

An aerial photograph of a suburban neighborhood. The landscape is dominated by dense green trees, with numerous houses and buildings scattered throughout. The houses are mostly small, single-story structures with dark roofs. There are some larger, more prominent buildings, possibly schools or community centers, interspersed among the smaller houses. The overall scene depicts a typical suburban residential area with a high density of greenery.

Local governments between growth incentives and land-thrift ambitions: The influence of the fiscal system on municipal land use policies

Vera Götze

Name: Vera Götze

Reg. Nr. 960510-291-130

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Name of supervisor: Dr. Thomas Hartmann

Second reviewer: Dr. Ir. Wendy Tan

Wageningen University and Research

Landscape Architecture and Spatial Planning Group

P.O. Box 47, 6700 AA Wageningen

www.lup.wur.nl

Cover page: Bosch en Duin, near Utrecht. Image © 2020 Google, Image © 2020 Aerodata International Surveys, Image © 2020 Maxar Technologies Map Data © 2020

Abstract

Unsealed soil is a valuable but limited resource. Therefore, minimizing land loss caused by urban and infrastructure development is a major priority for European governments and globally. Local governments play a key role in implementing instruments of land thrift policies such as urban growth management plans. However, local growth ambitions often stand in the way of regional land thrift goals. These growth ambitions are thought to be caused by intermunicipal competition for tax revenues. Incentives from the fiscal system and their influence on municipal land-use plans have not been researched sufficiently. Adapting a neoinstitutionalist approach, qualitative research was performed on two case study areas with contrasting fiscal systems. Interviewed municipal planners had little knowledge of the fiscal consequences of different spatial developments and underlined that other interests than the generation of revenues shaped their municipality's land use policy. Many other factors than the incentives from the fiscal system determine the weighting of interests in municipal land use policies. Understanding context-specific barriers for the implementation of land-thrift policies can ultimately lead to more fitting and more effective land-thrift policies.

Keywords: Urban Growth Management, Land thrift, fiscal incentives, Germany, the Netherlands, local growth ambitions

Summary

The national governments of many countries aim to decrease the land consumption from urban and infrastructure development. Urban growth management (UGM) plans are supposed to contribute to the achievement of this goal by limiting and steering the growth of metropolitan areas. A barrier for the implementation of these plans are the growth ambitions of local governments. The causes of these ambitions have not yet been researched sufficiently. Why do municipalities want to grow? Based on the assumption that municipalities are profit-oriented, answers are expected to be found in the fiscal system. Following institutionalist theory, the fiscal system and its incentives has a strong influence on the land use policy of local governments. Different fiscal systems, then, influence municipal land use policies differently. Consequentially, effective land thrift policies ought to be adapted to the fiscal system and its incentives. This thesis aims to examine the influence of fiscal incentives on the land use policies of local governments and thereby contribute to the knowledge on barriers for the implementation of UGM.

With the help of desk research, I examined which land use was incentivized by the different fiscal systems of Germany and the Netherlands. Subsequently, interviews were conducted with municipal officials to research the role that fiscal incentives play along other interests in the land use planning of the municipalities around the cities of Utrecht in the Netherlands and Berlin in Germany.

The German decentralized fiscal system rewards the growth of a municipality with increased tax revenues. Especially business parks and high-end residential areas result in high revenues from the local income- and business tax. Some of these revenues, however, are outbalanced by decreased allocations from rate support grants, increased contribution costs as well as high consequential infrastructure investments. Dutch municipalities, too, profit from growth. Especially from revenues from active land development and the generally increased efficiency of infrastructure investments due to a larger population.

With their land use policies, the interviewed municipalities pursue many more interests than the generation of revenues. Other policy goals are the creation of a balanced population composition, the preservation of natural assets and the stabilization of housing prices. The weighting of these interests not only depends on the formal institutional rules of the fiscal system but also the capability of the administration, the framing of problems, power relations between actors and external events. Fiscal incentives were thus not the primary determinant of the land use policies of the participating municipalities. The results of the research are not generalizable. They do, however, indicate that outbalancing fiscal incentives with the help of subsidies will not be sufficient to resolve conflicts of interest due to building restrictions from UGM plans.

Deutsche Zusammenfassung

Die Regierungen vieler Länder haben es sich zum Ziel gesetzt, den Flächenverbrauch als Folge von Stadt- und Infrastrukturentwicklung zu begrenzen. Regionale Wachstumsstrategien sollen zu diesem Ziel beitragen indem sie das Wachstum von Metropolregionen steuern und begrenzen. Eine Barriere für die Umsetzung dieser Strategien sind die lokalen Wachstumsambitionen der individuellen Gemeinden. Es fehlt ein differenziertes Bild zu den Ursachen dieser Wachstumswünsche. Warum wollen Gemeinden wachsen? Unter der Annahme, dass Gemeinden profitorientiert handeln, wird die Ursache für den Wachstumswunsch im Finanzierungssystem der Gemeinden gesucht. Einer institutionalistischen Theorie folgend hat das Finanzierungssystem mit seinen fiskalischen Anreizen einen starken Einfluss auf die Bodenpolitik der Gemeinden. Unterschiedliche Finanzierungssysteme beeinflussen die Bodenpolitik unterschiedlich. Folglich muss eine effektive Flächensparpolitik auf das Finanzierungssystem mit seinen fiskalischen Anreizen abgestimmt sein. Mit dieser Arbeit möchte ich den Einfluss fiskalischer Anreize auf die Bodenpolitik der Gemeinden untersuchen und damit zu dem Wissen über Barrieren für die Umsetzung regionaler Wachstumsstrategien beitragen.

Mithilfe von Dokumentenauswertung habe ich recherchiert, welche Bodennutzung die sehr unterschiedlichen Finanzierungssysteme Deutscher und Niederländischer Gemeinden anregen. Anschließend habe ich in Interviews mit Gemeindevertretern der Umlandgemeinden um Utrecht und Berlin untersucht, welche Rolle diese fiskalischen Anreize neben anderen Interessen in der Bodenpolitik der Gemeinden spielen.

Das Deutsche, dezentralisierte Finanzierungssystem belohnt das Wachstum von Gemeinden mit erhöhten Steuereinnahmen. Vor allem Gewerbegebiete und teure Wohnsiedlungen führen zu hohen Einnahmen aus der Einkommens- und Gewerbesteuer. Einige diese Einnahmen werden jedoch durch niedrigere Schlüsselzuweisungen, erhöhte Umlagen und hohe Folgekosten ausbalanciert. Auch Niederländische Gemeinden profitieren von Wachstum, vor allem durch Einnahmen aus aktiver Bodenpolitik und die generell erhöhte Effizienz von Infrastrukturinvestitionen bei erhöhten Bevölkerungszahlen.

Mit ihrer Bodenpolitik verfolgen die interviewten Gemeinden doch auch andere Interessen als die Verbesserung ihrer fiskalischen Position. Beispielsweise die Wahrung einer balancierten Bevölkerungszusammensetzung, die Stabilisierung von Wohnpreisen oder den Schutz von Naturgütern. Die Gewichtung dieser Interessen hängt nicht allein vom Finanzierungssystem ab, sondern auch von der Tauglichkeit einzelner Bürgermeister und deren Verwaltung, Machtverhältnissen zwischen den Akteuren, dem *Framing* von Problemen und externen Ereignissen. Das Finanzierungssystem war nicht der bestimmende Faktor für die Bodenpolitik der teilnehmenden Gemeinden. Die Resultate sind nicht generalisierbar, geben jedoch einen Hinweis darauf, dass eine Gegenreaktion auf die fiskalischen Anreize (durch Fördergelder) allein, den Widerstand der Gemeinden gegen Baurestriktionen als Folge von regionalen Wachstumsstrategien nicht brechen kann.

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1 INTRODUCTION

1.1 The key role of local governments in the control of urban sprawl

Land thrift is a policy goal of many national governments Limiting land loss caused by urban and infrastructure development is a major priority for European governments and globally. Unsealed soil is a valuable but limited resource. Its preservation is for example crucial for water management, climate adaptation, biodiversity, landscape conservation, agriculture and the production of biofuels (Deutsches Institut für Urbanistik, 2018).

In its *Roadmap to a Resource Efficient Europe*, the European Commission (2011) sets the goal of fully preventing net land loss by 2050 in order to stop the contamination and (irreversible) erosion of fertile soils. Many national governments have adopted this goal.

The German Federal Government aims to reduce land loss to less than 30 ha per day by 2030 (Die Bundesregierung, 2018). The Belgian Government has set the goal to fully prevent further sealing of the ground by 2040 (Olde, 2018). In the Netherlands, the *Ladder of Sustainable Urbanization* obliges municipalities to explain why further development is needed and – if applicable – why it cannot be placed within the existing urban area (Ministerie van Infrastructuur en Milieu, 2017).

Causes for land loss In most developed countries, land take increases independently from population growth (Colsaet, Laurans, & Levrel, 2018). Often, land is being developed faster than population growth. In some countries or regions, e.g. Switzerland or Eastern Germany, new land is even being developed without population growth (Weilenmann, Seidl, & Schulz, 2017; Nuissl & Rink, 2005). According to Moroni & Minola (2019) it is often argued that this has to do with the increasing consumption of space per person, the intensified car-use that makes commuting possible, and market dynamics. In their review of planning literature on land take, Colsaet et al. (2018) list more causes as the economic growth, rural-urban migration and market failures¹. Land take, or urban sprawl

¹ Market failures: (1) the price of converting rural to urban land does not take into account social values, (2) commuters do not bear social costs for traffic congestion, (3) developers do not pay for consequential investments in public infrastructure (Brueckner, 2000).

is often depicted as a natural development that has to be controlled with spatial planning and regulation (Buitelaar & Leinfelder, 2020).

The role of governments in urban sprawl Buitelaar & Leinfelder (2020) oppose this common theory and call attention to the role of governments that not only fail to regulate land take, but even foster it. **Next to the ‘natural’ causes for land take, governments themselves play a crucial role, as “government institutions impact the size and direction sprawl may take”** (Buitelaar & Leinfelder, 2020, p. 48). This becomes problematic when opposing governmental interests form a barrier for the implementation of land-thrift policies, as is the case with Urban Growth Management (UGM) plans.

The key role of local governments in UGM Urban Growth Management (UGM) plans allow urban development only within designated areas where further growth is expected to result in the least possible challenges from a regional perspective. Designated growth areas are often areas with good connection to public transport infrastructure, where an increase of car traffic as a result of residential and business developments is minimized. Well known examples of such UGM plans are the *Urban Growth Boundary* in Portland, Oregon and the *Fingerplan* for the capital region of Denmark. The green *fingers* in between the designated growth areas are to be kept free of urban and infrastructure development (Erhvervsstyrelsen, 2017).

The legal implementation of an UGM plan often lies with the local governments, which are charged with the task of translating regional UGM strategies into legally binding land use plans. Therefore, the successful implementation of UGM plans depends on the acceptance of local governments. In order to be effective, the UGM strategy has to be implemented by all municipalities within the region (Fertner, Jørgensen, Nielsen, & Nilsson, 2016).

Local growth ambitions outweigh regional concerns In Germany, municipalities compete with neighboring municipalities for new jobs and residents and the resulting tax revenues (Langer & Korzhenevych, 2018). These **local growth interests can outweigh regional ambitions** (Wegener, 2016). In this context, as UGM plans differentiate between areas where urban growth is desirable and areas where growth will be restricted, UGM always involves winners and losers (Janssen-Jansen, 2005).

Therefore, local governments try to impede the implementation of UGM plans. In the metropolitan region of Copenhagen, where municipalities generally agree with the principles of the *Fingerplan*, its implementation is highly contested as soon as it is perceived to stand in the way of a municipality's own development (Hartoft-Nielsen, 2018). Also, in the metropolitan region of Frankfurt, Monstadt & Meilinger (2020) observe that in spite of great efforts for regional growth management, urban development is still led by local growth politics. Likewise, the publication of the regional land use plan for the German capital region of Berlin-Brandenburg was met by strong opposition from local politicians that were facing building restrictions as a consequence of the land use plan (Metzner, 2019). Even in China, where local politicians face severe penalties for not complying with the regional UGM plan, local growth ambitions still seem to outweigh concerns for regional welfare (Shao, Bakker, Spit, Janssen-Jansen, & Qun, 2020).

This conflict of interests at the executing level of government is concerned to be the largest barrier of the effective implementation of UGM strategies (Colsaet, Laurans, & Levrel, 2018).

1.2 Approaches to enhance the implementation of UGM plans

Different researchers have tried to find ways to prevent conflicting local interests from impeding the implementation of UGM strategies (Meijmans, 2010; Henger & Bizer, Tradable planning permits for land-use control in Germany, 2010; Fertner, Jørgensen, Nielsen, & Nilsson, 2016).

UGM based on voluntary cooperation between local governments

Some scholars have researched how **better communication and participation processes** can enhance the cooperation between local governments that is needed to implement a regional growth strategy (Van Zoest, 2010; Meijmans, 2010; Fertner, Jørgensen, Nielsen, & Nilsson, 2016; Colombo, Van Schaick, & Witsen, 2018). Van Zoest (2010) reasons that if discussions between municipalities can be kept at a pragmatic and content-oriented level, they can overcome local interests and decide for what is best for the region. In the Netherlands, regional design is seen as a powerful tool to achieve these

content-oriented discussions (Meijmans, 2010; Colombo, Van Schaick, & Witsen, 2018). Likewise, Fertner et al. (2016) conclude from a comparison between UGM in different countries, that a strong vision like the *Fingerplan* in Copenhagen can create more acceptance and better implementation at the local level.

Others oppose that growth oriented local interests and resulting competition for development will always stand in the way of pragmatic solutions based on the common welfare (Wegener, 2016). Billé (2008) and Levelt & Metze (2014) argue, that these conflicts cannot necessarily be resolved with the help of round table discussions.

UGM based on regional planning by higher levels of government

Other scholars argue for **transferring planning power to higher levels of government.**

This would not resolve conflicts between local governments but make the implementation of UGM strategies less dependent on their consensus. According to Wegener (2016), “sustainable spatial development requires the reinforcement of democratic decision-making at the lowest possible level of government at which not particular interests but the common welfare are pursued” (Wegener, 2016, p. 166). He argues that regional planning cannot happen on the municipal level because municipalities often lack the ability to set aside local interests in favor of what is best for the region. However, in Denmark, where the spatial development of the capital region *is* regulated by a national directive – thus on a higher level – leading urban planning professors have recently published a joint appeal to fill the resulting *democratic deficit* with a network of the affected municipalities (Hartoft-Nielsen, 2020). Furthermore, in spite of the legally binding top-down regulation, Hartoft-Nielsen (2018) still detects many examples of Danish municipalities acting against the rules stipulated in the *Fingerplan*. More extremely, Shao et al. (2020) observe that local governments in China do not comply with the principles of the regional UGM plan, although non-conformance involves severe penalties. Buitelaar et al. (2011) conclude that “*in order to be effective (that is, to become institutionalized) any legislation that we design should not be at odds with institutions at the local level. Or, it should include strong enough incentives to mould these local institutions in the desired direction*” (Buitelaar, Galle, & Sorel, 2011, p. 929).

UGM based on equalization of development profits

Next to the communicative and the hierarchical approach, scholars research the possibility of creating consensus on a regional scale by **equalizing development profits**. German researchers, for example, have studied possibilities of implementing Tradable

Development Rights (TDR) to decrease fiscal disadvantages from building restrictions (Henger & Bizer, 2010). The implementation of TDR systems in Germany has been discussed for a long time and was even tested out (Henger, 2013). However, TDR remain difficult to implement on a regional scale (Skuzinski & Linkous, 2018). Also, Janssen-Jansen (2008) points out that, although interest in TDR is strong, this instrument is rarely implemented in Europe.

“The right mix” While some scholars highlight the importance of stimulating voluntary cooperation between municipalities, other scholars research possibilities of transferring planning power to higher levels of government. Other researchers again point out the need to mitigate competition for tax revenues between local governments with the help of Tradable Development Rights.

OECD (2017) shows that all these approaches are possible policies that national governments can choose to make the implementation of UGM plans more effective. They describe four ways in which national governments can respond to the conflicts between local land use policies and national objectives:

1. They can encourage local governments to cooperate and commit to a common development plan that is based on supra-local interests.
2. They can transfer planning power to a higher level of government, which will issue a regional land use plan that all municipalities have to commit to.
3. They can change the fiscal system in order to incentivize local governments to adjust their land use policies to national goals.
4. They can create fiscal incentives for individuals and businesses to provoke a land use that is in line with national goals.

While all policies can contribute to the implementation of UGM strategies, none of them can solve the problem alone. Governments thus have to choose the right mix of policies that allows for an effective UGM plan (see figure 1) (Fertner, Jørgensen, Nielsen, & Nilsson, 2016). What the right mix is depends on the country’s general framework such as the structure of governance and the fiscal system (OECD, 2017). If the fiscal system creates strong incentives for urban growth, these have to be addressed and counteracted. Often, however, possibilities to create counterincentives are neglected as they fall outside the classical realm of land use policies. The OECD report concludes: *“in order to meet the ambitions of spatial policy, tools, instruments and incentives both*

within and outside of the purview of spatial and land use planning need to be aligned” (OECD, 2017, p. 170).

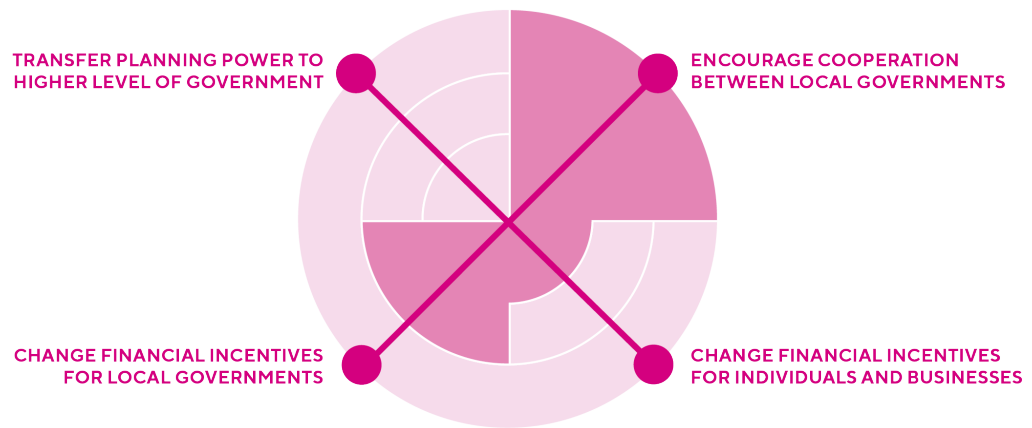


Figure 1 The right mix of policies. Own figure based on OECD (2017)

1.3 Why do local governments pursue expansive land use policies?

Earlier, local growth ambitions were explained as a consequence of competition for tax revenues between local governments. This causal relationship suggests that municipalities are interested in maximizing their local revenues. This draws attention to the fiscal system.

Incentives from the fiscal system

Incentives for urban expansion can stem from the fiscal system that determines the revenues and spending of municipal budgets. **The fiscal system rewards some forms of land use more than others.** If a municipality is allowed to collect business taxes, for example, it is likely to adapt its land use policy in order to attract businesses. A municipality that is highly dependent on revenues from local taxes (decentralized fiscal system) is more likely to pursue an extensive development. In a centralized fiscal system, on the other hand, the municipal budget relies on state grants rather than on local tax

revenues. Municipalities in centralized fiscal systems benefit generally less from developments. (OECD, 2017)

The role of fiscal incentives in the land use policies of local governments

While scholars realize that the fiscal system can counteract municipalities' compliance with UGM strategies (Monstadt & Meilinger, 2020), **detailed knowledge about which land use policies are incentivized by different fiscal systems is lacking**. Supposed that municipalities choose the land use policy that gives the highest fiscal benefits, it is important to understand what tax incentivizes what kind of land use.

Additionally, it is **unclear what role fiscal incentives play in the land use policies of local governments**. What other reasons do municipalities have to grow? How important is the interest in generating tax revenues compared to other political goals? A more differentiated understanding of the causes for expansive municipal land use policies is necessary to tailor national policies for the implementation of UGM plans to the specific fiscal system.

1.4 Research objective and research questions

Local governments play a key role in the implementation of UGM plans. The effective implementation of UGM plans is hindered as local growth ambitions oppose the restrictions of these regional development plans. A better understanding of the reasons for municipalities' expansive land use policies can help to enable supralocal efforts to evoke more consideration for national land-thrift goals.

The aim of this research is to get a more differentiated understanding of the effect that fiscal incentives have on the land use policy of local governments and thereby contributing to the knowledge on barriers for the implementation of UGM plans.

How do different fiscal systems affect the land use planning of local governments?

1. Which forms of land use are incentivized by the different fiscal systems?
2. Which goals do the municipalities pursue with their land use policies?
3. What explains differences in the influence of fiscal incentives on the land use policies of local governments?

1.4 Approach

The assumption that incentives from the fiscal system determine the land use policy of local governments builds upon the theory that decision-makers act according to formal institutional rules. From a neoinstitutional perspective, which additionally includes the effect of informal institutional rules, this hypothesis can be doubted. It is likely that more – also informal – explanations than merely the incentives from the fiscal system are needed to explain the policymaking of municipal planners. Therefore, a qualitative approach was chosen to gain in-depth insights in the motivations behind the land use policies of selected municipalities.

A multiple case study was conducted in order to analyze the ambitions of municipalities in the context of different fiscal systems. Only few comparative studies of the implementation of UGM in different countries exist (Colsaet, Laurans, & Levrel, 2018). A comparison of two contrasting cases highlights the distinctiveness of different national practices. Understanding these national differences helps to surpass limits of simply borrowing best practices and adapting them (Buitelaar & Leinfelder, 2020). *“The point is not to take something and adapt it, but to figure out something about other places and systems, about oneself, to learn from theory, and to bring this together in discussions which produce novel insights, which enable dialectical learning”* (Van Assche, Beunen, & Verweij, 2020, p. 18).

1.5 Outline of the structure of the subsequent chapters

The following chapter 2 will present the concepts and theoretical relations that my hypotheses are built upon. Based on these I will develop the methodological framework that will help me to test these theoretic assumptions along the structure of my research questions. Chapter 4 will reveal the results of my research. These will be discussed in chapter 5 with the aim of answering the research questions and embedding the results in the context of planning literature. The insights will be concluded in chapter 6.

2 THEORY

In this chapter, I will introduce the theory on which this thesis work is based. It is the underlying basis of the hypotheses and expectations with which I entered the research. From this starting point, I will later discuss and relate the gained insights to existing concepts.

In the following, I will first present the used theories and later relate them to the fiscal system and land use policy.

Regarding the influence that formal institutional rules have on public policies, one can distinguish two opposite poles. As the following review will show, scientific literature is distributed between, on the one hand, the assumption that formal institutional rules have a strong influence on public decision-making and the development of public policies and, on the other hand, that informal rules and external factors determine the outcome of public policies. Before explaining these poles further, I will define what a public policy is.

2.1 Public Policies

Political-administrative authorities develop policies to change the behavior of a target group that is causing a problem (Knoepfel, Larrue, Varone, & Hill, 2007). Public policies are thus *“legislative and administrative activities aimed at the resolution of real problems”* (Knoepfel, Larrue, Varone, & Hill, 2007, p. 24).

In the context of this thesis, the political-administrative authorities are local governments. They develop land use policies to solve problems of land scarcity (Hartmann & Spit, 2015). The definition of public policies that is used in this report thus covers **all the legislative and administrative activities performed by local governments to steer the *“allocation and distribution of resources – in particular of land”*** (Needham & Hartmann, 2016, p. 13). Important is the notion of a policy goal. Local governments have instruments to achieve their policy goals, such as the local land use plan. But these instruments are not in themselves land use policies. In a land use policy, a local government combines a set of instruments in a strategic plan to achieve a policy goal.

When I mention that different factors have an influence on the land use policy of a municipality, I thus mean that different factors influence the policy goals of a municipality and, in

consequence, the set of policy instruments that the municipality is using to achieve these goals.

2.2 The influence of formal institutional rules on policymaking

Classical Institutionalism The assumed influence of the fiscal system on the land use policy of local governments originates in traditional institutionalism. Institutionalists claim that **formal institutional rules** influence public policies. These formal institutional rules are embedded in the democratic, constitutional framework. (Knoepfel, Larrue, Varone, & Hill, 2007)

In the context of this project, examples for institutional rules could thus be (1) the planning law that specifies the responsibilities and competencies of different actors, (2) rules by other levels of government that local governments have to respect or (3) the fiscal laws that control how municipalities generate income.

The institutional rules influence public policies as they determine which actors are involved in the decision-making processes. Additionally, institutional rules stipulate which resources these actors can mobilize to enforce their interests. Thereby, they influence the scope of maneuver which the actors have in policymaking. (Knoepfel, Larrue, Varone, & Hill, 2007)

Actors act in accordance with rules Institutionalists thus expect decision-makers to move and stay within this framework of formal rules (Gerber, Hengstermann, & Viallon, 2018).

This assumed effect of institutional rules on individual and collective decision-making implies that undesired behavior of individuals or organizations can be “corrected” by applying the right instruments. The undesired behavior of private developers can be adjusted with the right municipal policy instrument. The undesired behavior of municipalities can be adjusted by adapting institutional rules on higher levels.

2.3 The role of informal rules and external factors

Room for interpretation In their preface to *Instruments of Land Policy*, Gerber et al. (2018) emphasize that this technical understanding of institutions is not differentiated enough. Assuming that actors behave according to the framework of institutional rules neglects “*political and strategic dimensions*” (Gerber, Hartmann, & Hengstermann, 2018, p. xii). In their book, Gerber et al. (2018) present a number of land use instruments and show that they are being used and reacted

to differently by actors in various countries. The instruments – or formal institutional rules – leave the target group enough room for interpretation to adapt them to their own needs.

Neoinstitutionalism Neoinstitutionalists have therefore researched the various ways in which the influence of formal institutional rules on public and individual decision-making is diminished. They focus on the power of **informal rules** and the mutual impact between actors and institutional rules (Knoepfel, Larrue, Varone, & Hill, 2007). Neoinstitutionalists recognize that actors are not completely free, but they are challenging the hypothesis that the actors' behavior is entirely controlled by formal institutional rules (Gerber, Hengstermann, & Viallon, 2018, p. 17).

There are different movements within neoinstitutionalism. However, they all have in common that they attribute significance to the *informal* institutional rules in policymaking (Knoepfel, Larrue, Varone, & Hill, 2007). Informal institutional rules could be culture, routines and social norms (Enserink, Koppenjan, & Mayer, 2013). They could also be voluntary arrangements between actors or power relationships (Knoepfel, Larrue, Varone, & Hill, 2007). For example, Knoepfel et al. (2007) describe the case of an MP voting *against* abortion for personal or ethical reasons, although the party to which (s)he belongs is *for* abortion.

While the formal institutional rules thus influence the scope of maneuver and, to some degree the preferences and perceptions of actors, the actors themselves have the power to shape decision-making processes (and thus policies) according to their interests (Gerber, Hengstermann, & Viallon, 2018).

Next to these informal social and cultural rules, other researchers focus on additional factors that can have an impact on public policies.

Political game This could for example be the power relations between actors. All actors have different goals and values and negotiate policies in order to reach a compromise that satisfies their interests. The final compromise is then thought to be determined by the **power relations** between the actors (Enserink, Koppenjan, & Mayer, 2013). Flyvbjerg (1991) highlights these processes in his analysis of urban planning in the city of Aalborg, where he illustrates the policy-changing powers of single interest groups.

Discourse model In the discourse model, the **quality of the arguments** is added as a determining factor to the power relations in a political debate (Fischer & Forrester, 1993). Depending on the background of persons or organizations, the same problem can be viewed from different perspectives. Schön and Rein (1994) call this the different *framings* of a problem. In theory, the

actor with the most convincing storyline then determines the outcome of the debate and the content of the policy (Hajer, 1995).

Streams model With the streams model, Kingdon (1995) introduces the role of **external factors** to the policymaking process: “*disruptions, unexpected events, and coincidences*” (Enserink, Koppenjan, & Mayer, 2013, p. 27) in the environment in which the policy is developed. Kingdon (1995) distinguishes between three streams that flow next to each other: the problem stream, the policy stream and the stream of political events (see figure 2). Only if all streams meet does a *policy window* open and is there a possibility for making a policy (Kingdon, 1995). A problem may exist, but it might not be addressed by the ruling political party. In case of a new election, the political stream changes and new problems move in the focus of awareness, but there might not yet be a solution (in form of a policy) for this problem.

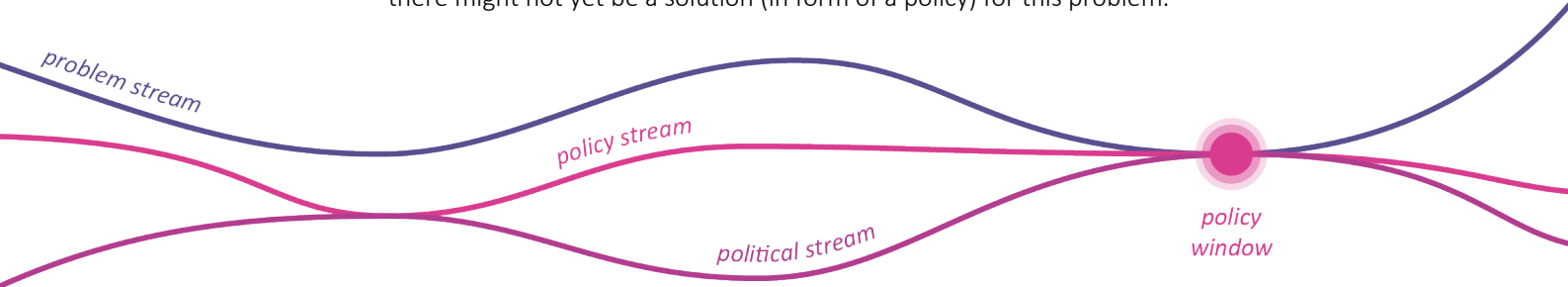
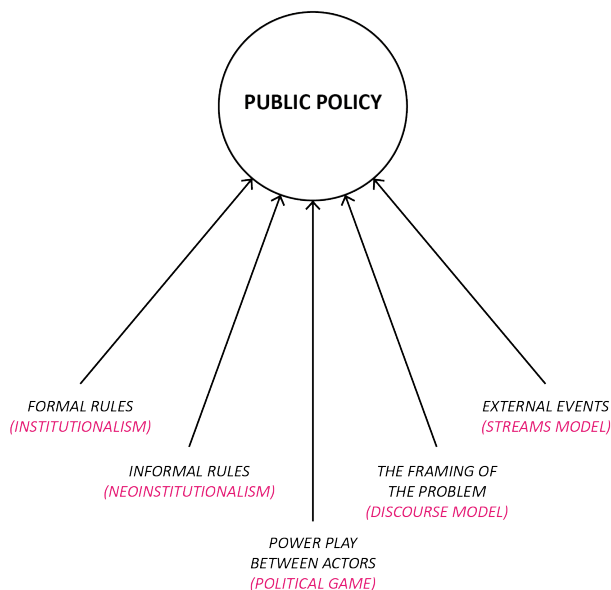


Figure 2 Kingdon's streams model. Based on (Pauli, 2001)

Conceptual framework Combining these theories in a conceptual model gives me a more comprehensive understanding of the factors that can influence public policymaking such as the development of municipal land use policies (see figure 3). This framework will help me to understand and relate the empirical findings to existing theories.



Seeing the fiscal incentives in the theoretical context of other influences on public policymaking will help me to achieve the research aim of getting a more differentiated understanding of the effect that fiscal incentives have on the land use policy of local governments and thereby contributing to the knowledge on barriers for the implementation of UGM plans.

Figure 3 Conceptual model of different influences on public policymaking. Own figure

2.4 Fiscal system and municipal land use policies

Applying the traditional institutionalist paradigm to the topic of this report, the fiscal system would be expected to affect the land use policies of municipalities. The fiscal system does not limit the municipalities' scope of maneuver as directly as e.g. the planning law does. However, municipalities need income in order to finance their tasks. To a degree, this makes their policies dependent on the formal rules of the fiscal system.

The fiscal system determines the profitability of spatial developments

The **fiscal system determines how municipalities generate income**. Some types of spatial development get rewarded more by the fiscal system than others. Certain developments are thus incentivized by the fiscal system. The problem that is addressed in scientific literature is that some fiscal systems incentivize expansive land use.

If municipalities are allowed to collect local taxes, for example, this incentivizes them to attract investments in urban development which increases their tax revenues (Monstadt & Meilinger, 2020). More detailed, if a municipality is highly dependent on revenues from property taxes, as is the case in France, it might be interested in supporting the transformation of greenfield sites (with low property taxes) into higher taxed urban areas (OECD, 2017). If, on the other hand, a municipality has the possibility to collect business taxes, it is probably interested in attracting more businesses to increase its revenue from business taxes. It can do so by allocating business areas. As municipalities in the region follow the same strategy, large areas of land are being converted to building land (Langer & Korzhenevych, 2018). If the fiscal system allows a municipality to keep revenues from active land development, expansion is incentivized as the development of greenfield sites is generally more profitable than the redevelopment of brownfield sites (Buitelaar & Leinfelder, 2020).

In this way, the fiscal system incentivizes municipalities to follow land use policies that are *"rational from a local perspective but create inefficient land use patterns overall"* (OECD, 2017, p. 10).

The fiscal system, however, does not only cover the incomes that a government can generate. In order to understand the incentives of the fiscal system on municipal land use planning, a more holistic definition is needed.

Demarcation of the fiscal system

The fiscal system is the entirety of all government revenue and expenditures and the rules that determine how agencies can collect and disburse those funds (Kimmons, 2017). While

the scientific literature is mostly preoccupied with the fiscal incentives of the taxes which a municipality can collect, the fiscal system also involves national rate support grants and costs for e.g. infrastructure and the provision of services. These factors are important to add into the calculation in order to fully understand its incentives for municipalities (OECD, 2017).

Centralized and decentralized fiscal systems

The OECD (2017) describes two basic categories of fiscal systems: the *centralized* fiscal system and the *decentralized* fiscal system. In a centralized fiscal system, revenues are collected by the national government and from there distributed among municipalities. The municipalities depend on these national transfers and have thus a low fiscal autonomy. In theory, a centralized fiscal system does not reward developments on the local level. Municipalities are not expected to gain fiscal benefits from attracting additional residents or businesses. Municipalities in centralized fiscal systems are therefore more likely to pursue urban containment policies. (OECD, 2017)

In decentralized fiscal systems, on the other hand, municipalities keep local revenues in their own budget. The municipalities depend on local revenues to finance programs, investments in infrastructure and services. Growth is rewarded by the decentralized fiscal system through increased tax revenues. Municipalities in decentralized fiscal systems are expected to have a strong interest in growth and thus less likely to accept urban containment policies. (OECD, 2017)

Limits to the influence of fiscal incentives on municipal land use policies

In many of the analyzed cases in scientific literature, the fiscal system rewards an expansive land use policy. Traditional institutionalism suggests that municipalities therefore are incentivized to pursue policies of local growth. However, the review of theoretical literature has shown that other factors can also have an influence on the municipalities' policies. But other factors that support or undermine fiscal growth incentives have hardly been researched.

3 METHODS

3.1 Character of the thesis work

Worldview and character To answer the main research question “*How does the fiscal system affect the land use planning of local governments?*”, research has to be done on which land use a certain fiscal system incentivizes and whether (and why) these incentives play a role in local governments’ decision-making.

Institutional theory suggests a connection between the fiscal system and the land use decisions of local governments. Testing this theory reflects an interpretivist worldview. Through an exploratory research, I aim to get a better understanding of how external influences shape municipal decisions.

Qualitative research Researching why local governments choose certain land use policies calls for a qualitative research strategy. While a quantitative study could show differences in pursued land use policies in different countries, it would not be sufficient to explain causal connections to the fiscal system. Qualitative research, on the other hand, can deliver in-depth insights in the motivations that underlie land use decisions. It is “*explanatory to the familiar, more quantitative research that measures urban sprawl, its causes and its effects*” (Buitelaar & Leinfelder, 2020, pp. 53-54).

Comparative case study The performance of a case study was chosen to get an in-depth understanding of the highly country-specific fiscal systems. Analyzing two countries with contrasting fiscal systems can highlight the different consequences which the two systems have for the land use policy of the municipalities. The strength of the comparative case study lies in its ability to “*contextualize and understand one’s own national practices*” (Buitelaar & Leinfelder, 2020, p. 54).

The choice for a comparative case study entails two issues that need to be addressed: the comparability of the cases and the representativeness of the results.

Representativeness The outcomes of the multiple-case study are highly context-specific and will not be representative for other countries. Neither will they be representative for other areas in Germany and the Netherlands where municipalities might face other challenges or rely on other sources of income. However, the results can draw attention to an under-researched driver

of urban land expansion and to the necessity to adjust UGM policies to the fiscal incentives that local governments are facing.

Differences in the countries' fiscal systems might be reflected by differences in the type of land use that the municipalities pursue. These contrasts will help me to understand how the design of the fiscal system influences land use and eventually the effectiveness of UGM plans.

Comparability Apart from the contrasting fiscal system, any two chosen cases would hardly be comparable. The effect of the fiscal system on municipal land use decisions cannot be isolated as there are likely to be many other factors that influence these decisions. For example, demographic developments, differences in the planning system or the organization of regional collaboration. Therefore, any difference in land use policies cannot with certainty be traced back to the differing fiscal systems. This is an issue that any comparative planning analysis must struggle with (Van Assche, Beunen, & Verweij, 2020).

The reason for choosing two cases with different fiscal systems is to capture as broad a spectrum of influences of municipal land use planning as possible. Because, according to institutionalist theory, the pursued land use of municipalities within a centralized fiscal system is very different from the land use of municipalities that act within a decentralized fiscal system.

In this context, it is not the differences of the municipalities' interests that are important but the similarities. Which factors influence municipal land use policies *regardless* of the underlying fiscal system?

Case selection It is now clear that one of the selected case areas is characterized by a centralized fiscal system while the other case area is characterized by a decentralized fiscal system. A further contrasting criterium could be that the municipalities in one of the chosen areas pursue an active land policy while the municipalities in the other area pursue a passive land policy. Given these criteria, Germany and the Netherlands are a suitable selection.

While municipalities in Germany have high fiscal autonomy and a monopoly on local tax revenues, the municipalities in the Netherlands depend on rate support grants from the national government. Additionally, it is common for Dutch municipalities to actively develop land. On the other hand, German municipalities predominantly pursue a passive land policy. The national governments of both countries see land thrift as crucial for their future spatial development. Both have embedded this goal in their national strategy on sustainable

development (Die Bundesregierung, 2018; Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2019). Consequentially, forms of urban growth management can be found in the quickly developing metropolitan areas of Germany and the Netherlands. In the context of the societal problem of implementing urban growth management, I chose two metropolitan areas for this research: the metropolitan area of Utrecht in the Netherlands and the metropolitan area of Berlin-Brandenburg in Germany.

3.2 Data collection and data analysis

Desk research Desk research was performed to describe the two fiscal systems and their incentives on the land use policy of local governments. The analysis of relevant scientific literature, legal texts and statistical data enabled me to understand the sources of income and their weighting within municipal budgets. In this context, sources of income involve both revenues from taxes and fees as well as revenues from state grants and – if applicable – land exploitation. Special emphasis was on sources of income that relate to the municipality's chosen land use policy, i.e. sources that can be influenced by the municipality's land use. Also, the expenditures of a municipality were studied as they can outbalance the profits of certain developments.

The desk research resulted in a first understanding of the functioning of the fiscal systems of Germany and the Netherlands. Still, an exact evaluation of the fiscal benefits of particular spatial developments proved challenging. Questions that were raised throughout the desk research were answered in expert interviews.

Interviews The other – and primary – purpose of the interviews was to understand the role that fiscal incentives play in the decision-making of local governments. Also, the interviews clarified if the fiscal incentives that were uncovered through desk research were at all perceived as incentives by municipal officials.

The topic to be examined in the interviews is fairly specific, namely the reasons why municipalities choose certain land policies. Therefore, I chose a semi-structured interview design that allowed me to focus the interview on this topic. At the same time, this interview form

was flexible enough to allow for unexpected turns, which were likely to occur, given the explorative character of the study.

Due to travel restrictions, the interviews were conducted by telephone or video call.

Interviewees For the study, I primarily interviewed municipal officials concerned with spatial planning. Those were the staff of the planning departments and in 2 cases the mayors of the municipality. Also, officials of higher government levels were interviewed, given that they were directly involved in regional planning processes and experienced in negotiating regional ambitions with representatives of the municipalities. As spatial planners turned out to have little detailed knowledge of the fiscal system, I also sent interview invitations to municipal treasurers.

Interview invitations were primarily sent out to municipalities in the direct surroundings of the metropolises. For Berlin-Brandenburg, I used the definition of the state development plan Berlin-Brandenburg, which distinguishes the immediate surroundings (*Berliner Umland*) from the wider metropolitan area (*Weiterer Metropolenraum*) (Priewe, n.d.). The prior was used to demarcate the search area. For Utrecht, the municipalities that are part of the regional cooperation association (*U10*) were included in the search area (see figure 4).

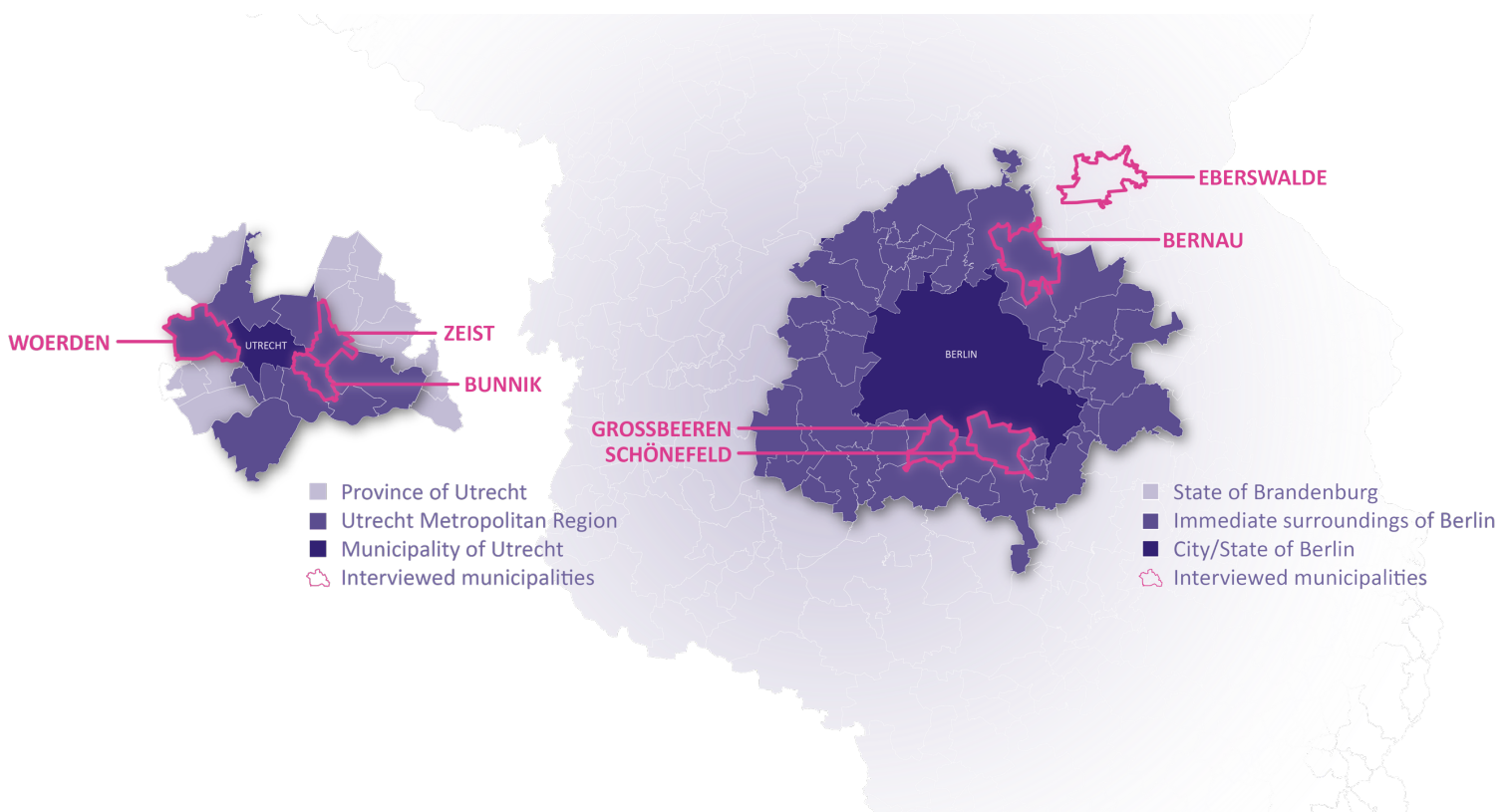


Figure 4 Search area and interviewed municipalities. Same scale. Own figure

Within these search areas, I contacted municipalities with different characteristics in order to achieve as broad a range of impressions as possible. This was especially relevant in the larger search area of Berlin-Brandenburg where municipalities differ in size, geographic characteristics, history, and their location within the state development plan. In Brandenburg, I also contacted a single city outside the immediate surroundings of Berlin. This city was only partially affected by the growth of Berlin due to its long commuting distance from the capital. However, it is designated as a secondary growth center in the state development plan of Berlin-Brandenburg.

At the end of each interview, the participants were asked to recommend further interview partners with deviant experiences or interests.

The number of participants was restricted by the available time for conducting the interviews and by the willingness of the contacted persons to answer my invitation.

The people that were interviewed for this research are listed in the following table 1.

Table 1 Interviewees

	Utrecht	Berlin-Brandenburg
<i>Local government level</i>	<i>3 strategic planners 1 treasurer</i>	<i>2 strategic planners 2 mayors</i>
<i>Higher levels of government</i>	<i>1 official of the Dutch Ministry of the Interior, coordinating the regional collaboration process on the urbanization of the Province of Utrecht</i>	<i>1 official in the Brandenburg Ministry of the Interior, advising municipalities on urban densification 1 official of the joint planning department Berlin-Brandenburg</i>

Interview guide The interview guide for all interviews with municipal officials had the same central questions: Which spatial developments are fiscally profitable for the municipality? To which degree does the municipality develop in this way? Why does it deviate from the most profitable development?

For each municipality, however, the interview guide was adapted to the current building plans of the municipality, which I had researched before the interview. A municipality

highlighted the importance of densification in its spatial strategies would thus be asked why it pursues this rather expensive strategy.

Also, especially the first interviews were used to clarify questions about the functioning of the fiscal system. This topic was again extensively covered in the interview with the treasurer of a municipality in the Utrecht region.

Interviewees on higher levels of government, on the other hand, were asked to give overarching assessments of the land use policies which the municipalities in the region pursue.

The interviews were recorded and transcribed. The results were then coded. From these results, I was able to extract categories of other interests and factors that influence municipal land use policies. These results were used to answer research question 2: *Which goals do the municipalities pursue with their land use policies?*

All results – completed with general information from the case description beneath – were used to discuss the final sub-question: *What explains differences in the influence which fiscal incentives have on the land use decisions of local governments?*

Trustworthiness The trustworthiness of the results can be influenced by my own bias and the bias of the interviewees. To avoid that my own bias would influence the interviews, I critically searched the interview guide for leading questions. These might narrow the scope of possible answers down to single topics only. The interviews should reflect the officials' own ranking of most influential factors on the municipality's land use policy. Focusing the questions too much on the influence of fiscal incentives might distort the actual role they play in land use decisions. The interview guide was tried out during a test interview and adapted afterwards.

To ensure the trustworthiness of the answers, I discussed answers from previous interviews in the following interviews. Especially if answers were deviating from each other. Also, interviewees on higher levels of government functioned as a control mechanism. They were able to tell whether the answers I had gotten from municipal representatives reflected the reality and whether the opinions were generally shared by the municipalities in the region. Additionally, before each interview, I researched the latest development strategies of the concerning municipality.

Problems which occurred While it was possible to define the different sources of income and expenses of the municipalities, a deeper understanding of the effect that different developments have on the municipal budget was hard to acquire. Most of the interview partners could not answer my

detailed questions on the fiscal system and in the end, only one Dutch treasurer was interviewed to make up for this deficit. In the German context, the interviewed mayors had a better insight in municipal finances than the interviewed planners.

3.5 Case description

3.5.1 Berlin-Brandenburg, Germany

The German planning system

Germany is a federal country. Under the national level of government, there is the governmental level of the states. Within the states, municipalities belong to different federal districts. The national level creates spatial strategies, based on which the states prepare the state development plans (SDP). These are legally binding for the municipalities, which develop land use plans that are again legally binding for private developers.

Urban Growth Management in Berlin-Brandenburg

The metropolitan region of Berlin-Brandenburg spans the states of Berlin and Brandenburg. Its growth is restricted by a joint state development plan (*Landesentwicklungsplan Hauptstadtregion*). This SDP divides the state of Brandenburg in the immediate surroundings of Berlin and the further metropolitan area. For this research, only the immediate surroundings will be regarded.

The SDP defines areas in which further urban development is desired and areas where development is largely restricted. The development areas that are arranged along the axes of the public rail transport form the shape of a star – *der Siedlungsstern* (see figure 5). Between these axes, municipalities are only allowed to plan developments that cover the municipality's natural growth. Within the axes, urban development is desired. It is not in the power of the SDP to further specify characteristics of the developments as e.g. the density of residential areas. This would violate the planning autonomy of the municipalities. Nevertheless, the state can make use of subsidies to support developments that are desired from a regional perspective.

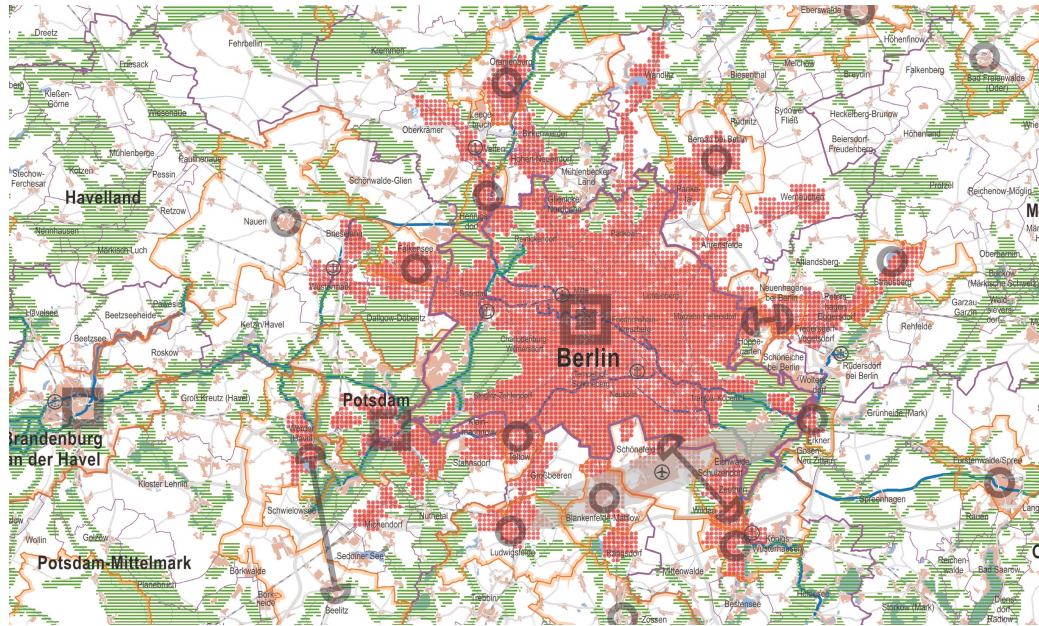


Figure 5 State development plan for the capital region of Berlin-Brandenburg, Siedlungsstern. (Landesregierung Brandenburg, 2020)

Fiscal position in national context

Using the total tax revenues to indicate the fiscal position of the case region, one notices that the metropolitan area of Berlin-Brandenburg is situated in the comparatively weak region of former Eastern Germany (see figure 6). Berlin and its direct surroundings, however, can compete with the higher tax revenues in the west and south of the country. Especially the municipality of Schönefeld, where the airport BER is being constructed stands out. The revenues of this municipality south-east of Berlin are more than 10 times higher than the revenues of the other municipalities in this area.

The tax revenues of a municipality do not provide information about the expenditures and indebtedness of the municipality. Therefore, their informative value for determining the municipality's financial position is limited. The tax revenues do however give an idea of the municipality's structural capability to cover expenditures and pay back debts.

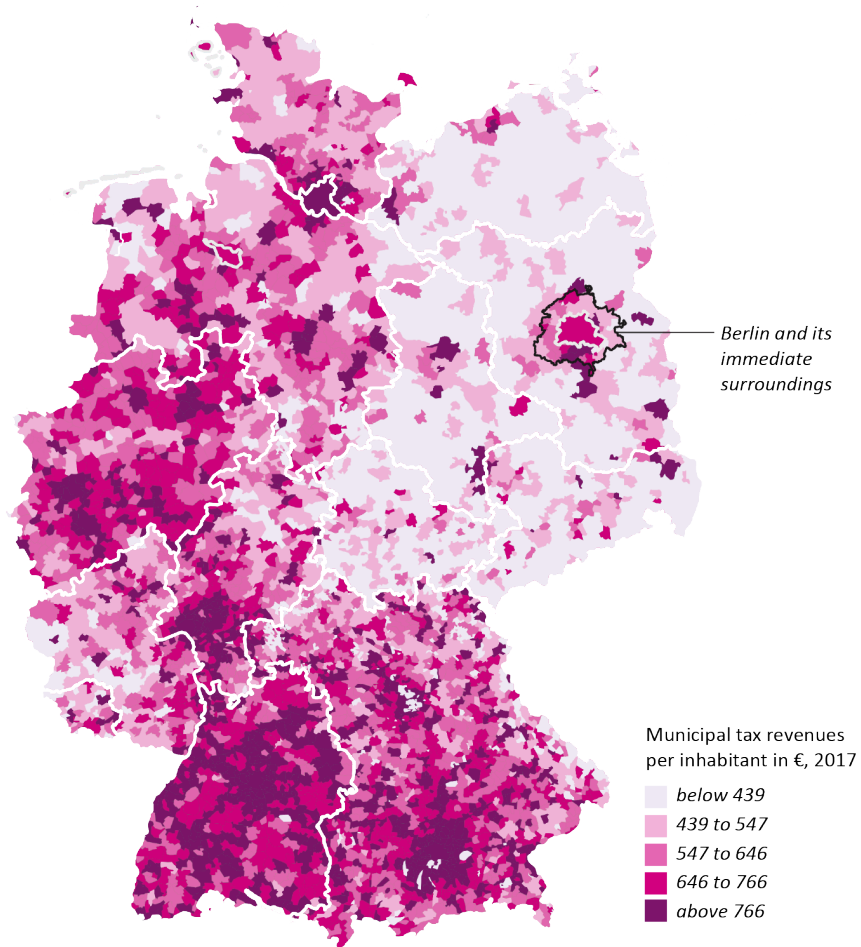


Figure 6 Average municipal tax revenues per inhabitant between 2011 and 2014.
Based on (Thünen-Institut 2018)

Inhabitants and expected growth

In 2018, 3,5 million people lived in the city and state of Berlin. The immediate surroundings of Berlin in the state of Brandenburg counted another 985.000 inhabitants. (Priewe, n.d.)

Since the 1990s, the metropolitan region of Berlin-Brandenburg experienced a strong growth while the wider metropolitan area – with few exceptions – was shrinking. This trend is expected to continue, though less extreme (see figure 7). The wider metropolitan area is expected to shrink furtherly and the immediate surroundings of Berlin are expected to grow furtherly.

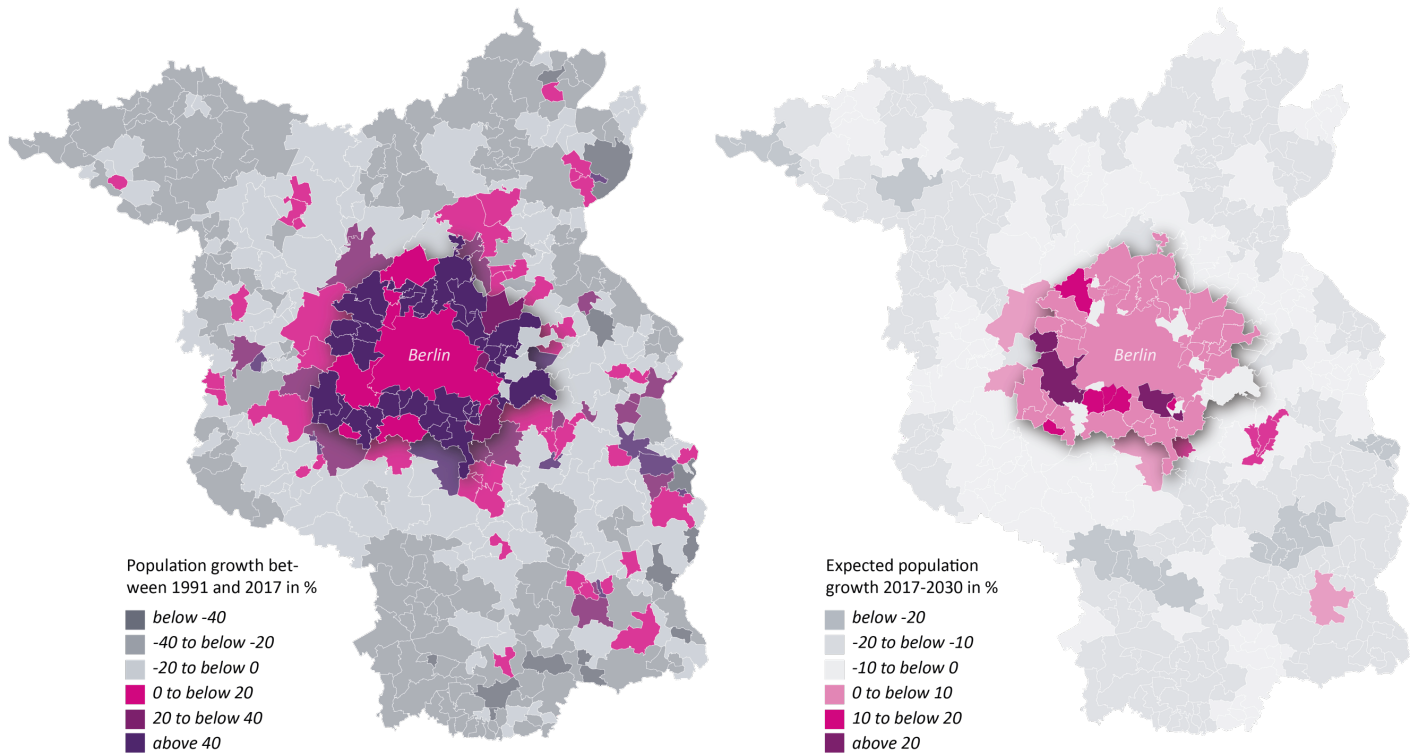


Figure 7 Historical (left) and expected population growth (right). Data source: BKG 2016

3.5.2 Utrecht, The Netherlands

The Dutch planning system

Contrary to Germany, the Netherlands is a unitary state. It has three levels of government: the national government, the Provinces and the municipalities. The national government regulates areas and networks of national interest in the national structure plan. The national government also works together with lower levels of government on the development of larger metropolitan areas. The provinces are responsible for rural development plans and the functioning of the provincial road system. Both the national government and the provinces have the power to directly intervene in municipal land use plans. However, this instrument is rarely used. As in Germany, the local level of government – the municipalities – enjoy a high level of planning autonomy and are responsible for making the legally-binding land use plans. In addition to German municipalities, Dutch municipalities also actively develop land. In the larger metropolitan areas, municipalities cooperate informally in regional associations.

Urban growth management

The urban growth of municipalities is limited by the so-called red contours. These are drawn by the provinces and mark the border between rural and urban areas. The red contours are comparable with the demarcations of the state development plan that determines growth potentials in Berlin-Brandenburg. Additionally, the national government can assign residential developments in the context of housing shortage. More common, however, is the support of housing construction with national subsidies. In the housing deals (*Woondeals*), the national government works together with a province and municipalities of a metropolitan area on a strategy for safeguarding a sufficient supply of housing in the region, financed by the national government. As part of the national long-term infrastructure investment program (*MIRT*), the national government subsidizes investments in municipal transport infrastructure that are needed to support further urbanization. The distribution of these funds is agreed upon as a result of round table discussions about the future urbanization of the region. Additionally, the municipalities of the metropolitan region of Utrecht work together voluntarily on an integrated spatial strategy (*Ruimtelijk economisch programma*).

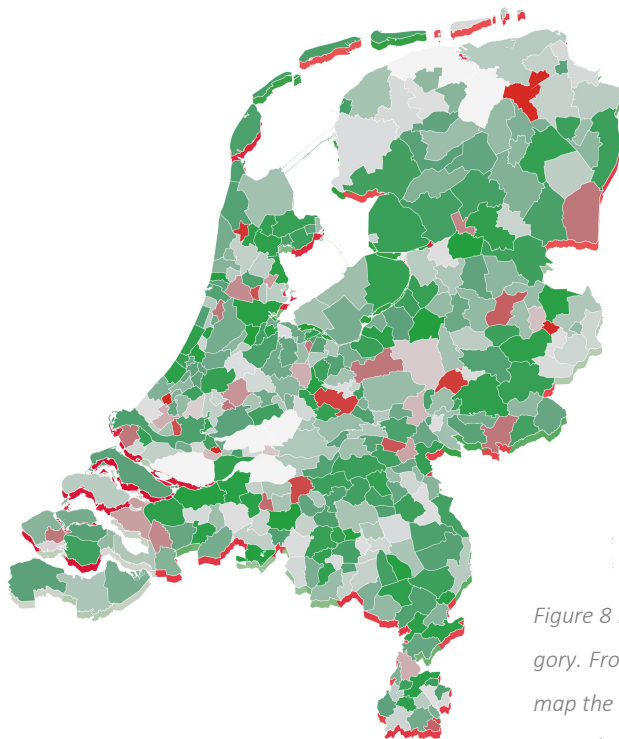


Figure 8 Fiscal stability of Dutch municipalities within their own size category. From red (fiscally weak) to green (fiscally healthy). Underneath the map the balance of the municipal budget of 2018. From red (shortage) to green (surplus). (BDO, 2020)

Fiscal position in national context

In the context of the centralized fiscal system of the Netherlands, the extent of local tax revenues is not sufficient to assess the fiscal position of a municipality. In the calculation by

BDO consultants (2020), five official indicators of fiscal stability were combined to give a more complete picture of the fiscal stability of Dutch municipalities². According to their map, the municipalities in the province of Utrecht are fiscally relatively stable, apart from the municipality of Utrechtse Heuvelrug and the city of Utrecht itself (see figure 8).

Inhabitants and expected growth

In 2020, the municipality of Utrecht counts 350.000 inhabitants. 500.000 additional inhabitants live in the metropolitan region of Utrecht. The entire province counts 1.350.000 people. (CBS, 2020)

The region is thus much smaller than Berlin-Brandenburg. The city of Berlin has 10 times more inhabitants than Utrecht. Also, the historic and predicted population growth is less extreme (see figure 9). The growth is more equally spread throughout the region and the municipalities that surround the city of Utrecht grow less than the immediate surroundings of Berlin.

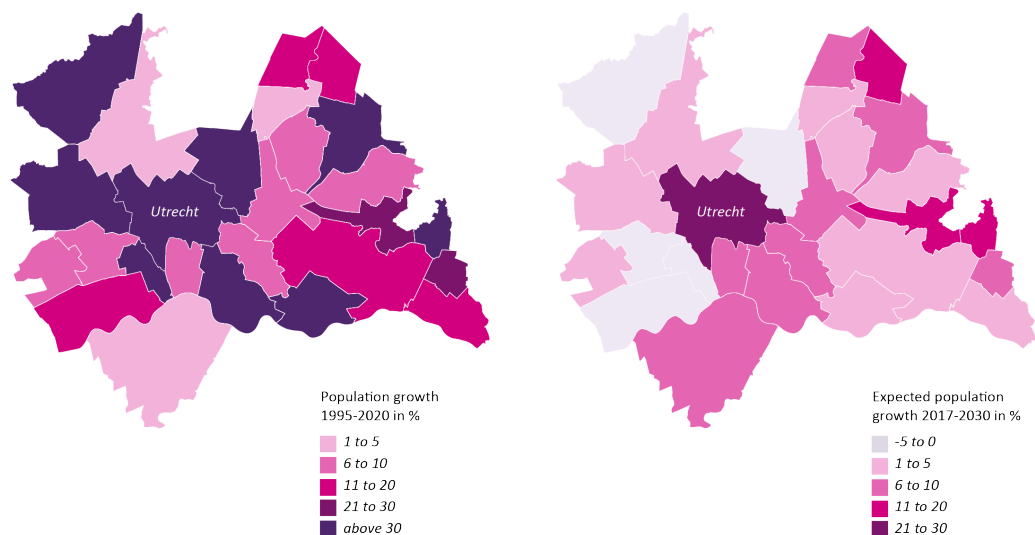


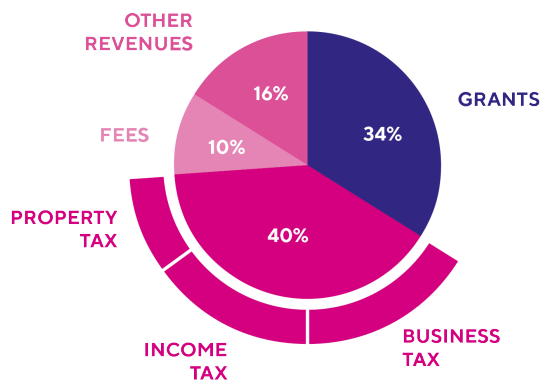
Figure 9 Historical (left) and expected population growth (right). Data source: CBS 2020

² The five indicators of fiscal stability are (1) solvability, (2) percentage of expected revenues from land development in municipal budget, (3) possibility to further increase tax rates, (4) relation between structural revenues and structural expenses and (5) debts. (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, n.d.)

4 RESULTS

4.1 The fiscal system in Germany and the Netherlands

4.1.1 The municipal finances in Germany



German municipalities retrieve the largest part of their income from local taxes (figure 10). The three most important taxes are the business tax (44%), the income tax (37%) and the property tax (14%). On average, state rate support grants only make up for a third of the municipal budget. (Scherf, 2010)

Figure 10 Average municipal budget of a German municipality. Based on Scherf (2010)

Revenues from the business tax The business tax is calculated based on the profits of businesses within the municipality. While small firms are largely exempt from the business tax³, large firms with higher profits generate high business tax revenues for the municipality. Large, nationally connected businesses have the additional benefit of being more stable than smaller businesses (Mayor, municipality A, Brandenburg).

The businesses' profits are multiplied with a collection rate, which the municipality can determine. If a large number of businesses with high revenues are located in a municipality that has set a high collection rate, then the municipal incomes from the business tax are maximized. Municipalities with a predominantly residential profile thus profit much less from the business tax than municipalities that are characterized by large business parks (Gesellschaft für Innovationsforschung und Beratung mbH & Deutsches Institut für Urbanistik gGmbH, 2012).

The differences in business tax revenues between the municipalities can be very large. Within the metropolitan area of Berlin-Brandenburg, the gross business tax revenues of a

³ "Unincorporated firms benefit from a tax-free allowance of 24,500 €" (Langer & Korzhenevych, 2018, p. 280)

municipality like Schönefeld (with an airport and airport-related businesses within its boundaries) was in 2010 more than 10 times higher than the business tax revenues of its neighboring municipalities. (Gesellschaft für Innovationsforschung und Beratung mbH & Deutsches Institut für Urbanistik gGmbH, 2012).

If a municipality aims to increase its business tax revenues, it can increase the collection rate of the business tax. However, the collection rate can only be increased to the amount that businesses are willing to pay for the location. Above that amount, businesses might decide to relocate to municipalities where the collection rate is lower. The second option that a municipality has to increase its business tax revenues is therefore to attract more businesses by lowering the collection rate and offering extensive areas for business use with little building regulations for interested investors. However, revenues from the business tax are to some degree outbalanced as the municipality also has to pay a higher contribution to its neighboring municipalities within the same administrative district (Landkreis) (see more under *expenses*).

Although business tax revenues can play a substantial role in the municipal budget, they fluctuate with economic developments (Gesellschaft für Innovationsforschung und Beratung mbH & Deutsches Institut für Urbanistik gGmbH, 2012). It is therefore important for the municipality to also rely on other sources of income.

*Revenues from the
income tax*

The income tax is quantitatively the second most important tax. It is calculated based on the income of the municipality's residents. The income tax is distributed between the different levels of government. The lowest level of government, i.e. municipalities are entitled to receive 13% of the revenues from their residents' tax payments (Bundeszentrale für Politische Bildung, 2009). A municipality with wealthy inhabitants collects higher revenues from the income tax than municipalities with a large share of low-paid or unemployed inhabitants. Additionally, a large share of unemployed inhabitants also rises a municipality's expenses for social services (see more under *expenses*).

Attracting wealthy house owners to a municipality promises high and steady future revenues from the income tax. However, the municipality also has to take account of high investments in social and technical infrastructure as a consequence of residential developments.

*Revenues from the
property tax*

The property tax has to be paid by owners of business and residential estate. It is calculated based on the property value multiplied by a collection rate that can be determined by the

municipality. The property value consists of the land value on the one side and the value of the buildings on the other side. The revenues of the property tax thus increase with every new building, especially in urban areas, where land values are generally higher than in rural areas. Contrary to the potentially high, but fluctuating revenues from business taxes, the value of the property tax lies in its stability (Gesellschaft für Innovationsforschung und Beratung mbH & Deutsches Institut für Urbanistik gGmbH, 2012).

A reform of the calculation of the property tax is being discussed. Not due to its fiscal incentives for municipalities but for landowners.⁴

State grants After the local tax revenues, the second largest part of an average German municipal budget are grants. Unconditional grants are paid by the state to fill in possible gaps between a municipality's financial power and its financial requirements. If the tax revenues of a municipality are increasing, it thus gets less financial support by the state. If a municipality's financial power is larger than its financial requirements, it is no longer eligible for the grant. In some states, these *abundant* municipalities have to pay surplus revenues to the state for redistribution.

The decrease in grant allocation, however, does not outweigh an increase in local tax revenues completely. Depending less on state grants does give the municipality more freedom to invest in "extras" which the municipality otherwise has to apply for (e.g. a swimming pool, bike lanes or a train station that the municipality desires but which the state does not regard as necessary). *"We would never have gotten these things if we hadn't paid for them ourselves!"* (Mayor, municipality A, Brandenburg)

Although the state grants are unconditional, a municipality that depends on the state grants therefore also depends on the state politics (Scherf, 2010).

Other revenues Other revenues consist of (1) revenues from license fees that network operators pay the municipality for the right to use municipal streets and infrastructure as well as (2) revenues from economic activity. They cannot be influenced by the municipal development decisions and will therefore not be regarded further.

⁴ The property tax in its current form favors land consuming developments as detached houses with a plot area of up to 1.500 m² are exempted from the property tax. Additionally, it deters landowners from building on plots as property tax rates for built-up land are higher than for not built-up land. (Deutsches Institut für Urbanistik, 2018)

Contributions and expenses Most of the local revenues are used on staff expenditures, maintenance costs and social costs (Scherf, 2010). While the land use policy of a municipality has little influence on its staff expenditures and maintenance costs, it is able to affect the extent of the social costs. This can be done by actively attracting high-income households by allocating large, expensive building plots. This prevents the municipality from having to pay large amounts of unemployment benefits. Still, the municipality might have to use money on a new school or a kindergarten. On the other hand, some of these costs are covered by the rate support grant, which takes account of the number of unemployed and children at school age (§§ 14 and 15, BbgFAG).

Only about 12% of the municipal budget is left for investments (Scherf, 2010). With these, a municipality has to finance technical and social infrastructure, such as streets, schools, kindergartens as well as energy and sewage systems. If new residential areas are built with a low density, new infrastructure is not used to capacity and the investments are harder to realize. (Planner, Joint planning Department Berlin-Brandenburg)

Especially near Berlin, the municipalities have experienced strong population growth in the past years. While on the one hand, these municipalities benefit from high tax revenues, they also have to cope with high consequential costs. *“These municipalities might be able to build a school or a kindergarten but having to provide a highway access really pushes them to their limit. They are shouting ‘we cannot do this anymore, move further away!’”* (Planner, municipality B, Brandenburg)

All municipalities have to pay contributions to the administrative district that they are part of. The administrative district determines the collection rate of these contributions. The collection rate is the same for all municipalities in the district. If the municipalities in the administrative district have high revenues, the contribution rate decreases as a smaller percentage of the total revenues is sufficient to cover the expenditures of the administrative district. If one municipality has much higher revenues than the other municipalities in the district, all other municipalities profit from the low contribution rate. *“Let me say it like this: If our municipality catches a cold, the administrative district suffers a pneumonia [...] The other municipalities are broke [...] If we go down to 0, the other municipalities have to muster 60 million euros to ensure the funding of the district”* (Mayor, municipality A, Brandenburg).

If the financial power of a municipality surpasses its expected financial needs by more than 15%, it has to hand over 25% of its surpluses to the state for redistribution (§17, Paragraph 1, sentence 1, BbgFAG).

4.1.2 The municipal finances in the Netherlands

State grants About two thirds of the budget of an average Dutch municipality is derived from national grants (see figure 11). The national allocations can be divided in the unconditional grant and specific grants. The unconditional grant covers around 55% of the municipal budget and the specific grants cover additional 10% of the municipal budget (CBS, 2020). While the specific grants are earmarked, the municipality can spend the unconditional grant freely.

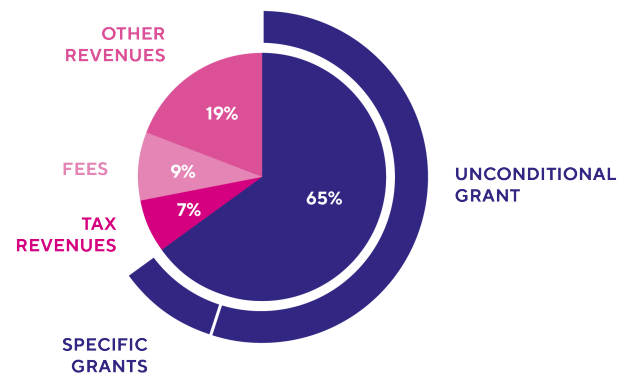


Figure 11 Average municipal budget of a Dutch municipality. Based on CBS (2020)

The extent of the unconditional grant depends on the size of the national grant pool, as well as on the anticipated financial needs of the municipality. This financial need is calculated based on factors like population, built-up area, amount of young and elderly residents, but also local tax revenues, etc. A municipality with a large population or a large share of unemployed residents is thus allocated a higher amount of the unconditional grant. If the municipality has a high income of taxes, the grant is reduced.

The unconditional grant is allocated by the national government to cover the financial needs of the municipalities as well as different tasks that were transferred from higher levels of government to the municipalities in the past years. However, municipalities can also experience fiscal advantages when a new housing project moves them a category higher in the allocation system, due to the increased number of inhabitants. The following increase in allowed grant money allows municipalities to govern more efficiently when the same infrastructure investments can be used by more citizens (Planner, municipality F, Utrecht).

On the other hand, if the grants can no longer sufficiently cover the expenses of a municipality, the province takes over the task of planning the municipal budget and the municipality loses its autonomy (Planner, municipality F, Utrecht).

In order to avoid this situation, the municipality can collect local revenues.

Municipal taxes The most important municipal tax is the property tax that has to be paid by the owners of business and residential real estate. On average, it makes up for 7% of the municipal budget. It is calculated based on the value of the buildings and the value of the plot of land that the building is located on. Just as in Germany, the municipality can define its own collection rate. Generally, businesses generate more property tax revenues than residential use (Treasurer, municipality G, Utrecht).

To a limited degree, municipalities can collect additional taxes (e.g. a dog tax or a tourist tax). These taxes usually do not generate large revenues for the municipalities. In some municipalities however, revenues from a tourist tax play a significant role. In Amsterdam, they even exceed the revenues from the property tax (Gemeente Amsterdam, 2019).

Other sources of revenues Other sources of revenues are land exploitation and longtime land leases. In the Netherlands, many municipalities pursue an active land policy. This means that the municipality buys land, changes the zoning plan, prepares the land for development and sells it (Tennekes, 2018). The planning gain then stays in the municipal budget and can be spent on public services and infrastructure (Buitelaar, 2010).

The revenues are especially high if a municipality develops its own land or if the municipality transforms agricultural land to the much more valuable building land. On the other hand, if the municipality redevelops land within the city, revenues from selling it have to cover high initial investments. The development becomes riskier. A treasurer of one of the municipalities around Utrecht estimates that half of these inner-city developments generate a small revenue while the other half generates a loss for the municipality (Treasurer, municipality G, Utrecht).

The municipality can also choose not to sell the land but keep it in municipal ownership. The land is then leased. The annual rent collection from these long-term leases can make up for a considerable percentage within the municipal budget.

Expenses The largest expenditures for Dutch municipalities are staff expenditures and social costs (CBS, 2020). Especially the social costs are rising with an increasing number of tasks that is

being transferred to the municipal level from higher levels of government. Within this category, the expenses for unemployment benefits and allowances for nursing care are the highest. (BDO, 2020)

To some degree, these social costs can be influenced by the chosen land use policy of the municipality. When developing new residential areas, a municipality can avoid targeting elderly citizens, unemployed or citizens with a low income.

4.2 The interests and conditions that shape land use policies in municipalities in the metropolitan area of Berlin-Brandenburg and Utrecht

The previous chapter has illustrated how German and Dutch municipalities are financed. Different fiscal systems make certain developments more profitable than others. Given that municipalities attach a great importance to these fiscal incentives, it can be assumed that differences in the fiscal system are reflected in the land use policies which the municipalities pursue. But, the land use policy of local governments is also shaped by other interests and conditions. It is thus important to research which role fiscal incentives play along other interests and conditions in the land use decisions of the municipalities.

In general, these other incentives can be divided in incentives for further growth and incentives against further growth. More differentiated, a municipality can also experience incentives for further expansion rather than densification and vice versa.

4.2.1 *Interests that shape the land use policy of municipalities around Berlin*

Incentives for further growth

One reason to grow is the political goal to **create space for a more diverse population** in the suburban areas that are mostly characterized by single-family homes. Often, the grown-up children of the families that moved to the suburban areas decades ago cannot afford a house at the beginning of their career and are forced to move away (Mayor, municipality C, Brandenburg). Additionally, municipalities with a high concentration of low-paid working places are interested in also providing the workers with affordable housing opportunities (e.g. freight center Großbeeren and airport area Schönefeld) (Mayor,

municipality C, Brandenburg). The political focus on this issue also reflects the distribution of different political parties in the city council (Planner, municipality B, Brandenburg).

In order to **stabilize housing prices** in the attractive suburbs near Berlin, municipalities have tried to apply a rental cover. However, after evaluating the effectiveness of this instrument, they realized that housing prices cannot be controlled unless the supply follows the demand. (Project manager, Brandenburg Ministry of the Interior)

Incentives against further growth

Simultaneously, municipalities also face strong incentives against further growth. The municipalities around Berlin have experienced a rapid, and hardly regulated growth in the past decades. Many municipalities have missed the opportunity to reserve areas and money for schools and kindergartens and have not sufficiently adapted the transport infrastructure (Planner, Joint planning Department Berlin-Brandenburg). After decades of shrinkage, they neither anticipated the sudden high demand nor the high consequential costs of growth (Mayor, municipality C, Brandenburg). Nowadays, many municipalities near Berlin report crowded schools and congested roads. (Planner, Joint planning Department Berlin-Brandenburg). They are therefore hesitant to allow more growth as **the increase in tax revenue does not cover the consequential costs of having to adapt the infrastructure** (Planner, municipality D, Brandenburg).

This is reflected in the political debate. Inhabitants – and with them, local politicians – grow more dissatisfied with insufficient infrastructure developments and oppose further growth as it would worsen for example the congestion of the local streets. Additionally, they block further developments in order to **preserve the nature** which they chose for when they moved there themselves several years ago. (Mayor, municipality A, Brandenburg)

Incentives for densification

As the undesired consequences of the rapid growth are becoming more and more noticeable, the municipalities around Berlin start rethinking their land use policies. Many of them have adapted more sustainable growth strategies with a focus on densification and space-saving developments (Project manager, Brandenburg Ministry of the Interior). On the one hand, this goes together with an increasing **scarcity of available greenfield areas** for development. On the other hand, the state supports the analysis of densification potentials by making it a condition for receiving state subsidies.

Especially cities „on the second row“ (larger cities on the outskirts of Berlin’s daily urban system), where **development pressure is lower**, have grasped the opportunity to use **state subsidies** for the redevelopment of their historical centers (Planner, municipality B,

Brandenburg). A city like Eberswalde has the additional advantage of having a **historical center** where apartments, once renovated, become very attractive to prospect citizens. As a city with its own job opportunities, the **demand for housing is different** from the smaller municipalities in the immediate surroundings of Berlin. While the peri-urban municipalities are in demand among commuters who are looking for a detached house close to nature, but also close to the city, Eberswalde also attracts people that want to stay in the city. (Planner, municipality B, Brandenburg)

Incentives against densification Other municipalities have less potential for inner city development or less demand for dense housing areas. Therefore, they can have problems finding investors that are willing to develop these areas. Compared to larger cities, smaller municipalities often cannot afford a public housing association that develops residential areas that are in the interest of the municipality. Therefore, they **depend on the collaboration of private investors**. (Mayor, municipality A, Brandenburg)

Private investors then are influenced by the market demand and the financial incentives from the property tax that supports the development of detached houses. Especially municipalities that are further away from Berlin depend on the cooperation of private investors. Municipalities that are close to Berlin have a stronger position. Their development areas are scarce and in very high demand. These municipalities can bind more conditions to their land use plans, such as a contribution by the developer for covering consequential infrastructure investments. (Mayor, municipality C, Brandenburg)

Not regarding the willingness of private parties to cooperate, municipalities themselves are not always interested in dense developments. Some municipalities argue that **dense living forms will attract unemployed and low-income households**. *“There are still loads of municipalities that argue ‘we are explicitly interested in attracting a well-off clientele. This corresponds to our social expectations. The social peace is preserved’”* (Planner, Joint planning Department Berlin-Brandenburg). Also, high-density developments do not always **fit into the existing low-density building structure** (Planner, municipality D, Brandenburg). Dense developments are thus unwanted both from an architectural and a social point of view.

4.2.2 Interests that shape the land use policy of municipalities around Utrecht

- Incentives for further growth* Just as in Berlin-Brandenburg, some municipalities around Utrecht are experiencing an increasing demand and see further growth as a necessity to keep housing prices at an affordable level. (Planner, municipality E, Utrecht)
- Rural municipalities with little job opportunities on the other hand are expecting their population to age drastically in the coming years and see growth as an opportunity **to attract and keep young families in the municipality**. This is necessary to stabilize the population and ensure the functioning of schools, retail, sports clubs etc. (Planner, municipality F, Utrecht)
- If population is declining, the maintenance of technical and social infrastructure has to be borne by fewer people. It becomes harder for the municipality to cover these costs with declining tax incomes and decreasing allocations from the rate support grant. The infrastructure has to be adapted to the shrinking population. Technical infrastructure can hardly be downsized at all, especially network-based infrastructure. The downsizing of social infrastructure is possible, but inhabitants often do not accept the closing of schools and kindergartens. (Difu, 2016)
- Incentives against further growth* Apart from being an opportunity, interviewed municipalities in the Province of Utrecht also experience further urbanization as a **danger to one of the province's greatest assets: open, natural landscapes**. In round table discussions on the development of the metropolitan region of Utrecht, the municipalities therefore campaign for preserving the clear distinction between city and nature. (Planner, municipality E, Utrecht)
- Incentives against densification* Therefore, the municipalities in the metropolitan area of Utrecht generally agree that future development has to happen within the existing built-up area. However, the interviewed municipalities would like to **limit future growth to their own needs**, rather than *"building for the region"* (Planner, municipality G, Utrecht). While the province would like to focus future growth around existing public transport nodes, the affected municipalities do not agree with the proposed high densities (Project manager, Dutch Ministry of the Interior). The municipalities are concerned that the new developments would not correspond with the character of their surroundings. They are afraid that high densities would decrease the livability that characterizes their municipality (Planner, municipality G, Utrecht).

Conclusion Besides the fiscal incentives, the land use policies of the municipalities around Berlin and Utrecht are influenced by

- Political goals for sustainable and inclusive development
- Aging and declining populations
- Financial, social and geographic consequences of earlier decisions
- Development pressure and increasing housing prices
- The willingness of private developers to cooperate
- The availability and location of land for potential (re)development

5 DISCUSSION

Below, the insights from the previous chapter will be discussed with regard to the theory presented in chapter 2. At first, I will reflect upon the incentives of the Dutch and German fiscal system, which – on closer examination – are less distinct than expected (sub-question 1). Then, the policy goal of generating revenues is placed in the context of other goals that the interviewed municipalities pursue with their land use policies (sub-question 2). Finally, I will use theory to discuss the different factors that influence the weighting of these interests in municipal land use policies (sub-question 3)

5.1 Fiscally incentivized forms of land use

To begin with, I will shortly summarize the forms of land use that are especially rewarded by the fiscal system of Germany and the Netherlands.

5.1.1 Fiscally incentivized forms of land use in Germany

Growth leads to increased revenues In the decentralized fiscal system of Germany, municipalities are allowed to keep revenues from local taxes. In general, this makes growth a profitable public activity.

Although an increase in local revenues also leads to a lower allocation of state grants and higher regional contributions, the fiscal benefits of having high revenues from local taxes are not completely outweighed. **A municipality with high local revenues has more freedom of action than a municipality that is completely dependent on state grants.**

High-income residents and large businesses create the highest revenues If a German municipality is interested in generating more income, it can target its land use in order to maximize revenues from the business and income taxes. Generally speaking, the tax revenues can be increased by attracting more businesses and more inhabitants to the municipality. More specifically, businesses with a high profit and inhabitants with a high income lead to a larger tax revenue increase than small businesses and inhabitants with a low income.

In order to attract these target groups, the municipality can – amongst other things – provide the plots that these target groups demand. Given the assumption that large businesses have many employees and need much space, the municipality can primarily allocate large business areas. Given the assumption that wealthy inhabitants move to the suburbs in search of

a large, detached house, surrounded by nature, the municipality can primarily allocate large plots surrounded by nature for large, detached houses. In summary, **the business and income taxes can incentivize municipalities to allocate large-scale business areas and large residential plots for spacious, detached houses, which only citizens with a high income can afford.**

Consequential costs are difficult to anticipate

However, this simple equation has to be differentiated by also taking consequential costs into account. As mentioned above, increased local revenues do not stay in the municipal budget completely. To some degree, they are outweighed by lower state allocations and higher regional contributions.

Also, **consequential infrastructure investments** have to be considered. A growing population also needs more kindergartens and schools. Higher business activity puts more stress on transport infrastructure.

On the one hand, targeting new developments on high-income households can avoid comparatively high costs of disbursing unemployment- and other social benefits. On the other hand, high-end, low-density residential developments lead to the issue that **public infrastructure investments are used by fewer people**. This can lead to a decreased cost-efficiency of technical infrastructure, for example.

Anticipating all consequential costs of a development can be challenging for a municipality. History has shown this lack of foresight. When allocating large new residential and business areas in the 1990s, municipalities around Berlin did not anticipate the high costs for infrastructure investments that are needed now that the developed buildings are occupied.

The challenge of anticipating consequential costs still exists today. Especially as **land use decisions and accounting are performed by different departments within the municipality**. The planners that were interviewed for this research often did not have a detailed understanding of the functioning of the municipal budget. Mayors and treasurers were able to provide more information on the fiscal context of land use planning decisions.

5.1.2 Fiscally incentivized forms of land use in the Netherlands

Growth incentives in a centralized fiscal system The fiscal system of the Netherlands is centralized, meaning that most tax revenues go to the state and from there are distributed among the municipalities. Local growth is therefore expected to be rewarded to a lesser degree than in the decentralized fiscal system of Germany. Still, **as a larger population can move a municipality to another category of the rate support grant**, which allows municipalities to govern more efficiently, **local governments in the Netherlands do have a fiscal incentive to grow.**

Ways of generating local tax revenues That said, it is not easy to determine fiscal incentives that are more targeted towards certain developments. In order to move higher in the categories of the rate support grant, it is sufficient to simply increase the population. The municipality can try to raise its local revenues to become less dependent on variable national grants and get the freedom of action that comes with a larger municipal budget.

In order to increase revenues from the local property tax, the municipality can choose to allocate areas for high-end residential developments or focus more on the profitable business developments. Also, it can try to avoid expenses for social welfare by attracting wealthy inhabitants with little to no health issues and no children in compulsory school age. But the tools to specify the user group of a land use plan are too coarse to target this specific user group. Moreover, the national grant takes into account and covers social costs. It is thus questionable whether these maneuvers would really lead to a more profitable development.

Municipalities have other and easier ways to generate local tax revenues. These are not necessarily connected to their land use planning. For example, by collecting a **tourist tax, parking fees or offering the service of collecting industrial waste**. The latter is an optional service which the municipality can offer. As it does not belong to the set of legal responsibilities, the municipality can ask market price for collecting industrial waste. Some municipalities use this possibility to generate additional revenues (Treasurer, municipality G, Utrecht)

Revenues from active land policy The largest fiscal benefits, however, can be achieved by developing on municipality owned land. Although it is a one-time income, land exploitation is fiscally very attractive for municipalities in the Netherlands, especially in the case that greenfields are transformed to urban land. Active **land policy therefore constitutes an incentive for urban expansion**. Still, Buitelaar & Leinfelder (2020) add that developing greenfields in the Netherlands is costly due to the

country's often weak soil. They therefore specify that active land policy “provides an incentive for consolidated sprawl” (Buitelaar & Leinfelder, 2020, p. 52).

Still, the use of this instrument has declined. Especially smaller municipalities do not often own land that is suitable for development (Treasurer, Municipality G, Utrecht). Additionally, the financial crisis has illustrated the high risks that are connected to developing land. Municipalities buy and develop land but in times of economic decline, it is not sure whether private actors will buy the land. (Van Oosten, Witte, & Hartmann, 2018).

5.1.3 Concluding remarks

Centralized and decentralized fiscal systems

OECD (2017) suggests that municipalities in centralized fiscal systems are less incentivized to grow than municipalities in decentralized fiscal systems. This assumption can be confirmed in the sense that municipalities in Germany are allowed to keep the increased tax revenues that are a direct consequence of the municipality's development. In the centralized fiscal system of the Netherlands, municipalities are rewarded less, as their increased tax incomes go to the national government. Still, the **municipalities in both countries can enlarge their budget and create more freedom of action when they grow**. The municipalities in both countries can create financial benefits for themselves if they find ways of increasing local revenues instead of fully relying on the allocation of national grants. And municipalities in both countries need the additional freedom of action to invest and achieve political goals.

Of course, this observation cannot be used to characterize centralized and decentralized fiscal systems in general. Neither is the German system completely decentralized (municipalities still receive support from the state), nor are Dutch municipalities totally restricted to collect local revenues. In the Netherlands, municipalities surely have the additional possibility of generating revenues by actively developing land. This fiscal freedom is not characteristic for a centralized fiscal system. But even if we do not regard this possibility, Dutch municipalities *are* fiscally rewarded for growing.

When characterizing centralized and decentralized fiscal systems, it is therefore important to understand **the degree to which municipalities have the autonomy to improve their fiscal situation**. One has to understand to what extent local, fiscal advantages are being outbalanced by decreased support from the national rate support grant. These are nuances that cannot be understood from looking at the sources of income alone. Even from the extensive desk research that accounted for both the sources of income and expenditures of the

municipalities, it was still difficult to conclude exactly how much of a fiscal advantage would be outweighed by the fiscal system.

What is the most profitable land use?

While it is possible to assume that both Dutch and German municipalities are rewarded for growth in general, **it is hard to determine which land use is *the* most profitable**. For German municipalities, it is profitable to attract wealthy inhabitants. But are 100 wealthy inhabitants better than 1000 inhabitants with an average income? Besides the calculation of the gained income taxes, different consequential costs and reactions of the rate support grant make it very difficult to say what the more profitable decision would be. How wealthy should the new inhabitants be? Is a 53-year-old inhabitant with a monthly income of 4000€ but also a chronic illness more profitable than a young father with a monthly income of 2000€ and a child that needs to go to kindergarten? Even if one could calculate the features of the perfect inhabitant, the question arises of how the municipality should attract this specific target group (not mentioning that it wouldn't be desirable to have a population exclusively consisting of 35 to 45 years old males in high-paying positions without illnesses or families). The power of a municipality to determine a specific target group in the land use plan is limited. It can refrain from planning playgrounds to discourage young families to move in. Or, it can determine the allowed density and allowed parking spots per household to influence the price range of the buildings.

Spatial planners have a limited understanding of the fiscal system

One can expect that municipal officials in charge of spatial planning do not know all these details either. This became clear from the conducted interviews. On the one hand, this can be seen as an issue as the fiscal consequences of a development are not considered sufficiently. On the other hand, it supports planning based on content instead of finances.

Nevertheless, it is therefore thinkable that **land use policies are – to some degree – based on false expectations of profitability**. That this is the case is illustrated by the fact that regional governments are providing municipalities with tools to calculate the consequential costs of a spatial development. Not only in Brandenburg. The Federal Environmental Agency (Umweltbundesamt) generally recommends the intensified use of *Folgekostenrechner* in Germany (Deutsches Institut für Urbanistik, 2018).

Therefore, it is important to ask what priority the generation of income has in the land use policies of local governments.

5.2 The policy goals of interviewed municipalities

Municipalities pursue different goals with their land use policies

The interviewed officials mentioned different goals that they want to pursue with their land use policies. The desire to grow is not (only) a result of the need to generate more revenues. In municipalities that are characterized by population growth, further urban development is seen as a necessity in the light of the increasing pressure on the housing market. By allocating new residential areas, municipalities around Utrecht and Berlin aim to keep housing prices low and create space for low-income households. Municipalities that experience less or even a negative population growth see urban development as a possibility to attract young residents to an ageing population and secure the functioning of their infrastructure.

At the same time, the interviewed municipalities are aware of the threat that further urban expansion poses on their natural assets. Some do not wish to grow further as they fear an increased pressure on their technical and social infrastructure.

The mentioned **interests do not necessarily correspond with a land use policy that would maximize a municipality's revenues**. Allocating expensive residential areas would provide the municipality with high tax incomes. Instead, the interviewees in both regions highlight the necessity of creating living space for low-income households in order to avoid social problems in the future. These interests were reflected by interviewees of both regions, despite the different fiscal system. This suggests that fiscal incentives do not play an important role in the land use planning of these municipalities. Interviewees deny that fiscal interests play a leading role in their policymaking.

By and large, the participants highlight that it is not the task of the municipality to generate a high income. Rather, the land use planning is led by political goals. (Planner, municipality E, Utrecht; Planner, municipality B, Brandenburg; Planner, municipality F, Utrecht)

Still, they recognize the necessity to generate enough revenues to realize their political strategies (Planner, municipality F, Utrecht; Mayor, municipality A, Brandenburg). **Local revenues are portrayed as a means to an end.**

Opinions or truth?

This statement reflects the opinion of the interviewed planners and politicians. Not necessarily the truth. On the one hand, the statement is supported by regional planners from the

Brandenburg Ministry of the Interior and the Joint Planning. They agree that, since the rapid growth of the 1990s, many municipalities have changed priorities towards more space-efficient, long-term oriented growth strategies. On the other hand, they highlight that the building restrictions from the state development plan still are contested by municipalities outside the areas that are earmarked for urban development and by the state of Brandenburg itself. (Planner, Joint planning Department Berlin-Brandenburg)

Also, they mention municipalities within the immediate surroundings of Berlin that have not performed the change of mentality towards more sustainable growth strategies yet. The municipality of Schönefeld was by several interviewees mentioned as a municipality that follows the slogan *“the more the better”* (Planner, Joint planning Department Berlin-Brandenburg).

The same goes for municipalities in the Netherlands. A treasurer tells me: *“I used to work for a municipality that said: ‘Let’s build a lot of apartments. Let’s earn a lot of money’. They wanted to build everywhere, on the meadows. **The urge to expand differs from municipality to municipality**”* (Treasurer, municipality G, Utrecht, own formatting).

How can these differences be explained? Why do fiscal incentives and the desire to generate local revenues influence the land use policies of municipalities within the same fiscal system differently? How can it be that the same municipalities that pursued expansive spatial policies in the 1990’s are no longer interested in growth? Which factors influence the weighting of the different interests in the municipal land use policies?

5.3 The weighting of interests in municipal policymaking

These questions lead back to the conceptual framework that was developed at the beginning of the report. The different theories that were presented in chapter 2 explained the influence that different factors can have on policymaking. Those different factors were formal institutional rules, informal institutional rules, power relations between actors, the framing of the problem and the occurrence of external events.

5.3.1 Policymaking as a political game

The interests of the municipality are not the only factor that influence the content of the land use policy. Unless the municipality pursues an active land policy, spatial developments have to be negotiated with private actors who buy and develop the land. Also, what is the interest of *the municipality*? The decisions of the democratically elected city council reflect to a high degree the topics that inhabitants find relevant. According to interviewees, **the interests of private parties and inhabitants where thus determining for the outcome of the municipalities' land use policies.**

Private parties Unless municipalities actively develop land, the actual land use will also be determined by the demand and thus the willingness of private investors to cooperate when land use plans are being negotiated. While municipalities sometimes accept the rather unprofitable redevelopment of brownfield areas (Treasurer, municipality G, Utrecht), private investors expect to profit from spatial developments. It can therefore be difficult for a municipality to negotiate the desired density, price range or allowed number of parking spots per household. Especially smaller German municipalities that do not have a public housing society as well as smaller Dutch municipalities without a development agency are **limited in their capability to develop independently from private investors.** After having elaborated on all the political goals of the municipality, an interviewed planner had to conclude: *“After 30 years of experience, I can tell you that everything is very much ruled by money”* (Planner, municipality D, Brandenburg)

Depending on the demand for building land, a municipality can attach more or less conditions to the land use plan. Municipalities that are close to Berlin profit from a high demand. This enables them to ask developers for contributions to cover consequential costs for infrastructure investments.

Political opposition The consequences of the liberal land use policies of the 1990's shapes the political agenda: the transport infrastructure is lacking behind; the schools are too small, and residents have problems finding a kindergarten spot for their children. Many municipalities have not reserved land or money for the construction of more schools and kindergartens. Further growth would worsen the situation and additionally decrease the natural values of the areas. The **relatively wealthy inhabitants actively engage in local politics and block further developments** (Mayor, municipality A, Brandenburg). Also, in the metropolitan region of Frankfurt,

Monstadt & Meilinger (2020) observe that municipalities with high income tax revenues oppose further urban development.

5.3.2 Formal institutional rules of the fiscal system

If the formal rules of the fiscal system played an essential role in the policymaking of municipalities, one would expect municipalities with a weak fiscal position to act more in accordance with fiscal incentives than municipalities with a strong fiscal position.

Fiscal preconditions Many of the municipalities that were interviewed for this research had the advantage of having relatively high tax revenues and were expecting further demand for housing in the coming years. It is thinkable that municipalities with large shortages in the public budget need to develop in a way that is more oriented towards fiscal benefits. On the other hand, the municipality of Schönefeld is one of the richest municipalities in Brandenburg. Still, its expansive development is observed critically by the interviewed officials of higher government levels.

However, the fiscal situation of the municipalities around Berlin should not be overestimated. Although they collect much higher tax revenues than the municipalities in the wider metropolitan region, they also face high costs as a result of their rapid growth. The demand for new houses is still high and mayors feel forced to develop further in order to keep housing prices at an affordable level. It can be expected that these costly challenges can hardly be combined with mayors' high ambitions of investing in dense and affordable housing.

Also, the examined municipalities around Utrecht are relatively stable from a fiscal perspective. Still, interviewees did not expect the priorities of planners in regions with less growth perspectives to be more affected by fiscal incentives. Just as the planners in the municipalities around Utrecht, they were expected to prioritize the demographic balance of the population: ensuring enough inhabitants of all age groups to sustain existing infrastructure.

Not regarding the difficulty of assessing the actual fiscal position of a municipality, interviewed planners and municipal representatives **doubted that the fiscal preconditions of a municipality determine its inclination to follow fiscal incentives** (Planner, municipality G, Utrecht; Planner, municipality E, Utrecht; Mayor, municipality C, Brandenburg; Planner, Joint planning Department Berlin-Brandenburg).

Fiscal counter-incentives It is worth mentioning that higher levels of government are actively counteracting the influence of fiscal incentives on the land use policies of the municipalities in the case regions. This

is done by creating fiscal counterincentives for developments that are in the regional interest. In Brandenburg, municipalities receive subsidies for the redevelopment of existing city centers (*Städtebauförderung*). Also, the state has developed a cost calculator to give municipalities more insight in the anticipated consequential costs of a development (*Folgekostenrechner*). This helps municipalities to decide based upon long-term cost-benefit analyses instead of short-term benefits.

In the Netherlands, a weaker incentive to grow is counteracted by national subsidies to support the development of residential areas (*Woondeal*) and to cover the necessary investments in infrastructure (*MIRT fonds*).

5.3.3 External factors

The influence of external factors on the policymaking of municipalities was earlier illustrated with Kingdon's (1995) streams model. External events could change the political situation and result in (increased) awareness of problems and, consequentially, the adaptation of policies. In this overview, I have added technical innovations and geographical characteristics to the definition of external events or external factors.

History and political awareness

As mentioned earlier, in Brandenburg, the liberal land use policy of the 1990's was followed by severe challenges related to social and technical infrastructure. In this case, **past decisions of the municipalities led to local problems that attracted political awareness to the necessity of changing the land use policy.**

In the region of Utrecht, problematic demographic developments were already becoming apparent in the beginning of the new millennium. However, first when one of the municipalities published a strategy to attract young residents as a measure to prevent the ageing of the population, other municipalities started to "wake up" as well. Now, the ambition to grow is reflected by the land use policies of many municipalities in the province. (Planner, municipality F, Utrecht)

Technical innovations

The short-term orientation of Brandenburg municipalities in the 1990's was by one interviewee explained with the lack of statistical tools at that time (Mayor, municipality C, Brandenburg). According to his explanation, hardly regulated building permits were granted on every plot as municipalities (after a long time of population decline) were not expecting investors to actually build on the purchased land. But even then, the municipalities should have had the far-sightedness to reserve plots for social infrastructure and at least consider

the scenario of a full occupation with the consequences this would have on technical infrastructure (Planner, Joint planning Department Berlin-Brandenburg).

*Physical
preconditions*

In the Netherlands, the existence of municipality-owned building land together with the capability of the municipality to acquire more land determines whether the municipality can pursue an active land policy. Also, the **existence of inner-city development potentials** determines whether a municipality can densify. Not all municipalities have invested time and money in the taking of an inventory of densification potential. In Brandenburg, state subsidies are therefore distributed under the condition that the municipality has mapped its inner-city development potential.

5.3.4 Discourse

In some municipalities, inner-city developments and dense forms of living have a negative connotation. This form of framing can hinder the emergence of space-saving spatial policies.

“Dense developments attract the unemployed”

The question of whether wealthy inhabitants necessarily prefer to live in a large, detached house was already raised above. Some municipalities argue that **multi-story dwellings will attract low-income, or even unemployed residents** that will disturb the social coherence in the municipality. A planner of the Joint Planning Department Berlin-Brandenburg dismisses this argument as polemic. However, it is thinkable that many voters in the concerned municipalities share this view. To a large degree, they moved to the suburbs themselves in order to flee the cramped city and enjoy the comforts of a private house with garden. Persons who move to an apartment in a multi-story building must therefore not have the financial prerequisites to choose for the better option. While one can argue that people pay a lot of money to live in an apartment in the center of Berlin, the argument has some validity in the context of the municipalities that surround Berlin – at least as long as their position in the regional context is not taken into account. With the rising challenges of finding an apartment in the city center, locations in the metropolitan area with good train connections can be expected to become more and more attractive.

5.3.5 Informal institutional rules

Finally, the role of personal values and organizational norms was brought up as a possible influence on the weighting of interests in the land use policy of local governments.

Capability of the administration Several interviewees mentioned the capability of the mayor and his/her administration as a decisive factor for the degree to which the municipal land use policy is influenced by fiscal incentives. A **capable team is thought to follow a land use policy that brings long-term benefits to the municipality**. A less capable team is interested in short-term profits that show during their term in office. Van Oosten et al. (2018) describe growth ambitions as being part of the Dutch cultural heritage. Pursuing a growth-oriented land use policy could thus be understood as a matter of pride and a way for the acting mayor to inscribe his/her name in the local history books.

5.3.6 Concluding remarks

Different factors influence the weighting of interests in the policy: the framing of the problem, the influence of other actors, the awareness of the problem, the capability of the administration and maybe also the fiscal preconditions of the municipality.

This list is by no means exhaustive, but it reflects what municipal officials in the studied areas perceive as strong influences on their land use policies. The characterization is very specific for the cases of Berlin-Brandenburg and Utrecht and cannot be generalized – nor does it cover every single municipality in the case areas. It does, however, illustrate a number of **municipalities that engage in much more complex considerations than the aim of maximizing local revenues**.

The analysis suggests that the role of fiscal incentives in policymaking can be limited by many different factors. However, this does not suggest that the institutionalist view on policymaking is less valid. In fact, it overlaps the different models of policymaking. The influence of private interests on policymaking can just as well be understood as a consequence of the planning law (i.e. a formal institution) that ascribes municipalities a passive role in spatial developments.

The different theories do not exclude each other. They work as lamps that cast light on the policymaking process from different directions. Using them enables a more holistic understanding of the way that municipalities develop spatial policies and thus a better answer to the question why municipalities pursue expansive land policies.

Recommendations for future research With my thesis, I have uncovered different factors that shape municipal land use policies. Future research could be conducted with the aim of increasing the generalizability of my results. This can be done by analyzing land use patterns using GIS. New spatial developments

can be compared to the incentivized land use patterns as an indicator for the influence of fiscal incentives on the land use planning of local governments. This variable can then be compared to independent variables as the fiscal position of the municipality, expected population growth, expected ageing of the population, population growth in the past decades etc. A regression analysis of these variables could give an understanding of the factors that affect the influence which fiscal incentives have on the land use policies of municipalities.

6 CONCLUSION

Research aim and main research question The aim of this research was to get a more differentiated understanding of the effect that fiscal incentives have on the land use policy of local governments and thereby contributing to the knowledge on barriers for the implementation of UGM plans. The main research question of this study was *“How do different fiscal systems affect the land use planning of local governments?”*

Methodological reflections To answer the research question, qualitative analysis was performed in two metropolitan areas in respectively Germany and the Netherlands. Desk research resulted in understanding the functioning of the two distinct fiscal systems, as well as the forms of land use that are especially profitable for a municipality. Semi-structured interviews with municipal representatives complemented this understanding of fiscal incentives together with the role they play in the making of municipal land use policies.

The interviews provided an insight into the motivations that lead officials in the study areas in their policymaking. They did not deliver generalizable results. The opinions were collected from governmental officials that were willing to answer the invitation for an interview on the topic of fiscal incentives in municipal land use planning. It is thinkable that officials in municipalities with a more growth-oriented land use policy did not answer or decline the invitation. This bias is to some degree attempted to be decreased by involving interviewees from higher levels of government. But even those might have been more hesitant to present the government in a bad light than a researcher would be. The results might thus show a more optimistic picture than reality.

In spite of their location near the city of Utrecht, the interviewed municipalities in the Netherlands were expecting a relatively decent growth compared to the municipalities around Berlin. As opposed to Berlin, whose growth has surpassed the boundaries of the city, the city of Utrecht still has potential to grow within its own boundaries. The growth of the metropolis thus affects the adjacent municipalities to a lesser degree. A municipality with a high demand for housing combined with a further potential to grow is interesting to interview in the context of the effect of fiscal incentives on the municipality's land use policy. Therefore, it would have been interesting to also interview the municipality of Utrecht itself.

Which forms of land use are incentivized by the different fiscal systems? For German municipalities, which depend on local business and income taxes, the development of business and high-end residential areas is particularly profitable. Dutch municipalities only collect local taxes to a limited degree. For them, the active development of greenfield areas is most profitable. Also, growth results in higher allocations from the rate support grant and a higher efficiency of infrastructure investments. However, increased local revenues are – to some degree – outbalanced by consequential costs, reductions of the rate support grant and increased contribution costs. This complex calculation makes it difficult to compare the profitability of specific spatial developments.

Which goals do the municipalities pursue with their land use policies? The interviewed municipalities grow with the aim of keeping housing prices stable in a growing region, to create space for a diverse population or to counteract the ageing and shrinking of a population which puts infrastructure services under pressure. At the same time, the preservation of natural assets is an important goal for municipalities around Utrecht and Berlin. The generation of local revenues is necessary to finance these goals, but municipal officials regard it as a means to an end, rather than a leading policy goal. Nevertheless, the prioritization of interests differs between municipalities.

What explains differences in the influence of fiscal incentives on the land use policies of local governments? Many different factors influence the weighting of interests in the municipal land use policy. While private parties can be powerful negotiators, development plans can be blocked by unwilling inhabitants. The framing of problems and external events or preconditions can influence the political urgency to react. A capable administration can outweigh the urge of a fiscally weak municipality to chase after short-term profits. While the fiscal system thus incentivizes certain forms of land use, it is not sure that the generation of local revenues is prioritized during the development of municipal land use policies. Although the results are not generalizable, the comparative case study has illustrated a selection of municipalities whose policy goals are much more complex than the simple generation of local revenues.

How do different fiscal systems affect the land use policy of local governments? Different fiscal systems incentivize different forms of land use. Depending on the degree to which municipalities rely on local revenues on the one hand, and the degree to which fiscal advantages are being outbalanced on the other hand, the incentives can be stronger or weaker. Municipal officials, however, often do not have the detailed knowledge that is necessary to assess the profitability of one spatial development compared to the other. The generation of local revenues is one out of many policy goals that a municipality pursues with its land use policy. The weighting of the different policy goals

depends on many more factors than the strength of the fiscal incentives. The degree to which the fiscal system affects the policymaking of a municipality thus differs from municipality to municipality and depends on the influence of many other factors and actors.

Scientific relevance The insights of this research project contribute to a more differentiated understanding of the sources of local growth ambitions. The expectation that municipalities grow with the aim of generating revenues is too simple. Many different interests are combined in the municipal land use policy. The incentives of the fiscal system are one of the factors that influence the weighting of policy goals, but not necessarily the most important.

Societal relevance In view of these insights, it is questionable whether the application of fiscal counterincentives by supralocal governments would ease the implementation of urban growth management plans. Fiscal counterincentives can support developments that are more desirable from a regional perspective, such as brownfield redevelopments and dense, affordable residential areas. However, they do not outweigh the disadvantages that municipalities experience due to actual building restrictions. Generating local revenues is not the only (or even not the primary) reason for the municipalities' desire to grow. In order to be effective, UGM policies have to address issues of an ageing population, growing housing prices or the support of infrastructure services.

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