat er politiek gezien een lastige situatie. Hierdoor is de besluitvorming gebaseerd op risico's politiek gezien soms lastig.
- Organisatie breed risicomanagement kan ook betekenen dat er bewuste keuzes zijn gemaakt om iets niet te doen. Bijvoorbeeld kleine risico's/projectrisico's op concernniveau willen managen.

Communicatie, monitoring & rapportage

- Als het gaat om risicomanagement van grondexploitaties vindt (vanuit het perspectief van de concerncontroller) communicatie over risico's voornamelijk plaats met de teamleider grondzaken, de planeconomen en waar nodig met de projectleider. Hierbij is de communicatie en daarmee de borging van risico's mede afhankelijk van de personen die de functie bekleden. Momenteel zijn de 'de lijntjes' kort en zijn er weinig belemmeringen op

het gebied van communicatie. Als er in de toekomst andere personen aangesteld worden op deze functie zal de communicatie opnieuw zijn weg moeten vinden. Daarbij is het niet zeker of de communicatie opnieuw zonder belemmeringen zal plaatsvinden. Het gaat namelijk om de cultuur en samenwerking. Kort geformuleerd: de factor 'mens'.

- Aanvullend op bovenstaand punt speelt de schaalgrote van gemeente B een rol. De gemeente is niet te groot waardoor medewerkers dichter bij elkaar staan. Dit zorgt ervoor dat zaken soms sneller kunnen worden behandeld waardoor ze beheersbaar blijven. Wel blijven zaken hierdoor in sommige gevallen op informeel niveau onvoldoende gedocumenteerd, wat problemen op zou kunnen leveren in het geval dat verantwoording afgelegd dient te worden. Bijvoorbeeld bij een risicomanagement audit of accountcontrole.
- 1 à 2 keer per jaar vinden er binnen de afdelingen 'in control' gesprekken plaats en worden er afdelingsplannen gemaakt.
- De communicatie van risico's naar de raad gaat in de gemeente volgens de reguliere planning & control cyclus. Hierin worden jaarlijks de belangrijkste risico's van grondexploitaties gerapporteerd aan de raad.
- Mede door de invloed van de crisis is het informatiegehalte van de grondexploitaties in de begrotingstukken omhoog gehaald. Hiermee is de informatievoorziening naar de raad toe aangescherpt. Voorheen kreeg de raad alleen het totale begrotingssaldo gepresenteerd. Nu wordt er meer informatie geleverd zoals ook informatie per project en de geplande kasstromen voor de komende jaren. Dit is geborgd via de financiële verordening van de gemeente (art. 212).
- De gemeenteraad wordt niet betrokken bij het inventarisatieproces van risico's. De vraag is ook of dat in het huidige dualistische systeem zou moeten. Wel zou de raad haar controlerende rol kunnen vervullen door de juiste (systeem-)vragen te stellen. Bijvoorbeeld, is er een risicomanagement beleid? Hoe is er voor gezorgd dat de risicoanalyse volledig is? Dit soort vragen worden door de raad echter niet altijd gesteld. Hieraan liggen twee redenen ten grondslag:
    1. De gemeente heeft zelf georganiseerd dat het huidige beleid zo is dat de aangeleverde stukken een deel van deze vragen al beantwoorden. Een voorbeeld hiervan is de geactualiseerd financiële verordening waarin de gemeente aangeeft dat ze de controlerende rol van de raad willen versterken. Beleids- en besluitvormingsstukken zijn hierop aangepast.
    2. De raad is niet altijd gewend om op die manier te denken en vragen te stellen.
- Als resultaat van de recentelijk slechte financiële positie van de gemeente is de raad wel bijgepraat over het financieel beleid van de gemeente. Het probleem uit het verleden dat informatievoorziening naar de raad toe in veel gemeenten niet transparant genoeg was speelde ook in gemeente B een rol. Informatievoorziening was namelijk vaak van een te hoog abstractieniveau. Wel is de informatievoorziening ten aanzien van grondexploitatie naar de raad de laatste jaren verbeterd. Signalen vanuit de raad ten aanzien van de behoefte aan meer en betere informatie zijn wel meegenomen in de huidige opzet van werkwijzen.
- De vraag blijft wel of de informatievoorziening naar de raad nu voldoende transparant is. Er zijn namelijk nog geen signalen vanuit de raad hierover ontvangen omdat de wijzigingen en nieuwe werkwijzen pas recentelijk zijn doorgevoerd.
- Een aspect dat de communicatie ten aanzien van grondexploitaties en gebiedsontwikkeling naar de raad toe bemoeilijkt is dat niet alle zaken in het openbaar kunnen worden besproken in verband met de concurrentiepositie van de gemeente. Wel is hierin een slag gemaakt ten opzichte van een paar jaar geleden. In de huidige situatie worden er meer zaken in het openbaar besproken.
- Er zijn twee manieren waarop er binnen de gemeente over risico's gerapporteerd wordt:
    1. Vanaf een bepaald drempelbedrag dient elk besluit voorzien te zijn van een verrijkte risicoparagraaf. Hierin worden de risico's van dat besluit genoemd, of juist de risico's

als van het besluit wordt afgezien. Deze paragraaf moet worden goedgekeurd door een intern orgaan. Bijvoorbeeld de concernstaf of de afdeling financiën plus een eventuele projectleider. Dit geldt voor belangrijke beslisdocumenten en besluiten die naar het college en/of de raad gaan. Dit is iets wat recentelijk is doorgevoerd binnen de gemeente.

2. De risicorapportage vindt plaats via NARIS. Alle verzamelde risico's worden in NARIS ingevoerd. De input van NARIS wordt geleverd door de concernstaf. Deze verantwoordelijkheid ligt niet bij de afdelingen omdat de concernstaf dan eerst kan checken of de aangeleverde risico's juist zijn alvorens dat ze worden ingevoerd in NARIS. Daarnaast wordt er in de nota risicomanagement gerapporteerd over onder andere de hoogte van de benodigde weerstandcapaciteit en wat de gemeente ziet als de beschikbare weerstandcapaciteit.

- Ten aanzien van de monitoring van doelstellingen en de voortgang daarvan richt de gemeente zich op wat er gedaan kan worden om doelstellingen te behalen en wat de knelpunten daarin zijn. Dit in plaats van te monitoren en te rapporteren over het feit dat een bepaalde doelstelling niet gehaald is. Het monitoren of bepaalde doelstellingen wel of niet behaald zijn vindt dus minder actief plaats. Er wordt meer gekeken naar hoe bijvoorbeeld speerpunten en doelen van een afdeling geformuleerd zijn en of ze voldoende concreet zijn. De gemeente heeft er, ook met het oog op capaciteit, bewust voor gekozen om geen energie te verliezen in het continu rapporteren over de voortgang van bepaalde doelstellingen, maar meer bezig te zijn met wat er in de toekomst gedaan kan worden als een bepaalde doelstelling niet gehaald wordt. Een voorbeeld hiervan is het maken van een marketing en/of targetplan ten aanzien van grondverkopen voor de komende jaren. De vraag hoe hiernaar gehandeld dient te worden staat hierbij centraal. Het accent ligt op actie ondernemen om doelstellingen te halen in plaats van veel energie steken in het rapporteren. Het uitgangspunt hierbij is dat informatievoorziening geen doel is, maar een middel.

Weerstandsvermogen & Risico inventarisatie

- De algemene risico's voor de grondexploitatie worden geïnventariseerd en aangeleverd door de afdeling grondzaken. Project-specifieke risico's worden door de afdeling grondzaken geïnventariseerd in samenwerking met de betrokken projectleiders. Uiteindelijk worden de aangeleverde risico's gecontroleerd (zijn ze goed bepaald?) en waar nodig aangepast door de concernstaf. Het aanpassen gebeurt in samenwerking met de afdeling grondzaken.
- Alle analyses, berekeningen en wijzigingen worden bijgehouden in NARIS om het inzicht te behouden m.b.t. het tot stand komen van het risicoprofiel.

Marktonderzoek bij locatieontwikkeling

- Marktonderzoek in gemeente B omvat het volgende:
  - Het levert regionale woningbouwafspraken op.
  - Wordt gedaan door onafhankelijke partijen/organisaties. Onafhankelijke derden die onderzoek doen naar de grond, de huizenmarkt, woningvraag per type en de kwantiteit.
  - Naast een woningopgaaf gebaseerd op de autonome groei van de gemeente zelf levert het marktonderzoek ook een woningopgaaf gebaseerd op regionale afspraken en taakstelling op.
- Het afstemmingsprobleem ten aanzien van woningbouw en locatieontwikkeling dat bij sommige gemeenten zichtbaar is speelde bij deze gemeente minder. Mede doordat er goede regionale afspraken waren waarin gemeenten hun woningbouwbeleid voldoende op elkaar afstemden.
- Er wordt ook gekeken naar de invloed van locatieontwikkeling door private ontwikkelaars op de totale woningbehoefte. De planning van de gemeente wordt hierop afgestemd.

- Vergeleken met de woningbouw zijn bedrijventerreinen voor de gemeente een grotere zorg. Daar zijn ook marktonderzoeken voor gedaan. Het nadeel van bedrijventerreinen is dat het lastig is om tot een regionale vraag en planning te komen. Dit komt doordat bedrijventerreinen vaak vast zitten aan grotere volumes en niet eenvoudig op te splitsen zijn in kleinere projecten. Daarnaast is de vraag naar bedrijventerreinen onderhevig aan veel meer en andere externe factoren ten opzichte van de woningvraag. Dit maakt het lastiger om de planning af te stemmen met aangrenzende regio's.

Rekenkamerrapport

- Een nadeel van rekenkamerrapporten is dat de aanbevelingen vaak achteraf komen.
- Een punt van kritiek van de rekenkamer was dat tijdens de besluitvorming van het samenwerkingsverband voor gebiedsexploitatie door gemeente B onvoldoende was gekeken naar een scenario waarin het project niet rond ging komen. Hierdoor was niet duidelijk hoe groot de financiële buffer in een dergelijk geval had moeten zijn. Dit probleem was voor gemeente B mede de aanleiding om de nota risicobeleid hierop aan te passen.
- Een reden dat niet alle aanbevelingen van de rekenkamer konden worden opgevolgd is dat gemeente B nagenoeg voor al haar projecten voorbij de periode is waarin risico's kunnen worden vermeden. Locatieontwikkelingsprojecten hebben nou eenmaal vaak een langere looptijd. Wel kan gestuurd worden op het (verder) beperken van de financiële impact van risico's.
- De overige aanbevelingen uit het rekenkamerrapport, anders dan bovengenoemde punten, zijn wel werkbaar en geïmplementeerd.

Grondbeleid

- Voor gemeente B geldt dat de komende jaren, ook in een meer aangetrokken markt, faciliterend grondbeleid gehandhaafd zal worden. De verwachting is dat de gemeente onder betere marktomstandigheden niet terug zal gaan naar het oude meer actieve grondbeleid. De gemeente heeft namelijk de aantrekkende markt nodig om de nog openstaande opgaaf te realiseren. Ook in een aantrekkende markt zal er dus geen nieuwe grond worden verworven. Het beleid is om eerst de locaties af te bouwen die nog in ontwikkeling zijn. De situatie van gemeente B is nogal specifiek, dus of dit ook voor andere gemeenten geldt is onduidelijk.

Invloed vanuit het BBV

- De wijzigingen van het BBV-besluit hebben alleen op boekhoudkundig vlak effect. De kasstromen in de grondexploitaties wijzigen er niet door. Wel zijn er significante gevolgen voor de begroting. Er vindt namelijk een verschuiving plaats tussen incidentele verliezen en winsten en structurele effecten in de begroting. Dit betekent niet dat de totale bedrijfseconomische situatie van de gemeente zal veranderen. Het zou een ander verhaal zijn als verschillende veranderingen/situaties tegelijkertijd zouden optreden. Er zouden bijvoorbeeld wel problemen ontstaan als de wijzigingen van het BBV-besluit samen komen met de wijzigingen omtrent de vennootschapsbelastingen en dan ook nog eens in combinatie met grondverkopen die nog slechter gaan dan nu gedacht wordt. Een link naar risicomanagement zou kunnen zijn dat je als organisatie met het oog op bovenstaande ontwikkelingen je financieel beleid daar ook naar gaat voeren. Bijvoorbeeld, een begrotingsoverschot zou in dit geval niet leiden tot een korting van de bezuinigingen omdat dit overschot met een oog op komende ontwikkelingen het jaar daarop wel eens verdwenen zou kunnen zijn.

Preventief provinciaal toezicht

- Een reden dat de gemeente uiteindelijk onder preventief provinciaal toezicht is komen te vallen is dat er in het verleden veel groei gerelateerde investeringen waren in combinatie met een teruglopende/slechter wordende markt. Hierbij ging het niet alleen om grondexploitaties, maar bijvoorbeeld ook om investeringen in onderwijshuisvesting.
- Het feit dat de gemeente onder preventief provinciaal toezicht staat heeft erg geholpen bij de financiële bewustwording en de focus van de gemeente. Risicomanagement is hierdoor ook een grotere rol gaan spelen.

Interview report municipality C

Datum interview: 26-11-2015
Respondenten: Financieel adviseur van ruimtelijke programma's
Financieel beleidsmedewerker

Risicomanagement op projectniveau

Risicomanagement in de gemeentelijke organisatie

- Gemeente C organiseert regelmatig risicomanagementsessies voor specifieke projecten. Recentelijk was er een risicomanagementsessie voor het project Sluiskwartier. De nadruk van deze sessie lag op het identificeren van risico's. Het identificeren van risico's is gedaan door met het projectteam in gesprek te gaan en te brainstormen over alle mogelijke risico's die zich kunnen voordoen. Van het projectteam zitten onder andere de projectleider, een planeconoom, mensen vanuit de communicatie, ruimtelijke ordening en vastgoed. Kortom een groep mensen met verschillende disciplines. De grondexploitatie van dit project lag al vast, hieraan ligt ook een risicoanalyse ten grondslag. Deze risicomanagementsessie was onder andere bedoeld om de geïdentificeerde risico's te herzien.
- De aanwezige personen bij de sessie kwamen uit de uitvoerende ambtelijke laag van de organisatie, er was geen bestuur of directie aanwezig. Personen van de overkoepelende lagen worden vooral betrokken bij de resultaten van de risico-inventarisatie. Bijvoorbeeld wat de risico's betekenen voor het project vanuit financieel perspectief. Af en toe vinden er ook gesprekken plaats tussen de projectmanager, de ambtelijk opdrachtgever en portefeuillehouder waarbij de risico's van het project worden besproken.
- De risico-inventarisatie en risicoanalyse zijn als stappen duidelijk herkenbaar tijdens projecten.
- De geïdentificeerde risico's tijdens de risicomanagementsessie waren zowel kwantitatief en kwalitatief van aard.
- Het risicomanagementproces is gebaseerd op de handreiking risicomanagement. Hierin staat per stap beschreven hoe het risicomanagementproces vormgegeven is. Er wordt sinds begin 2015 gewerkt met deze handreiking en de verwachting is dat deze ook bij andere projecten gebruikt wordt.
- Prioritering van risico's hangt samen met het financiële effect van de risico's en de invloed op het weerstandsvermogen. Aan de hand daarvan wordt ook bepaald of het relevant is om de problematiek/risico's te bespreken met de gemeenteraad.
- Het identificeren van risico's gebeurt door de hele projectgroep. De vervolgstap, het analyseren van risico's, gebeurt voornamelijk door de projectmanager in samenspraak met de planeconoom. Het zou beter zijn als het analyseren van risico's ook door een bredere samenstelling van mensen gedaan wordt.
- De uitkomst van een risicoanalyse is in veel gevallen een tabel met daarin het risico, de kans en de impact. De onderbouwing die aangeeft waarom verondersteld wordt dat de kans van een bepaald risico X% is ontbreekt vaak nog. Een reden dat een dergelijke onderbouwing ontbreekt is dat het lastig is om dit in te schatten.
- Een andere reden zou kunnen zijn dat projectmanagers niet altijd alle risico's willen noemen omdat hun project daarmee te negatief zou lijken. Dit is niet per se aan de orde in gemeente C. Het is niet per definitie negatief als een projectleider (veel) risico's benoemt zolang het besluit een brede afweging is (op project en op concernniveau) met een goed onderbouwd risicodossier. Wel is het zo dat het belang voor een projectleider om een project te laten doorgaan afgespiegeld tegen de belangen die spelen op concernniveau soms een spanningsveld opleveren tussen projectleiders en medewerkers op concernniveau.
- Voorheen werd er geen gebruik gemaakt van scenarioanalyse in gemeente C. De gemeente is hier nu wel mee bezig maar dit moet zich nog verder ontwikkelen. De bandbreedtes en

het variëren daarvan zijn nu nog reken-technisch van aard. Dus variëren met cijfers in de bandbreedtes, bijvoorbeeld het hanteren van een lagere grondprijs. Nu worden verschillende scenario's uitgewerkt door te variëren met parameters. Hieraan zou nog kunnen worden toegevoegd dat parameters zo worden gekozen dat ze zoveel mogelijk overeen komen met de werkelijkheid, waarbij dan een realistisch scenario wordt geschetst. Deze stap moet nog gemaakt worden. Gemeenten willen in ieder geval het zogenaamde 'doel-redeneren voorkomen'. Dit betekent dat je van tevoren bedenkt waar je op uit wilt komen en aan de hand daarvan je parameters kiest.

- Minder reken-technische parameters uitzoeken en daar onderzoek naar doen zou ook deel moeten uitmaken van scenarioanalyse. Bijvoorbeeld, hoe belangrijk de grondprijs in de vestigingsplaatskeuze van bedrijven is, of in welke bedrijvensector een gemeente groei verwacht en hoe die sector vertegenwoordigd is binnen de gemeente. Dit gebeurt nog te weinig binnen gemeenten, niet alleen binnen gemeente C.
- Om een organisatie meer risicobewust te laten zijn helpt het mee als er een zekere 'sense of urgency' is. Het probleem moet namelijk groot genoeg zijn om verandering plaats te laten vinden.

Communicatie, monitoring & rapportage

- De communicatie van risico's op portefeuilleniveau naar de raad gaat volgens de reguliere momenten van de P&C-cyclus. Dit zijn de voornaamste momenten dat de raad geïnformeerd wordt over de belangrijkste risico's. Ook zijn er de standaard voortgangsrapportages waarin de belangrijkste zaken in risico's in ieder geval in ambtelijke kringen besproken worden. Uit het gesprek blijkt dat het echter wenselijk zou zijn dat de raad en het college nog meer betrokken worden bij het risicomanagement proces.
- De communicatie en de rapportage omtrent projecten verloopt in de meeste gevallen volgens de reguliere P&C-cyclus. Wel zijn er bepaalde situaties waarbij het college en de raad separaat van de P&C-cyclus geïnformeerd worden. Bijvoorbeeld bij de vaststelling en herziening van de grondexploitatie, als risico's zich over een langere periode voordoen of van een dusdanige omvang (boven de €500.000) zijn dat het noodzakelijk is dat de raad daarvan op de hoogte is. Over de grens van €500.000 wordt gezegd dat het enigszins arbitrair is om op die manier te beoordelen of een risico relevant genoeg is om buiten de P&C-cyclus om te rapporteren aan de raad. Het zou beter zijn om te kijken hoe de omvang van het risico zich verhoudt t.o.v. de totale begroting en wat de verdere impact is op de organisatie. Niet alleen vanuit financieel oogpunt, maar ook vanuit het perspectief van de gemeente als organisatie.
- Als het gaat om risicomanagement heeft de financieel adviseur van ruimtelijke programma's veel te maken met personen die gaan over project- en programmamanagement en de ambtelijke opdrachtgever. Formeel is er met de programmamanager eens in de twee weken overleg. Eens in de maand is er een stafoverleg met de complete staf van programmamanagement. Op dit moment zijn er echter dusdanig veel ontwikkelingen die het programmamanagement aangaan, dat de financieel adviseur de programmamanager bijna dagelijks ziet.
- De verantwoordelijkheden van de financieel adviseur ten aanzien van het monitoren van de risico's op projectniveau zijn opgenomen in de beleidsnota risicomanagement en weerstandsvermogen. Wel streeft hij er naar om hier een zo goed mogelijk beeld bij te krijgen om zo zicht te krijgen op wat er speelt op projectniveau en wat dat nou betekent op portefeuilleniveau. Voor een aantal projecten is dat beeld er, maar nog niet voor alle projecten. Dit heeft er ook mee te maken dat de financieel adviseur op het moment van dit interview nog maar een half jaar in dienst is. Het is wel de taak voor de financieel adviseur, samen met de programmamanager om uiteindelijk het complete beeld op portefeuilleniveau te hebben en risico's op portefeuilleniveau te monitoren op het gebied

van vastgoed. Gemeente-breed ligt deze verantwoordelijkheid bij de financieel beleidsmedewerker. Het is niet zeker of bovengenoemde verantwoordelijkheden expliciet ergens zijn vastgelegd. Wel is het voor iedereen duidelijk waar de verantwoordelijkheden liggen.

- Risico's moeten worden gesignaleerd en gecommuniceerd op projectniveau. Daarna worden deze op hoger niveau getoetst en er wordt bepaald wat ze betekenen op portefeuilleniveau.
- Hoe het effect van beheersmaatregelen gemeten en gemonitord wordt, is voor de financieel adviseur niet helemaal duidelijk. De indruk is dat de voornamelijk gebaseerd is op een inschatting en dat hier geen vaste methode of proces aan ten grondslag ligt. Rapportage omtrent de voortgang van het project, de risico's en waarschijnlijk ook het effect van beheersmaatregelen gebeurd via de voortgangsrapportages (4x per jaar).
- Op projectniveau worden alle risico's geïdentificeerd. Vervolgens wordt gekeken welke risico's kunnen worden gekwantificeerd en deze worden opgenomen in een risicomanagementdatabase (RIS). Hierin wordt specifiek naar financiële gegevens gevraagd. Vanuit RIS wordt de analyse op portefeuilleniveau gemaakt. Via de voortgangsrapportages worden risico's op projectniveau gecommuniceerd naar de ambtelijk opdrachtgever en de portefeuillehouders. Via RIS worden risico's vertaald naar concernniveau.
- Het invoeren van kwantitatieve risico's in RIS gebeurt voornamelijk door de projectmanager en de planeconoom.
- Om goede afwegingen te kunnen maken is het belangrijk dat de ambtelijk opdrachtgever, de portefeuillehouder en het college goed en volledig geïnformeerd zijn. De taak en de verantwoordelijkheid ligt dan bij het college hoe en of risico's gecommuniceerd worden naar de raad. Hiervoor is het belangrijk dat de kwaliteit van de ambtelijke besluitvorming goed op orde is. Onderdeel daarvan is dat er inzicht bestaat in de risico's zowel op project als op portefeuilleniveau. Een voorbeeld om dit te bewerkstelligen is om bij de herziening van grondexploitaties heel duidelijk te maken wat nou de wijzigingen en de voortschrijdende inzichten zijn ten opzichte van de vorige grondexploitaties. Daarbij dienen keuzes goed onderbouwd te zijn.

Invloed van de crisis op de gemeente

- In de huidige situatie neemt gemeente C geen nieuwe projecten meer aan en is er geen sprake meer van actief grondbeleid, behalve in uitzonderingssituaties.
- Het niveau van de productieplanning van woningen ligt soms hoger dan je zou verwachten in tijden van een teruglopende markt. Dit kan er mee te maken hebben dat gemeenten vaak gronden hebben die ze al veel eerder verworven zijn en daarop nog steeds woningen willen realiseren. Gemeenten hebben in sommige gevallen flink geïnvesteerd in grond en willen ervoor zorgen dat ze nog zoveel mogelijk kunnen terugverdienen.
- Gemeente C is momenteel aan het zoeken naar de rol die ze willen en kunnen vervullen bij gebiedsontwikkeling. Activerend grondbeleid lijkt hierbij steeds aantrekkelijker te worden. Om als gemeente echt je rol te veranderen en echt anders om te gaan met gebiedsontwikkeling moet het probleem groot zijn. Er moet sprake zijn van 'sense of urgency'. De crisis is hier wel een goed voorbeeld van geweest. In hoeverre het effect daarvan blijvend gaat zijn is nog onzeker. Hier en daar, ook bij andere gemeenten, zijn er namelijk al signalen dat het effect begint weg te ebben en men langzaam weer onvoorzichtig begint te worden als het gaat om gebiedsontwikkeling.

Rekenkamerrapport

- Een bevinding in het laatst verschenen rekenkamerrapport was dat de informatie met betrekking tot risico's vanuit gemeente C naar de gemeenteraad verbeterd kon worden. Deze bevinding werd over het algemeen ook wel gedeeld binnen gemeente C. Een maatregel die genomen is door gemeente C is het aanpassen van het

risicomanagementbeleid en het schrijven van de handreiking risicomanagement. De gemeente is op dit moment druk bezig met het inpassen van de speerpunten uit de handreiking risicomanagement.

- Over het algemeen zijn de aanbevelingen die gedaan zijn in het rekenkamerrapport wel uitvoerbaar voor de gemeente. Daarom wordt daar momenteel ook de nodige opvolging aan gegeven. Bijvoorbeeld het SMART maken van beheersmaatregelen wordt momenteel opgepakt in verschillende risicomanagementsessies.

Risicomanagement op portefeuilleniveau

Risicomanagement in de gemeentelijke organisatie

- Risicomanagement in gemeente C is bottom-up georganiseerd. Risico's moeten vanuit de (project)-organisatie worden geïnventariseerd. Hiervoor zijn o.a. de programmamanagers verantwoordelijk.
- Er zijn standaard drie momenten in het jaar waarin de risico's en het weerstandsvermogen geactualiseerd worden: de voorjaarsnota, de begroting en de jaarrekening. Hierbij is de voorjaarsnota niet verplicht volgens het BBV.
- Op het gebied van risico's is er nauw contact tussen de financieel beleidsmedewerkers en de adviseurs van de programmamanagers en de programmamanagers zelf.
- In het grondexploitatieprogramma komen in het algemeen de meeste risico's voor.
- Er wordt getracht om zoveel mogelijk risico's te kwantificeren door risico's via verschillende invalshoeken te benaderen.
- Voor kwalitatieve risico's bestaat er een classificeringstabel om zo toch een schaal aan te brengen aan niet-kwantificeerbare risico's.
- Zowel kwantitatieve als kwalitatieve risico's worden getoetst door o.a. de financieel beleidsmedewerker, de programma adviseurs en de concerncontroller.
- Risico's die worden ingevoerd door bijvoorbeeld de adviseurs van de programmamanagers worden ook wel eens getoetst door de financieel beleidsmedewerker.
- Over risico's die in de database worden gezet vinden soms discussies plaats of het wel echt een risico betreft. In sommige situaties betreft het een extra vraag naar geld of het is een probleem dat "going concern" ontstaat en wordt oplost. Een voorbeeld van het laatste is gladheidsbestrijding. Een vraag die altijd beantwoord dient te worden is of er extra weerstandsvermogen voor aangehouden moet worden.
- Een gemeente of een grondbedrijf is ook voor een deel een onderneming en bij het ondernemen horen risico's. Daarbij dient het dan ook niet zo te zijn dat je alles gaat zien als een risico want dan creëer je een overvloed aan risicomanagement, waardoor de organisatie te star wordt. De focus zou moeten liggen op het anticiperen op de onverwachte gebeurtenissen met een grote impact op de organisatie. Zaken die hier o.a. bij centraal staan zijn rente en de afzet van grond. Het kwantificeren of classificeren van deze aspecten is niet altijd eenvoudig.
- Kwalitatieve risico's worden geclassificeerd met behulp van een classificeringstabel die te vinden is in de kadernota. Risico's boven een bepaalde score moeten worden gerapporteerd aan de gemeenteraad. Dit is iets waar gemeente C nu mee bezig is, maar wat zich nog moet ontwikkelen.
- Voor de ontwikkeling van risicomanagement binnen gemeente C is het belangrijk dat risicomanagement breder gezien wordt dan alleen de invulling van het weerstandsvermogen. Aandachtspunten hiervoor zijn: Politiek bestuurlijke, financieel economische, juridisch en wettelijke, organisatorische, geografische & ruimtelijke en maatschappelijke. Dit zijn de invalshoeken die ook worden gehanteerd door RISMAN.
- De RISMAN methode fungeert als een framework dat de gemeente voor risicomanagement gebruikt.
- Succesfactoren op het gebied van risicomanagement binnen gemeente C:

- Binnen de gemeente vindt communicatie over risico's en verantwoording nu op een hele open manier plaats, ook naar het college en de raad toe.
- Op het gebied van IT heeft de gemeente een risicomanagement informatiesysteem waarin de laatste jaren ook een ontwikkeling heeft plaatsgevonden om het systeem organisatie breed te krijgen.
- De risico-intelligentie is de afgelopen 5 jaar enorm gestegen. Deze stijging heeft plaatsgevonden doordat enerzijds de raad er meer op is gaan focussen en naar is gaan vragen. Anderzijds is het ook de organisatie zelf die intern en naar buiten meer is gaan benadrukken dat risicomanagement belangrijk is om je processen te beheersen. Ook heeft de recessie hierbij geholpen.
- Het risicobewustzijn: de gemeente is zich er nu meer van bewust dat een crisis onverwacht kan optreden. Meer bewustzijn wil nog niet zeggen dat ze beter voorbereid zijn. Dat is de volgende stap die de gemeente wil zetten.

Communicatie, monitoring & rapportage

- Communicatie over risico's en risicomanagement vindt vooral plaats tussen de programmamanagers en de adviseurs. De financieel beleidsmedewerkers zijn (meestal) niet bij deze gesprekken.
- Het monitoren en communiceren van de voortgang/het effect van beheersmaatregelen is binnen gemeente C één van de lastigste trajecten die er is. Op de vraag of de beheersmaatregel het gewenste effect oplevert is niet altijd een antwoord. Hierin is het risicomanagementsysteem van de gemeente nog niet uitontwikkeld. Dit is ook een probleem voor andere gemeenten.
- Binnen de gemeente is het wel een streven om beheersmaatregelen te benoemen, te bepalen en dan ook te registeren. Dit is ook opgenomen in de kadernota. Het kan namelijk zijn dat een beheersmaatregel niet direct aanslaat, maar pas later.
- Voor gemeenten zou het een uitkomst/hulpmiddel zijn als er een soort algemene database bestond waarin beheersmaatregelen van gemeenten in dezelfde regio worden geregistreerd. Als bijvoorbeeld een buurgemeente een maatregel heeft getroffen die effect heeft gehad, kunnen andere gemeenten hier ook van leren en gebruik van maken. Omgekeerd werkt het ook dat als een bepaalde maatregel geen effect heeft, andere gemeenten daarvan op de hoogte zijn. Een soort van interregionale database. Zoiets zou je eerst kunnen testen op kleine schaal binnen de eigen organisatie. Binnen gemeente C zou dit dan bijvoorbeeld werken tussen de verschillende programma's die er zijn. In een dergelijke (programma)database kunnen dan de beheersmaatregelen plus eventuele effecten bijgehouden worden. Een dergelijke database zou dan ook kunnen bestaan voor risico inventarisatie. Zo kunnen gemeente inzicht verkrijgen in elkaars risico's. Gemeenten dienen dan wel transparant te zijn en open te staan voor andere gemeenten. De verwachting is dat, tot op zekere hoogte, gemeenten hiertoe wel bereid zullen zijn. Ook omdat ze dezelfde rol hebben en maatschappelijke doelen nastreven. Daarnaast, als de onderlinge verhoudingen goed zijn is de verwachting dat gemeenten sneller informatie met elkaar zullen delen.
- De communicatie omtrent beheersmaatregelen vindt binnen gemeente C nu nog te minimaal plaats. De gemeente is zover dat ze risico's inventariseren, kwantificeren, benoemen en registeren in een database en communiceren middels de P&C-cyclus. Ook vindt er nog te weinig communicatie plaats over de integrale risico's zoals politieke en strategische risico's. Deze verbeterpunten zijn al wel benoemd in de beleidsnota, de implementatie/verbetering daarvan is echter nog niet gestart. De verantwoordelijkheid om deze implementatie te starten zou kunnen liggen bij de concerncontroller.
- Gemeente C beschikt over een risicomanagement database om de communicatie omtrent risico's te verbeteren. De raad heeft echter geen toegang tot deze database. Daarnaast zou

een nadelig gevolg kunnen zijn dat als de raad toegang zou krijgen tot deze database, het voor een programmamanager een drempel opwerpt om alle risico's te melden. Er kan namelijk een idee ontstaan dat hierdoor een project/programma een te negatief imago zou krijgen. Tijdens de risicomanagementsessies is het de bedoeling dat er een open en transparante sfeer heerst. Hierdoor delen mensen ook minder voor de hand liggende risico's en beheersmaatregelen met elkaar. Uiteindelijk is het mogelijk dat sommige van deze risico's en beheersmaatregelen in de database gezet worden. Als de raad toegang zou hebben tot de risicodatabase zijn mensen geneigd om minder open te zijn tijdens een dergelijke risicomanagementsessie. Hierdoor worden sommige risico's en beheersmaatregelen misschien niet genoemd. De raad heeft echter wel aangegeven dat ze toegang zouden willen tot de database.

- De vraag blijft of de raad meer transparantie nodig heeft. Op dit moment komt vanuit de gemeente zelf het signaal dat de organisatie voldoende transparant naar de raad toe is. De raad krijgt namelijk uiteindelijk voldoende inzicht in de risico's en ook voldoende stuurmogelijkheden. De raad heeft zelf aangegeven vanaf welk bedrag ze geïnformeerd willen worden over risico's. Dit gaat om gekwantificeerde/financiële risico's en rapportage hiervan vindt plaats via de P&C-cyclus. Buiten de P&C-cyclus om wordt de raad op de hoogte gesteld van de niet of slecht kwantificeerbare risico's, zoals politieke risico's, via andere risicomanagement rapportages. Ook heeft de raad de kaders vastgesteld hoe het college en het ambtelijk apparaat met risico's om moeten gaan.
- Er was altijd wel een jaarlijkse risico managementrapportage waarin het totaal overzicht van risico's (kwantitatief en kwalitatief) met de raad gedeeld werd, buiten de P&C-cyclus om. De laatste jaren ligt de focus op de meer financiële risico's vanwege de gevolgen van de crisis op de grondexploitaties..

Invloed van de crisis op de gemeente

- De crisis heeft een grote impact gehad op de grondposities en de financiële positie van gemeente C. Net als vele andere gemeenten heeft gemeente C last gehad van teruglopende grondexploitaties en heeft de gemeente verliezen moeten nemen op haar grondposities. Daarnaast heeft de gemeente flink moeten bezuinigingen en sommige bezuinigingen lopen nog steeds.
- In principe zou het risicomanagementbeleid van de gemeente nu niet moeten verschillen van het beleid van voor de crisis. Het idee is dat je altijd risicomanagement moet toepassen, in goede en in slechte tijden. Een gemeente dient ten alle tijden kritisch te blijven kijken naar haar eigen processen en prestaties. Met andere woorden, zijn er risico's waardoor doelen niet bereikt worden en kunnen daarvoor nog beheersmaatregelen genomen worden. Dit dient een continu en cyclisch proces te zijn dat zowel in goede als in slechte tijden doorlopen moet worden.

Integraliteit

- Standaardisatie van de risico's vindt vooral plaats via de risicomanagement database. Adviseurs en programmamanagers moeten risico's continu in deze database zetten. Daarbij is het de bedoeling dat ze zorgen dat dit intercollegiaal gebeurt, zodat risico's door meerdere personen worden beoordeeld.

Rekenkamerrapport

- In het rekenkamerrapport van 2013 wordt genoemd dat de transparantie en informatievoorziening naar de gemeenteraad onvoldoende was. In de huidige situatie is dit niet meer het geval. Dit is ook het signaal dat vanuit de raad komt. De nieuwe kadernota uit 2014 waarin het risicomanagementbeleid is geactualiseerd heeft hier aan bijgedragen.

- Voor het merendeel zijn de aanbevelingen van het rekenkamerrapport verwerkt in de beleidsnota 2014. Ze zijn dus voldoende concreet en werkbaar.

Invloed vanuit het BBV

- De wijzigingen van het BBV worden op dit moment doorgevoerd binnen de gemeente. In eerste instantie zijn de wijzigingen werkbaar en gezien de situatie in het verleden bij veel gemeenten valt er ook wel wat voor te zeggen. Wel is de timing van de wijzigingen voor gemeenten niet echt gunstig. Gemeenten zijn nu net aan het herstellen van hun financiële problemen en de nieuwe wijzigingen van het BBV doen opnieuw een beroep op het financiële vermogen van gemeenten. Meer spreiding van de maatregelen was wenselijk geweest.
- Één van de aanbevelingen van het BBV waarin gemeente C niet tegemoet is gekomen is het opstellen van scenario's.
- Op dit moment is de verwachting niet dat de herziening van het BBV nieuwe risico's voor een gemeente op gaat leveren.

Weerstandsvermogen & Risico inventarisatie

- Het weerstandsvermogen van gemeente C moet minimaal 1,0 zijn. De gemeente wil het liefst ook dat het weerstandsvermogen niet veel hoger dan 1,0 is, omdat er anders geld wordt vastgezet dat ook gebruikt zou kunnen worden voor het verbeteren van voorzieningen, terwijl het anders eigenlijk nergens voor gebruikt wordt. Een andere reden om de ratio niet hoger te laten uitvallen is de volgende: risicomanagement blijft gebaseerd op subjectieve aspecten zoals inschattingen en aannames betreft het kwantificeren. Wellicht zitten daar al voorbehouden/zekerheden ingebouwd. Dan is het misschien niet nodig om dit ook nog in het weerstandsvermogen in te bouwen. Voor een gemeente zoals gemeente C waar veel bezuinigd is blijft het lastig om dan ook nog de buffer in het weerstandsvermogen uit te leggen omdat dat geld is wat niet gebruikt wordt voor bijvoorbeeld voorzieningen.
- Het risicoprofiel waarop de benodigde weerstandscapaciteit is gebaseerd komt tot stand uit de risicomanagementsessies die eens in de zoveel tijd gehouden worden. Hier worden namelijk ook de risico's voor elk programma geïdentificeerd.
- In het risicomanagementinformatiesysteem worden de risico's van alle programma's geregistreerd en geclassificeerd. Daarna worden de risico's die relevant zijn in een simulatieprogramma ingevoerd en op basis daarvan wordt bepaald hoeveel weerstandsvermogen daar tegenover moet staan. De risico's die in het risicomanagementsysteem opgeslagen worden zijn wel getoetst door de adviseurs, die ook als agendapunt hebben om risico's te bespreken. Door kritische vragen te stellen t.a.v. de inschatting van risico's worden de medewerkers die de risico's invoeren gedwongen om hun inschattingen te voorzien van een onderbouwing. Dit kan gezien worden als een soort van second opinion.

Marktonderzoek bij locatieontwikkeling/regionaal beleid

- De resultaten van sommige marktonderzoeken blijken uiteindelijk niet overeen te komen met de werkelijke situatie. Er zijn gevallen waarbij de resultaten zelfs niet in de buurt van de werkelijke situatie komen.
- Gemeente C maakt woonafspraken met de provincie. Deze afspraken worden vormgegeven in samenwerking met alle gemeenten in de provincie. Voor gemeente C is met name de sub-regio Salland relevant. Woningbehoefte en planontwikkelingen worden daarbij in beschouwing genomen en afspraken worden gemaakt over onderlinge afstemming. Daarnaast maakt gemeente C onderdeel uit van de woningmarktregio Stedendriehoek (6 Gelderse gemeenten en gemeente C). In dat verband wordt gewerkt aan een Regionale woonagenda Stedendriehoek. Daarbij wordt de woningbehoefte en verdeling in

regioverband afgestemd. In gemeente C is regionale afstemming dan ook een belangrijk gespreksonderwerp waarover afspraken worden gemaakt.

- Voor zowel het traject van woonafspraken van provincie Overijssel als in de regio Stedendriehoek worden onderzoeken gedaan naar de woningbehoefte, de harde plancapaciteit in gemeenten en de ontwikkelruimte. Voor alle gemeenten is inzichtelijk hoe de (harde) plancapaciteit zich verhoudt tot de woonbehoefte. Gemeente C heeft een harde plancapaciteit die onder de berekende woningbehoefte zit. Dit betekent dat er nog ruimte is om nieuwe plannen toe te voegen. Gemeente C kiest er voor zelf te voorzien in de woningbehoefte. Gemeente C zal niet akkoord gaan met plannen van buurgemeenten die voorzien in de woonbehoefte van Gemeente C.

Interview report municipality D

Datum: 11-11-2015
Respondenten: Teammanager vastgoed en grondzaken
Financieel adviseur middelen

Weerstandsvermogen

- De gemeente hanteert als streefwaarde voor het weerstandsvermogen de streefwaarde die door NARIS wordt gegeven . Dit betreft het weerstandsvermogen voor de algemene risico's. Voor het grondbedrijf wordt er een andere streefwaarde/methode gehanteerd (zie *risico inventarisatie)*.
- Het inschatten en kwantificeren van risico's voor het grondbedrijf blijft een lastig punt. Het is soms moeilijk om per risico te bepalen hoe hoog de kans en de financiële impact precies zijn. Dit geldt ook voor andere gemeenten dan gemeente D. Indien nodig worden hiervan soms ruwe schattingen en afwegingen gemaakt. In sommige gevallen zijn deze gebaseerd op de interpretatie en intuïtie van een individu. Van buitenaf (pers/media & regelgeving) wordt er veel nadruk gelegd op het weerstandsvermogen en het kwantificeren van risico's. Ondanks het feit dat de gemeente D zeker ook aandacht besteed aan het beschrijven en beheersen van kwalitatieve risico's, wordt de nadruk van buitenaf vooral gelegd op het weerstandsvermogen en het kwantificeren van risico's. Dat is namelijk waar de gemeente van buitenaf op aangesproken wordt (bijv. in de krant). Het zou echter wenselijk zijn als er een gezonde balans bestaat tussen de aandacht voor de kwantificering en kwalificering van risico's, zowel binnen als buiten de gemeentelijke organisatie. Zeker omdat inschatten en kwantificeren van sommige risico's voor een gemeente soms lastig is.
- De vraag hoe en door wie (bijv. de politiek, of juist een collectief van gemeenten) georganiseerd zou moeten worden dat er, ook van buitenaf, wordt gewerkt aan een betere balans tussen aandacht voor de kwalificering en kwantificering van risico's is een vraagstuk dat blijft spelen.

Risico inventarisatie

- Voor de inschatting van risico's voor het grondbedrijf die ten grondslag ligt aan het weerstandsvermogen hanteert de gemeente een aparte methode. Voorheen was de berekening van risico's ingewikkeld voor veel mensen binnen de gemeente en de raad. Voor de inschatting van risico's bij projecten werd er gebruik gemaakt van de RISMAN methode. Ondanks dat de gemeente informatie verstrekte (boekje over hoe de RISMAN methode werkt) aan de raad over hoe de risicoprofielen tot stand kwamen, bleef het lastig voor de raad om hier inzicht in te krijgen. Toen is er voor een andere aanpak gekozen. De IFLO-methode. Deze methode bleek beter geschikt om risico's inzichtelijk te maken voor en te communiceren naar de raad. Daarnaast sloot de methode beter aan bij de risico's die daadwerkelijk van belang zijn voor de gemeente. De IFLO-methode is getoetst door de resultaten te vergelijken met de RISMAN methode. Deze bleken overeen te komen. Met het gebruik van de nieuwe methode is het voor de raad beter te begrijpen waarom het risicoprofiel van het grondbedrijf toe- of afneemt. Hiermee is het risicoprofiel van het grondbedrijf voor de raad een stuk transparanter geworden.
- De IFLO-methode wordt gebruikt voor het berekenen van het risicoprofiel van het grondbedrijf. De IFLO-methode is daarmee vooral gericht op de kwantificeerbare ruimtelijke risico's. Deze worden samengevoegd om zo te komen tot een gemeenschappelijk risicoprofiel voor het grondbedrijf. De methode zegt niks over bijvoorbeeld politieke of strategische risico's. Om deze risico's in kaart te brengen worden er gesprekken aangegaan tussen de projectleiders en de teammanagers. Daarnaast gebruikt de gemeente bestuurlijke voortgangsrapportages om de raad te informeren ten aanzien van de gekwalificeerde risico's.

Invloed van de crisis op de gemeente

- Voorheen was risicomanagement vooral gebaseerd op beheersing van de kosten, terwijl de focus nu meer ligt op de realisatie van opbrengsten. Ook is er veel aandacht voor het reduceren van de schuldpositie (komt vanuit het BBV).
- Er heeft een verschuiving plaatsgevonden van een actief grondbeleid naar een meer faciliterend grondbeleid. Daarnaast worden er nu meer kleinere projecten met een kortere looptijd aangegaan in plaats van grotere met een langere looptijd. Deze verschuiving is echter nog wel politiek beladen. Dit komt doordat de politiek de gemeente in sommige gevallen stimuleert om meer te doen dan alleen het faciliteren van de locatieontwikkeling, om zo de economische ontwikkeling van de stad te stimuleren. Hierdoor is het niet onwaarschijnlijk dat in de toekomst, wanneer de markt nog meer aangetrokken is, het grondbeleid weer terug schuift naar een meer actievere vorm.
- De gemeente heeft momenteel twee grote projecten met een lange looptijd, die al gestart zijn voor de crisis. Dit maakt dat de programmering van de stad nagenoeg op slot zit. De gemeente heeft dus niet altijd de keuze om alleen kleinere projecten met een kortere looptijd aan te gaan, maar is ook gebonden aan grotere projecten.
- Een invloed van de crisis is geweest dat er in de huidige situatie meer aandacht uitgaat naar risico's en het benoemen en inzichtelijk maken daarvan. Dit heeft geresulteerd in een andere opzet van college- en raadsvoorstellen. Namelijk dat er nu een aparte paragraaf is waarin de risico's van een besluit/project expliciet worden benoemd richting college en/of raad, samen met eventuele alternatieven. Vanuit de raad zijn er positieve signalen ontvangen ten aanzien van deze nieuwe opzet.

Integraliteit

- Het probleem van integraliteit vanuit de literatuur wordt herkend binnen gemeente D. Dit wordt enigszins ondervangen door een medewerker, met een overkoepelende of centrale functie, de invoering en het beheer van gegevens in NARIS te laten controleren. Dit zorgt voor enige standaardisatie, maar ondervangt de kwestie van integraliteit niet volledig. De kwantificering van risico's door verschillende personen blijft echter ingewikkeld. Een compleet realistische inschatting is dan ook moeilijk. Dit komt doordat het voor de medewerkers die de risico's in NARIS invoeren, maar ook voor diegenen die ze controleren een lastig punt blijft om te bepalen hoe groot bijvoorbeeld de impact of kans van een bepaald risico is, of zal zijn.
- De politieke dimensie heeft invloed op de integraliteit, maar is ook bepalend voor het risicomanagement binnen de gemeente. Een voorbeeld hiervan is de invloed van een portefeuillehouder binnen het college. Zijn of haar houding en politieke achtergrond kan bepalend zijn voor het risicobeleid van een gemeente. Ten aanzien van het grondbeleid levert dit soms een spanningsveld op tussen twee portefeuillehouders. Hierna volgt een voorbeeld. Waar de portefeuillehouder grondbedrijf aanstuurt op een faciliterende vorm grondbeleid, wordt er vanuit de portefeuille stedelijke ontwikkeling gepleit voor een meer actievere vorm van het grondbeleid (met het oog op economische groei). Uiteindelijk spelen politieke motieven een doorslaggevende rol. Een ander voorbeeld is dat de portefeuille economie en de portefeuille grondbedrijf recentelijk zijn samengevoegd. In de oude situatie stuurde de portefeuillehouder economie aan op actief grondbeleid terwijl de portefeuillehouder grondbedrijf aanstuurde op faciliterend grondbeleid. Dit zorgde voor een spanningsveld. Nu vallen beide portefeuilles onder dezelfde persoon, wat zorgt voor een minder groot spanningsveld. Dit geeft aan dat niet alleen de politieke achtergrond, maar ook de persoonlijkheid van wethouders bepalend kan zijn voor het grondbeleid. Ditzelfde geldt voor het beleid rondom risicomanagement.

Risicomanagement in het algemeen

- Risicomanagement in de gemeente ligt bij meerdere personen. Sommige medewerkers spelen hier een meer centrale rol in, bijvoorbeeld de teammanager. Risicomanagement wordt dan misschien vanuit één afdeling gecoördineerd, maar niet georganiseerd.
- Het aanpassen van de lay-out van een standaard college-/raadsvoorstel (zie '*invloed crisis op gemeente')* heeft ertoe bijdragen dat de gemeentelijke organisatie meer risicobewust is geworden en dat risicomanagement beter geland is onder de verschillende afdelingen.
- De verwachting is dat de methode waarmee het risicoprofiel van het grondbedrijf bepaald wordt niet bij veel andere gemeenten gebruikt wordt. De meeste gemeenten gebruiken nog steeds een methode waarbij per project een post onvoorzien gehanteerd wordt. Gemeente D niet. Deze methode is toepasbaar in andere gemeenten.
- Ook van het onderscheid dat de gemeente D maakt tussen kwantitatieve en kwalitatieve risico's en het meenemen van kwalitatieve risico's in besluitvorming en rapportages, wordt verwacht dat de gemeente voorloopt op sommige andere gemeenten.
- De gemeente heeft maatregelen genomen om de risico's in het grondbedrijf inzichtelijker te maken en beter te communiceren naar de raad.

Communicatie

- Het grondbedrijf levert een stukje aan dat in de jaarlijkse risicoparagraaf verwerkt wordt.
- Teammanagers hebben periodiek overleg met de projectleiders van iedere grondexploitatie over wat er binnen het project speelt en de risico's die daarbij een rol spelen. Dit overleg vindt eens in de 2 à 3 weken plaats (voor 2 grote projecten). Hierin wordt de voortgang van het project besproken en de eventuele wijzigingen ten aanzien van risico's die zich voordoen. Dit geldt voor zowel grondzaken als algemene dienst. Daarnaast heeft de teammanager vastgoed & grondzaken iedere week overleg met planeconomen over de financiële risico's van de projecten.
- Communicatie naar andere organen:
    - De teammanager vastgoed & grondzaken heeft wekelijks overleg met portefeuillehouder van het college B&W omtrent voortgang van projecten.
    - Bij een nieuw project/contract is er in het raadvoorstel een aparte paragraaf waar de risico's genoemd dienen te worden.
- Per risico-onderdeel van een project wordt er een inschatting gemaakt (n.v.t, laag, neutraal, hoog). Als het risico hoog is dient er ook genoemd te worden welke beheersmaatregelen er getroffen zijn, of getroffen gaan worden. Beheersmaatregelen worden daarmee gekoppeld aan risico's binnen bepaalde projecten. De risico's worden ingeschat door de opsteller van het stuk/voorstel. Die raadpleegt daarvoor verschillende personen. Bijvoorbeeld een jurist, een stedenbouwkundige, een planeconoom etc. Daarna wordt het stuk beoordeeld door achtereenvolgens een teammanager en/of financieel adviseur, het afdelingshoofd, de portefeuillehouder(s) uit het college en daarna neergelegd bij de gemeenteraad. Er zijn dus verschillende lagen bij betrokken, die allemaal in de gelegenheid zijn om kritisch te kijken naar de lijst met geïdentificeerde risico's en beheersmaatregelen. Wel is het zo dat binnen de gemeente de meningen niet altijd eenduidig zijn over de hoogte van een bepaald risico.
- Een belemmering bij bovenstaande communicatievorm is dat sommige projectleiders moeite hebben met het benoemen van risico's. Dit omdat risico's mogelijk twijfel veroorzaken bij de raad om het project wel of niet door te laten gaan. Sommige projectleiders vinden het benoemen van risico's lastig. Dit komt omdat ze het idee hebben dat als er meer risico's genoemd worden de kans dat de raad akkoord gaat met het besluit om een bepaald project te starten kleiner wordt. Het beschrijven van risico's maakt deze zichtbaar en zorgt soms voor spanningsvelden.