Chapter I

General introduction of research topic
Organizations and teams are not autonomous, but depend on their organizational, political, and social environment for resources required for the performance of complex work (Casclaro & Piskorski, 2005; Gibson & Dibble, 2013; Haas, 2010; Pfeffer & Salancik, 2003). According to research on interorganizational relationships, resource dependence is one of the most important motivators for organizations to engage in relationships with external actors (Lundin, 2007; O’Toole Jr, 2003; Pfeffer & Davis-Blake, 1987). For example, in order to acquire resources, organizations merge with other organizations (Halebian, Devers, McNamara, Carpenter, & Davison, 2009), form partnerships (Scott & Davis, 2015), or engage in actions directed at the coordination of activities (Van de Ven & Walker, 1984) and the sharing of resources (Davis & Cobb, 2010). In other words, when organizations require resources from other organizations, some kind of collaboration or coordination is likely to occur.

In my dissertation, the focus is on the interdependence between project teams and actors from their (inter)organizational and political environment who are involved in the performance of public infrastructure projects. As public infrastructure projects occur outside the boundaries of a single organization (Keast & Brown, 2002), the required tangible resources (e.g., money, equipment, or materials), intangible resources (e.g., authority, technical expertise, or contacts), and the accountability / responsibility for project outcomes are distributed among a large number of interdependently operating parties (Child & McGrath, 2001; Forrer, Kee, Newcomer, & Boyer, 2010; Heligren & Stjernberg, 1995; Kickert, Klijn, & Koppenjan, 1997; Provan & Milward, 2001). In other words, project teams that carry out public projects are not self-contained, but depend on a diversity of stakeholder groups, which are individuals, groups, or organizations that either affect or are affected by the performance of these kinds of projects (El-Gohary, Osman, & El-Diraby, 2006).

For example, the continuation and legitimization of public projects depend on the approval and support from stakeholders such as politicians, parent organizations, project sponsors, departments, or formal authorities. These kinds of stakeholder groups are accountable, or responsible, for (parts of) project outcomes and often possess the authority to influence project decisions (Blackburn, 2002; Dicke & Ott, 1999; Jensen, Johansson, & Lofstrom, 2006; Posner, 2002). Additionally, in order to perform public projects, project teams depend on task-related knowledge, expertise, and know-how from other public organizations (Dawes, Cresswell, & Pardo, 2009; Kickert et al., 1997; Weber & Khademian, 2008) or private companies (Enberg, Lindkvist, & Tell, 2006; Grimsey & Lewis, 2004; Huang & Newell, 2003). Due to these kinds of interdependencies,
it is necessary for public projects and stakeholders to manage their resources across public networks (Agranoff, 2006; McGuire, 2006; Ratcheva, 2009), which can enable well informed decisions, innovation (Argote, McEvily, & Reagans, 2003; Hansen, Mors, & Løvás, 2005; Tsai, 2000), and (inter)organizational integration (Hülshcger, Anderson, & Salgado, 2009; Lawrence & Lorsch, 1967). Thus, project teams that perform public projects have to consider, and be involved in, a large number of interdependent relations with public, private, political, and societal actors who can contribute to, or have vested interests, in project outcomes, and who will therefore seek to influence project decision-making (Aaltonen & Sivonen, 2009; Klijn, Edelenbos, Kort, & van Twist, 2008).

The dependence on external resources also brings challenges for public projects. This is for instance the case when public projects operate within overloaded or ambiguous environments (Haas, 2006). In such environments, it can be difficult to gain support or acquire resources in a timely fashion (Zika-Viktorsson, Sundström, & Engwall, 2006). The dependence of public projects on external resources can also become difficult when there are no shared or common criteria for project success among stakeholders (Shenhar, Dvir, Levy, & Malz, 2001). In other words, stakeholders establish their own criteria for the evaluation of projects, whereby the criteria for project success vary according to the differentiated interests of involved stakeholders (Hellgren & Stjernberg, 1995). This can become challenging when stakeholders push their own agendas and these are incompatible, or not in accordance with project goals (Aaltonen & Sivonen, 2009; Harrison & Freeman, 1999). Under such circumstances, it can be difficult for project members to prioritize activities or to adjust to incompatible interests (Gibson & Dibble, 2013; Haas, 2006). Moreover, adjusting to diverse stakeholders with differentiated objectives can lead to conflicts of interest among stakeholder groups or between project teams and their stakeholders (Ancona & Caldwell, 1992). The aim of this dissertation is to study how the complex interdependence between public projects and the various stakeholders from their (inter)organizational and political environment affects project realization. This brings us to the central research question of this dissertation:

*How do the interdependencies between public projects and their (inter)organizational and political environment influence project realization?*

In this dissertation, in addition to project delivery, project realization is viewed as the way in which interdependently operating project teams and involved individuals, groups, and
organizations realize a joint project. The focus on the interdependence of public projects is interesting for several reasons. First, the (inter)organizational and political environment of public projects encompasses a large, diverse number of involved political, public, private, and societal actors with differentiated interests in project outcomes (Hahm, Jung, & Moon, 2013; Keast & Brown, 2002; Kickert et al., 1997; Klijn et al., 2008). Within such a context, project teams have to balance between multiple stakeholders with incompatible objectives. Moreover, prior studies have shown that within public networks, differences exist in the ability of stakeholders to influence project decisions and outcomes, based on the extent to which public projects depend on crucial resources from specific stakeholders (Agranoff, 2006; Forrer et al., 2010; Kickert et al., 1997; McGuire & Agranoff, 2011; Waterman & Meier, 1998). This means that public projects often have to adjust their actions and decisions to the most influential stakeholders, such as political stakeholders who possess the authority to influence or exert pressure on the behavior and decisions of bureaucratic agents (i.e., project management) who govern public projects (Jensen et al., 2006; Waterman & Meier, 1998). Thus, the distribution of influence based on mutual dependence is likely to determine the way interdependencies are managed between public projects and their environment (Casciaro & Piskorski, 2005; Hellgren & Stjernberg, 1995; Hillman, Withers, & Collins, 2009).

While prior research has predominantly focused on how organizations cope with dependence on a strategic level, insufficient attention has been given to the daily management of these interdependencies by those involved in public projects. The aim of this research is therefore to study the daily actions and decisions that guide this management throughout the project realization process. This dissertation places an emphasis on project realization in sensitive political environments, as this lends a unique dimension to the discussions to date. Demands and pressure from political, or otherwise powerful stakeholders, are likely to affect how public projects are realized. So far, it has remained unclear how these pressures and demands affect the way in which project teams and stakeholders manage their interdependencies throughout project realization.

Therefore, I aim to study how project teams cope with political demands and pressure, while they simultaneously have to manage multiple interdependencies with other stakeholder groups with differentiated, but legitimate interests in the realization of public projects. From prior studies we know that under such circumstances, it is necessary for project teams to balance or shift between activities that create, reinforce, or span their boundaries (Ancona & Caldwell, 1992; Faraj & Yan, 2009; Gully, 2000;
Marrone, 2010). In other words, public projects have to manage the permeability of their boundaries in such a way that enables them to simultaneously achieve primary project objectives, engage in multiple interdependent relationships, and respond to political demands and pressure. This dissertation aims to extend prior research by demonstrating that managing project boundaries might be more difficult than is previously stated when public projects are performed in sensitive political environments.

In order to better understand the challenges of performing projects in politically sensitive environments, this dissertation focuses on the public scrutiny of public projects. Public projects, and particularly municipal infrastructure projects, are in full public view and therefore vulnerable to public scrutiny (Eggers & Goldsmith, 2004; Forrer et al., 2010; Ring & Perry, 1985). Public scrutiny occurs when public projects attract intense or obtrusive forms of attention from citizens, other organizations, stakeholders, partners, board members, or regulators (Sutton & Galunic, 1995). For political and public stakeholders, who seek to be powerful and respected, it is important to devote close attention to public opinion (Pfeffer, 1992). When public projects underperform, or do not meet the expectations of society, this can harm the reputation and credibility of accountable stakeholders (Eggers & Goldsmith, 2004; Forrer et al., 2010; Sutton & Galunic, 1995). In turn, the reputation loss among stakeholders can generate political actions in order to enhance credibility and legitimacy, which can impose additional demands and pressure on project teams that perform public projects. This dissertation also focuses on how public scrutiny can complicate the interdependencies between public projects and their environment, or can exert tensions on the ability to realize public projects.

In the theoretical section of this dissertation, I will first address the nature of interdependence within public networks, and why interdependence can be beneficial and challenging for public projects and involved stakeholders. I will then elaborate on the difficulties of managing the permeability of project boundaries in sensitive political environments characterized by public scrutiny. Throughout this theoretical chapter, I will provide a running example of the renovation of the Amsterdam metro system. The majority of the metro renovation project took place directly prior to the period in which I started my dissertation research. I was able to illustrate the course of events of this project by conducting an analysis of the intensive media coverage of this project. Providing this case example is important for several reasons. Firstly, the case provides a concrete window through which we can better understand the various theoretical discussions of interdependence in complex organizational environments. The case also
highlighted several complexities of interdependence related specifically to its political environment, which provided a motivation to conduct further empirical studies on this issue. Finally, as this project was employed in the same research setting as my dissertation research, this case example provides important background information on the context in which my dissertation research was performed. Before I will elaborate on the nature of interdependence within public networks, I will first provide some general information on the Amsterdam metro renovation project.

**The renovation of the Amsterdam metro system**

One of the major infrastructure projects in Amsterdam at the time of my dissertation research was the project “renovation Eastern tracks”, which involved the redevelopment of large parts of the Amsterdam metro system. The project included the refurbishment of the tunnel walls, tracks, escape routes, ventilation systems, and the redesign of 16 metro stations. The plan for the renovation was approved by the city council in 2004 and preparations for the project started in 2008. The project was a joint effort between multiple actors and organizations, including the municipal public works department (MPWD), city planners, the municipal public transport department (MPTD), the municipal public engineering department (MPED), the municipal project management bureau, specialists from private engineering companies, and a consortium of contractors and subcontractors. Although the city councillor of traffic and public transport was politically accountable for the project, the main responsibility for actual project implementation was assigned to the municipal public works department.

In 2008, at the start of the project, the main tasks related to the preparation and execution of the project were allocated to a project team, for which the municipal public works department was responsible. Within the project team, members of the public works department (e.g., project managers, engineers, planners, financial experts, and legal advisors) collaborated closely with engineers from private partners and other municipal departments. Moreover, project activities were continuously coordinated with a great array of actors in the project’s environment, such as politicians, high public officials, employees of the public works department and other municipal departments, and societal groups. In the following sections, I will expand on the nature of interdependence within public networks and discuss why it can become challenging for project teams that have to carry out public infrastructure projects in sensitive political environments.
Chapter 1

THEORETICAL BACKGROUND

This theoretical section starts with addressing the nature of the interdependence between public projects and an intricate network of stakeholders in their environment. Next, I will elaborate on the challenges of interdependence in politically sensitive environments characterized by public scrutiny, which has important implications for the manner in which public projects are realized.

The nature of interdependence within public networks

Generally, organizations and teams are not in complete control of all the resources necessary for their performance (Hillman et al., 2009; Pfeffer & Salancik, 2003), which creates interdependence. Interdependence is defined as the mutual reliance between two or more actors for important resources (Emerson, 1962; Thompson, 1967) and is a function of resource criticality and the availability of alternative providers of crucial resources (Casciaro & Piskorski, 2005). The dependence on external resources has caused organizations to manage their dependencies by setting up different forms of (inter)organizational arrangements or engaging in different kinds of collaboration and coordination with external actors (Davis & Cobb, 2010; Halebian et al., 2009; Van de Ven & Walker, 1984).

Managing resource dependencies is also critical to the performance of public work. In organizational theory there is a growing realization that public work cannot be resolved by a single governmental actor that functions as a central, focal point from which society is governed (Keast & Brown, 2002). Rather, policy development and implementation are increasingly established in networks of interdependently operating public and private actors (Kickert et al., 1997; Klijn & Koppenjan, 2000; McGuire, 2006; Weber & Khademian, 2008). For example, for the performance of the Amsterdam metro renovation project, the required tangible (e.g., project funding, equipment, or materials) and intangible resources (e.g., authority, contacts, or technical expertise) were distributed among a vast number of actors, groups, and organizations within and beyond the municipality. Consequently, the responsible project team had to manage multiple interdependencies with diverse stakeholders. I define stakeholders as individuals, groups, or organizations that either affect or are affected by the performance of projects (El-Gohary, Osman, & El-Diraby, 2006). Using this definition, different types of interdependencies related to various stakeholder groups can be distinguished.
Public projects depend on stakeholders for formal approval (Forrer et al., 2010; Waterman & Meier, 1998). These types of stakeholders are accountable for public projects’ outcomes (Kettl, 2002; Posner, 2002) and possess the authority to impose demands or exert influence on final project decisions. For example, the project team from our case example required formal approval from political leaders and high public officials for decisions regarding project budgets or the closure of tunnel tubes during renovation periods. Furthermore, the project team’s project designs and work plans had to correspond with those from the municipal service of construction inspection (MSCI). This municipal department was accountable for the implementation of legislation in the field of tunnel safety, but also for the occupational safety of workers during renovation work. Thus, whereas politicians were accountable for the overall project outcomes, MSCI was responsible for parts of the project implementation. In that sense, the dependence was mutual: projects required formal approval from these types of stakeholders, and stakeholders depended on the project team to act in accordance with their objectives.

Besides stakeholders on which public projects depend for formal approval, public projects also have to align project decisions with the objectives of other stakeholder groups who have vested interests in project outcomes, including other projects, the objectives of other sub-departments, or the strategic goals of parent organizations that operate in the same area (Blomquist & Packendorff, 1998; Engwall, 2003; Hulsheger et al., 2009). For example, within the public works department, the asset management sub department was responsible for the long-term sustainability and maintenance of infrastructure work. Likewise, the municipal transport department required a well-maintained metro network in order to achieve high quality public transport. For these kinds of stakeholders, project realization is often directly connected to the achievement of their overarching objectives, and therefore they demand the integration of project activities within their command and control routines (Newell, Goussevskaya, Swan, Bresnen, & Obembe, 2008; Sydow, Lindkvist, & DeFillippi, 2004). Evidently, project teams repeatedly have to gain support from stakeholders that are affected by the realization of projects.

Finally, there are stakeholder groups that possess task-related knowledge, know-how, and expertise that project teams require to make well-informed decisions (Argote, 2012; Argote et al., 2003; Hansen, 1999; Hansen et al., 2005; Tsai, 2000; Tsai & Ghoshal, 1998). Prior research has shown that organizations generally have to cope with a wider distribution of knowledge (Baldwin & von Hippel, 2011) and fast developments that constantly outrun existing knowledge (Child & McGrath, 2001). This has triggered a great
dependence on external actors, groups, and organizations to obtain required knowledge and expertise (Gulati, Puranam, & Tushman, 2012). Similarly, for the performance of complex public work, public organizations depend on knowledge, skills, and technical expertise distributed across a large number of public and private parties in their network (Dawes et al., 2009; Grimsey & Lewis, 2004; Weber & Khademian, 2008).

For the performance of the metro renovation project, the required knowledge and expertise was scattered over multiple municipal (sub)departments, which caused the project team to depend on a large number of parties within their municipal organization. Specific expertise was not always available within the municipal organization, and the project team additionally had to attract expertise from private companies. For example, the project team turned to private engineers in order to obtain specialist knowledge about tunnel ventilation systems. Likewise, municipal departments were not equipped to execute complex reconstruction work on metro tubes and stations. Therefore, this kind of work was outsourced to a consortium of private contractors. Such partnerships between public and private organizations prevail in many projects, particularly in relation to public (re)construction work. It comprises of collaboration between public and private actors in which all whom are involved develop mutual products and/or services and in which risks, costs, and benefits are shared (Forrer et al., 2010; Grimsey & Lewis, 2004; Klijn & Teisman, 2003).

In sum, public projects have to engage in close collaboration and coordination with multiple stakeholder groups to manage resource dependencies. Whereas project teams depend on stakeholders for important resources, such as financial resources, authority, support, expertise, or materials, stakeholders depend on public projects to align project actions and decisions with their objectives. Before I elaborate further on the challenges of such interdependencies within sensitive political environments, I will first highlight why interdependence can be beneficial for teams and organizations.

**Benefits of managing multiple interdependencies**

Interdependence is an important antecedent to different kinds of organizational arrangements, partnerships, collaborations, and coordinated efforts between (parts of) organizations (Drees & Heugens, 2013; Hillman et al., 2009; Lundin, 2007). In that sense, interdependence could be beneficial for both teams and organizations, because in order to perform, they have to engage in relations with each other. The required engagement in relations can play a significant role in knowledge exchange within and
beyond organizations (Argote et al., 2003; Phelps, Heidl, & Wadhwa, 2012). Knowledge exchange can support teams and organizations in making better-informed decisions (Haas & Hansen, 2003) and can lead to the generation of new knowledge, ideas, and ways of performing (Tsai, 2000; Tsai & Ghoshal, 1998).

Interdependence can also ensure proper alignment between the activities of different projects, (project) teams, (sub)departments, and organizations (Engwall, 2003; Hülsheger et al., 2009). Simply put, interdependence ensures project actions and decisions comply with the overall objectives of involved stakeholders. Interdependence means that project teams need to convince or gain support from stakeholders, such as senior management or other departments (Ancona, 1990). Through their efforts to gain support, project teams are more likely to produce outputs that meet the stakeholders’ objectives. In that sense, interdependence between project teams and involved stakeholder groups can function as an integration mechanism as it enables influence of stakeholders over project actions and decisions. This is particularly pivotal for political stakeholders who are not directly involved in projects, but are nevertheless accountable for project outcomes (Dubois & Gadde, 2002; Jensen et al., 2006; Turner & Müller, 2004). These kinds of stakeholders depend on project teams for the realization of their political objectives, and project teams obviously depend on political approval for project implementation. Hereby, political stakeholders have the authority to monitor and steer the behavior of project members in order to have them act in a manner consistent with their interests (Dickie & Ott, 1999; Posner, 2002; Waterman & Meier, 1998).

Due to the large number of actors and groups with a potential interest in, or contribution to, public projects, the performance of complex public projects is often allocated to project teams (Grabher, 2002; Hobday, 2000). Project teams include members from different functional backgrounds and organizational affiliations, who collaborate closely on complex tasks (Enberg et al., 2006). Therefore, project teams are able to acquire a more extensive set of resources or to gain support from multiple stakeholders when they rely on a diverse set of team members, fostered through their linkages to different domains inside and outside the organization (Lampel, Scarbrough, & Macmillan, 2008).

The challenges of managing multiple interdependencies

Project teams’ dependence on diverse stakeholders is also likely to bring about challenges. A key example of such a challenge is the distributed accountability and responsibility for project outcomes among involved stakeholders (Forrer et al., 2010). Public agents that
govern projects (i.e., project teams) not only report to elected officials, but also to interest groups, media, and other public agents (Posner, 2002). As a result, public project teams have to conform simultaneously to several legitimate, but often competing interests (Dicke & Ott, 1999). This means that multiple, accountable stakeholders can impose their demands on teams with the purpose of forwarding or promoting their own agendas (Gibson & Dibble, 2013; Haas, 2010; Pettigrew, 2014). This can form an impediment for project teams when demands from different stakeholders are incompatible, or not in accordance with team interests (Ancona & Caldwell, 1992). Adjusting to multiple or competing demands can also create difficulties regarding the prioritization of project activities, which can lead to disorientation, causing project members to work on divergent purposes with a lack of focus (Gibson & Dibble, 2013). Furthermore, when too much time and energy has to be spent on satisfying stakeholders, project teams may be distracted from task completion when working towards deadlines. This is particularly important for temporary project teams, as the limited availability of time is seen as one of their central challenges (Lindkvist, Soderlund, & Tell, 1998; Lundin & Soderholm, 1995; Norqvist, Hovmark, & Zika-Viktorsson, 2004).

In addition, actions and decisions of stakeholders on whom projects depend often take place beyond the control and sight of project teams (Agranoff, 2006; Agranoff & McGuire, 2003). The uncontrollability of stakeholders’ actions and decisions requires the ability of project teams to adapt to changing project conditions, though it is often difficult to recognize or anticipate these changes in time (Argote & McGrath, 1993). For example, it is hard to predict or anticipate the occurrence of incidents within (re) construction projects, as such work is often performed by private contractors who are not under continuous supervision. Moreover, when incidents do occur, these can trigger a series of unpredicted actions and decisions amongst the various stakeholders (Aaltonen & Sivonen, 2009; Haas, 2006; Zika-Viktorsson et al., 2006), particularly when an incident harms the interests, or threatens the credibility of stakeholders. In this manner, stakeholders’ reactions to events can become unmanageable for project teams, resulting in situations in which project teams need to constantly shift their orientation and attention between different stakeholder groups (Weck, 2005). Several incidents in the metro renovation project can illustrate the complexity of stakeholders’ reactions.

From the very beginning of the renovation project, in 2008, the performance of operational activities in multiple tunnel tubes faced problems; for instance when a supervisor from the public transport department informed other parties that the con-
sortium of contractors had not sent their work plans on time. This was problematic as the work plans needed to be assessed for compliance with safety legislation. Should the work plans not comply with these requirements, the municipal service of construction inspection (MSCI) could then “upscale” the issue to its own councillor, who was politically accountable for environmental and safety legislation. In turn, this could generate a discussion on the highest political level, which often leads to delayed approval or political interference (new demands).

Without approval from MSCI, the contractors could not start the operational work. This was particularly problematic since the operational work and, consequently, the phases of tunnel closure were prefixed (throughout summer holidays), in compliance with the municipal public transport department (MPTD). This illustrates how changes in the project situation – in this case not receiving work plans from contractors – immediately affected the interests of stakeholders, namely the completion of renovation work over the summer period. When projects did not meet the objectives of the MSCI or MPTD, these stakeholders could use their leverage over projects or their relations with political actors to impose their demands on the project team. Similarly, prior research showed that it can be challenging for project teams when they constantly have to shift their attention to different stakeholder groups as a result of unexpected events and changes in the project or its environmental conditions (Aaltonen & Sivonen, 2009; Söderholm, 2008; Weck, 2005). Moreover, how project teams respond to such events in terms of interactions with project stakeholders can significantly influence project performance (Jensen et al., 2006).

The way in which the adjustment to stakeholder demands can affect project performance is illustrated by the building supervisors’ discovery of asbestos when they were working in one of the tunnel tubes. This led to an immediate cancellation of all operational work, and caused a dispute between the project team and the private contractors. The project team complained openly that the contractors did not work in accordance with the developed technical designs of their engineers. In turn, contractors complained that the project team continuously changed the assignment and plans. Within the project, the problems piled up as they could not continue with operational work. This harmed the objectives of the project, as well as all involved stakeholders. It had become more and more strenuous for the project team to adjust to the constant flow of incidents and sudden changes in the circumstances of the project. Members of the project team constantly needed to invent solutions for these unforeseen issues.
Chapter I

Amidst these pressures, it may become increasingly important for project teams to consider and acknowledge the concerns of political stakeholders (Jensen et al., 2006; Olander, 2007). In the metro renovation project, political stakeholders initially granted the authority to the project team to make critical decisions or cope with incidents. However, the immediate cancellation of project activities meant that the project team would not complete the project in time. For several stakeholders with vested interests in project outcomes this was problematic. For example, for the municipal public transport department the metro tubes were a key link in their overarching network. The public engineering department had allocated financial resources and employees to the project. The public works department, their management, and political stakeholders were accountable for time delays and cost overruns in infrastructure projects. As a result, the project team had to cope with a severe increase in demands, and interference from both the municipal department and the political stakeholders on whom they depended for approval and support. For example, new members were added to the project team, a task force was created to monitor the project’s progress, and numerous stakeholders demanded a serious amount of information about the project situation. Eventually, political leaders postponed the project and reallocated it to a newly formed public department, which meant that the project team had to adjust to changes in the accountability structure, as new managers and project principals took over responsibility. At the time of writing this dissertation, the metro project has still not reached completion.

The course of events in the metro renovation project illustrates how the interdependence between public projects and multiple stakeholders with differentiated interests in project outcomes can cause all kinds of demands and pressures on project teams. Likewise, prior research (Alvesson, 2004; Eisenhardt & Bourgeois, 1988; Haas, 2006; Hahm et al., 2013; Zika-Viktorsson et al., 2006) has demonstrated that in overloaded or politicized environments, the interdependence between project teams and their environment can lead to persistent high pressure on projects, causing project teams to miss important opportunities for gaining control and reflecting on the actual and upcoming situation (Zika-Viktorsson et al., 2006). Under such circumstances, project teams often have a poor adherence to schedules (Peeters & Rutte, 2005) and have limited time and attention to come up with solutions that cover the interests of all involved stakeholders. This, in turn, can lead to underperforming projects and dissatisfaction amongst stakeholder groups (Pettigrew, 2014).
Dissatisfaction among powerful, political stakeholders can become particularly problematic for public projects (Eggers & Goldsmith, 2004; Forrer et al., 2010). As the metro renovation project illustrates, political stakeholders have the authority to influence public projects. For example, these kinds of stakeholder groups had the authority to demand a vast amount of information about project progress, influence important project decisions, and to postpone and reallocate the entire project. Although these political measures are not necessarily in accordance with the objectives of project teams and other stakeholder groups, public projects and involved organizations have to adjust to these kinds of demands. The main reason for the compliance is that political stakeholders are elected democratically to serve the public interest. Therefore, they have the authority to hold public agents accountable through imposing pressure and demands on public projects when they are not satisfied with project progress (Jensen et al., 2006; Provan & Milward, 2001; Waterman & Meer, 1998). The case example demonstrated that excessive interference brings challenges for project teams in both their effort to realize public projects and in adjusting to the concerns of multiple stakeholder groups.

While past research has recognized the challenges of interdependence and stakeholder influence, so far it has not sufficiently addressed how demands and pressure from political stakeholders affect project realization. In particular, the way in which the totality of interdependencies is managed throughout project realization as a result of these pressures, has received insufficient attention. As discussed, in the complex and volatile environments that often surround public projects, project teams have to cope with, or adjust to, political demands and pressure, while they simultaneously have to achieve primary project objectives and manage interdependencies with multiple stakeholder groups. In such environments, it is essential for project teams to manage project boundaries in a way that enables them to continually shift between activities that create, reinforce, or span their boundaries (Ancona & Caldwell, 1992; Faraj & Yan, 2009; Gully, 2000; Marrone, 2010). In the next section, I will elaborate on the permeability of project boundaries and the ability of project teams to deliberately reinforce their boundaries in case of persistent outside pressure on project realization.

The permeability of project boundaries in sensitive political environments

The case example of the Amsterdam renovation project illustrates that the responsible project team had to cope with an increase in demands and interference from (political) stakeholders. Generally, project teams do not have a choice in whether or not to adjust
to such demands or interference, as they need to overcome interference in order to continue task performance (Waller, 1999; Zellmer-Bruhn, 2003). For example, the project team responsible for the metro renovation had to adjust to the decisions of political leaders (e.g., compliance to task force or delivering of information) as the continuation of the renovation project eventually depended on political approval. This meant that the project team had to spend a lot of time and energy on responding to public and political pressure, in addition to performing an increasingly difficult project, and managing relations with several other, interdependent stakeholders in their environment. Ultimately, the project team neither got the project back on track nor satisfied the stakeholders, and the project was reallocated to another, newly formed municipal department.

These examples illustrate that public projects face a dilemma when they have to cope with, or adjust to, political pressures and demands, while they simultaneously have to achieve primary project goals, and engage in numerous interdependent relations with other stakeholder groups with differentiated interests in project outcomes (Aaltonen & Sivonen, 2009; Forrer et al., 2010; Newcombe, 2003; Turner & Zolin, 2012). Public projects, not only depend on political approval, but also have to gain support, acquire resources, or have to align their activities with other involved actors including other projects, (sub)departments, partner and parent organizations, or societal groups that operate in the same area (Blomquist & Packendorff, 1998; Engwall, 2003; Hülsheger et al., 2009). The aim of this dissertation is to study how such political pressures and demands affect the realization of primary project objectives, and how public project teams engage in interdependent relationships with multiple stakeholder groups from their environment.

For example, one can imagine that growing demands and pressure from political stakeholders might conflict with the time devoted to sustaining workable relations with involved actors from the parent organization. Similarly, attention to political demands might be at the expense of communicating with contractors for the purpose of monitoring their activities. Generally, project teams that balance well between external adjustment, the involvement in interdependent relations, and the focus on task completion seem to be more effective than teams that spend too much time on either of these activities (Ancona & Caldwell, 1992; Choi, 2002; Gersick, 1988; Gibson & Dibble, 2013). However, as the illustration of the Amsterdam metro renovation project shows, maintaining a balance might be impeded when public projects have to cope with severe political pressure and demands imposed on projects.
From literature we know that under these kinds of circumstances, it is essential for project teams to deliberately manage the permeability of their boundaries (Beal, Cohen, Burke, & McLendon, 2003; Faraj & Yan, 2009; Gully, 2000). Due to the multitude of interdependencies between project teams and a diversity of actors, groups, and organizations in their environment, project teams constantly have to shift between activities that create, reinforce (Faraj & Yan, 2009) or span their boundaries (Ancona & Caldwell, 1992; Marrone, 2010). This can become harder when project boundaries continuously evolve and change within a large (inter)organizational and political environment (Gibson & Dibble, 2013; O’Leary, Mortensen, & Woolley, 2011; Wageman, Gardner, & Mortensen, 2012). In the metro renovation project, for example, multiple stakeholders invaded the project with differentiated demands and requirements. In such environments, the permeability of project boundaries, i.e., how much external interference project teams allow, might influence both project realization and the achievement of stakeholders’ objectives. The challenge for project teams is to manage their permeability in such a way that they are able to simultaneously achieve primary goals, engage in multiple interdependent relations, and respond to political and public pressure (Faraj & Yan, 2009; Gibson & Dibble, 2013). This dissertation aims to extend prior research by demonstrating that managing the permeability of project boundaries might be more difficult than is previously stated when public projects are performed in sensitive political environments.

The complexity of performing public projects in such environments is for a major part due to the public scrutiny of public projects, which can further complicate the interdependence between public projects and stakeholders. In the next section, I elaborate more thoroughly on the public scrutiny of public projects and its consequences for political behavior in relation to projects.

**Public scrutiny of public projects**

In the public sector, public executives, managers, and political actors are subject to public scrutiny due to the open character of public projects (Ring & Perry, 1985). Public scrutiny means that political leaders and public agents are exposed to intense and obtrusive forms of attention from citizens, other organizations, stakeholders, partners, board members, or regulators. Public scrutiny occurs when there is something sufficiently novel, interesting, or important about a leader or organization to attract close attention and interference from observers (Sutton & Galunic, 1995). The scrutiny of public projects has previously been characterized as a “fishbowl” (Malek, 1972). The fishbowl phenomenon is also
highly applicable to municipal infrastructure projects. For example, the performance of the Amsterdam metro renovation project was in full public view. This project was performed in densely populated city areas, whereby project outcomes often had a great impact on citizens (e.g., commuters or residents living close to building sites).

Consequently, the project team and involved stakeholders also had to acknowledge the interests of citizens and societal associations. The support of these actors is often important in the context of public projects, because citizens and societal associations can easily affect public opinion (Arnaboldi, Azzone, & Savoldelli, 2004; Berry, 2015; Olander & Landin, 2005; Suskind & Field, 1996). In turn, politicians are sensitive to public opinion as they are democratically elected to serve the public interest. For instance, if projects do not meet the expectations of the public, or when projects have a negative impact on their environment, it tends to end up on the front page of the newspaper, instantly transforming a project issue into a political problem (Eggers & Goldsmith, 2004; Forrer et al., 2010). In our case, the public scrutiny of municipal infrastructure projects had a major impact on public participation and political involvement with project implementation. For example, during the actual renovation phases of the project, parts of the metro system had to be closed as operational activities took place in stations and tunnel tubes. This had already caused agitation among commuters and societal groups that represented the interests of commuters even before the project had started. Moreover, the renovation project was already controversial, because at that time other major infrastructure projects in the city had underperformed or failed. This caused major disturbances for citizens, entrepreneurs, and commuters as major parts of the city center were inaccessible for several years. In case of disturbances, societal associations, citizens, or local media can generate a lot of negative publicity for public projects. Thus, project teams needed to consider and acknowledge these groups in order to gain support and legitimate their project.

In our case, incidents in numerous major infrastructure projects resulted in extensive media coverage of project failure. Political leaders and higher public officials became worried and agitated as the incidents in the metro renovation project became part of the public discourse, and consequently the subject of negative media coverage. In my search for information on this project I found 203 negative articles in Dutch newspapers, which is an indication of the intensity of the media coverage. Television stations also repeatedly covered “clumsy” politicians who tried to justify or mitigate the project problems, stranded commuters, angry shop owners or metro drivers, or impassable
metro stations full of building materials. This was fuel for the already negative public opinion regarding the development of a new metro line crossing the city center. This project had previously faced severe incidents (e.g., subsidence of buildings in city center, severe cost overruns, and postponed project completion). As a result, these kinds of incidents became the symbol of the inability of the municipal organization to govern large and complex infrastructure projects.

The failure of highly scrutinized public projects can have severe consequences when the legitimacy and credibility of involved stakeholders is harmed. For example, underperforming organizations under intense scrutiny will devote more time and attention to symbolic actions dealing with outside attention and reputation rather than with substantive organizational tasks and responsibilities (Powell, 1988; Tetlock, 1992). Furthermore, actors under intense scrutiny are often asked to deliver a constant flow of justifications for current and planned actions (Salancik, 1977). Thus, scrutinized public projects and stakeholders might have to spend a lot of additional time and energy on political issues rather than core activities. For public projects this can become difficult as these kinds of additional demands and pressures are likely to interfere with activities aimed at project realization or adjustment with other stakeholders.

Although prior research has addressed the public scrutiny of government (Eggers & Goldsmith, 2004; Forrer et al., 2010; Ring & Perry, 1985; Sutton & Galunic, 1995) and the challenging interdependence between public projects and their politicized environment (Alvesson, 2004; Eisenhardt & Bourgeois, 1988; Haas, 2006; Pettigrew, 2014), less is known about how the public scrutiny of public projects can complicate the diverse interdependencies between projects and its different stakeholders. This is particularly relevant when public projects and involved stakeholders have to cope with project failure and increased public attentiveness. The empirical Chapters of my dissertation specifically focus on the extent to which publicly scrutinized projects attempt to maintain a balance between project realization, coping with political actions, and the adjustment to the objectives of other stakeholder groups within their environment. Before presenting the empirical Chapters of this dissertation, I will first provide information on the case background, research focus, and methodology of my empirical studies.
CASE BACKGROUND, RESEARCH FOCUS, AND METHODOLOGY

In the following sections I will provide information on the research setting, and elaborate on the research focus and methodology of the empirical chapters. A more comprehensive insight into the methods of my studies is provided in the methodological sections of the empirical chapters.

Case background

Throughout a large part of my dissertation project, I was hired as an independent research consultant by governmental organizations in order to support organizational change programs and mergers. In particular, I carried out (research) projects with a focus on coordination and knowledge exchange between teams, departments, and organizations within changing public networks. I further focused on the way in which relationships between teams and their environment affected the strategic position of organizations in their wider network of public and private partners. Against this background, I was able to set out a number of interesting case studies in order to gather data on the interdependence between (project) teams and their (inter)organizational and political environment.

Most of the data1 was collected within the infrastructural domain of Amsterdam. This domain was also the context of the metro renovation project, which I used as an example throughout the introduction of this dissertation. More specifically, I conducted large parts of my research within the municipal public works department, which was the central organization within the infrastructural domain at that time. Throughout the research period within the public works department, I was hired as a consultant to support their organizational change program. Generally, the role of researcher differs from that of a consultant (van Marrewijk, 2016; Schein, 1985). As a consultant, I was hired to monitor the change processes on specific themes, such as coordination between sub departments, organizational learning, and employees’ error handling strategies. The consultant role provided me with opportunities to talk informally with various employees and managers, which enabled me to gain a deeper understanding of the organization (van Marrewijk, Veenwijk, & Clegg, 2010). My temporary employment at the public works department also allowed me to gain access to different research sites. The role

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1 Data is stored in accordance with the guidelines for data storage of the Faculty of Social Sciences (VU University)
of researcher was different, namely, to adopt an insider’s perspective of specific projects and sub departments in order to collect data over a long period of time.

The roles of consultant and researcher cannot be completely separated throughout data collection. In that sense, it is important to note that within the public works department, I communicated clearly about my combined roles and the employees accepted this. Furthermore, I separated research and consultant activities as much as possible. For example, during consultancy activities (e.g., meetings, workshops, or presentations), I solely used data from quantitative surveys and reported findings on the departmental level. Moreover, with exception of the survey used in Chapter 3, data from the in-depth case studies was never explicitly used as input for activities to support the change program. As part of my dissertation research, for a period of nine months I participated in a project team responsible for the renovation of a central car tunnel between the northern and southern parts of the city (project Underwater). For this research project, it was important to adopt an insider’s perspective and completely adopt the role of researcher. Therefore, throughout this period, I was not involved in any other activities within the department. This was approved by the team responsible for the organizational change program. Furthermore, I made the commitment not to provide insights from project Underwater to the change team. Instead, these findings would be discussed with my colleagues at the university. Finally, it is important to note that throughout the research period in project Underwater, I used a non-intervention approach (Czarniawska, 1992) in order to capture the course of events within the project as it occurred.

The public works department suited my research purpose for several reasons. As mentioned before, I aimed to study the interdependence between public projects and their environment. The public works department is a project-based organization, which means that projects are a primary element of production, performance, and innovation (Hobsley, 2000). The responsibility for public projects was shared between political stakeholders, senior management, the (management of) functional departments, and project teams. Within project teams, organizational members from different functional and organizational backgrounds (public and private) worked together on a temporary basis. For the public works department, its main functions, resources, and knowledge had to be integrated in the infrastructure projects. Therefore, the responsibility for project outcomes constantly needed to be balanced and negotiated along functional lines. This meant that, while project teams were able to operate quite independently, they also had to maintain relations with functional departments and their management; for instance
to align project activities with departmental goals or strategic, organizational objectives.

On the basis of my preliminary interviews within the organization, I was able to determine that the public works department faced problems regarding integration and coordination between the functional sub departments. Besides, employees from the functional sub departments also complained that there was “too much distance” between large infrastructure projects and other departments. To gain a more refined understanding of such distance between interdependent temporary project teams and more routinized, functional departments, I focused more closely on the coordination and knowledge exchange between several municipal infrastructure projects and permanent departments (see Chapter 2).

As mentioned before, during my research period I was involved in a major organizational change program within the public works department. Originally, the change program was initiated after the department had failed in three major projects. One of these “failed projects” was that same metro renovation project. Examples of failure included legal conflicts between partners, inaccurate cost estimations, unforeseen technical complexities, inaccurate technical designs, and the subsidence of monumental buildings due to ground drilling. These events eventually led to major time delays and cost overruns of infrastructure projects that were of major importance for the municipality.

I observed that after such failure, the pressure to successfully perform projects can grow extensively on project teams, the public works department, and on political stakeholders. Both the projects sub department and the entire public works department faced a high degree of negative publicity, which incurred reputation damage within their wider municipal organization. As a result, political actors suspended two large projects (also the project “renovation Eastern tracks”), reallocating them to a newly formed “heavyweight” public department. I started my dissertation research within the public works department after the first turbulence had subsided, and actors were taking measures in an attempt to prevent similar failure in future projects.

At that time, the entire municipal organization was strongly focused on the success of infrastructure projects. I conducted a nine-month case study of project Underwater (see Chapter 4 and 5). This was one of the most complex and politically precarious projects at that time, which had to be executed in the direct aftermath of failure. It was interesting to study the embeddedness of the project team within a sensitive and skeptical (inter)organizational and political environment in which negative expectations and anxiety about project performance caused pressure on the performance of projects.
RESEARCH FOCUS AND METHODOLOGY OF EMPirical CHAPteRS

The empirical studies in my dissertation are centered around the diverse interdependencies between (project) teams and their (inter)organizational and political environment. Research previously addressed the benefits and challenges of interdependence for teams as well as for organizations, and this dissertation aims to extend this research in multiple ways. My research specifically focuses on the scrutiny of public projects and involved actors and stakeholders. As mentioned, public scrutiny can generate political pressure and may cause demands to be imposed on projects. In such environments, it is, or can become, necessary for project teams to manage their permeability in order to adjust to these pressures and demands, while simultaneously maintaining activities to achieve primary goals and engaging in various relations with other involved parties. The empirical chapters of this dissertation are related in multiple ways to the dilemmas that public project teams face where they have to simultaneously focus on both internally and externally oriented activities.

In order to address this dilemma and unravel the benefits and challenges of the inter-dependence between (project) teams and their environment, I adopted a multi-method approach comprising of both qualitative and quantitative methods. First, in order to gain a refined understanding of the embeddedness of public projects in a politically sensitive environment, I not only observed, but also chose to participate in a highly scrutinized municipal infrastructure project (Project Underwater). Throughout this period I used several qualitative techniques (e.g., recorded observations of project meetings and interviews), which enabled an insider’s perspective on the way the project team coped with and responded to their environment. In order to understand the interdependencies between and their environment, it was also vital to study the perspectives of involved stakeholders. For this purpose I conducted interview studies to identify the way in which actors from the municipal public works department, several public and private partners, and the wider public and political environment experienced projects and their interdependent relations with project teams. In addition to these qualitative methods I performed, in line with my research goal, a quantitative survey research to map out the interdependent relations between 73 teams from the public works departments and two other organizations (see Chapter 3). This study was designed to test specific findings from Chapter 2.

My research demonstrates the beneficial (Chapter 3) along with the detrimental effects (Chapters 2, 4, & 5) of interdependence on the effectiveness of (project)teams, departments, and organizations. Chapters two, four, and five specifically focus on the
performance of public projects, whereas chapter three broadens the research focus, including different kinds of teams from various organizations. The research focus and methods of these empirical chapters will now be outlined in more detail.

Chapter two highlights the dilemmas that temporary project teams face when they have to cope with political pressure on timely project completion. This focus can be at odds with knowledge coordination and alignment of objectives with other slower-paced, permanent departments. Prior research has demonstrated that time pressure can yield benefits to the realization of project goals by expediting project planning, coordination, and decision-making (Nordqvist et al., 2004; Waller, Zellmer-Bruhn, & Gianbatista, 2002). However, time pressure can also magnify coordination challenges between the fast-paced activities and short-term orientation of temporary project teams, and the slower paced, long-term strategic orientation of permanent departments (Dille & Söderlund, 2011; Söderlund, 2010). In order to further our understanding of the coordination between project teams and permanent departments under time pressure, I conducted a relational coordination survey (Gittell, 2001) to pinpoint the coordination between public projects and permanent departments.

To supplement these findings, I conducted interviews with managers and employees from both temporary project teams and permanent departments. At the start of every interview I asked interviewees open questions, inviting them to describe recent and prior events that were critical to coordination during collaborative episodes between teams and/or departments. Based on the events described, I was able to elaborate on the determinants and consequences of the quality of coordination. This also allowed me to identify, and explain how the quality of coordination was related to experienced time pressures within project teams. The findings revealed that political prioritizing and pressures on project completion amplified time pressure within project teams. Therefore, timely coordination of knowledge was required between projects and permanent departments, but this was inhibited by the embeddedness of knowledge and a lack of transactive memory in specific permanent departments. Given these findings, this chapter aims to advance the understanding of coordination between project teams and slower-paced, permanent departments, by explaining the differentiated nature of transactive memory across organizational settings. Furthermore, this chapter aims to extend our understanding of inhibitors to public project realization by explaining how public and political pressure on public projects can ensure timely project completion, but at the same time can harm the long-term strategy of involved public organizations.
Specific findings from chapter two reveal ways in which the differentiated nature and functioning of a transactive memory across organizational settings can inhibit timely coordination between temporary project teams and permanent departments. Chapter three extrapolates on these findings, focusing on the positive effects of a transactive memory within teams and how this enhances interdependent, boundary spanning relations between teams. Prior research has demonstrated that interdependence between teams and their environment can enhance knowledge exchange, which can lead to the generation of new knowledge, ideas, and ways of performing (Tsai, 2000; Tsai & Ghoshal, 1998). Interdependence can also ensure mutual influence, thereby enabling the alignment of actions and decisions within organizations (Lawrence & Lorsch, 1967; March & Simon, 1958).

Chapter three builds on these studies and focuses on positive aspects of interdependent relations between teams and their organizational environment, as enhanced by the functioning of a transactive memory within teams. Transactive memory is the ability to recognize and utilize team knowledge through relations between team members (Kotlarsky, van den Hooft, & Houtman, 2012). Literature on this notion has so far predominantly sought to explain internal team processes. However, as complex work is increasingly performed by multiple, interdependent teams, new challenges arise that are related to the development, functioning, and performance effects of transactive memory across team and organizational boundaries. Therefore, chapter three aims to study the effects of a team’s transactive memory on knowledge sharing effectiveness and mutual influence between various interdependent teams. In line with this goal, a theory testing approach study was designed, which comprised of a survey research of 73 teams from three organizations, respectively including 30 teams from the municipal public works department, 20 teams from an insurance company, and 23 teams from a division of a Dutch banking company. This study aims to explain how internal team processes, related to the development and functioning of a transactive memory, positively affect engagement beyond team boundaries, and how such engagement may be effective. Thus, chapter three focuses on the opportunities that interdependence provides for teams and organizations.

The last two chapters take a different angle, revealing that interdependence also becomes a challenge for project teams that operate in a difficult political environment. More precisely, chapters four and five focus on the vulnerability of project teams who have to perform publicly visible projects in a sensitive and sometimes hostile political
environment. In order to understand the vulnerability of project teams to these kinds of environments, it was necessary to adopt the perspective of a scrutinized and pressured public project. Therefore, I conducted a nine-month case study of project Underwater, which was one of the most complex and politically sensitive projects in the municipality at that time. Throughout my period in project Underwater, I took comprehensive field notes and attended 28 project meetings, which were tape-recorded and transcribed. In addition, 14 formal interviews took place with project members and stakeholders. On the basis of this data, I developed two empirical chapters from different theoretical perspectives. Both perspectives advance our understanding of the complexities that come with performing publicly scrutinized projects in a complex political environment.

Chapter four demonstrates how relations between project teams and stakeholders deteriorate when team identity is threatened and teams start to attribute project risks, such as unsolved technical problems or poor adherence to schedules, to stakeholders. To understand why project teams talk about risks in a certain way, I have used Social Identity Theory (Tajfel & Turner, 1979; Turner & Tajfel, 1982), which provides a fundamental insight into the way in which a project context affects the emotions and behaviors of project members. Specifically, this chapter reveals that teams, when a source of identity is threatened, can actively resist the threat (Ashforth, Kreiner, Clark, & Fugate, 2007; Blanz, Mummendey, Mielke, & Klink, 1998; Petriglieri, 2011). Extrapolating these findings, this chapter aims to provide thorough insight into the reasons why publicly visible projects are so sensitive to risks, and why dealing with them can become such a problem. More specifically, an in-depth case study shows that when a complex project entails severe political risks, project risks not only threaten the goals of a project, but also present a threat to the social identity of the project team. For example, as the project team was constantly scrutinized and risks were increasingly associated with their team, the members felt threatened by their environment. On the other hand, this chapter reveals how threats to social identity can stimulate a project team to attribute responsibility for risks to external stakeholders, which can influence the way in which public projects and stakeholders cooperate with one another. Given these findings, this study provides a theoretical grounding for the reason why teams construct risks in a certain way and explores the consequences of risk discourse for the relations between projects and stakeholders.

Chapter five reveals how project teams continue to be burdened by a history of organizational failure in their host department's infrastructure projects. Prior research has shown that organizational failure can lead to a breakdown in perceived organizational
trustworthiness among individuals and groups that are involved in the failed organization (Anheier, 1999; Gillespie & Dietz, 2009; Nakayachi & Watabe, 2005; Slovic, 1993). Therefore, in case of project Underwater, external trust regarding the chance that the required project outcomes would be achieved was low, and anxiety about a possible reoccurrence of failure was still dominant. This chapter focuses on ways in which a project team can demonstrate trustworthiness and sustain trust relations in the direct aftermath of failure, while simultaneously having to cope with anxiety about repeated failure and increased control of stakeholders. Little trust in project outcomes causes stakeholders to intensify their control to prevent project teams from behaving in a manner that could lead to repeated failure (Sitkin & Roth, 1993), but can also function as a means for accountable stakeholders to publicly demonstrate that they are trustworthy, i.e., able to prevent future negative outcomes (Nakayachi & Watabe, 2005). My findings indicate that increased control by stakeholders hampers project completion and thus hinders project teams in demonstrating trustworthiness independently. Moreover, the public display of stakeholder control can be perceived by project teams as avoidance of reputation loss, or as a means for preemptive blame attribution, further thwarting trust relations between projects and stakeholders. Given these findings, this chapter aims to contribute to the debates on political avoidance of reputation loss and trust-control interrelations by showing how the aftereffects of failure (anxiety and avoidance) limit the effectiveness of control as a means to repair trust in relation to scrutinized public projects.

In Table 1.1, I present an overview of the research questions, settings, methods, and empirical data I used in this dissertation and an insight into the journal papers from which the chapters in my dissertation are derived. The contribution of the supervisors and promotor to the empirical chapters is briefly described in Appendix C.
Table 1.1 Overview of empirical basis on which dissertation chapters are based.

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Research setting</th>
<th>Methods</th>
<th>Research question/ focus</th>
<th>Publications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Project teams and permanent sub departments of the public works department</td>
<td>Survey research and 18 interviews</td>
<td>How do temporary project teams and permanent departments coordinate public projects in situations of time pressure?</td>
<td>The paper on which this chapter is based is under (3rd round of) review at Long Range Planning.</td>
</tr>
<tr>
<td>3</td>
<td>Public works department, insurance company and bank division</td>
<td>Survey research in 73 teams</td>
<td>How does team’s transactive memory influence team boundary spanning effectiveness?</td>
<td>The paper on which this chapter is based has been reviewed by the Journal of Management and is finalized for submission to another journal.</td>
</tr>
<tr>
<td>4</td>
<td>Project team and stakeholders responsible for project Underwater (renovation of large tunnel)</td>
<td>Nine-month case study: 14 Interviews and observations of 28 project meetings</td>
<td>The role of social identity threat in risk discourse in an infrastructure project, and the consequences of risk discourse for cooperation with stakeholders.</td>
<td>The paper on which this chapter is published in the International Journal of Project Management.</td>
</tr>
<tr>
<td>5</td>
<td>Project team and stakeholders responsible for project Underwater (renovation of large tunnel)</td>
<td>Nine-month case study: 14 Interviews and observations of 28 project meetings</td>
<td>How do project teams and stakeholders sustain and repair trust relations in the direct aftermath of organizational failure?</td>
<td>The paper on which this chapter is based is under review at Administration &amp; Society.</td>
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