Multi-level governance as a cause of lacking institutional capacity in the application of land value capture at large infrastructure projects in Indonesia
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June, 2020
Preface

In front of you lies my Master Thesis “Multi-level governance as a cause of lacking institutional capacity in the application of land value capture at large infrastructure projects in Indonesia”. This thesis is the final part of the Master Spatial Planning, specialization Land and Real Estate, at the Nijmegen School of Management, part of the Radboud University in Nijmegen. After obtaining my bachelor in Spatial Planning and my pre-master Spatial Planning, I decided to follow this Master to deepen my knowledge in the built environment sector.

Since I was fifteen years old, I was interested in Asia, and especially Indonesia. Geography was my favorite subject at high school, in which one of the four domains was South-East Asia and Indonesia. When I was obtaining my bachelor’s degree, I was mostly focused on land and real estate. This interest was even more on the Radboud University, so I decided to combine all my geographical interests in my thesis. Which led to this topic. Unfortunately, I did not go to Indonesia itself due to the Corona crisis this year. But I will absolutely do in the future!

I would like to thank my parents and sister for all their critical feedback on this thesis. Especially my mum, who was willing to help me and provided me comments, even when she was busy herself. In addition, I would like to thank my friends who helped me during the Corona crisis and changed circumstances. Our online meetings were a nice distraction from writing my thesis.

Of course, I would like to thank my supervisor Erwin van der Krabben and Ary Samsura for their help. Erwin van der Krabben because of his feedback and helpful thoughts, and Ary Samsura for his contacts and helpfulness.

This research remarks the end of the Master Spatial Planning, but not my student-life. In September 2020 I will start the Post-Master Educational Master for Geography, to become a Geography teacher at high schools. I am looking forward to deepening my knowledge again and see what the future brings.

I hope you enjoy reading.

Sanne van der Wal
Ede, 13 June 2020
Summary

The Indonesian planning system is criticized for its ineffectiveness of spatial developments and land use policies (Hudalah & Woltjer, 2007; Fitriani & Sumarminingsih, 2015). Part of this ineffectiveness is caused by decentralization, which lies in hand with institutional capacity problems (Hudalah, Firman & Woltjer, 2014; Talitha, Firman & Hudalah, 2019). As a consequence, issues regarding limits of institutional capacity influences economic developments (Davis, 2005; Samantela, 2019). As a result of lacking economic developments, Indonesia’s infrastructure is in a terrible condition, both in a qualitative and quantitative way (World Bank, 2007, a; Indonesia Investments, 2017). Recently, however, a substantial number of large infrastructure investment projects have been announced by the national government (Suhartono & Salna, 2019; PWC, 2019). This research aims to identify the causal relationship between institutional capacity problems and multi-level governance (MLG), in the application of land value capture (LVC) instruments with regard to large infrastructure (TOD) projects. Theoretical insights in institutional capacity problems and multi-level governance, a conceptual model and corresponding prediction was developed. The prediction is as follows: The more (fiscal) autonomy a certain level of government has, the more institutional capacity problems will occur, which result in implementation problems of land value capture instruments.

Results from expert interviews and desk research show that approximately 50 percent of institutional capacity problems in Indonesia are related to MLG. Furthermore, 20 challenges of the implementation of LVC came forward. 12 out of those 20 challenges are related to institutional capacity problems, and 9 are related to MLG. 7 challenges are related to both institutional capacity problems and MLG. These institutional capacity problems are caused by decentralization, and are: corruption (1), lack of knowledge at regional governments (2), lack of knowledge at local governments (3), local kings (4), financial limitations at local governments (5), weak law enforcement (6), and lack of communication between local governments (7).

Is implementing LVC possible? The answer to this question is: yes, it is. However, the national government needs to take the important aspects into account. Not all are related to institutional capacity or multi-level governance, but if Indonesia improves institutional capacity at all levels of government, part of the challenges is gone. However, the most important issue to solve, is the adaptation of a legal framework. The private sector, community, and all levels of government then have a clearer regulation, in which they feel freer to use LVC instruments, despite the fact that some LVC instruments are already possible under the current circumstances.

Keywords: institutional capacity, land value capturing, decentralization, multi-level governance
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<th>Full Form</th>
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<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
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<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
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<td>IC</td>
<td>Institutional capacity</td>
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<td>ICW</td>
<td>Indonesian Corruption Watch</td>
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<td>KPPIP</td>
<td>Komite Percepatan Penyediaan Infrastruktur Prioritas (Committee for Acceleration of Priority Infrastructure Delivery)</td>
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<tr>
<td>LMAN</td>
<td>Lembaga Manajemen Aset Negara (State Assets Management Agency)</td>
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<td>LVC</td>
<td>Land value capture</td>
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<td>MLG</td>
<td>Multi-level governance</td>
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<tr>
<td>NGO</td>
<td>Non-governmental organisation</td>
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<td>OECD</td>
<td>Organization for Economic Co-operation and Development</td>
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<td>PPP</td>
<td>Public-private partnerships</td>
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<td>PSN</td>
<td>Proyek Strategis Nasional (National Strategic Projects)</td>
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<td>SDGS</td>
<td>Sustainable Development Goals</td>
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<td>TIF</td>
<td>Tax Increment Financing</td>
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<td>TOD</td>
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Chapter 1. Introduction

The Indonesian planning system is criticized for its ineffectiveness of spatial developments and land use policies (Hudalah & Woltjer, 2007; Fitriani & Sumarminingsih, 2015). For example, ineffective spatial and development plans lead to spatial infringements and unoptimized spatial utilization control (Cahyani, Munibah & Mulyanto, 2019). Part of this ineffectiveness is caused by decentralization, which is obvious for institutional capacity problems (Hudalah, Firman & Woltjer, 2014; Talitha, Firman & Hudalah, 2019). According to Talitha, Firman & Hudalah (2019), decentralization is described as a “structural change of governance through the transfer of power and authority from the national to subnational levels”. Since the implementation of the Regional Administration Act of 1999 in 2001, Indonesia has transformed from a centralized and hierarchical political system to a decentralized and democratic one (Hudalah & Woltjer, 2007; Hudalah, 2010). This spatial change resulted in a more difficult political system (i.e. autonomy policy), whereby regional and local governments have more authority, resources and responsibilities to manage developments (Hudalah, Firman & Woltjer, 2014; Talitha, Firman & Hudalah, 2019). This shift from the central to subnational governments is referred by Hofman & Kaiser (2004) as ‘Big Bang Decentralization’, and by Shah and Chaudry (2004) as the ‘Big Bang reforms’. Harun & Kamase (2012) emphasize regional and local governments are faced with governing their own administrations. However, decentralization in Indonesia has been criticized because of the lack of power and resources, and sometimes even corruption, from both regional and local governments, which can be seen as a lack of institutional capacity (Hudalah, 2010; Davis, 2005). The absence of adequate institutional and political capacity in developing countries is causing state failure, whereby progress of infrastructure projects is unlikely (Khan, 2004). Many other Asian countries with a decentralized governance structure succeed in making plans, but the further step of implementation through the local government gets stuck (Hudalah, Firman & Woltjer, 2014; Talitha, Firman & Hudalah, 2019). As a consequence, issues regarding limits of institutional capacity influences economic developments, which also occurs in a number of other developing countries (Davis, 2005; Samantela, 2019).

As a result of lacking economic developments in Indonesia caused by administrative capacity constraints and the Asian crisis in 1998 (as an example: the Ministry decided to cancel 12 infrastructure projects and 29 toll roads, because of the Asian crisis in 1998) (OECD, 1999; Sharma, 2003; Hudalah & Woltjer, 2007; Hudalah, Firman & Woltjer, 2014), Indonesia’s infrastructure is in a terrible condition, both in a qualitative and quantitative way (Abiad & Teipelke, 2017; Indonesia Investments, 2017; World Bank, 2007, a; personal communication, interviews 4 and 5, 2020). This also led to the condition whereby 46.3 percent of the roads were in bad condition, and “32.8 percent of the rail-tracks were no longer operational” (National Development Planning Agency, 2007). According to OECD (Organization for Economic Co-operation and Development) (2010), road congestion and electricity supply “has not kept pace with growing demand, resulting in frequent power outages”. In addition, “land-acquisition procedures for infrastructure projects remain cumbersome and have significantly slowed down the extension of the road network”. Although these are more technical issues, they are affected by the lack of institutional capacity. Infrastructure budgets from the Ministry of National Development and Planning (Bappenas) has not spent a large budget on infrastructure, because of coordination and capacity issues (OECD, 2010). Although the Ministry tried to overcome this by creating agencies whom should improve coordination
among other agencies, and hired new staff to manage development projects, the lack of concrete powers on policies and decision-making, has not sorted the right affect yet (OECD, 2010).

The lack of supply of infrastructure thus has occurred through financial, governmental (i.e. administrative and power) and technical issues. Crawly (2015) extended these causes to environmental issues and maintenance and sustainability issues, but the formers are more important, because sustainability have not received much attention in wide circles.

In the past, infrastructure developments were lacking. Recently, however, a substantial number of large infrastructure investment projects have been announced by the national government (KPMG, n.d.; Suhartono & Salna, 2019; PWC, 2019). An important issue is whether regional and local governments have sufficient administrative capacity how to manage and implement these projects (PWC, 2019). The Ministry of Economic Affairs, which is a department of the national government, depends on foreign investors such as the Asian Development Bank (ADB), Japan (OECD, 1999; JICA, 2012; Indonesia Investments, 2017; PWC, 2019) and South-Korea (personal communication, interviewee 5, 2020). The Ministry of Economic Affairs would not like to completely finance the announced infrastructure investment projects, but only 40 percent (Suhartono & Salna, 2019). Therefore, they need some financial instruments or concepts to gain the other part and become less dependent on foreign investors. They would like to do this through land value capture in relation to transit-oriented development (TOD). Implementing land value capture policy “may provide an alternative financial resource for the provision of urban infrastructure” (Pramana & Samsura, 2018), whereby parts of increased land values are used to finance public infrastructure (Alterman, 2012; City Planning Labs, 2017).

Transit-oriented development and land value capturing have a strong correlation in surrounding countries, whereby both concepts depend on accessibility. According to the concept of transit-oriented development, living in a TOD-area ensures that the use of public transport and walking increases – where the use of cars reduces (Noland & DiPetrillo, 2015). These areas have a high density nearby the station where the development of housing, employment, activity sites and public services is integrated with a (high quality and efficient) public transport system (Knowles, 2012). In other words: improvement of infrastructure can be an incentive to increase transport movements, which results in more comfort in accessibility, and results in increased economic activities. This leads to increased land values and land prices (Pradhitasari & Palupiningtyas, 2013; ADB Institute, 2018). The local government can then ‘capture the value’ through, for example, developer impact fees paid by the developers, or a special tax which is assessed on land parcels (City Planning Labs, 2017; ADB Institute, 2018). A major benefit of the use of land value capturing is “that it makes more likely to launch of an infrastructure project that otherwise might not occur, by introducing private investors without incurring additional tax burdens on the government and general taxpayers” (ADB Institute, 2018). However, the application of land value capture is rarely researched in Indonesia so far (Pradhitasari & Palupiningtyas, 2013; Dentiala & Koesalamward, 2019). Furthermore, Indonesia currently does not have any regulation or policy document on land value capture (personal communication, all interviews, 2020). Some pilot projects were done in the previous years, but land value capturing is not widely used,
due to many reasons among which lacking institutional capacity and land acquisition problems (Mahi & Nazara, 2012; personal communication, interview 4, 9 and 10, 2020).

1.1 Research problem statement

This study aims to understand the effect of multi-level governance in relation to institutional capacity in the application of land value capture at large infrastructure developments in Indonesia. Institutional capacity problems in spatial planning are already researched, in contrast to implementation of land value capture instruments in relation to institutional capacity problems and multi-level governance. In addition, the definition and indicators of institutional capacity is not unambiguously. So, there is a research gap on both institutional capacity itself, and the relation with multi-level governance and land value capture instruments at large infrastructure projects. The problem statement therefore is:

*Large infrastructure developments in Indonesia got stuck by lack of finance and institutional capacity, whereby decentralization places an important role in the political system. A knowledge gap on multi-level governance, institutional capacity and alternative financial instruments (i.e. land value capturing with regard to transit-oriented development) needs to be decreased in order to increase spatial developments in Indonesia.*

The problem statement is focused on Indonesia as a case study. However, as grounded on studied literature, institutional capacity problems are a well-known phenomenal in other developing countries in Asia (e.g. Philippines and Malaysia) as well (Lim & Douglas, 2000; Samantela, 2019).

1.2 Research aim

According to Saunders, Lewis & Thornhill (2016), a research aim is “a brief statement of the purpose of the research project, which is often written as a sentence stating what you intend to achieve through your research”. As this study focusses on the multi-level governance approach towards institutional capacity, an explanatory research aim can be applied. Van Thiel (2014) describes an explanatory research aim as “research in which the causes of a certain problem are sought or studied”. Within this aim existing theories can be applied in the search for causes, but also development of a new theory is possible. In addition, Given (2008) implies that explanatory research is a type of research whereby the not only the phenomena is described, but also is explained. The main aim within this study is therefore:

*To analyse and understand institutional capacity problems in Indonesia as related to the introduction of multi-level governance, with regard to the implementation of land value capture instruments at large infrastructure developments.*

1.3 Research questions

Explanatory research relates to a research question which establishes the causes and circumstances “that have led to certain behaviours or policy measures” (Van Thiel, 2014). To tackle institutional capacity problems (i.e. behaviours or policy measures) and related lacking
infrastructure projects, the multi-level governance approach needs to be examined. This research therefore will address the following research question:

**To what extent does the implementation of multi-level governance policies cause institutional capacity problems in the application of land value capture instruments with regard to large infrastructure projects in Indonesia?**

According to Farthing (2016), research questions can be identified as descriptive or explanatory research questions. Descriptive questions are mostly ‘what’ questions, or “questions where the purpose of the research is to provide a descriptive answer”. In contrast to descriptive questions, explanatory questions are “questions where the purpose is to make whatever is the subject of the research intelligible or less puzzling” (Farthing, 2016). A mix of both descriptive as explanatory research questions is possible (Saunders, Lewis & Thornhill, 2016).

Because one main research question is too extensive to conduct a full research project, sub-questions are necessary. “The sum of the answers to all sub-questions taken together forms the answer to the main research question” (Van Thiel, 2014). The sub-questions result in the following:

With regard to the implementation of multi-level governance:

**Subquestion 1:** What are the characteristics and common problems of multi-level governance in Indonesia?

**Subquestion 2:** How has multi-level governance been implemented with regard to the implementation of large infrastructure projects in Indonesia?

With regard to institutional capacity problems:

**Subquestion 3:** To what extent do levels of government in Indonesia experience institutional capacity problems?

**Subquestion 4:** To what extent do institutional capacity problems appear with respect to the implementation of large infrastructure projects in Indonesia?

With regard to the use of land value capture instruments:

**Subquestion 5:** To what extent do levels of government in Indonesia use land value capture instruments?

**Subquestion 6:** To what extent do land value capture instruments appear with respect to the implementation of large infrastructure projects in Indonesia?

With regard to multi-level governance related to institutional capacity problems for land value capture instruments in large infrastructure projects:

**Subquestion 7:** Is the use of land value capture instruments for infrastructure projects hindered by multi-level governance related to institutional capacity problems?

1.4 Societal relevance

This study has two main advantages for society. On one hand, for the implementation of policies and on the other hand, for the welfare of Indonesia as a whole. First, this research is
useful to gain more insight on the implementation of policies. As Indonesia is a developing country, several issues are taken in case of implementation of policies. Morah (1996) describes 14 issues; 3 of them are most important. First, administration is a critical problem in the development plans of developing countries. Next, in developing countries more competition and in rivalry is involved, because resources are scarcer than in developed countries. Lastly, inter-governmental relations affect implementation of policies, whereby each government level has their own structure and jurisdiction (Morah, 1996). More insight in policy implementation – in any policy area, so not only in spatial developments (e.g. infrastructure) – can cause more implemented policies, whereby Indonesia is more structured in that sense. On a broader scale, this study could be used to increase the welfare of Indonesia. If institutional capacity problems are solved, spatial developments will increase and therefore the economy. This is in line with the Millennium Goals from 2000, whereby poverty had to be reduced by half in 2015. According to Graham (2002), the crucial aspect for achieving this objective is to solve institutional capacity problems, thus promoting economic developments. These goals ended in 2015 but were replaced by the Sustainable Development Goals. Increasing the level of institutional capacity or capacity building is an important goal to support ‘peace and prosperity’ for people and the planet (now and into the future) (SDGS, n.d., a; SDGS, n.d., b). Recently, the national government announced large infrastructure projects, which also focusses on the developing of the welfare and economic aspects of Indonesia as a whole (KPMG, n.d.; PWC, 2019; Suhartono & Salna, 2019). Expansion of the infrastructure increase the economy in Indonesia and follows the goal of being a developed country (Indonesia Investments, n.d.). When future infrastructure projects will be developed by the use of TOD, land values in that area will increase, among which the government can capture this value (City Planning Labs, 2017; ADB Institute, 2018). This will lead to new financial possibilities which will increase the income of (local) governments. If institutional capacity problems will be partly solved, spatial developments will increase as well, which is also important for Indonesia.

1.5 Scientific relevance

There have been many studies which focused on decentralization in Indonesia (Bardhan, 2002; Shah & Chaudry, 2004; Firman, 2008), regional autonomy (Setiawan & Sudharto, 2007; Butt, 2010), the concept of multi-level governance (Hooghe & Marks, 2003; Firman, 2014), institutional capacity (Graham, 2002; Mimba et al., 2007) and policy transfer (Hudalah & Woltjer, 2007; Evans, 2009). In addition, literature suggests that there is a lot of attention on (introducing) TOD policy in Indonesia (Dirgahayani & Choerunnisa, 2018; Susetyarto, 2020), which is related to the announcement of large infrastructure investments by the President of Indonesia (PWC, 2019; Suhartono & Salna, 2019). Furthermore, a lot of research on the relation of land value increases as a result of transit-oriented development is done in general (City Planning Labs, 2017; ADB Institute, 2018). This relation is rarely researched in Indonesia so far (Dentiala & Koesalamward, 2019). However, this is very interesting, because of the large investments in infrastructure in Indonesia, whereby implementation of TOD is suggested. With the implementation of TOD policy, the national government of Indonesia also would like to use land value capturing (Widan, 2019; personal communication, interviewee 6, 7 and 8, 2020). Some studies on land value capture in Indonesia are done (Pradhitasari & Palupiningtyas, 2013; Wardani, 2019), but land value capturing is not widely used (Wardani, 2019; personal communication, interviewee 6, 7 and 8, 2020).
This explorative study used international literature regarding to what extent decentralization and the implementation of multi-level governance policies are hindered by institutional capacity problems. This study contributes to the international literature, in which Indonesia is the case study. There are no studies that have researched whether institutional capacity problems are an explanation for the fact that land value capture instruments are not used. On top of that, that this could also be due to the defective multi-level governance implementation. Therefore, this makes this study therefore scientifically relevant. In addition, scientific knowledge on institutional capacity and how to measure is currently lacking. Previous research only mentioned the problems of institutional capacity, so not the exact operationalisation and possible ways to measure this. Furthermore, this study could help both Indonesia as other Asian or developing countries to gain more insights in spatial (e.g. infrastructure) developments and the way in which they take place (or not). Other countries with the same institutional capacity problems could learn from this research and it could help them to increase spatial developments.

This research provides an explanation for a supposed causal relationship between institutional capacity and multi-level governance, which will be applied in land value capturing. The theoretical assumptions about the efficiency of multi-level governance will be tested in a developing country such as Indonesia. According to the literature, a multi-level governance system can be distinguished in two types: type I and II. Type I refers to a federal structure where a clear distinction is made in authority and responsibilities (Chou et al., 2017). The authority and responsibilities are given to the regional and local governments (Faludi, 2012). Type II refers to multiple levels of governance where the number of levels of governance of other institutions depends on the domain (Chou et al., 2017). This distinction is based on experiences from Europe (i.e. the European Union) and the USA, which can be considered as the ‘Global North’ (Odeh, 2010). Theories on multi-level governance apply to the Global North, because they do not take institutional capacity problems into account. Theorists assume that there is knowledge in all levels of government, and more autonomy on a lower level results in more effective governments. This does not fit the assumptions in the Global South, whereby institutional capacity problems do occur. According to the literature, countries in the Global South have various capacities, “largely the result of their colonial past, civil wars and conflicts, and traditions of authoritarianism, militarism, and corruption” (Morgan, Gomes & Perez-Aleman, 2016). Therefore, there is a knowledge gap of institutional capacity problems related to multi-level governance within the Global South, and thus in Indonesia. Researching this knowledge gap give more insights in the application of multi-level governance policies in the Global South, related to institutional capacity.

1.6 Report structure

Chapter 2 provides an overview of existing literature and theories, which are combined into a conceptual model. Chapter 3 presents the methodology of this research, in which the research philosophy, research methods and research approach are explained. In chapter 4, the results derived from the different research methods are presented. Chapter 5 describes the conclusions of this research. Lastly, chapter 6 discusses the results and the validity and reliability of this research. Furthermore, it provides recommendations for further research.
Chapter 2. Theoretical framework

Within this chapter, theories such as transit-oriented development, land value capturing, multi-level governance and institutional capacity will be explained. This is done by a literature review in which a critical view of the relevant literature is taken from all aspects of this research. Furthermore, those theories together form the theoretical framework, in which the relationship between the theories is explained.

2.1 Literature review

2.1.1 Transit-oriented development

Transit-oriented development (TOD) is the idea of “mixed-use, compact, walkable neighbourhoods that encourage people to live near and use public transit” (Wangtu et al., 2019). As mentioned before, according to this concept, living in a TOD area ensures that the use of public transport and walking increases – where the use of cars reduces (Noland & DiPetrillo, 2015). TOD areas typically have high density buildings where the development of housing, employment, activity sites and public services is integrated with a (high quality and efficient) nearby public transport system (Knowles, 2012). The use of TOD can lead to different kind of benefits: reduced air pollution caused by a smaller number of vehicles (1), creating an attractive business climate (2), the reduction of congestion on the roads (3), are the most important ones (Li et al., 2019), leading to the creation of higher land values within the TOD area. Improvements of infrastructure can be the incentive to increase transport movements, which will lead to higher land values (Pradhitasari & Palupiningtyas, 2013; ADB Institute, 2018). By using TOD, local governments can finance the development of infrastructure through the increase in land value in the area in question through land value capturing (Dentiala & Koesalamward (2019). Land value capturing will be further explained in the next paragraph (2.1.2). The relation between TOD (‘open a new rail link’) and land value capture (‘value uplift’ and ‘retain a portion’) is shown in figure 1.

![Figure 1: Relationship TOD and LVC (source: ADB, 2019).](image-url)
Chapter 2. Theoretical framework

2.1.2 Land value capturing

In Asia, and thus including Indonesia, governments face challenges to meet the demand for new infrastructure and at the same time have more private participation in infrastructure provision (ADB Institute, 2018). The reason for more private participation is that new infrastructure exceeds the financial capacity of governments, “especially in developing countries” (ADB Institute, 2018). To gain capital for large infrastructure projects, diverse strategies are necessary. Recent studies in raising capital to finance public investments in Asia have shown successful strategies, among which land value capture (LVC) is one strategy (Asian Development Bank, 2020). According to the Infrastructure Victoria (2016), land value capture is “the recovery of all or part of the increase in land value or improved connectivity created by change in land use regulation, public investment in infrastructure, or the granting of air rights over public transport facilities”. This means the increase in land or property value is taxed by public investments in infrastructure (Asian Development Bank, 2020). LVC suggests this increase in land or property value belongs to the government which spends their capital to provide the infrastructure, and therefore the owner of that land or property value should be (partially) return the capital to the government (Hong & Brubaker, 2010). This is supported by PWC (2019), whom said that “public action should generate public benefit”. This perception is based on the idea that infrastructure creates economic benefits that exceeds costs, and the those who benefit are willing to pay those costs (ADB Institute, 2018). As an example: adding new stations can result in high land values. The local government can then capture those values by a special tax assessed on “land parcels to contribute to the costs of the new improvement” (Ko & Rosenblatt, 2013).

LVC instruments in general

Land value capturing includes various mechanisms and policies, which have different implementation jurisdictions and practices (Lincoln Institute, 2020). Categories or types of LVC instruments have been devised by different scholars. The first difference is the difference between direct value capture and indirect value capture. Direct value capture aims at direct users, in the case of TOD, the users of road infrastructure. Direct value capture instruments could be toll collection, parking fees or congestion charge (Offermans & van der Velde, 2004). Indirect value capture aims at direct beneficiaries. This means in the case of TOD, the owners and developers in surrounding areas (Slegtenhorst, 2013). According to van der Krabben, Samsura & Wang (2019), indirect value capturing is “perhaps the most effective form of value capture, flexible enough to adapt to differing institutional contexts and regulatory environments”. The other category that can be distinguished within indirect value capture instruments, is the distinction between tax- and fee based LVC and development-based LVC instruments. Tax- and fee based LVC instruments consists of land and property tax, betterment charges/special assessment, tax increment financing and impact fees. Developed-based LVC instruments consists of air right sales, land sales, development rights leases, joint development or land readjustment (Suzuki et al., 2015). The differences between both categories — and other direct types of instruments such as fuel tax or toll – are summarized by Suzuki et al. (2015) (figure 2). Although all value capture instruments are possible with TOD, the main focus of this research is on indirect value capture instruments. Another focus are the possibilities for the governments that would like to affect their financial position. That is why the development based LVC instruments in this research are not be taken into account in the first place.
Chapter 2. Theoretical framework

Figure 2: Types of LVC instruments (source: Suzuki et al., 2015).
Property tax
Property taxes are an important form of land value capture, because land value could increase with well-functioning property tax systems (Kim, 2018). Property taxes can refer to taxes on land, buildings, or both (Alterman, 2012; Walter et al., 2016). In most developing countries property tax is not a widely used instrument, because a property tax system requires a good cadastral system, training for tax assessment, enforcement and financial commitments to establishing a computer system (Suzuki et al., 2015). Moreover, if property rights in developing countries are not well-defined, property tax could be difficult to use (Suzuki et al., 2015).

Betterment charges and special assessments
According to the Lincoln Institute (2020), betterment charges (also mentioned as contributions) are fees, at which the owners of selected properties pays to the municipality, “which defrays the cost of a public improvement or service from which the owner specifically benefits”. Betterment charges with new infrastructure projects are applied when there is direct benefit from improved accessibility (ADB, 2020). Furthermore, betterment charges are “intended to allow the community to have a share from the benefits, which is in the form of increase in private land values resulting from the improvements” (Samantela, 2019). The use of special assessments “wherein funding for public service within a geographic district is provided by property owners in the district who benefit directly from the service” (Kim, 2018). Compared to the betterment charges, require special assessments property owners whom are required to pay based on their own benefit from the public improvement (Kim, 2018).

Tax increment financing (TIF)
Tax increment financing (TIF) is a tax on properties in a certain area which will be redeveloped by public investments and financed by the government (mostly municipalities) (Suzuki et al., 2015). For example, after a district is chosen by the municipality, assessment values of the properties are frozen. If someone would like to change their property in the future, an extra tax on top of the existing property tax must be paid (Suzuki et al., 2015).

Development Impact fee
According to Lari et al. (2009), development impact fees are “one-time charges collected by local governments from developers for the purpose of financing new infrastructure and services associated with new development”. This means that the municipality receives a one-time charge and invests this revenue in public services and infrastructure (Lincoln Institute, 2020).

Land value capture instruments in Indonesia
Although land value capturing has potential, implementing value capture in Indonesia is still challenging due to institutional problems such as “conflict between governments, bureaucracy, rigid policy regulation, and political interference” (Medda, 2012; Wardani, 2019). However, the Indonesian President has announced in the National Coordination Meeting in November 2019, that the Indonesian government will work on a system or an approach for all levels of government (PWC, 2019). Although land value capturing is not widely used in Indonesia, taxes and development impact fees are used as financial tools in some projects in Indonesia (Wardani, 2019). In chapter 4, results, the current and future use of land value capture instruments in Indonesia will be further examined.
2.1.3 Multi-level governance

The conceptual framework of multi-level governance (MLG) is closely related to political factors, such as decentralization, corruption or lack of coordination (Marquardt, 2014). Decentralization is “a transfer of significant degrees of authority and responsibility for public expenditures and revenues from the central government to lower levels of government” (Firman, 2003). According to the description of Firman (2003), multi-level governance and decentralization refer to the connection between the national government and the lower levels of government. ‘Multi-level’ in multi-level governance, refers to “the interdependence of governments operating at different territorial levels” (Mccallion, 2007). ‘Governance’ is referring to “the interdependence between governments and non-governmental actors at various territorial levels” (Mccallion, 2007). In contrast with the term ‘government’ focusses ‘governance’ more on steering than on controlling in the perspective of the national government (Kellow, 2012; Piattoni, 2015). The definition of multi-level governance as a whole is therefore: “a system of continuous negotiation among nested governments at several territorial tiers: national, regional and local” (Hooghe & Marks, 2003, a) or as Richards & Smith (2004) said: “Multi-level governance is a process by which authority and decision-making is dispersed to a wide range of bodies through a process of negotiation, in order to enhance the chances of achieving politically defined goals”. Within this governance system, decisions are made in collaboration between public and private actors, at different levels (Ongaro, 2015; Thomann, Trein & Maggetti, 2019).

The MLG approach was originally developed by Marks (1992) for European regional and cohesion policies (i.e. EU integration policy), which was important for the implementation and decision-making of the structural funds in the EU (Marks, 1992; Mccallion, 2007; Piattoni, 2009). Later, Marks, Hooghe & Blank (1996) discussed the importance of MLG, where they focused on three analytical levels: political mobilization (politics), policy-making arrangements (policy) and state structures (polity) (Piattoni, 2009). They had drawn attention to non-national state governments and referred to the fact that lower levels of government were also important (Piattoni, 2009). The multi-level governance approach can then highlight the interaction between the different levels of government.

Hooghe & Marks (2003, a) defined 2 types of governance, type I and II as mentioned before. Type I refers to a federal structure where a clear distinction is made in authority and responsibilities (Chou et al., 2017). Furthermore, the authority is given to a limited number of levels of government, where the national government gave the authority to the regional and local governments (Faludi, 2012). In contrast to type I, type II focusses on “overlapping, policy-focused jurisdictions” (McTravish, 2015; Curry, 2018). This means that there are multiple levels of governance with overlapping policies where the number of levels of governance of other institutions depends on the domain (Chou et al., 2017). A type II multi-level governance domain could be the transport sector, where for example the most important institutions are the state-owned enterprises (Faludi, 2012). Besides the clear distinction of the types of multi-level governance, all literature on MLG focusses on Europe or the USA, which can be considered as the ‘Global North’. Can MLG be applied in the ‘Global South’ as well?
Chapter 2. Theoretical framework

Motives
One of the reasons to adopt multi-level governance as a country (or state) is because of the increasing expectations of the citizens. They are expecting more and more services from the state and ask for direct involvements in decisions of their lives (Piattoni, 2015). The state can accomplish this request to adopt a multi-level governance system where (new) local governments are more involved in the citizens lives and can simpler implement policies according to their needs (Piattoni, 2015). This lies in hand with Lockwood et. al (2009), whom refer to the importance of regions (i.e. regional governments) for the implementation of public policies (Lockwood et. al, 2009). Direct involvement of levels of government closer to the citizens, is the aim of the ‘subsidiarity principle’ (Milio, 2014). The subsidiarity principle is a principle which refers to “a process of devolution and transfer of competences from high to lower levels of government, in order to give more independence to regions, as well as to produce a higher degree of accountability and responsibility amongst the political and administrative authorities” (Milio, 2014). Everything that could be done at a lower level of government, needs to be done at that level. The second reason to adopt multi-level governance is to increase economic activities and ensure a better financial situation (Piattoni, 2015). The increase of economic activities is derived from the transition: “from subsistence to commercial agriculture, from agriculture to industry, and from industry to financial markets” (Piattoni, 2015), which refers to the ‘ultimate objective of economic activity’. This means that the aim is not longer to maximize the production, but rather on immaterial financial wealth (Epstein, 2006).

Disadvantages
Besides the advantages of multi-level governance, scholars also criticize MLG. First, they suggest MLG is only descriptive (i.e. not explorative) and it is more an overarching concept than a real theory (Ongaro, 2015). Second, fragmentation of governance systems can lead to coordination and integration problems, because of the different tasks and areas of the levels of government (Kellow, 2012). In addition, these different levels of government have their own dynamism (Kellow, 2012) and a “wide variety of arrangement for local governments” (McTravish, 2015). Third, multi-level governance can lead to inefficient decision-making. Lastly, differences between regions can occur, due to the existence of natural resources (Haryanto & Astuti, 2017). The advantages and disadvantages of the multi-level governance approach in Indonesia will be explained in chapter 4.
2.1.4 Institutional capacity

Most countries in the Global South (i.e. developing countries) are interested in how institutions can be reformed to promote economic development. Because the role of institutions is limited within these countries where limited resources, expertise and sometimes corruption are the most important causes (Davis, 2005), and weak institutional capacity is seen as a major obstacle to economic development (Graham, 2002). Mimba et al. (2007) discussed four characteristics of (public) institutions in developing countries which influence decision-making, control and accountability. This research focusses on one of these characteristics, namely a low level of institutional capacity, which this research is focused on. The others are the limited involvement of stakeholders, a high level of corruption and a high level of informality. What are the institutional capacity problems? What is exactly meant by institutional capacity and how to measure this concept? In this paragraph the answer to these questions will be answered.

**Institutional capacity problems**

Low institutional capacity occurs in most developing countries, where institutional capacity relates to the public sector (Mimba et al., 2007). Based on the characteristics of the public sector in developing countries from Mimba et al. (2007), and other relevant scientific literature, a supposed causal relationship of institutional capacity and other related problems is shown in figure 3.

![Causal relationship diagram](source: rework by author)

As figure 3 shows, low institutional capacity is influencing the responsibilities of the local government in a negative way. This means that the lower the institutional capacity level, the lower the responsibilities of the local governments. In addition, the four characteristics account for (high level of corruption, high level of informality, low level of stakeholder involvement and a low institutional capacity level) long bureaucratic procedures and a lack of transparency of the public sector. Stakeholders and citizens have little information about the achieved goals from the public sector (Mimba et al., 2007). Another related problem with low
institutional capacity is state failure (Khan, 2004). State failure can cause poverty in a lot of developing countries and therefore there is no economic growth does not, which the Indonesian country has set as a goal (KPMG, n.d.; Suhartono & Salna, 2019). In relation to the research interest, which is the application of land value capture instruments in Indonesia, institutional capacity is important, because “enforcing or transforming a property rights system is impossible without the appropriate bureaucratic capacity” (Khan, 2004). Institutional capacity problems specifically in Indonesia will be further explained in chapter 4.

Related to infrastructure projects in South Asia, land use development and urban transport is linked to a set of national, regional, and local governments plus quasi-government institutions and private transport operators and investors (UN-Habitat, 2003). The link between all institutions is missing, which leads to certain challenges (i.e. low institutional capacity level) of urban transport institutions in South Asia (table 1). These challenges, focused on the gap between planning and implementation, could only be fixed by “institutional reorganization, capacity building and streamlining of the procedures” (UN-Habitat, 2003).

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under-resourced institutions</td>
<td>Lacking in overall capacity to plan, execute, maintain and deliver affordable sustainable urban transport</td>
</tr>
<tr>
<td>Fragmented policy formulation and implementation</td>
<td>With lack of cooperation among multiple ministries and transport agencies</td>
</tr>
<tr>
<td>Lack of finances</td>
<td>For transport infrastructure and public transport services resulting in extensive institutional and governmental support, concessions and subsidies</td>
</tr>
<tr>
<td>Insufficient financial procedures</td>
<td>Insufficient financial procedures and accounting/audit systems</td>
</tr>
<tr>
<td>Bureaucratic procedural constraints</td>
<td>That impede the delivery of urban transport infrastructure and services</td>
</tr>
<tr>
<td>Inadequate legal and enforcement frameworks</td>
<td>Capacities needed for urban transport and land-use developments</td>
</tr>
<tr>
<td>Absence of comprehensive information systems, disclosures and public participation</td>
<td>Which leads to corruptive practices</td>
</tr>
</tbody>
</table>

Table 1: Challenges of urban transport in South Asia (source: UN-Habitat, 2003).

The above-mentioned challenges can be organized in four themes, namely: adaptation (1), administration and governance (2), mobility policy, plan-making, management, and regulation (3) and resourcing and capacity building (4) (UN-Habitat, 2003). The latter refers the most to institutional capacity. To increase the institutional capacity level, capacity-building on local governments can be done. This implies that the local employees and political leaders are trained to create a dialogue and support the communication within the local government. In addition, communication between the public and private sector needs to be improved (UN-Habitat, 2003). Malaysia as an exception of mentioned challenges in South Asia, has a reasonable institutional capacity level “with regulatory controls at national, regional and local levels” (United Nations, 2019). Planning procedures interact with many stakeholders,
including the private sector at regional and local levels. Furthermore, local governments have tools to develop negotiated outcomes which are led by strategic spatial planning from the national government (Malaysia, Ministry of Urban Wellbeing, Housing and Local Government, 2016). The IMF considers several solutions to overcome some of these challenges in Indonesia:

- The role and function of all levels of government need to be clarified and established within a regulatory framework
- The distribution of resources needs to be improved to provide fiscal balance across regions
- Local government needs to be provided with proper tax-raising powers in order to reduce its dependency on the national government
- A mechanism must be put in place to make local governments more accountable
- Local governments’ capacity must be strengthened

**Policy transfer**

Another challenge, on the international level, is to facilitate knowledge-sharing both between developed and developing countries as in between developing countries. Some of the knowledge cannot be applied in their own country, because it is not appropriate or applicable (UN-Habitat, 2003). This has to do with policy transfer, which can be described as “the processes in which knowledge about policies, administrative arrangements, institutions and ideas in one political setting are used in the development of policies, administrative arrangements, institutions and ideas in another political setting” (Thomas & Bertolini, 2015). Some policy is transferable across countries, but some do not. Peck & Theordore (2015) describes policy transfer as ‘fast policy’, which is according to them “those social practices and infrastructures that enable and sustain policy mobility, which enable the complex folding of policy lessons derived from one place into reformed and transformed arrangements elsewhere”. This raises the question: why is policy transfer an important challenge to face? Thomas & Bertolini (2015) mentioned several possibilities. First, municipalities or countries sometimes search for examples to compete with others to improve their image. Second, there are no local examples of solutions to planning problems, so they have to take a look outside their municipality or country. Third, there is lack of information, scientific consensus, a policy disaster or crisis, and new problems occur (Thomas & Bertolini, 2015).
**Operationalization institutional capacity**

The definition of institutional capacity is not a common understanding by all scholars. Harun & Kamase (2012) used the definition from Howitt (1977), the World Bank (2004) and Mimba et al. (2007) to define institutional capacity in governmental organisations. According to them, institutional capacity is defined as “the organisation’s ability to identify problems, to develop and evaluate policy alternatives, and to operate the government’s programs”. This means that the level of institutional capacity would depend on the qualities of the employees. Furthermore, implementation problems are also important for institutional capacity issues. If implementation problems arise, they determine the institutional capacity of those organisations in implementing and performing their tasks (Harun & Kamase, 2012). More scholars have made their own indicators for institutional capacity. To summarise all possible indicators or measurements of institutional capacity according to different scholars, table 2 provides a summary, sorted by ‘types’ (political, social, financial, institutional).

<table>
<thead>
<tr>
<th>Types</th>
<th>Resources literature</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Political</strong></td>
<td>Political instability&lt;sup&gt;1&lt;/sup&gt; Local government prioritization&lt;sup&gt;4&lt;/sup&gt; Level of enforcement&lt;sup&gt;5&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Social</strong></td>
<td>Insufficient schooling/ lack of knowledge&lt;sup&gt;1&lt;/sup&gt; Community support&lt;sup&gt;4&lt;/sup&gt; Commitment to topic&lt;sup&gt;4&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Financial</strong></td>
<td>Insufficient funding&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Institutional</strong></td>
<td>A low level of public accountability&lt;sup&gt;3&lt;/sup&gt; Administrative inefficiencies&lt;sup&gt;3&lt;/sup&gt; Lack of access to information&lt;sup&gt;2&lt;/sup&gt; Autonomy of local governments&lt;sup&gt;4&lt;/sup&gt; Implementation issues&lt;sup&gt;6&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Table 2: Operationalisation institutional capacity indicators (source: own work).

<sup>1</sup> Nsouli, 2000/Harun & Kamase, 2012/Brown, 2018;  
<sup>2</sup> Hsieh, 2006;  
<sup>3</sup> Mimba et al., 2007/Brown, 2018;  
<sup>4</sup> Cuevas et al, 2015;  
<sup>5</sup> Khan, 2004;  
<sup>6</sup> Harun & Kamase, 2012

2.2 Conceptual model

![Figure 4: Theoretical framework (source: own work).](image-url)
The theoretical framework helps answer the main research question and the research problem statement. Therefore, the theoretical framework consists of the three concepts from the main research question and research problem statement, which were: “To what extent does the implementation of multi-level governance policies cause institutional capacity problems in the application of land value capture instruments with regard to large infrastructure projects in Indonesia?” and “Large infrastructure developments in Indonesia got stuck by lack of finance and institutional capacity, whereby decentralization places an important role in the political system. A knowledge gap on multi-level governance, institutional capacity and alternative financial instruments (i.e. land value capturing with regard to transit-oriented development) needs to be decreased in order to increase spatial developments in Indonesia.” The three concepts therefore are: institutional capacity problems, governance structure (or multi-level governance), and the application of land value capture instruments at large infrastructure projects. Within this theoretical framework, the conditions are the institutional capacity problems, because this is already known and occurs in Indonesia. The independent variable (and coherent mechanism) is the governance structure or multi-level governance. The dependent variable is the application of land value capture instruments at large infrastructure projects. The prediction is that multi-level governance leads to institutional capacity problems, which result in implementation problems of land value capture instruments. More specific, the degree of autonomy will affect institutional capacity problems. The more (fiscal) autonomy a certain level of government has, the more institutional capacity problems will occur.
Chapter 3. Methodology

This chapter will explain the used methodology in this research. The underlying choices, thoughts and techniques are explained. One way to explain which aspects in research methodology can exist, is the research ‘onion’ (figure 5) (Saunders, Lewis & Thornhill, 2016). The chosen aspects consist of critical theory, deductive approach, multi-method qualitative, archival research, survey, and cross-sectional.

![Figure 5: Chosen aspects within the research ‘Onion’ (source: Edited from Saunders, Lewis & Thornhill, 2016).](image_url)

3.1 Research philosophy

For doing research its important which way the research will go with his research, because it affects the assumptions, research methods, research strategies and kind of research approach (Saunders, Lewis & Thornhill, 2016). Guba & Lincoln (1994) discussed four types of research philosophies, namely: positivism, postpositivism, critical theory and constructivism. Each philosophy has certain assumptions – ontology, epistemology and methodology – to distinguish those philosophies (Guba & Lincoln, 1994). For this research, positivism as a research philosophy is chosen. The explanation is as follows.

Ontology refers to “the nature of reality or what is real and does exist?” (Creswell & Porth, 2018). The ontological assumption of positivism is ‘naive realism’. This means that reality exists, which can be “understood, identified and measured” (Park, Konge & Artino, 2020). This ‘reality’ are assumptions based on literature, where with empirical data causal relations are
Chapter 3. Methodology

This research assumes that the more (fiscal) autonomy a certain level of governments has, the more institutional capacity problems will occur, which will lead to implementation problems of land value capture instruments. Institutional capacity problems, multi-level governance policies, and land value capture instruments are researched to verify this assumption and check the supposed connections. The next assumption, epistemology, refers to ‘dualist’ or ‘objectivist’ (Guba & Lincoln, 1994), which means the researcher is objective and does not influence the data collection and results (Park, Konge & Artino, 2020). This research is based on literature (desk research) and expert interviews and uses a software program to analyse the results. This means there are no interpretations of the researcher involved. Lastly, the methodology assumption refers to verification of the assumptions based on the literature by examine “the explanatory or causal relationships between variables in the study” (Park, Konge & Artino, 2020). This fits the assumption, because this research tries to examine supposed relationships between institutional capacity problems and multi-level governance, in the application of land value capture instruments in Indonesia.

3.2 Research approach

A research study can be an inductive or deductive study (Van Thiel, 2014). The choice for inductive or deductive depends on the amount of knowledge available and the chosen research philosophy. In a deductive study, a certain theory or hypothesis is set, after which this can be tested in a later (i.e. empirical) phase (Niu, Zhang & Yang, 2007). These hypothesis “provides guidance on the sorts of cases to be selected, the data to be collected and the analysis to conduct” (Farthing, 2016). This is in contrast to inductive studies, whereby theory can only be developed during the empirical phase (Van Thiel, 2014). This study uses the inductive approach because the results from the literature and expert interviews develop a certain theory. Furthermore, although there is a certain prediction, a clear hypothesis which can be tested is not relevant.

3.3 Research strategy and methods

This study focusses on multi-qualitative methods, which means more qualitative methods are used. According to Given (2008), qualitative methods are more useful to develop explanations for causal factors within explanatory research. The strategies in this study are related to the explorative research approach, which are desk research and expert interviews. The use of these methods is chosen, because it can be used to combine data and the findings, whereby it is more reliable (Saunders, Lewis & Thornhill, 2016).

3.3.1 Desk research

As first step in this research, desk research was done. Desk research provides the opportunity to gain a lot of data, because of the increased available data due to the current digitalization period (Saunders, Lewis & Thornhill, 2016). Possible documents within this study are government sources such as publications, reports and (national) statistics. These documents can be used to search for data about the amount of infrastructure developments both in the past as in the future. Furthermore, documents about the Indonesian government structure or land value capture instruments can be examined to gain precise information about these topics.
3.3.2 Expert interviews

To develop explanations for causal relationships, expert interviews with a semi-structured interview guide (both oral as written) were held. These interviews addressed all topics (i.e. institutional capacity problems, multi-level governance and land value capture instruments), to get more in-depth information. This method was chosen, because it gives interviewees (a bit of) freedom to express themselves and follow-up questions on the interviewee’s responses can be asked. Those are big advantages of semi-structured interviews compared to for example a written questionnaire (Kallio et al., 2016).

Respondents were asked if they were willing to do a semi-structured interview. If they were not able to, or were not interested, the same questions could be also answered by mail. This research method was chosen, because the respondents had more time to answer so it took less time to participate, and the researcher still got answers to important questions. When conducted the expert interviews, the researcher shortly introduced the topic in general. Then, the researcher started with content-related and in-depth questions. If all questions were answered, the researcher asked the respondent if he or she had any comments in response to the interview or if he or she would like to share more information about the topic of the study. Finally, the researcher asked the interviewee if he or she was interested in receiving the outcomes of the study by mail.

The respondents for the expert interviews were chosen to obtain information from ‘experts’ from the field. These experts consisted of people from the Ministry of Economic Affairs in Indonesia and lecturers from Universities in Indonesia, whom work or have worked with large infrastructure projects, multi-level governance or land value capture in Indonesia.

<table>
<thead>
<tr>
<th>Institution</th>
<th>Function</th>
<th>Oral</th>
<th>Written</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University UNIKA</td>
<td>Lecturer at the Department of Law and Communication</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>University Universitas Gadjah Mada (UGM)</td>
<td>Professor in Urban Planning</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>UNDIP University</td>
<td>Lecturer at the Department of Regional and Urban Planning</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Institut Teknologi Bandung</td>
<td>Associate professor at the Department of Regional and City Planning</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Institut Teknologi Bandung</td>
<td>Professor at the Department of Regional and City Planning</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Institut Teknologi Bandung</td>
<td>Associate professor at the Department of Regional and City Planning</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Institut Teknologi Bandung</td>
<td>Associate Professor at the Department of Regional and City Planning</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>University of Westminster</td>
<td>Professor at Urban Infrastructures and Planning</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Consultant</td>
<td>Consultant/works for the Ministry of Public Works</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>National government</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coordinating Ministry for Economic Affairs</td>
<td>Lead of the Deputy for Infrastructure Acceleration and Regional Development</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Coordinating Ministry for Economic Affairs</td>
<td>Staff member for Infrastructure and Regional Development</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Coordinating Ministry for Economic Affairs</td>
<td>Staff member for Infrastructure and Regional Development</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Table 3: Sample interviewees (source: own work).
Chapter 3. Methodology

The expert interviews were analysed by coding. Data from the expert interviews was collected by recording, when the interviewee gave permission for this. The researcher made transcriptions and did the coding through the software programme ATLAS.ti afterwards.

3.3.3 Operationalization research questions

The subquestions from this study are divided by topic, namely: institutional capacity, multi-level governance and land value capture instruments. For each subquestions, the relevant research strategy or method, and data sources are explained.

<table>
<thead>
<tr>
<th>Subquestion</th>
<th>Topic</th>
<th>Research strategy/method</th>
<th>Data source</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the characteristics and common problems of multi-level governance in Indonesia?</td>
<td>Multi-level governance</td>
<td>Desk research and expert interviews</td>
<td>Government documents; expert interviews (interviewee Universities)</td>
</tr>
<tr>
<td>How has multi-level governance been implemented with regard to the implementation of large infrastructure projects in Indonesia?</td>
<td>Multi-level governance</td>
<td>Desk research and expert interviews</td>
<td>Government documents; expert interviews (interviewee Universities)</td>
</tr>
<tr>
<td>To what extent do levels of government in Indonesia experience institutional capacity problems?</td>
<td>Institutional capacity</td>
<td>Desk research and expert interviews</td>
<td>Reports from financial investors such as ADB and Worldbank; expert interviews (interviewee Universities)</td>
</tr>
<tr>
<td>To what extent do institutional capacity problems appear with respect to the implementation of large infrastructure projects in Indonesia?</td>
<td>Institutional capacity</td>
<td>Desk research and expert interviews</td>
<td>Reports from financial investors such as ADB and Worldbank; expert interviews (interviewee Universities and Ministry)</td>
</tr>
<tr>
<td>To what extent do levels of government in Indonesia use land value capture instruments?</td>
<td>Land value capture instruments</td>
<td>Desk research and expert interviews</td>
<td>Expert interviews (interviewee Universities, consultant and Ministry)</td>
</tr>
<tr>
<td>To what extent do land value capture instruments appear with respect to the implementation of large infrastructure projects in Indonesia?</td>
<td>Land value capture instruments</td>
<td>Desk research and expert interviews</td>
<td>Expert interviews (interviewee Universities, consultant and Ministry)</td>
</tr>
<tr>
<td>Is the use of land value capture instruments for infrastructure projects hindered by multi-level governance related to institutional capacity problems?</td>
<td>Multi-level governance, institutional capacity and land value capture instruments</td>
<td>Desk research and expert interviews</td>
<td>Expert interviews (interviewee Universities, consultant and Ministry)</td>
</tr>
</tbody>
</table>

Table 4: Operationalization subquestions (source: own work).
3.4 Research design

According to Van Thiel (2014), a research design consists of eight elements which together provide a good overview of how the research will proceed. The elements are: research problem (1), theoretical framework (2), sampling framework (3), research strategy, method(s) and technique(s)(4), measurements to ensure reliability and validity (5), data analysis (6), time schedule (7) and the research results (8). Those elements, except for the time schedule are shown in figure 6. All elements are explained in previous or further sections, and therefore are expected to be known.

Figure 6: Research design (source: own work).

3.5 Validity and reliability

Because a research design is supposed to represent a logical set of statements, you also can judge the quality of any given design according to certain logical ‘tests’. These ‘tests’ could be categorized by internal validity, external validity and reliability (Yin, 2014).

3.5.1 Internal validity

Internal validity means that a trustworthy causal relationship is established, showing which conditions lead to other conditions (Yin, 2014; Saunders, Lewis & Thornhill, 2016; Cuncic, 2020). In the perfect case, the research would have a high internal validity. This means the researcher is convinced that there is a trustworthy causal relationship (Statistics How To, 2014). A problem with internal validity is the extent to which respondents want to participate or not (so-called non-response) (Van Thiel, 2014). Non-response can affect the sample, if respondents are been asked to do interviews, but not want to participate. This affects the representativeness of the sample, because the sample then can be too small for analysis (Van Thiel, 2014). The last problem with internal validity is if respondents do not reply truthfully, or they do not answer all questions, but partly (Van Thiel, 2014). One way to improve internal validity is to avoid the researcher’s bias (Zohrabi, 2013). Every researcher has his own beliefs and values, which could occur a subjective view and could affect the results. The researcher should be critical, objective and explicit, and try to “remain as non-judgmental throughout the research process” (Zohrabi, 2013). Another way to improve internal validity, is the use of triangulation, collecting data from several sources which can confirm findings. If multiple sources have the same results, the data is valid (Zohrabi, 2013). In this research, semi-structured interviews and desk research are done, so triangulation is used. In addition, the outcomes of both semi-structured interviews and desk research are compared to each other, so the internal validity can be checked. The last improvement is that the same interview guide
is used for most semi-structured interviews. Hereby, the same questions in the same order are used, which makes this research more valid (Dingemanse, 2019).

3.5.2 External validity
External validity means to what extent the research can be generalized, so if the research also holds for other countries, cities or institutions (Van Thiel, 2014). This research focusses on the relationships between institutional capacity problems and multi-level governance in the application of land value capture in Indonesia. Can the results also be applied in other (Asian) countries? Or is it possible to generalise the relationship between institutional capacity problems and multi-level governance to other domains such as education or healthcare? Other Asian countries with the same problems can benefit from this research if the circumstances of institutional capacity are the same. But because of different circumstances, such as policies or financial aspects, the external validity for other Asian countries can be considered as low. The generalizability of other domains can be considered low as well due to other institutional capacity problems or stakeholders. However, some domains – for example, the environmental or climate change –, face the same multi-level governance structure and coherent problems. According to Balme & Ye (2014), decentralization is “a condition for the political system’s capacity for environmental policy”, because new environmental institutions at different levels of governance were introduced. Chapter 6 will further explain the external validity of this research.

3.5.3 Reliability
Reliability means that “the operations of a study can be repeated, with the same results. The goal of reliability is to minimize the errors and biases in a study” (Yin, 2014). According to Van Thiel (2014), reliability encounters accuracy and consistency, but both authors mean the same: if the research can be repeated, without knowing of any further information. The answer to this question for this research is a bit difficult for now. On one hand, the current government structure is maybe changed in a few years, so the results are different then. But on the other hand, if the circumstances are the same, the research is reliable. The reliability can be increased if the researcher will give access to all collected data, including transcripts and coding schemes. In addition, the researcher needs to prevent herself from influences on the researcher’s interpretation (Saunders, Lewis & Thornhill, 2016).
Chapter 4. Results

This chapter consists of the multi-level governance structure in Indonesia with some corresponding regulations. Hereafter, institutional capacity in Indonesia will be explained, also in relation with multi-level governance. Lastly, useful land value capture instruments in Indonesia will be explained. These instruments can be used in the current or future situation.

4.1 Government intentions in relation to infrastructure

In general, governments of Asian countries “face challenges to meet the demand for new infrastructure” (ADB Institute, 2018). This also holds for the Indonesian government. According to both the Indonesian government as several scholars, the quality and quantity of the infrastructure is lacking (personal communication, interviewee 5, 2020). According to Puspasari from Lman (State Assets Management Agency) (n.d.) there are five main issues in infrastructure developments in Indonesia. These issues are:

1. **Planning and project preparation (11%)**: Which means insufficient funding for feasible studies and unresolved agreements between stakeholders in relation to locations or traces
2. **Construction (23%)**: Which means synchronization amongst projects and lack of anticipation on field conditions in the design
3. **Land acquisition (40%)**: Which means unfit and unmet purpose of land, funding readiness for land acquisition, overlapping ownerships of land and conflicting regulations
4. **Funding for land and construction (18%)**: Which means limited budget allocation, readiness of private investments and budget flexibility
5. **Project approval (8%)**: Which means environmental issues and construction issues

![Figure 7: Main issues infrastructure developments in Indonesia (Puspasari, n.d.).](image)
To summarize the above, the most important challenges in infrastructure developments are limited funding, problems with land acquisition, regulation problems and coordination among stakeholders (Puspasari, n.d.; KPPIP, 2017). The impacts on the investments could be the following (KPPIP, 2017):

- **Planning and project preparation**: Government policy changes in a short time show a weak commitment in attracting investors
- **Construction**: Lacking infrastructure in the neighbourhood of the project can result in the difficulty to access the location of the project
- **Land acquisition**: Investors choose other countries to invest
- **Funding for land and construction**: Decrease of certainty of project feasibility
- **Project approval**: Uncertainties in the schedule may slow down the investment schedule

To face those challenges, the Indonesian President Joko Widodo announced in 2018 his national development agenda for 5 years, whereby the improvement of infrastructure projects is an important issue (PWC, 2016; Rakhmat, 2018). This national policy document is a first step to face the challenges of infrastructure developments in Indonesia. To address the budget issue, the Indonesian government would like to explore alternative solutions for financing infrastructure (Indonesia Investments, 2018). One possibility to do this, is by using land value capturing.

### 4.2 Multi-level governance in Indonesia

Since the implementation of the Regional Administration Act of 1999 in 2001, Indonesia has transformed from a centralized and hierarchical political system to a decentralized and democratic one (Hudalah, 2010; Hudalah & Woltjer, 2007). This means that the national governments functions and authorities were transferred to the regional and local governments (Brillantes, 2004; Imron, 2011). The main purposes for doing this was to improve the local economic development (Talitha, Firman & Hudalah, 2019) and to provide more room for the local and regional governments to consider alternatives in their plans (Hudalah, 2010).

Unfortunately, there is no clear evidence shown of its success in regional development (Talitha, Firman & Hudalah, 2019), and even more disadvantages came with. First, local governments in peri-urban areas carry out regional development policies alone without collaboration with their neighbouring municipalities. They consider it as a ‘kingdom of authority’ (Legates & Hudalah, 2014). Another issue are difficulties with the division of local governments. Local governments are sometimes divided into more autonomous administrative areas to “bring the government closer to the people and to improve the quality and efficiency of public service delivery” (Talitha, Firman & Hudalah, 2019). However, an enormous amount of new autonomous regions makes the collaboration and decision-making more difficult, and could create fragmentation in regional development (Firman, 2009).

Furthermore, the distribution of power, resources and authority between the national, regional and local government have been criticized because of their actual role in developments (Hudalah, 2010; Talitha, Firman & Hudalah, 2019). In addition, sometimes local governments fail to support infrastructure plans from the national government, because they do not have enough money to hire local people with certain knowledge (Indonesia Investments, 2017) and therefore have a lack of “the necessary administrative and managerial skills” (Firman, 2003). In fact, moreover, all these different levels of government cause more
complexity to develop large infrastructure projects “that cover land in more than one province”, because of the lack of cooperation and coordination between all governments (Indonesia Investments, 2017). Lastly, the national government is concerned with the proper use of public funds within the regional and local government (Firman, 2003).

4.2.1 Levels of government
According to Firman (2003), Indonesia “consists of a huge archipelago”, which has many geographical areas and diverse cultures and socioeconomic conditions. Furthermore, Indonesia is a country with more than 200 million people (Firman, 2003) and has 34 provinces, five of which have a special status (OECD, 2016). The provinces/regions are divided into regencies and cities/municipalities, which are further divided into subdistricts and villages. These districts and villages represent “the lowest level of governmental administration” (OECD, 2016).

Besides numbers of the levels of government, the roles and responsibilities of each level is important. The OECD (2016) made an overview of the most important roles and responsibilities of the different levels of government. This is provided in table 5.

<table>
<thead>
<tr>
<th>Level of government</th>
<th>Main roles and responsibilities</th>
</tr>
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</table>
| **National government**              | • Ministry of Home Affairs, Bappenas and the Ministry of Finance are the key central institutions concerned with decentralization and resource allocation  
• Allocation of most financial resources to provincial and local governments  
• Legislative and regulatory power nationally  
• Control over government staffing and performance incentives                                                                 |
| **Provincial/regional governments**  | • Capacity building  
• Supervision of local government  
• Budget preparation  
• Local taxation  
• Close links to the national government as the deconcentrated bodies of the national government                                                                 | |
| **Municipal governments**            | • Provision of key public services (exception: foreign affairs, monetary and fiscal policy, judiciary, religious affairs)  
• Interaction with citizens and businesses  
• Oversee regional budget  
• **Local infrastructure**                                               |
| **District governments**             | Primary responsibility for the provision of key public services such as health, education and **infrastructure** (exception: foreign affairs, monetary and fiscal policy, judiciary, religious affairs). |
| **Village governments**              | Use financial resources both from district and provincial governments’ budgets and from national programs. Do not have a formal responsibility in public service delivery. |

*Table 5: Roles and responsibilities of the different levels of government (source: OECD, 2016).*
As seen in table 5, the most important levels of government for infrastructure are the district governments and municipal governments. This is, because they have the closest interaction with citizens, “which should enhance its response to various public needs and requirements as and when they arise” (Purwanto & Pramusinto, 2018). In fact, the national government has given the district and municipal governments the most administrative responsibilities (Sutiyono, Pramusinto & Prasojo, 2018). Because of the importance of key public services and therefore infrastructure development, minor activities such as waste disposal management or street maintenance are limited in district and municipal governments (Purwanto & Pramusinto, 2018). Next to the district governments and municipal governments, both provincial governments as the national government are important. The provincial governments are important for the co-ordination and capacity building, and the national government for providing the financial resources (OECD, 2016). In more detail, the national government is divided into 34 Ministries. The involved Ministries for infrastructure are the Ministry of National Development Planning (Bappenas), the Ministry of Administrative and Bureaucratic Reform (KemenPAN) and the Ministry of Finance. The Ministry of National Development Planning (Bappenas) is responsible for national planning in all sectors, including infrastructure development (OECD, 2010; OECD, 2016). In addition, together with the Ministry of Finance it determines the budget. The last Ministry, the Ministry of Administrative and Bureaucratic Reform (KemenPAN) “assists the President in formulating policies and coordinating policy implementation” (OECD, 2016).

4.2.2 Types of multi-level governance
As explained in chapter 2, the concept multi-level governance can be distinguished in two types, type I and II. Type I refers to a federal structure where the authority is given to a limited number of levels of government, and the national government gave the authority to the regional and local governments (Faludi, 2012). This refers to decentralization and is related to the Indonesian situation of decentralization and multi-level governance. However, type II focusses on “overlapping, policy-focussed jurisdictions” (McTravish, 2015; Curry, 2018). This means that there are multiple levels of governance with overlapping policies, and where the number of levels of governance of other institutions depends on the domain (Chou et al., 2017). A type II multi-level governance domain could be the transport sector, where for example the most important institutions are the state-owned enterprises (Faludi, 2012). Because Indonesia has state-owned enterprises for rail- and highways, it can also be explained as type II multi-level governance. Hooghe & Marks (2003, b) and Piattoni (2010) discussed the possibility of both types of multi-level governance within one country. They both concluded type I and type II can occur in one country, where type II “is widespread at the local level” (Hooghe & Marks, 2003, b). Therefore, a combination of type I and II is applicable in Indonesia.

4.2.3 Related laws and regulations
The most relevant laws and regulations related to infrastructure development and land value capture are explained in this paragraph. As mentioned before, there is no specific regulation for LVC, but there are some regulations that effect the implementation of LVC, and therefore are related.

4.2.3.1 Decentralization law (No.23/2014)
Since the decision of the decentralization in 1999, which was ratified in 2001, the decentralization law changed a few times. In 2004, the law was revised for the first time and
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the second revision was in 2014, which is the decentralization law (No.23/2014) that is currently used (Rudy et al., 2017). Both revisions lead to changes in responsibilities of all levels of government. The national government gave the local governments at first (in 2004) a lot of power but after the emergence of the ‘small kings’ – which means the national government seemed to lose control of the local governments due to the local heads –, the power was given back (in 2014) to the regional and national government (OECD, 2016; Wulandari, Budiono & Ekayani, 2019).

4.2.3.2 National Strategic Projects and Priority Projects (Presidential Decree No.3/2016)

To fasten the development of new infrastructure and prevent delays due to a large range of stakeholders, President Joko Widodo in 2016 decided to make a list of the most important projects called National Strategic Projects (PSN) and Priority Projects (PWC Indonesia, 2016; KPPIP, n.d., a.; Indonesia Investments, 2018). To control, coordinate and monitor these projects, the KPPIP (Committee for Acceleration of Priority Infrastructure Delivery) was formed (PWC Indonesia, 2016; KPPIP, n.d., a). The KPPIP works across Ministries and other institutions, whereby the lack of effective coordination and communication between the large range of stakeholders was prevented (KPPIP, n.d., a). The chosen projects were selected based on which had the most strategic value to Indonesia’s economy, and fitted four principles: “it should be in accordance with the type of infrastructure covered in Presidential Regulation No.122/2016 on the Accelerated Provision of Priority Infrastructure (1), the project should provide benefits both regionally as well as financially (2), the project requires acceleration support that KPPIP can add value to (3), and the project should generate an impact leading up to the participation of private enterprises (4)” (Syarizka, 2017). A huge advantage of the National Strategic Projects is that when a project is on the list, the process of permits and land acquisition goes faster, and political risks are less (Jakarta Post, 2020). Furthermore, you can so-called “bypass local governments”, which means the projects are already approved by the national government which makes it easier and more attractive for private developers to get involved in the projects (personal communication, interview 3, 2020). However, the developers still need to have their building permits from the local governments to start building the project (President of the Republic of Indonesia, 2016). Furthermore, the National Strategic Projects also faces the same challenges with infrastructure developments in Indonesia, although the percentages are a bit different. For example, land acquisition is a problem in 40% of the projects in general, but 30% of the project belongs to the National Strategic Projects (KPPIP, 2017).
In the case a TOD project can be added to the list of National Strategic Projects, which according to the principles is a possibility, the implementation of that project goes smoother and leads to faster implementation of land value capture (pilot) projects.

4.2.3.3 Basic Regulation on Agrarian Affairs (No.5/1960)

The Basic Regulation on Agrarian Affairs (after this: Basic Agrarian Law) sets out the basic provisions and agricultural conditions on land affairs (Maryouri, 2018). It describes the principles and main issues of land and describes specific rights for the use of land, such as the right of exploitation, the right of building, the right to use, the right to lease (Article 16) (The President of the Republic of Indonesia, 1960), and other rights which are regulated by law (i.e. land acquisition and expropriation, Article 18 of No.5/1960 and Law No2/2012) (World Bank, 2007, b; personal communication, interview 4, 2020). It does not refer to (infrastructural) developments and it can be considered as a very general law on land (personal communication, interview 4, 2020).

**Article 16 of the Basic Regulation on Agrarian Affairs, No.5/1960**

(1) The rights on land as meant in paragraph (1) of Article 4 are as follows:

- a. hak milik (right of ownership),
- b. hak guna-usaha (right of cultivation),
- c. hak guna-bangunan (right of use of structures),
- d. hak pakai (right of use),
- e. hak sewa (right of lease),
- f. hak membuka tanah (right to clear land),
- g. hak memungut-hasil-hutan (right to collect forest produce), and
- h. rights other than those mentioned above which shall be stipulated by way of an act and rights of provisional nature which are mentioned in Article 53.

**Source:** The President of the Republic of Indonesia, 1960.
4.2.3.4 Acquisition of Land for Development in the Public Interest (No.2/2012)
As mentioned before, land acquisition is still one of the main issues of infrastructure developments in Indonesia, which is also acknowledged by the Coordinating Minister for Economy (Aziz, 2017). That is why the Indonesian government ratified the regulation for land acquisition developments, No.2/2012. The previous law for land acquisition of 2005 was not effective, because negotiations processes ended in long processes and disagreements, where both the community as the governments did not have the power to solve this problem (Mahi & Nazara, 2012; Maryouri, 2018). The new law of 2012 includes a clearer mechanism for land acquisition “to facilitate the development of new infrastructure projects” (Hamzah & Pasaribu, 2012). This law describes 18 developments (such as public roads, airports, hospitals, cultural heritage), which are considered as public interests (Simamora, 2018; personal communication, interview 1, 2020). When the development is on the list, land can be acquired, and the landowner will be compensated. According to article 36 from this law, compensation can be in the form of money, replacement of land, resettlement, shareholding or other forms agreed by both parties (Simamora, 2018). One development which is considered as public interest, is in relation to railways: developing of railways, railway stations and railway operations facilities. This means that if the TOD concept is implemented somewhere, land acquisition for those activities is possible. This will be further explained more in paragraph 4.4.3.

4.2.3.5 Tax (No.28/2009)
The Indonesian government ratified a new Tax Law in 2009. Before 2009, taxes (including property tax – which is called ‘Land and Building Tax’ in Indonesia) belonged to the national government. After implementing the new Tax Law, taxes were given to the local governments. This change was the result of the findings that the local governments are responsible to serve the community (personal communication, interview 2, 2020). Due to this change, local governments got more (local) income. Furthermore, local governments can choose which tax administration system they use, which tax rate they use (Von Haldenwang et. al, 2015), and have administration responsibilities as well, such as fiscal cadastre and valuation of the land (Bird & Martinez-Vazquez, 2014). What this means in relation to TOD and land value capturing will be explained in paragraph 4.4.3.
4.3 Institutional capacity

4.3.1 Indicators of institutional capacity in general

According to the literature, institutional capacity problems mostly occur in developing countries, because of the limited role of institutions (Davis, 2005). This lack of institutional capacity affects infrastructure developments in a negative way, because developments cannot continue and gets stuck (Graham, 2002).

Indicators of institutional capacity are researched (in this thesis) by performing expert interviews and desk research. The general indicators of institutional capacity, according to the expert interviews, are shown in figure 9. Those indicators are sometimes ordered by themes, like ‘human resources’ and ‘staff’. The indicators of institutional capacity are the following:

1. Equipment (related to human resources)
2. Knowledge (related to human resources)
3. Skills (related to human resources)
4. Technology (related to human resources)
5. Qualified staff (related to staff)
6. The amount of staff (related to staff)
7. Awareness of the community
8. Administrative capacity
9. Commitment
10. Coordination
11. Finance
12. Political stability
13. Law enforcement

Some indicators are social indicators (e.g. awareness of the community), where others are more related to the institutions itself (e.g. finance, administrative capacity) or the officials of the institutions (e.g. equipment, knowledge, skills, qualified staff, the amount of staff).

Figure 9: Indicators of institutional capacity in general (source: own work).
4.3.2 Institutional capacity problems in Indonesia

If focused on Indonesia and related to institutional capacity problems instead of general characteristics of institutional capacity, 15 factors of influence have come forward. Those factors are sometimes related to a theme, such as knowledge, innovation, or finance. Furthermore, not all factors occur at all levels of government, so the included levels of government are in the list below. The factors that occur institutional capacity problems in Indonesia are:

1. Different meanings between the national and local government(s) (related to the national and local government(s))
2. Lacking budget for innovation at local governments (related to finance / local governments)
3. Technical issues (related to all levels of government)
4. Lacking communication between local governments (related to communication / local governments)
5. Local governments do not want to innovate in finance (related to innovation / local governments)
6. Corruption (related to all levels of government)
7. Lacking monitoring and control on plans (related to all levels of government)
8. Sectoral rivalry among Ministries (related to politics / the national government)
9. Weak law enforcement (related to all levels of government)
10. Unstable political situation (related to all levels of government)
11. Lacking amount of staff at the national level (related to staff / national government)
12. Local kings (related to local governments)
13. Lack of knowledge at regional governments (related to human resources / regional governments)
14. Lack of knowledge at local governments (related to human resources / local governments)
15. Limitations of local governments (related to finance / local governments)

Figure 10: Institutional capacity problems in Indonesia (source: own work).
1. Different meanings between the national and local government(s)

Local governments are not always in line with the interests of the national government (personal communication, interview 2 and 3, 2020). The problem is that what happens in practice is sometimes totally different than what is already regulated (personal communication, interview 2, 2020). An example of possible different meanings is that President Jokowi would like to move the capital from Jakarta to East Kalimantan (Maulia, 2019), which will affect both cities and areas. The local government of Jakarta may not be in line with this replacement, because they gain a lot of revenue from tourists, and in the future, there might be more tourists visiting the new capital instead of Jakarta. Which will lead to less tourist tax income for Jakarta. The National Strategic Projects are an example of a regulation which will overcome and steer different meaning within infrastructure development. It includes a list of important infrastructural projects for the national government. Local governments have to deal with this list and in that way can support the national interests (personal communication, interview 3, 2020).

2. Lacking budget for innovation at local governments

Local governments spend most of their budget on overhead costs, which means salaries of their staff and other routine costs such as the costs for their buildings (Lewis, 2005). Almost 60 percent of the local budget is going to the salaries of the officials (personal communication, interview 11, 2020). Therefore, only 40 percent remains for other costs. This is in line with the research from Vujanovic from the OECD (2017) which stated that local governments mostly spend their budget on social services and their own administrations (Vujanovic, 2017).

3. Technical issues

Technical issues with regard to institutional capacity problems in Indonesia consist of lack of equipment, useable spatial data and technology. Local governments are running out of equipment to measure land (personal communication, interview 4 and 11, 2020). This leads to longer processes of land measurements when new developments occur. Furthermore, digital measurements such as GPS or other data information systems are yet not used in Indonesia (personal communication, interview 2, 2020). This means all the land have to be measured by hand, which also leads to longer processes or more officials. Lastly, technical issues such as “underreporting of sale transaction prices” can cause substantial losses of revenues of local taxes (ADB, 2019).

4. Lacking communication between local governments

Sharing knowledge and data between both local governments as regional governments is still lacking in Indonesia (personal communication, interview 10 and 12, 2020). This means that collecting data for developments is very difficult. If data is shared between all levels of government, everyone can help each other with developments. The Indonesian government tried to overcome this problem in 2010 by ratifying the ‘One Map Policy’. This regulation aimed to digitise data and information related to land (Shahab, 2016). However, the scale of the map is still 1:50.000, which means it is not very useful (personal communication, interview 6, 7 and 8, 2020).

5. Local governments do not want to innovate in finance

Many local governments are afraid to innovate in finance due to the financial control from the national government. They are afraid to use the received money from the allocation fund of
the national government, because they are responsible on how to spend their money. When the project fails, financial innovation can then be considered as fraud, which can harm the officials whom were involved can be put in jail (personal communication, interview 4 and 5, 2020).

### 6. Corruption

According to the literature (Davis, 2005; Mimba et al., 2007; Hudalah, 2010) and expert interviews (personal communication, interview 2, 4, 5 and 12, 2020), corruption is something that still occurs in Indonesia. The Indonesian government introduced the Indonesian Corruption Watch (ICW) after the decentralization to overcome the corruption problem. But this still occurs, mostly in regional governments. In 2017, 33 percent of the corruption cases were in regional governments (ICW, 2017). Related to corruption problems, landowners also play an important role in bureaucracy on a local scale. Landowners can manipulate their land value when selling it, so they have to pay a lower property tax (ADB, 2019). The prices which are registered in the cadastre register are then informal prices, and not the real values (personal communication, interview 3, 2020).

### 7. Lacking monitoring and control in plans

The national government has not enough staff to check plans from local governments, such as the land use plan (personal communication, interview 3 and 5, 2020). Land use plans then cannot be reviewed by the national government, which will lead to a delay in developments. The review process can be shared among regional governments in theory, but in practice this will not work. The regional governments do not have the capacity to review the plans (personal communication, interview 3, 2020).

### 8. Sectoral rivalry among ministries

Individual ministries are protecting their own interests first, which sometimes leads to a sort of rivalry among ministries (personal communication, interview 3, 2020), so-called inter-ministerial competition (Smoke & Lewis, 1996). Just like for example climate change, which is also quite ‘new’, land value capturing can also be seen as an inter-sectoral issue. More Ministries need to be involved to implement land value capturing in the right way.

### 9. Weak law enforcement

The lack of enforcement of regulations, in particular in land-use regulation in Indonesia is still weak (Monkkonen, 2013). One factor that influences this is that local governments have other opinions and do what they would like to do, instead of what they have to do. Another factor is that the police who can implement the law in the right way does not have enough capacity to control (personal communication, interview 2, 2020). Lastly, specific roles for the police at a local level are not delineated, which means that their responsibilities are not “formally backed up by law enforcement power” (Kristiansen & Trijono, 2005).

### 10. Unstable political situation

The unstable political situation stems from the dependence of the leaders, the election term and the earlier mentioned corruption. Every 5 years there is a new election and the President can only hold for a maximum of 10 years (Macdonald, 2013). New Presidents may have other opinions than the previous one, which involve for example infrastructure developments. The
current President stated that infrastructure developments are his priority, but what if the next President does not continue with all ongoing projects?

11. Lacking amount of staff at the national government
The amount of staff within the national government is not enough to cover all their responsibilities, such as reviewing the plans of the local governments (personal communication, interview 3 and 5, 2020). This is therefore a challenge for the introduction of land value capturing.

12. Local kings
Due to the decentralization, local governments got more power which led to institutional fragmentation and local egoism (Holzhaeker, Wittek and Woltjer, 2016). Firman (2009) describes this as follows: “Local governments feel like ‘small kingdoms of their own’, in which even provincial and central government have no right to intervene with their autonomy”. The status of these ‘local kings’ is still puzzling. Therefore, it is important to look at the background and relationships with the community “to understand what kind of democracy is taking roots in Indonesia’s local societies” (Choi, 2012).

13. Lack of knowledge at regional governments
Regional governments do not have the capacity and knowledge to have smooth (infrastructure) developments, in terms of time (i.e. possible delays), policymaking or policy implementation (personal communication, interview 2, 3, 5 and 11, 2020).

14. Lack of knowledge at local governments
Local governments do not have the capacity and knowledge to have smooth (infrastructure) developments, in terms of time (i.e. possible delays), policymaking or policy implementation (personal communication, all interviews, 2020).

15. Financial limitations local governments
Currently, local governments have limitations in terms of finance and are depending on the allocation fund from the national government (Firman, 2009; personal communication, interview 3 and 12, 2020). Local governments do not have the fiscal authority, which means they can create enough income (personal communication, interview 3, 2020). They can create some income, but this only relates to tax and is limited compared to the allocation fund (Lewis, 2005). Local governments are not allowed to take money from property owners if it is not based on tax, otherwise it can be considered as fraud (Wardani, 2019; personal communication, interview 4, 2020). This makes the financial possibilities in the current situation low.

4.3.3 Institutional capacity problems related to multi-level governance
In the previous paragraph 15 institutional capacity problems in Indonesia were described. Some of them are related to multi-level governance, which in figure 11 is shown as ‘decentralization’. Decentralization is namely the cause for multi-level governance in Indonesia. Seven out of 15 institutional capacity problems are related to multi-level governance or decentralization, whom are explained hereafter. The whole network which also includes challenges for the implementation of land value capturing, is shown in appendix 1.
1. **Lacking communication between local governments - decentralization**  
The first relation is the relation between ‘lacking communication between local governments’ and ‘decentralization’ or ‘decentralization system’. Due to the decentralization, local fragmentation has arisen (Holzhacker, Wittek and Woltjer, 2016). A large number of local areas such as districts and municipalities came with the Decentralization Law in 1999. Of course, decentralization is not the only reason for this lacking communication, but there certainly is some relation.

2. **Corruption - decentralization**  
The second relation is the relation between ‘corruption’ and ‘decentralization’. According to Marquardt (2014), multi-level governance is closely related to corruption. Furthermore, Haryanto & Astuti (2017) researched this relation as well and found a very strong and consistent positive relation between corruption and decentralization. The more decentralized expenditure, the higher the corruption (Haryanto & Astuti, 2017).

3. **Weak law enforcement - decentralization**  
The third relation is the relation between ‘weak law enforcement’ and ‘decentralization’. According to Kristiansen & Trijono (2005), is weak law enforcement the result of decentralization. When the governance system changed in 1999 due to the Decentralization Law, the police force did not change, and therefore is not decentralized. The roles of the police in the national and regional areas are clear, but the role of the police at the local level is not. Which means these responsibilities are not in the law (Kristiansen & Trijono, 2005).

4. **Local kings – decentralization**  
According to Holzhacker, Wittek and Woltjer (2016), local kings are the consequences of the decentralization in Indonesia. Because of the decentralization, local governments got more power to make their own rules and norms (Firman, 2009; personal communication, interview 3, 2020).

5. **Lack of knowledge at regional governments – decentralization**  
Decentralization led to a gap of knowledge within and between regional governments. Due to the decentralization, the number of regional governments and thus administrative units has increased. These increased geographical boundaries “made spatial planning and land-use zoning problematic, especially from the perspective of business wanting to build and invest” (Vujanovic, 2017). This is because more officials were needed which led to more spending on salaries and other “other unproductive assets such as office buildings” (Vujanovic, 2017). The rest of the budget is then for other expenditures, where training and gain knowledge for officials is not a priority.

6. **Lack of knowledge at local governments – decentralization**  
Before the decentralization, the main function of local governments was to implement the national policies and programs from the national government. Therefore, local governments “never built the capacity to carry out economic planning and undertake initiative to promote local economic growth” (ADB Institute, 2016). Decentralization gave local governments more authority, political power and mostly more responsibilities. These responsibilities were new and local governments had no knowledge of those topics. This is still a problem in Indonesia.
7. Financial limitations local governments - decentralization

Regional and local governments receive money from the national government since the introduction of the decentralization in the form of the allocation fund (Vujanovic, 2017).

Figure 11 shows the relations between institutional capacity problems in Indonesia and the decentralization. The red boxes are the institutional capacity problems, such as ‘lack of knowledge at regional governments’. Decentralization is in the box at the bottom left side, which is multi-level governance, because this is the name for the governance system and decentralization is only the change of that system. The rest of the network which also includes challenges for land value capturing, is shown in figure 16/appendix 1.

Figure 11: Relations multi-level governance and institutional capacity problems in Indonesia (source: own work).
4.4 Land value capture instruments in Indonesia

This paragraph describes some experiences with LVC in Indonesia. Furthermore, the related aspects regarding LVC are explained. Lastly, the problems and possible solutions regarding LVC in Indonesia are shown.

4.4.1 Experiences of LVC

Land value capturing is not widely used in Indonesia (Wardani, 2019). However, some studies of land value capturing are performed, both theoretically as practically. There are some projects where land value capture instruments are used, or where at least they have tried to do this. Some examples are described in the following section.

**Semanggi flyover – Jakarta**

The Semanggi flyover project in Jakarta was a project which build “two elevated box girder bridges to revitalize the existing Semanggi Interchange” (ICE, n.d.). It is situated in the South of Jakarta and consists of three main roads: Jakarta Inner Ring Road, Jl. Gatot Subroto and Jl. Jend Sudirman. The aim of the project was to improve the existing road infrastructure to reduce congestion by 30 percent (Indonesia Investments, 2016).

The Semanggi flyover was completely financed by a private building company from Japan, Miltra Panca Persada. This company developed a new building in the area of the Semanggi flyover. They asked the local government of Jakarta if they could get permission to have more floors in their building. They made a deal in which the company got a higher building floor coefficient (which is the standard for the maximum size of building floor area permitted in an area) when they financed the Semanggi flyover in return (Indonesia Investments, 2016; The Jakarta Post, 2016; personal communication, interview 6 and 9, 2020). In this way, the company got more money from their buildings because of the increased price of the area. This
was the result of the presence of the Semanggi flyover, for which they paid as part of the development of the area (personal communication, interview 9, 2020). For both the Japanese private company as well as the local government this was a win-win situation. This ‘deal’ looks similar to the LVC mechanism of the Transfer of Development Rights (TDR). It is not the same, because TDR refers to “a voluntary, incentive-based program that allows landowners to sell development rights from their land to a developer or other interested party who then can use these rights to increase the density of development at another designated location” (Center for Land Use Education, 2005). In the case of the Semanggi bridge, it was voluntary, but instead of the landowner (the Japanese private company) that sold their rights, the local government sold the right to build more floors. Furthermore, the increased density (i.e. more floors) was not on another location, but on the same. Although this kind of LVC mechanism was used for road infrastructure, it can be used under the current regulations in Indonesia and has potential to grow.

**Trans-Sumatra toll road**
The Trans-Sumatra toll road is a project which includes 304 kilometers from Aceh (North) to Bakauheni (South) on the Sumatra island. The whole project consists of 15 sections, and must be complete in 2024 (KPPIP, n.d., b). The state-owned enterprise PT Hutama Karya is assigned by the Indonesian government to develop the Trans-Sumatra Toll Road (The Insider Stories, 2019).

![Trans-Sumatra toll road](source: Indonesia Expat, 2019; Google Maps, 2020).

The Trans-Sumatra Toll Road is financed by PT Hutama Karya. However, they see possibilities to collaborate with the private sector to do value capturing (personal communication, interview 2, 2020; Yasa, 2020). They would like to use developer rights as a land value capture mechanism and are still looking for other possibilities (Yasa, 2020).

**Kartamantul region**
The Kartamantul region is a region which consists of the municipality of Yogyakarta, the Bantul district and the Sleman district. To support each other and improve infrastructure developments in their region, they developed a joint secretariat. The secretariat has the aim...
to facilitate the cooperation between the local governments in order to both sharing benefits as well as risks of infrastructure developments (Firman, 2014). Due to the limited budgets of local governments for supporting infrastructure development, the Kartamantul region was searching for innovative finance such as land value capturing. They experienced with implementing taxes, retributions, planning obligations and impact fees. The impact fees were a combination of “retribution of special permits and retribution of nuisance” (Wardani, 2019). All instruments deliver financial advantages, with the exception of planning obligations, which are in-kind contributions (Wardani, 2019). These kinds of instruments are possible under the current regulations. However, the challenge with financial contributions is that those contributions cannot deliver directly to the infrastructure, because it can be considered as corruption (personal communication, interview 2, 2020). A solution for this problem is to develop a local agency for achieving and distribute the revenues of the instruments (Wardani, 2019).

Figure 14: Kartamantul region (Source: Aryantie & Hidayat, 2019; Google Maps, 2020).

4.4.2 Related aspects with regard to LVC
Land value capturing and, more in general, financing infrastructure is related to some aspects such as public-private partnerships, corporate social responsibility (CSR) and social-cultural institutions.

Public-private partnerships (PPP)
Public-private partnerships are defined as “cooperative institutional arrangements between public and private actors” (Hodge & Greve, 2017). In Indonesia, public-private partnerships are regulated by Presidential Regulation No.38/2015. The aim of this regulation is to stimulate investment projects and provide a legal framework for collaboration between the public and private sectors (PWC, 2017). The Indonesian government sees public-private partnerships as important and stated this as one of their key strategies to improve the infrastructure (Oxford Business Group, 2017; Pamungkas & Samsura, 2019). A big advantage of public-private
partnerships is the perspective of finance. The public sector (i.e. the Indonesian governments) does not have the financial capacity to fulfil all its needs. The private sector does not have the power to involve in decision-making, which can lead to ineffective “organizational and institutional frameworks, a lack of competition and efficiency” (Pamungkas & Samsura, 2019). A collaboration can then offer a solution, where “the participation of the private sector in public infrastructure is expected to increase efficiency and reduce the financial burden on the government” (Santoso et. al, 2012).

However, the number of public-private partnerships is still low. One reason for this is the lack of incentive for private investors (Hermawan & Bahar, 2016). Another reason is the procedure of the PPP regulation, which is considered as very complex. The procedure is very complex in terms of implementation and the capacity of the executing agency (Hermawan & Bahar, 2016; personal communication, interview 6 and 12, 2020). This makes the use of public-private partnerships with regard to infrastructure developments not easy. The Indonesian government tries to overcome this implementation problem to work on an institutional arrangement for PPP in which a proper PPP scheme is explained which can be used for each case (personal communication, interview 12, 2020). However, if this implementation process is not changed in a few years, the introduction of land value capture can be more difficult.

**Corporate social responsibility (CSR)**

Corporate social responsibility (CSR) is introduced by the Indonesian government in 2007. Just before 2007, the society was more interested and thinking about responsibilities related to sustainability. That is why the Indonesian government decided to respond (Achda, 2006). Law No.40/2007 was made (Pamungkas & Samsura, 2019; Wardani, 2019). According to Achda (2006), corporate social responsibility “provides guidelines that the company is no longer an entity acting only for self-interest (and thus potentially alienating it from the community environment in which it operated), but a business entity with an obligation to adapt culturally to its social environment” (Achda, 2006). This means in the case of infrastructure that private companies must support the environment and public interests. This support (or contribution) can be financially or in-kind, where the private company can choose their preference (Wardani, 2019).

This contribution is successfully used in some local governments where they asked developers for financial support to build public interests. Furthermore, because corporate social responsibility is obligatory for every company, such as developers, some local governments made CSR “part of their negotiation before granting the development permit” (Pamungkas & Samsura, 2019). An example of successful use of CSR, is a real estate program in Jakarta. The real estate developer wanted to build luxury apartments, but the local government asked the developer to give an in-kind contribution, where he promised the buildings where only for the local people (personal communication, interview 4, 2020). Another example is the reclamation area in North-Jakarta. The real estate developers whom would like to build luxury apartments, have to give in-kind contribution to also build apartments for the low-income people, so they can live in the city center in a proper house as well (personal communication, interview 4, 2020).

Despite this successful use in some local governments, corruption can take place. There is no operational standard under the current regulation to implement CSR, which makes it a risk for
corruption problems (Pamungkas & Samsura, 2019). If the Indonesian government would like to have more financial support, especially in local governments, they need to introduce an operational standard. In this way, CSR have potential to financially support infrastructure developments in Indonesia.

4.4.3 Land value capturing problems

The institutional capacity problems in Indonesia, and the relation with multi-level governance in Indonesia are already explained in paragraph 4.3. Both institutional capacity problems due to multi-level governance as institutional capacity problems without any relation with MLG influences the implementation of land value capture in Indonesia (figure 15/appendix 2). In total, 20 challenges or problems are related to land value capturing in Indonesia. To identify those challenges, several categorisations are made, such as ‘technical issues’ or ‘land acquisition’.

![Figure 15: Challenges of land value capture in Indonesia (source: own work).](image)

1. **Awareness on LVC**

Because land value capturing is yet not implemented in Indonesia, both the community, the private sector and all levels of governments have to get the knowledge on LVC. They are not aware of the possibilities and consequences yet. Especially the community, whom probably do not understand why they have to pay in the case betterment charges/levies or special assessments are used as LVC mechanisms.
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2. **Technical issues: Limited digitalisation**
As mentioned before, Indonesian governments mostly do not use technological systems or programs to measure land or to calculate the land value (personal communication, interview 2, 4 and 11, 2020). If the land cannot be measured in a precise way, the current land value cannot be determined. Furthermore, the increase in land value due to a new TOD project cannot be determined if the current land value is not clear. Then, land value capturing is based on probabilities instead of real measurements, which can lead to uncertainties and maybe even corruption problems. Lastly, digitally data sharing is an issue as well (see also ‘sharing data’). For the use of LVC, data sharing is very important, because of the scale of large infrastructure projects, which mostly affects more local governments.

3. **Fragmentation of municipalities**
Since the Decentralization Law in 1999, a lot of new local governments arose. This led to more difficult decision-making with other governments in general (Firman, 2009), but also at infrastructure developments. It is difficult to stay coherent, because in the case of large infrastructure projects – or more specific, TOD projects – projects go through other municipalities or regions (personal communication, interview 5, 2020).

4. **Corruption**
Many local governments are afraid to innovate in finance due to the financial control from the national government. If there is compensation in the form of monetary value, it can be considered as fraud (Wardani, 2019; personal communication, interview 4, 2020). With the implementation of land value capturing, it is important to have a clear mechanism or document from the national government that support the financial decisions on LVC mechanisms.

5. **Lacking knowledge at regional governments**
Regional governments do not have the capacity and knowledge to have smooth (infrastructure) developments, in terms of time (i.e. possible delays), policymaking or policy implementation (personal communication, interview 2, 3, 5 and 11, 2020). Therefore, the implementation of LVC can be difficult. If regional governments do not know what LVC means and how to control or use a new LVC regulation, LVC cannot be implemented.

6. **Sharing data**
Many institutions would like to keep their own data (personal communication, interview 4, 2020). In the case of the implementation of land value capturing, sharing spatial data with others is necessary. For example, if data from land parcels is not shared with other governments, it is difficult to collaborate with and trust each other, which is necessary with land value capturing at large infrastructure projects.

7. **Lacking knowledge at local governments**
Local governments do not have the capacity and knowledge to have smooth (infrastructure) developments, in terms of time (i.e. possible delays), policymaking or policy implementation (ADB Institute, 2016; personal communication, interview 1, 3, 4, 5, 10 and 12, 2020). Therefore, the implementation of LVC can be difficult. If local governments do not know what LVC means or how to use a new LVC regulation, LVC cannot be implemented and used in the way it was intended.
8. **Issue to deal with the institutions**
Foreign private investors would like to avoid local governments in the current situation, because of the capacity problems within these governments (personal communication, interview 3, 2020). Solving capacity problems in local governments, will probably lead to more foreign investments.

9. **Staff: Lack of amount of staff at the national government**
The amount of staff within the national government is not enough to cover all their responsibilities (personal communication, interview 3 and 5, 2020). Currently, the national government in Indonesia does not have the capacity to control the lower levels of government. If they would like to introduce land value capture, this also can be an issue. If they have the knowledge and skills but not enough staff, the control on how regional and local governments are dealing with the implementation of land value capturing is still lacking.

10. **Skills: Not enough skills to estimate the land value**
Officials in local governments do not have the skills to estimate the land value. This is because of their knowledge level, but also because of the lack of digitalization and equipment.

11. **No legal framework for land value capturing**
Because land value capture is yet not implemented in Indonesia, it is difficult for all stakeholders (i.e. private investors and all levels of governments) to implement land value capture instruments in the current situation. There are some possibilities (see paragraph 4.4.5.1) but because there is no legal framework, governments are afraid to use those.

12. **Undeveloped land market system**
The land market system in Indonesia is undeveloped (Monkkonen, 2013; personal communication, interview 3, 2020). If developers (i.e. the private sector or governments) would like to buy some land, they have to deal with a lot of different parties (personal communication, interview 3, 2020). The result of this with regard to land value capturing, is that informal prices and possible higher transaction costs due to interactions with middle mans, are also an important issue of acquiring land (see ‘land acquisition’). Furthermore, dealing with several stakeholders in general can be difficult, but in the application of an innovative financial idea such as land value capturing, it could be easier to reduce the number of stakeholders as well.

13. **Local kings**
As explained before, some municipalities or regions have to deal with local kings, which means there is one leader whom affect the decision-making and regulations in that area (Firman, 2009). Local kings can also affect land value capturing in Indonesia, because they can decide if they would like to use those instruments or not due to the weak law enforcement.

14. **Land acquisition: Clearer mechanism for land acquisition**
Land acquisition is the most important issue in infrastructure developments in general (Puspasari, n.d.). So, this influences the developments of TOD – and in that hand also land value capturing – as well. The current regulation (No.2/2012) is not clear enough in the way of procedures. This relates to the National Strategic Projects (Presidential Decree No.3/2016), where every project on that list counts for a public interest (Jakarta Post, 2020). Land that is
required for such a project can then be acquired. If not, land acquisition is still a problem (personal communication, interview 6 and 10, 2020).

In the case of TOD developments for example, the following is currently happening. According to Article 10 from Law No.2/2012, railways, railway stations and railway operations facilities (sub 2) are considered as public interests, which means land can be acquired. However, only parts of the surrounding of the railway stations can be acquired, according to that Law. Article 10, sub 12 named ‘public facilities and public green open spaces’. Article 10, sub 15 describes ‘housing for low-income communities with rental status’, and Article 10, sub 18 named ‘public parking’ (Simamora, 2018). This means not the whole surrounding of the railway stations can be acquired. Land can only be acquired for housing if those new buildings are built for low-income people. This means the land values are not high, which is the opposite intention of land value capturing.

Another difficulty with land acquisition in relation to the law is the condition to have a Spatial Master Plan for each region or area if local or regional governments would like to acquire land for public interests (personal communication, interview 1, 2020). Some Spatial Master Plans are inappropriate or not checked by the national government yet, whereby land acquisition is not possible according to the law (Syarizka, 2017). In addition, all levels of government must develop a Master Plan for their region or area for 5 years. After the new elections, they must make a new plan, with the exception if their leader (i.e. President or governor) is elected again for 5 years (personal communication, interview 4, 2020).

15. Land acquisition: Arise the price of land
Land speculation is something that occurs in Indonesia (personal communication, interview 4, 6 and 12, 2020). Once a new infrastructure project is announced, speculations from landowners begin, which results in a higher price of land. Furthermore, the middleman can arise the price as land as well through negotiations (personal communication, interview 6, 2020). This higher price will affect the development of (infrastructure) projects, because acquiring land is then more expensive, and maybe even unfordable.

16. Land acquisition: Problems with acquiring land
The procedure for land acquisition and the coherent issues are already explained (see ‘land acquisition: clearer mechanism for land acquisition’). Another problem with acquiring land is the awareness of the community. According to Simamora (2018), the problem is “how land acquisition belongs to the community for the purposes of the development project”. Land acquisition is a vulnerable process, because the livelihood of the community is influenced. Furthermore, the community believes that the local government under-estimates their land value and would like a fair compensation for their land (Simamora, 2018). More awareness on land acquisition at the community will lead to shorter procedures.

17. Finance: Not enough financial capacity at local governments
Local governments do not have the financial capacity to gain more knowledge for their staff, because they have to spend a lot of their money on salaries (Vuljanovic, 2017; personal communication, interview 11, 2020). In addition, they do not have the fiscal authority and therefore cannot create enough income to develop infrastructure (Lewis, 2005). Lastly, local governments are not allowed to take money directly from property owners it is not based on
tax (Wardani, 2019; personal communication, interview 4, 2020). Because of this, some land value capture instruments cannot be used if the local government directly receives the revenue, such as betterment levies. The financial possibilities in the current situation to create more income can therefore be considered as low.

18. Data collection
Data collection is related to sharing data, but there is also a problem with the data collection itself (personal communication, interview 3, 10 and 12, 2020). There is no systemic and open-ended database where you can easily calculate or estimate the land value (personal communication, interview 3, 2020). Furthermore, because of the ‘One Map Policy’ other spatial data is presented, but only in a huge scale (1:50.000)(personal communication, interview 6, 2020).

19. Bottleneck of spatial plan
Many regions or areas in Indonesia did not completed their land use plan yet. The reason is the lack of staff at the national government, whom cannot review all these plans from the local governments (personal communication, interview 3, 2020). This also affects the introduction of land value capturing, because if there is no spatial plan, land value capturing is not possible. There is no legal basis for projects then.

20. Communication between local governments
Communication between local governments is difficult, because many local governments want to keep their own data (personal communication, interview 4, 2020).

4.4.4 Relationship between all aspects
In figure 16 (next page) and appendix 1, the relationship between institutional capacity problems, multi-level governance and the implementation of land value capture instruments is shown. The 4 large white blocks show the main topics as mentioned before, and also the topic ‘land acquisition’. This is such a big problem that it is showed separately. The red blocks show institutional capacity problems in Indonesia (15 times). The yellow blocks show the challenges when implementing LVC (20 times). The turquoise blocks are related to decentralization (3 times). The purple blocks are related to land acquisition (4 times). The green blocks are related to general institutional capacity factors (3 times), and the grey blocks are related to several regulations (3 times).

The red lines show the link between the main topic and their corresponding aspects. Some aspects/blocks are also linked to each other, and the relation can consist of: ‘is cause of’, ‘is part of’, ‘is a’ or ‘is associated with’. The interpretations of figure 16 are further explained in the conclusions.
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Figure 16: Network relationship between institutional capacity problems, multi-level governance and the implementation of land value capture instruments (source: own work).
4.4.5 How to implement LVC?
The experts from the expert interviews gave possible solutions to overcome some problems with regard to the implementation of land value capturing in Indonesia. Some LVC instruments can already be used under the current regulations (e.g. property taxes, planning obligations, transfer of developer rights and impact fees), and others are more suitable for the future (the yellow blocks in figure 17 show this distinction – which is explained in the next section). Although some of them need specific conditions before they can be used, which will further be explained in the next paragraph. Figure 17 (and appendix 3) shows all possibilities, where in pink the possible land value capture instruments are shown.

Figure 17: Current and future land value capturing possibilities (source: own work).
4.4.5.1 Current situation

Although problems regarding the implementation of land value capture (e.g. institutional capacity problems), several land value capture instruments can be applied in the current situation. Some of them are already applied but can be intensified, and some of them are ‘new’. Due to the decentralization, local governments have freedom to do (financial) innovation, which could be used in the current situation (personal communication, interview 5, 2020). The following 4 land value capture instruments (pink blocks) can be used under the current regulations and circumstances (figure 18, which is a part of figure 17): property taxes (1), planning obligations (2), transfer of developer rights (3), and impact fees (4).

![Image: Possibilities for land value capturing in the current situation (source: own work).](image)

**Property tax**

Property taxes are an important form of land value capture because land value could increase with well-functioning property tax systems (Kim, 2018). In Indonesia, the property tax in use is the land and building tax (personal communication, interview 1, 2020). This tax is widely used in Indonesia, because it is the main source of income besides the allocation fund (personal communication, interview 2, 2020). When a new project is built in the area, the local government can increase the land and building tax fees (personal communication, interview 2 and 9, 2020). When the area is more developed, the value of the surrounding properties became higher which can be ‘captured’ by higher property taxes. But in the case of a large infrastructure project like TOD, the revenues from property taxes are not enough to pay the whole development (personal communication, interview 9, 2020).

However, the use of property taxes can be used more often. The land prices are mostly informal and manipulated prices, because of a lacking measurement for land values and own interpretations from the landowners. This leads to lower land prices and thus lower property taxes. Some people from the community confirm that the amount of land and building tax they have to pay, is quite low (personal communication, interview 1, 2020).
Planning obligations

Another LVC instrument that can be improved is the use of planning obligations (personal communication, interview 5, 2020). Planning obligations are “obligations attached to land that is the subject of a planning permission. They are used to mitigate or compensate for the negative impacts of a development” (Designing Buildings Wiki, 2019). For example, planning obligations can require that developers need to build for a specific group of people, such as low-income people. Another example is the requirement for compensation for the loss of public space due to new buildings. Furthermore, a requirement for contribution to the provision of new infrastructure is possible in planning obligations (Gapura Bali, 2018; Designing Buildings Wiki, 2019). The government of Kendal Regency in Jakarta used planning obligations to ask for compensation for green open spaces in urban areas. Each developer only gets a building permit if they provide for “a green open space at least 10 percent of the total housing area” (Yulianti & Hadi, 2018).

The Indonesian government is allowed to ask a contribution from the developer to provide infrastructure or other public services (Pamungkas & Samsura, 2019). Related to this, planning obligations are compulsory for the developer to get his building permit (personal communication, interview 5, 2020). Because planning obligations are compulsory, the government can try to create more income or in-kind compensation. In the case of large infrastructure projects such as TOD projects, planning obligations for developers are good tools to use. Local governments have to give building permits anyway, both with as without planning obligations (Gapura Bali, 2018; personal communication, interview 3 and 12, 2020). So, the procedures are not changed. Furthermore, the local governments can create more income to invest in infrastructure or have less payment in case of in-kind compensation.

Transfer of Development Rights

As was explained in the case of the Semanggi flyover in Jakarta, Transfer of Development Rights (TDR) refers to a voluntary LVC mechanism, where local governments ask developers to contribute to public services or infrastructure developments. The developers get development rights in exchange, such as the permit to build higher buildings (i.e. more floors), or more units (King County, n.d.; personal communication, interview 9, 2020). Furthermore, TDR can also be applied to protect ‘open’ land, which means no buildings are placed on the parcels yet (figure 19). This could be done “by redirecting development that would otherwise occur on this land (sending area) to an area planned to accommodate growth and development (receiving area)” (Conservation Tools, n.d.). In the case of TOD projects, Transfer of Development Rights as explained in figure 19 not apply in contrast to receiving the permit to build more floors in exchange for infrastructure contributions does.

Figure 19: Transfer of Development Rights (source: King County, n.d.).
**Impact fees**

According to interviewee 1 (2020), we need to revisit impact fees, so that it could be a useful LVC mechanism. Lari et al. (2009) describes impact fees as “one-time charges collected by local governments from developers for the purpose of financing new infrastructure and services associated with new development”. This means that the municipality receives a one-time charge and invests this revenue in public services and infrastructure (Lincoln Institute, 2020).

Impact fees can be conducted by the Environmental Law, No.32/2009 (personal communication, interview 9, 2020). Articles 42 and 43 from this law describe the Economic Instrument of Environment, which is the base for impact fees (The President of the Republic of Indonesia, 2009). Article 42, section 1, describes that all levels of government are obliged to develop economic instruments to protect the environment. Furthermore, section 2 describes what kind of economic instruments are meant in section 1. This includes: ‘planning of economic development and activities’, ‘environmental funding’, and ‘incentives and/or disincentives’. Infrastructure developments can be placed in the first and third category.

**Article 42 of the Environmental Law, No.32/2009**

1. In the framework of preserving the environmental function, the government and regional governments shall be obliged to develop economic instruments of the environment.
2. The economic instruments of the environment as referred to in paragraph (1) shall include:
   a. planning of economic development and activities;
   b. environmental funding; and
   c. incentives and/or disincentives.

*Source: The President of the Republic of Indonesia, 2009.*

Article 43 describes the conditions in which economic instruments can be used and explain more about the categories of Article 42. Infrastructure developments can be placed in the *first category* (‘planning of economic development and activities’), because of Article 43, section 1, letter c. This describes that economic instruments can be used as a mechanism for environmental compensation. This means that, for example, if a developer would like to build a new road, there is a negative impact on the environment (e.g. nuisance or pollution). Then the government can use an impact fee to compensate the environmental impact and create more income. In addition, if the government finances the infrastructure by itself, impact fees can also be used. If a TOD project is built and the developers built the residential or commercial area, those also affect the environmental impact in a negative way. Which leads to the possible use of impact fees. Impact fees in infrastructure developments can also be placed in the *third category* (‘incentives and/or disincentives’), because of Article 43, section 3, letter b. This section describes 8 forms of economic instruments that can be used. Letter b is the application of environmental tax, levy or subsidy; which is in fact the impact fee.

**Article 43 of the Environmental Law, No.32/2009**

1. The instrument of planning of economic development and activities as referred to in Article 42 paragraph (2) letter a shall include:
   a. balance of natural resources and environment
   b. formulation of gross domestic product and regional gross domestic product covering the depreciation of natural resources and environmental damage
   c. mechanism of environmental compensation/exchange between regions
   d. internalization of environmental costs
2. The instrument of the environmental funding as referred to in Article 42 paragraph (2) letter b shall include:
a. guarantee funds of environmental restoration
b. funds of pollution and/or damage mitigation and environmental restoration
c. conservation trust / aids.

(3) The incentives and/or disincentives as referred to in Article 42 paragraph (2) letter c shall be among other applied in the form of:
   a. procurement of environmentally sound goods and services
   b. application of environmental tax, levy, and subsidy
   c. development of environmentally sound financial institution and capital market
   d. development of trading system of waste and/or emission disposal permit
   e. development of environmental service payment system
   f. development of environmental insurance
   g. development of environmentally sound labeling system
   h. system of performance appreciation in the field of environmental protection and management.

(4) Further provision on the economic instruments of the environment as referred to in Article 42 and Article 43 paragraph (1) up to paragraph (3) shall be regulated in a government regulation.

Source: The President of the Republic of Indonesia, 2009.

Although the impact fee is a useful LVC mechanism which can be used under the current regulations, the calculation mechanism needs to be taken into account (personal communication, interview 4, 2020). How will the impact fee and thus revenue be calculated, and who will do the calculation?

**Support from the national government**

In figure 18, the importance of the support from the national government is also named. If local governments are still afraid to use LVC mechanisms such as impact fees, the national government need to support local governments in order to implement those LVC instruments in the right way and avoid corruption (personal communication, interview 4, 2020).
4.4.5.2 Future situation

In contrast with the LVC mechanisms that are possible in the current situation, one LVC mechanism specific (figure 20) can be a huge possibility in the future, if the conditions are right. This LVC mechanism is the betterment levy. Besides this instrument, a lot of other aspects need to be taken into account when implementing land value capturing in Indonesia. In figure 20, the pink block is the LVC mechanism. The blue blocks are the other aspects.

Figure 20: Possibilities for land value capturing in the future situation (source: own work).

Betterment levies

Betterment levies can be implemented in the future, but under certain circumstances. First, betterment levies are a kind of special tax, where the landowners need to pay local governments because their land value increases due to the infrastructure development in their area (Lincoln Institute, 2020). Those levies can be captured by local governments, but only if the national government gives approval for this local by-law (Lewis, 2005; personal communication, interview 4, 2020). Local governments can make their own local by-laws, but the new tax cannot be overlapping with other taxes, also not at other levels of governments (personal communication, interview 4, 2020). Furthermore, direct revenue from property owners is not possible in Indonesia, because it can be considered as fraud (Wardani, 2019). That is why the revenue from the betterment levies need to be collected by a new agency or company which will give it to the local governments. Another option is that the national government adopts a legal framework for LVC where direct revenues in the case of LVC is possible, but the local governments need to explicitly give financial information and data. Where after the national government has to check and control. Another issue is the allocation of betterment levies (personal communication, interview 12, 2020). Who will receive what? For example, if the national government develops new infrastructure, the revenue has to go
to the national government. But what if the local government will develop the infrastructure by itself? Do they need to give some percentage to the other levels of government?

According to interviewee 1 (2020), betterment levies as land value capture instruments need to be revisit, “because so many landowners got benefit increasing land values due to infrastructure developments”, so the local government loses money if they do not revisit this. Interviewee 4 (2020) also thinks betterment levies could be a good option when introducing land value capture instruments, because tax innovation is something good. “Only if this proposal could get approval from the national government”, she said.

To conclude, betterment levies are possible land value capture instruments in the future, if direct revenue from property owners is possible, or the national government allows local governments to have an own agency for collecting those revenues. Another issue that has to be taken into account is the allocation of the betterment levies.

Other aspects related to the implementation of LVC
As mentioned before, besides the implementation of specific LVC instruments, other aspects also need to be taken into account. Other aspects are the improvement of institutional capacity (1), adaption of a legal framework for LVC (2), improvement of collaboration (3), and social-cultural norms (4).

1. Improvement of institutional capacity
The level of Institutional capacity needs to be improved if the national government would like to implement LVC (or also TOD). Lacking institutional capacity in Indonesia means lack of staff, lack of knowledge and technical issues corresponding with sharing data.

• Staff
The amount of staff is an important issue when implementing LVC. According to interviewee 1 and 3 (2020), the amount of staff at all levels of government needs to be improved. Furthermore, interviewee 4 (2020) made a statement that only the amount of staff of the national government needs to be improved. Lastly, interviewee 5 and 9 (2020) thought the amount of staff is at most a problem at local governments. From this you can conclude that mostly the national and local governments are important stakeholders to invest in the sense of the amount of staff. Investments in more staff lead to less work pressure for the national government to control local plans. Furthermore, more staff means that more officials can specify on a certain topic, such as land measurements. Which can lead to more knowledge, especially if they are collaborate together, and with other institutions.

“Local governments are facing the lack of human resources to fulfil the competence of the policy of LVC, and also spatial planning in general” – interviewee 6

• Increase knowledge
The knowledge gap within local and regional governments need to be improved in order to implement LVC and TOD. 6 out of 12 interviewees specifically named the lack of knowledge at local governments. Others not specifically named this issue, but all did mention ‘the lack of capacity’ at local governments in general. In the case of regional governments, 4 out of 12
interviewees specifically named the lack of knowledge. But also, as in the case of local governments, the lack of capacity in general is named in almost every interview.

“At the local level, local governments will create some projects that suit their capacity (knowledge) and budget” – interviewee 10

- **Sharing knowledge and data**
  Many institutions would like to keep their own data (personal communication, interview 4, 2020). In the case of the implementation of land value capturing, sharing spatial data with others is necessary. For example, if data from land parcels is not shared with other governments, it is difficult to collaborate with and trust each other, which is necessary with land value capturing at large infrastructure projects.

- **Technical issues at local governments**
  Many institutions focus on the improvement of administration instead of the improvement of technology (personal communication, interview 4, 2020). In addition, the measurement of both land parcels as land value of those parcels is lacking. There is no sufficient system that can measure these things (personal communication, interview 2, 4, 11 and 12, 2020). Implementation of a new system for land measurements and land values, will result in more transparent land values for everyone. Furthermore, this system can be used for measuring the new land value in case the land value is increasing because of a TOD project.

2. **Adapt a legal framework for LVC**

A legal framework for LVC to create a situation where each level of government can adapt their own LVC mechanisms is necessary. This is supported by 10 out of 11 interviewees. In the network of the possibilities for implementing LVC (figures 18 and 20), the blue block ‘adapt a legal framework for LVC’ is linked with ‘local governments have freedom to do (financial) innovation’. This is, because local governments have indeed possibilities for implementing LVC, but it could be that they are still afraid to use it, because they are afraid that it can be implemented as corruption.

That is why it is very important that all LVC mechanisms are specifically named, but it is the regional or local government that decides which instrument they would like to use in which case. Because of this, those governments have more freedom and can experiment with several cases, but those still depend on a legal framework. Furthermore, support from the national government to guide regional and local governments can be good for evaluation from the first LVC cases.

3. **Improvement of collaboration**

Collaboration between the national government and local governments needs to be improved, because the national government can then support local governments when implementing LVC. In addition, the collaboration between regional and local governments needs to be improved, because collaboration can lead to sharing data and knowledge. Especially at regional and local governments this is a problem, and with more collaboration this issue can be tackled. Lastly, the collaboration between the national government and private sector needs to be improved in order to involve the private sector more than in the current situation (Wardani, 2019). The regulation for public-private partnerships is already
there, but the national government can have more profit from this if they specify the procedures and increase the involvement of the private sector.

4. Social-cultural norms
Social-cultural norms need to be taken into account when implementing LVC (personal communication, interview 5, 2020). This is related to the ‘gotong-royong culture’, where everyone needs to help each other, and you can rely on each other to work together. This culture also relates to development projects, such as the construction of infrastructure (Wardani, 2019; personal communication, interview 5, 2020). According to Wardani (2019), shows the gotong-royong culture that development activities ‘encourage communities to work together to manage challenges such as physical development, and economic or social problems”. Therefore, the gotong-royong culture can help when implementing LVC.
Chapter 5. Conclusions

Indonesia had undergone decentralization (by the law; in 1999, 2004 and 2014), whereby in theory local governments were given more power, authority and responsibilities. In practice it works in a different way. Local governments do not have fiscal authority, and do not want to be responsible for projects with financial innovation due to corruption problems. This research therefore focused on the relationship between institutional capacity and multi-level governance with regard to land value capture instruments in Indonesia. The main research question of this study is: “To what extent does the implementation of multi-level governance policies cause institutional capacity problems in the application of land value capture instruments with regard to large infrastructure projects in Indonesia?” Answering this question is done by expert interviews and desk research. These results were within the context of this research, based on both methods. The research question consists of multiple topics, namely: institutional capacity, multi-level governance and LVC instruments. Institutional capacity problems in Indonesia were researched at first, where after the relationship with multi-level governance has been established. After describing this relationship, all three topics were connected. Furthermore, other important elements were added to the network. The relationships and connections between all topics were noted by the respondents from the expert interviews, and in some cases also noted by the literature (table 7 in chapter 6). The conclusions were based on both methods, the conclusions were made, and the main research questions was answered.

Figure 21: Relationship challenges implementing LVC with institutional capacity problems and multi-level governance in Indonesia (source: own work).
Chapter 5. Conclusions

The main research question can be answered by looking at above figure (or appendix 1), in which the challenges of implementing LVC (yellow blocks) are combined with institutional capacity problems (red blocks) and decentralization (turquoise blocks and one white block). The red dotted line means there is a connection between one of those main topics and an element. The 20 challenges of implementing land value capturing in the yellow blocks are connected to the most elements, because this is a main question: which factors influence the implementing of LVC and to what extent do institutional capacity problems and multi-level governance influence those?

Table 6 (next page) provides an overview of all challenges of land value capturing in Indonesia and the relations with institutional capacity problems (IC problems) and multi-level governance (MLG). 12 out of 20 challenges of land value capturing are related to institutional capacity problems. The 8 which are not related to institutional capacity problems, are mostly related to land acquisition and legal framework issues. For example, ‘undeveloped land market system’ is related to land acquisition but does not have any relation with institutional capacity or multi-level governance. In the perspective of multi-level governance, 9 out of 20 challenges are related.

Besides the relationship of all challenges to implement LVC with institutional capacity problems, table 6 also provides the relationship between institutional capacity problems and multi-level governance. 15 Institutional capacity problems in Indonesia (see figure 10 or appendix 4) came forward out of this research. Not every institutional capacity problem occurs at all levels of government. For example, lacking budget for innovation only refers to local governments, because local governments spent 60 percent of their budget on overhead costs such as salaries of their staff or buildings costs.

7 of these 15 institutional capacity problems are related to MLG. These 7 factors also influence the implementation of LVC as seen in the rightest column in table 6. This means 7 out of 20 challenges for the implementation of LVC are related to both institutional capacity problems as MLG. These factors are marked in blue in table 6. These institutional capacity problems are caused by decentralization, and are: corruption (1), lack of knowledge at regional governments (2), lack of knowledge at local governments (3), local kings (4), financial limitations at local governments (5), weak law enforcement (6), and lack of communication between local governments (7). In table 6, weak law enforcement is implemented as ‘bottleneck of spatial plan’ to make it more specific. In addition, financial limitations at local governments are implemented as ‘not enough financial capacity at local governments’.
Is implementing LVC possible? The answer to this question is: yes, it is. However, the national government needs to take the important aspects into account. Not all are related to institutional capacity or multi-level governance, but if Indonesia improves institutional capacity at all levels of government, part of the challenges is gone. However, the most important issue to solve, is the adaptation of a legal framework. The private sector, community, and all levels of government then have a clearer regulation, in which they feel freer to use LVC instruments, despite the fact that some LVC instruments are already possible under the current circumstances.
Chapter 6. Discussion and recommendations

This research had the following prediction: multi-level governance leads to institutional capacity problems, which results in implementation problems of land value capture instruments. More specific, the degree of autonomy will affect institutional capacity problems. The more (fiscal) autonomy a certain level of government has, the more institutional capacity problems will occur. This research showed that the prediction is not truly correct, because half of the institutional capacity problems were occurred by multi-level governance. However, this research focused specifically on Indonesia. It is not possible to say that every country with multi-level governance policies have institutional capacity problems.

This research also showed that institutional capacity problems to some extent influences the application of land value capture instruments in a negative way. If the Indonesian government would like to implement LVC, it would be a good idea to improve institutional capacity, because more than half (12 out of 20) of the challenges when implementing LVC are related to institutional capacity problems. Specific institutional capacity challenges that need to change, are the improvement of knowledge at both regional as local governments and solving the technical issues. Other priorities, but not related to institutional capacity, are solving land acquisition problems through a clearer mechanism for land acquisition (1), more data sharing (2), more communication between local governments (3), and adopting a legal framework for LVC (4). All priorities when implementing LVC are shown in figure 22.

Figure 22: Priorities challenges implementing LVC in Indonesia (source: own work).

Although the relationships/connections between institutional capacity problems, multi-level governance and LVC are noted by the respondents and literature, there could be other factors
which are not specifically named. Therefore, it is not possible to say with 100 percent certainty that all relationships have causality, and furthermore how strong the relationships are.

One issue the national government needs to consider if they would like to implement LVC, is what the exact consequences are. When local governments use LVC mechanisms, financial inequality arises. For example, some local governments have more infrastructure projects and therefore can create more income. Another example is when local governments in large cities (e.g. Jakarta) implement TOD and LVC mechanisms more often, because they have more possibilities due to urban areas. They then create more income than other cities, which will lead to inequality between local governments. This contrasts with the current decentralization system where regional and local governments receive money from the national government by the allocation fund and the money is supplied equally. Does the Indonesian government would like to change this?

6.1 Validity and reliability
A reflection on the internal and external validity, and reliability of the research will be discussed in this paragraph.

6.1.1 Internal validity
Internal validity means that a trustworthy causal relationship is established, showing which conditions lead to other conditions (Yin, 2014). The internal validity of this research is high for several reasons. First, the same interview guide is used almost every time. The exception was when an interviewee did not have knowledge on that specific topic, those questions were deleted. The same interview guide leads to a more valid research (Dingemanse, 2019). Second, the research was done with an objective point of view to avoid the researchers’ bias. This means that a subjective view can influence the results (Zohrabi, 2013). Third, which is related to the researcher’s bias, is the use of triangulation by comparing the results of different methods with each other. Table 7 (next page) provides a comparison of the indicators of institutional capacity between the literature and expert interviews. This comparison shows that most of the factors (12 out of 16) are named both in the literature as in the expert interviews, which means the research on this topic is valid. However, it is not possible to exclude that the experts also have their knowledge (partly) from the literature.
Table 7: Comparison institutional capacity factors in Indonesia (source: own work).

<table>
<thead>
<tr>
<th></th>
<th>Literature</th>
<th>Expert interviews</th>
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<tr>
<td><strong>Political</strong></td>
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<td>Local government prioritization</td>
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<td>Level of enforcement</td>
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<td>Corruption</td>
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<td>Yes</td>
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<td></td>
</tr>
<tr>
<td>Lack of knowledge</td>
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<td>Yes</td>
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<tr>
<td>Lack of staff</td>
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<td>Yes</td>
</tr>
<tr>
<td>Community support</td>
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<tr>
<td>Commitment to topic</td>
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<td>Collaboration</td>
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<td>Yes</td>
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<td><strong>Financial</strong></td>
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<td><strong>Institutional</strong></td>
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<td>Administrative inefficiencies</td>
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<tr>
<td>Lack of access to information</td>
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<tr>
<td>Autonomy of local governments</td>
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<tr>
<td>Implementation issues</td>
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<td>2</td>
</tr>
<tr>
<td>Total both yes</td>
<td>12 out of 16</td>
<td></td>
</tr>
</tbody>
</table>

6.1.2 External validity

External validity means to what extent the research can be generalized, so if the research also holds for other countries, cities or institutions (Van Thiel, 2014). The external validity in this research is limited, because it focused on Indonesia as a case study specific. Not all countries with multi-level governance policies have institutional capacity problems. And if so, probably not the same, or not to the same extent.

This research focusses on the relationships between institutional capacity problems and multi-level governance in the application of land value capture in Indonesia. The application of this research in other domains (e.g. education, healthcare, climate change) depends on the circumstances. For example, this research can be used in other spatial or ‘environmental innovations’, specifically in Indonesia. They face the same multi-level governance structure and coherent problems. Climate change is something new and therefore kind of innovative, in which the Indonesian government does not have enough expertise. In addition, all kinds of stakeholders are involved, which makes the implementation of climate change policy very difficult. This also holds through for the domain of land policy where both public as private companies are involved. In the domain of education or healthcare, the type of multi-level governance is different. These domains use type I of multi-level governance. Less stakeholders are involved, and they have a clear authority in a limited number of levels of governance. Land value capture/land policy uses a combination of type I and II, which means that (probably) different institutional capacity problems may occur. Therefore, this research is only applicable
on spatial domains, because of the same type of multi-level governance and coherent problems.

6.1.3 Reliability
Reliability means that “the operations of a study can be repeated, with the same results. The goal of reliability is to minimize the errors and biases in a study” (Yin, 2014). The reliability in this research is influenced by the sample. The results from the 12 expert interviews are reliable. However, more input from the business community can confirm those results which lead to more reliable and well-founded statements. The respondents of the expert interviews were only experts from Universities, the Ministry of Economic Affairs, and one consultant. Interviewees from other organisations, such as different NGOS and state-owned enterprises, could help to get other information and get more well-founded results.

6.2 Recommendations for further research
This research confirms the international literature described on policy transfer problems. Which means that institutional capacity problems make it difficult to transfer national ideas and policies to lower (i.e. regional and local) governments. This relates to the distinction between the Global North and Global South, in which the Global North do not take institutional capacity problems into account. Further research on the relationship of multi-level governance and institutional capacity in the Global South as a whole (so not only for Indonesia), or specific in certain other domains than land policy, would be useful.

In addition, as mentioned above, this research focused on experts from Universities and the Ministry of Economic Affairs. Therefore, it was unable to examine the entire business community. Improvements of this research in the perspective of reliability can be done by doing more interviews with for example NGOs (e.g. project developers, building companies), the community and state-owned enterprises. Furthermore, interviews within all levels of government are useful to research, because their experiences might differ and might lead to better founded conclusions. Besides the improvement of reliability, several case studies can be researched to investigate the local or regional level on which LVC instruments are applicable in that specific area, and why.
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