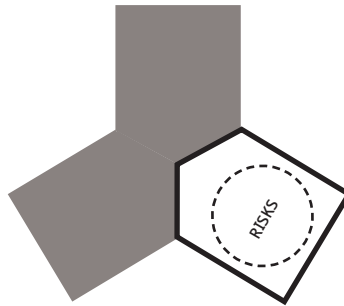


## 4 Taking risks to play it safe: value capture strategies of architectural firms



This paper was co-authored with Leentje Volker and Hans Wamelink. Currently, the paper is under review at *International Journal of Project Management*. Previous versions of this paper were presented at:

- The Engineering Project Organization Conference (EPOC), 29-31 July 2014, Winter Park, CO, the US.
- The 30th Association of Researchers in Construction Management (ARCOM) Conference, 1-3 September 2014, Portsmouth, the UK.
- The Engineering Project Organization Conference (EPOC), 28-30 June 2016, Cle Elum, WA, the US.
- The 32nd Association of Researchers in Construction Management (ARCOM) Conference, 5-7 September 2016, Manchester, the UK.

## Abstract

---

Project-based firms have to capture value from the projects in which they engage. This can be a challenging process, as firms need to reconcile project goals and organizational goals while attempting to avoid value slippage. Drawing on case-based interviews with architects and clients, this research reveals how architectural firms used the strategies of *postponing financial revenues in a project*, *compensating for loss of financial revenues across projects* and *rejecting a project* to capture value. The study contributes to the literature on project business by showing that firms will sometimes risk or accept slippage of financial value yet counteract the potential slippage of professional value in projects to enhance the overall benefits for the firm. These insights help to advance the research on value capture by project-based firms and can be used by managers to identify and overcome value capture difficulties at project and firm levels.

## Keywords

---

Architectural firms, construction projects, project business, value capture, value slippage.

---

## § 4.1 Introduction

---

Projects are the ‘business vehicles’ of project-based firms (Artto and Kujala, 2008). Thus, a mutually constructive relationship between a firm and its projects is vital for organizational sustainability. However, these relationships are often difficult to balance, as project-based firms are typically involved in several heterogeneous projects in which value creation is highly complex and uncertain (Matinheikki et al., 2016). As a result, each project can potentially benefit the firm’s business, but can also seriously undermine it.

Although organizational aspects of project-based firms have gained increased attention in the project management literature (e.g. Artto and Kujala, 2008; Miterev et al., 2017; Winter and Szczepanek, 2008), the value capture of project-based firms and the role that individual projects play in it is still largely unexplored (Laursen and Svejvig, 2016; Martinsuo et al., 2017). Since value capture represents one of the most fundamental dimensions of any business (Teece, 2010; Zott et al., 2011), understanding the value

capture of project-based firms is crucial to fully comprehend the nature and challenges of project business (Artto and Wikström, 2005).

This research aims to unravel processes of value capture by project-based firms to add to the understanding of project business. Project-based firms differ considerably from other types of organizations, as they are specialized in delivering customized products and services for unique projects, rather than operating on the basis of repetitive production or routine activities (Artto and Kujala, 2008; Whitley, 2006). Firms often pursue multiple strategic goals in their projects, for which they not only depend on the capture of monetary value, but also on the creation and capture of non-monetary dimensions of value, such as project quality, client satisfaction, knowledge or enjoyment (Bos-de Vos et al., 2016; Pinto et al., 1998).

Considering the multiple dimensions involved in project-based value capture, theories of value capture that have been developed to explain profit generation by firms (e.g. Bowman and Ambrosini, 2000; Lepak et al., 2007; Pitelis, 2009) may fall short when trying to develop an understanding of this process. Therefore, we build on and extend value capture theory from the field of strategic management (e.g. Bowman and Ambrosini, 2000; Lepak et al., 2007; Pitelis, 2009) by complementing use value and exchange value (Bowman and Ambrosini, 2000; Vargo et al., 2008) with professional value (Bos-de Vos et al., 2016) to study value capture from a multidimensional perspective.

A case-based interview approach was chosen to investigate value capture by project-based firms through the projects in which they are involved. We specifically focused on architectural firms, as they are good examples of project-based firms, predominantly undertaking construction projects to provide creative professional services to clients and to generate financial revenues and other benefits through these projects (Hobday, 2000; Turner and Keegan, 2000). Interviews with the architects and clients involved in 24 construction projects were used to answer the following research question: *How do architectural firms capture multiple dimensions of value from their projects and how do their project-based approaches relate to the overarching goals of the firm?*

The results reveal that architectural firms use three different strategies to enable and safeguard the capture of multiple value dimensions from their projects: *postponing financial revenues in a project, compensating for loss of financial revenues across projects and rejecting a project*. We found that these strategies largely revolve around responses to potential value slippage (Lepak et al., 2007). The postponing strategy shows how project-based firms attempt to benefit from risking not capturing sufficient monetary value from the value that they co-create over the course of the project's lifecycle (i.e. risking financial value slippage). The compensating strategy details how

firms accept financial value slippage in projects in line with their entire portfolio. The rejecting strategy reveals how project-based firms may dismiss projects in an attempt to counteract potential slippage of professional value.

The results contribute to the literature on project business in two significant ways. First, they add to the understanding of value creation and capture in projects (e.g. Artto et al., 2016; Laursen and Svejvig, 2016; Matinheikki et al., 2016) and project business (e.g. Artto and Kujala, 2008; Artto and Wikström, 2005; Kujala et al., 2010) by providing an extended and more nuanced conceptualization of value slippage. The results show that firms sometimes intentionally risk or accept financial value slippage as it can be beneficial for firms in the longer term or reject projects to actively prevent professional value slippage. This shows that a conceptual distinction between financial and professional value slippage can add new insights to our understanding of value-related processes and the relationship between project and firm in project business. It also shows that value slippage does not always need to be avoided, as has been pointed out in earlier research (Chang et al., 2013; Lepak et al., 2007), but needs to be managed consciously by firms.

Second, the results detail how projects are related differently to the overarching firm goals and highlight three aspects that play a pivotal role in the value capture strategies of firms, namely value dimensions, portfolio and time. This underlines the importance of a multidimensional, multilevel and lifecycle perspective for studying project-based value capture. Based on our insights, we argue that existing theories of value capture need to be extended to encompass the dynamics involved in project business. We further suggest that project-based firms may benefit from identifying and responding to potential value slippage in their projects to manage value capture in and across projects and enhance the benefits for both project and firm.

This paper is organized as follows. We first present a review of the literature, with a focus on value capture, challenges in project-based value capture and strategies for value capture. In the subsequent section, the research methods, including the empirical setting, data collection and data analysis will be presented. The results section then presents the three strategies that were used by architectural firms to capture value in projects, as well as the underlying responses to potential value slippage. We conclude with a discussion of the original contributions of our results to the literature on project business, drawing attention to the managerial implications of our research and addressing some limitations and directions for future research.

## § 4.2 Theoretical background

### § 4.2.1 Value capture

Value capture refers to the process by which firms retain a part of the value that they create (Zott and Amit, 2010). It is also referred to as value appropriation (e.g. Burkert et al., 2017; Mizik and Jacobson, 2003). In an organizational context, Pitelis (2009, p. 1118) defines value as 'the perceived worthiness of a subject matter to a socio-economic agent that is exposed to and/or can make use of the subject matter in question'. Thus far, the majority of research on organizational value capture has been conducted in the field of strategic management, focusing on profit generation by goods producing or entrepreneurial firms (Lepak et al., 2007; Pitelis, 2009). In these studies, value capture is commonly defined as the difference between a firm's revenues and costs, and is conceptualized as the exchange of the utility of a good or service for money at a certain moment in time (Bowman and Ambrosini, 2000; Mol et al., 2005). This is often referred to as the exchange of 'use value' (i.e. the customer's subjective perception of the qualities or utility of a product or service) for 'exchange value' (i.e. the price paid to the firm) (Bowman and Ambrosini, 2000; Vargo et al., 2008). While the value that is created by the firm consists of a certain quality and utility, the value that is captured by the firm is monetary.

In the field of project management, value capture has only recently gained attention as a phenomenon that is important to study (Chang et al., 2013; Laursen and Svejvig, 2016). Scholars have explicitly called for more research on value capture in a project context, as the process is distinct from the process of value creation and may add new insights to the understanding of value-based processes in projects and how project-based firms work (Laursen and Svejvig, 2016; Martinsuo et al., 2017). Value capture studies are also relevant because project-based firms often encounter difficulties when attempting to capture value in their projects.

### § 4.2.2 Challenges in project-based value capture

Service-dominant logic and service logic scholars argue that value is only created when a firm's products or services are perceived to be worthy by the client, user or

other stakeholders and, therefore, always co-created or co-destroyed in the context of interactions between multiple, heterogeneous actors (Grönroos and Ravald, 2011; Plé and Cáceres, 2010; Vargo and Akaka, 2009; Vargo et al., 2008). This means that project-based value capture is a complex, dynamic social process involving multiple stakeholders, who all have different and sometimes conflicting goals (Matinheikki et al., 2016; Van Marrewijk et al., 2016).

In project-based environments, value capture revolves around largely intangible values, which continue to evolve over the course of a project. At the front-end, the value that can be captured from a project is often highly uncertain and unpredictable (Samset and Volden, 2016). Certain aspects of a project delivery may only become worthy over the course of a project or even after completion (Chang et al., 2013). This makes it difficult to create a 'healthy' balance between use value and exchange value from the viewpoints of various actors; especially since these actors pursue different goals in the project and have different perceptions of worth (Chang et al., 2013).

Because of the complexity and dynamics involved in the process, value may easily slip from one actor to another. Lepak et al. (2007) used the notion of 'value slippage' to explain why actors are not always able to capture the monetary equivalent of the value that they co-create. They argue that value slippage occurs in situations where the use value created is high but the exchange value is low. In these situations, clients or other stakeholders may benefit from the utility of a product or service without adequate payment. In line with Lepak et al. (2007), Chang et al. (2013, p. 1140) describe value slippage as 'a phenomenon that occurs when value is created but not captured [by the firm]'. Value slippage can be detrimental for a firm that co-created value in a project, as the firm has to bear the costs of value generation without being able to benefit from it financially (Chang et al., 2013; Lepak et al., 2007). Thus, value capture 'needs to be managed appropriately to avoid "value slippage"' (Chang et al., 2013, p. 1140).

### § 4.2.3 Strategies for value capture

---

The strategic management literature has revealed how certain strategies allow firms to capture monetary value from their products and services and protect themselves against value slippage. Pitelis (2009) differentiates between four types of value capture strategies that firms may use: 1) field-level strategies aimed at creating and maintaining barriers to entry for new firms (e.g. absolute cost advantages, economies of scale, product differentiation strategies), 2) firm-level 'generic strategies' aimed at reducing the forces of competition (e.g. cost leadership, differentiation, niche

strategies), 3) inter-firm-level strategies aimed at generating efficiency or market power (e.g. integration, cooperation, diversification strategies), and 4) firm-wide differentiation strategies aimed at creating a competitive advantage by building on the advantages of the firm (e.g. resource, capabilities, business model strategies).

Although empirical evidence has demonstrated that firm-wide differentiation strategies can indeed be instrumental in their value capture (Zott and Amit, 2007), it has been recognized that they can also involve value slippage. For example, Somaya and Mawdsley (2015) argue that entrepreneurial, skilled or creative people enhance firms' abilities to capture financial value, but may also use their unique position in the firm to appropriate parts of the value captured, resulting in value slippage for the firm. Mizik and Jacobson (2003), argue that firms may sometimes decide to prioritize value creation over value capture and allocate their resources accordingly. This emphasizes that firms may be confronted with trade-offs when deciding on their value capture strategies.

A recent study on value capture by highly professionalized firms operating in projects highlighted that the value capture strategies used by these firms are often characterized by trade-offs between different value dimensions (Bos-de Vos et al., 2016). In the study of Bos-de Vos et al. (2016), the interaction between use value and exchange value is complemented with 'professional value'. With the notion of professional value, the authors refer to the perceived qualities or utility of a firm's products or services that are important for realizing the firm's professional goals, such as building and maintaining a reputation, further developing the organization or realizing work pleasure. The study emphasizes that projects are not only the main means by which project-based firms generate financial revenues (Arvidsson, 2009), but that they are also used to attain other strategic objectives, which makes it important for firms to develop value capture strategies that are able to generate a balance between the different values they aim to capture in a project (Bos-de Vos et al., 2016). Thus, for researchers interested in understanding the value capture of project-based firms with multiple strategic goals, it is important to gain more insight into how firms attempt to capture multiple dimensions of value in projects and how and why firms make trade-offs between different value dimensions in their project-based value capture strategies. This study focuses on this particular area of interest.

## § 4.3 Research methods

An inductive qualitative approach was chosen to develop an in-depth understanding of how project-based firms capture multiple dimensions of value in their projects. An inductive approach is appropriate to gain insight into phenomena for which plausible existing theory and empirical evidence are lacking (Edmondson and Mcmanus, 2007). As such, it is particularly suitable for examining the capture of multiple dimensions of value by organizations in a project context, which has been largely underexplored in existing value capture research. Choosing case-based interviews as our method of data collection allowed us to gather rich, case-specific data that could reveal important arguments, feelings and dynamics behind firm value capture strategies in projects.

### § 4.3.1 Empirical setting

Architectural firms involved in construction projects served as the empirical setting for our research. These firms primarily rely on various one-off projects as the basis of a successful business (Hobday, 2000; Turner and Keegan, 2000) and thus need to capture value in these projects. Value co-creation and value capture in construction projects is highly complex, as the many actors involved often have diverging goals (Matinheikki et al., 2016; Van Marrewijk et al., 2016). The value capture of architectural firms is particularly challenging, as these firms need to realize their own creative, professional and commercial goals (Løwendahl, 2005; Maister, 2012), while simultaneously addressing different client, stakeholder and societal demands in their projects. The fact that architectural firms are typically not in the position to design or influence the project's value co-creation process (Liefstink and Bos-de Vos, 2017; Manzoni and Volker, 2017), further complicates their value capture.

Due to the background of the authors, we conducted our research in the Netherlands. Over the past few years, many organizations that are involved in Dutch construction projects have proactively changed or been forced to change their service delivery. Contextual developments, such as the global economic recession of 2008, an increase in the procurement of integrated project deliveries, and the rise of new technologies, such as Building Information Modelling (BIM) and 3D printing, have also challenged architectural firms to rethink the way they create and capture value in projects (e.g. Schoorl, 2011; Van Doorn, 2014). As a result, organizations are confronted with new dynamics and challenges in their value co-creation and value capture processes.



### § 4.3.2 Data collection

---

Data were collected from January 2014 to January 2015. We chose to sample a broad selection of architectural firms that were involved in diverse projects so we could search the data for overarching patterns across firms, which were not exclusive to any particular project context. In total, 24 firms were selected. These had diverse strategic orientations, including strong-idea firms, strong-service firms and strong-delivery firms (Coxe et al., 2005). They were established between 1927 and 2013 and consisted, at the time of the interview, of between 1 and 120 people. The projects in which the firms were involved differed in typology (projects included residential buildings, hospitals and care facilities, offices, educational buildings, a sports facility and a railway station), geographical location (the locations were spread across the Netherlands) and governance form (projects included traditional project deliveries, integrated project deliveries and alternative governance forms). All projects were ongoing for at least one year or were realized no longer than a year prior to the interview to ensure that the respondents were able to reflect on the value capture process.

Our main data source consists of 25 interviews with project architects of the 24 architectural firms that were involved in the projects. The interviews were held at the interviewees' offices, they lasted between 45 and 120 minutes and were audio-recorded and transcribed verbatim. The respondents were invited on the basis of their involvement in the selected project. During the interviews, we first asked the respondents questions about the characteristics of the project to create a comfortable setting in which respondents were encouraged to open up about the sometimes sensitive subject of value capture. Then, we focused on the project goals, their own goals in the project and to what extent they felt that these project and organizational goals had been reached. This helped us to develop a general understanding of value co-creation and capture in the project. We then focused on the value capture process by questioning respondents about how they had attempted to realize their strategic goals in the project and how they felt enabled or constrained in this process.

We also conducted 15 interviews with the project clients to gather additional insights regarding the value capture processes of architectural firms. These clients were public, semi-public and private construction organizations and included governmental agencies, hospitals, housing corporations, contractors and developers. We specifically asked clients why they had selected the architectural firm, how they experienced the collaboration with the architects in the project and how satisfied they were with the outcome of the project. This was important, as it provided a different perspective on the co-creation and capture of value in the project and the extent to which goals had been reached. In addition, we collected project and firm documentation provided by

the respondents or available on firm websites, such as project descriptions and the firm mission and vision. The client interviews and archival documents helped to gain greater contextual understanding of the firms and projects under investigation.

### § 4.3.3 Data analysis

---

The data analysis consisted of three iterative steps in which we continuously alternated between within-case analyses on the basis of the interviews of one specific project and cross-case analyses by comparing the interviews of different projects. This facilitated us in gaining a detailed understanding of architectural firms' value capture in specific projects and the overarching patterns of relationships that characterized these processes (Eisenhardt and Graebner, 2007). The software program MAXQDA was used as a supporting tool. During the entire process, we repeatedly compared our empirical results with the literature on organizational value capture (e.g. Bowman and Ambrosini, 2000; Lepak et al., 2007; Pitelis, 2009) and attempted to identify similarities and differences. The transcripts of the architect interviews were used as the primary data source for the analysis. The transcripts of the client interviews and archival documents were consulted to support and refine the emerging results and were also used for triangulation purposes.

The first step in the analysis aimed to develop a detailed understanding of the *content* of architectural firms' project-based value capture. We searched the data for values that respondents wished or claimed to have captured in their projects and grouped these into four overarching categories of 'value capture goals', namely 'reputation', 'development', 'work pleasure' and 'money'. The reputation category included values such as prestige and project quality; development consisted of values such as knowledge, competitive advantage, innovation and commercial relationship; work pleasure consisted of values such as enjoyment, appropriateness and appreciation; and money included values such as income and profit.

In the second step, we aimed to gain a profound understanding of the value capture *process* of firms. We analysed the individual interviews looking for specific actions and decisions that were related to a firm's value capture in the project. The subsequent comparison with other interviews led to the emergence of various value capture tactics that were used by architectural firms to appropriate value from a project. Further investigation, which focused on detailing the situations in which each tactic was used, as well as their aims and effects; led us to distinguish between three categories of tactics that were used to navigate between the project and the firm: 'investing tactics'

(investing in the project, increasing the investment in the project), 'compensating tactics' (compensating the project with realized projects, compensating the project with another active project) and 'refusing tactics' (saying no to the client prior to involvement, saying no to the client during the project).

The third and final step focused on identifying and unravelling project-firm strategies for value capture based on the relationships between different tactics. For this purpose, we rigorously analysed the different tactics and examined how they were shaped by dynamics occurring at the intersection of the project and the firm. We specifically searched for project and organizational reasons that had triggered firms to engage in certain tactics in a project, and the implications of these project-specific tactics. This resulted in the identification of three overarching project-firm value capture strategies used by architectural firms, which we labelled as follows: 1) 'postponing financial revenues in a project', 2) 'compensating for loss of financial revenues across projects' and 3) 'rejecting a project'. Detailing the interaction between use value, exchange value and professional value (Bos-de Vos et al., 2016; Bowman and Ambrosini, 2000) was a crucial step in this process. It highlighted two types of value slippage-related risks that were at the core of the strategies: the risk of financial value slippage and the risk of professional value slippage. Analysis of the different ways in which these risks were responded to, revealed that the value capture strategies of architectural firms were largely shaped by strategic decisions with regard to value dimensions, firm portfolio and time. In the results section, the three strategies and underlying value slippage responses are presented in detail. [Table 4.1](#) provides an overview of typical interview statements for each of the three strategies. The respondents are designated A1 to A25.

VALUE CAPTURE STRATEGY 1: Postponing financial revenues in a project	VALUE CAPTURE STRATEGY 2: Compensating for loss of financial revenues across projects	VALUE CAPTURE STRATEGY 3: Rejecting a project
<p><b>Investing in the project:</b> ‘We made an agreement with the contractor about a bonus. We would do the tender for cost price and if we won, we would receive a bonus. For them [it was] good because the work was initially cheaper. And for us [it was] good because we would get more with a bonus than what we would have if we had asked for our normal fee.’ (A13)</p> <p>‘And then we try to make a good arrangement with the client regarding what we will earn if we get selected and what we will potentially earn afterwards. We don’t mind taking a risk with that because all parties do so, but it needs to be in proportion.’ (A22)</p> <p>‘So, sometimes we say in an initial stage, “Pay us half the hourly rate that we are asking; so, for an average fee of 100 euro, pay us 50 euro at this stage, but if it [the project] continues we want you to pay us 150 euro instead of 100 euro.” Well, that went well a couple of times because we won and got 150 all of a sudden, and sometimes it doesn’t go that well and then it’s our risk. But most of the time, those 50 euros cover our expenses, so we can just break even. But in that way, you have to try to be inventive in how you persuade the client to cooperate in the exploration of a project and pay us for it.’ (A23)</p> <p><b>Increasing the investment in the project:</b> ‘At a certain time, we had to do something again and then something else. So, we said: “There is no more money, we would love to do it, but we had an agreement.” Well, then we eventually solved it without additional payment, by making our subsequent assignment larger if we won.’ (A13)</p>	<p><b>Compensating the project with realized projects:</b> ‘[...] so, this was a project that we certainly didn’t make any profit with. [...] But we look at our entire portfolio and consider: “Can we miss out on those couple of thousand euros?” And that’s how it goes.’ (A20)</p> <p>‘If we can build a financial buffer with these projects, with which we can take risks, we will also start developing ourselves. Then I can dare to do even more by ourselves.’ (A15)</p> <p><b>Compensating the project with another active project:</b> ‘[...] in the past, it was already the case that utility projects frequently financed the housing projects’ (A21)</p> <p>‘The time spent with private clients is really a lot more than with commercial projects. In other words, we don’t make a profit in private projects. We do private projects because we can develop ourselves by doing them and because we really like it, but it gets paid for by other projects.’ (A9)</p>	<p><b>Saying no to the client prior to involvement:</b> ‘We notice that we have to say no more often to projects where you only get a small fee for a design stage. Because that’s just not feasible for us and also because I believe that it’s not good for your firm. After all, you need to stay healthy.’ (A23)</p> <p>‘We asked 2500 per house and he [the developer] considered that way too much [...]. He said: “My directors consider it an opportunity to work with you, but it isn’t a must and if I tell them that you are asking this amount, they will immediately go to another architect because this is way too much money.” [... So] I thought: ‘Maybe I just need to consider this a side experiment, but not give away everything I have to offer there, because you give those developers your network, all your ideas, your knowledge and then they destroy it. And you don’t get paid for that.’ (A15)</p> <p>‘So, if [the client] says: “I would like to have one hundred semi-hooded 1930s houses”, I [may] think “that’s a quick earn”, but after that my office is done. So, I don’t do it.’ (A9)</p> <p><b>Saying no to the client during the project:</b> ‘And we created a beautiful design, but the client was really pig-headed and wanted to ignore all kinds of rules, such as fire regulations, etc. [...] We really had a fantastic project. A very big assignment for our office, with a fee of more than one million euros. So, then we said: “Call it off, go find another architect, look for another victim.”’ (A19)</p>

TABLE 4.1 Typical interview statements

## § 4.4 Findings

Architectural firms used strategies of postponing financial revenues in a project, compensating for loss of financial revenues across projects and rejecting a project to capture value in their projects from a firm perspective. Further examination of the three strategies with regard to the interactions between different values (use value, exchange value and professional value) reveals that the three strategies all revolve around responses to potential value slippage. Firms intentionally risked or accepted financial value slippage in projects by using the postponing and compensating strategies, and attempted to avoid the slippage of professional value by using the rejecting strategy. In the sections below, we present the three strategies in detail, drawing attention to the underlying reasons that firms have for pursuing the strategies, providing examples of the tactics used to carry out these strategies and discussing the value slippage responses underlying each strategy with regard to the trade-offs they involve across different value dimensions, across firm portfolio and across time.

### § 4.4.1 Value capture strategy 1: Postponing financial revenues in a project

By postponing financial revenues in a project architectural firms offered the client a reduced fee in the project's first phase and attempted to ensure that they could generate profit in later phases. With this strategy, firms accommodated their clients' need to keep the costs low in the initial phase, as well as their own professional desire to be involved in the project. They also pursued an increase in financial benefits compared to their traditional revenue structure. As the strategy requires an investment in the front-end of a project, it carries substantial risk related to the uncertainty about the project continuing or not.

#### Underlying reasons

The postponing strategy was often chosen in tender situations where architectural firms were expected or asked by their clients to treat the initial assignment as an investment. Many clients seem to believe that joint investments represent crucial incentives to collaborating actors to give everything it takes to win a project. A private developer explained that he expected architectural firms to invest in a potential project, as they would automatically become part of the team in case of winning the tender:

*What we do, we have a competition and then we compose a team and we say to the architect, but also to ourselves and to the contractor, 'Let's all go for it, all the way, but we won't send each other invoices'. So, we all do it at our own risk, but if we win, we are also a team and we will arrange everything nicely and ... so together you all invest in yourself.*

Although the architects often expressed their dissatisfaction regarding the tough financial conditions that accompanied tenders and development competitions and attempted to be selective in the tenders in which they became engaged; in general, they considered tenders necessary investments in future work.

Architectural firms also used the postponing strategy in other projects where the client had the financial resources to pay the architect an adequate fee, but where payment in the front-end was difficult. This was, for example, the case for projects where the potential benefits were still highly uncertain or where the client did not yet have access to the necessary financial resources. In these situations, architectural firms wanted to help their client make the project feasible. They also attempted to ensure that the client would not let the project go or continue without the involvement of the architectural firm. As architect A23 said:

*[...] you have to try to be inventive in how you persuade the client to cooperate in the exploration of a project and pay us for it.*

Although this architect eventually wanted payment for her services, she was willing to co-invest in the project to help her client. Hence, firms deliberately chose to postpone financial revenues in projects that they absolutely wanted to be engaged in.

### Examples of tactics used

---

The tactics that were used by firms to postpone financial revenues in a project largely revolved around attempts to negotiate revenue structures that covered their expenses or would only lead to marginal losses during the first phase, and that became profitable over the course of the project. Firms seemed particularly keen on ensuring that their investments were reasonable in the context of the wider project and that they would eventually pay off. Respondent A22 pointed out:

*We don't mind taking a risk with that [investing in the project] because all parties do so, but it needs to be in proportion.*

In several interviews, the architects argued that investing in the first phase of a construction project – which usually includes the development of a design – basically implies giving away their core business for free. For the other project actors, such as real estate developers or contractors, the investments required generally involved fewer substantial activities and costs, which are often insignificant compared to the overall revenues of these firms.

Respondents gave examples of negotiating dynamic fees that grew when they were able to create more square metres in a project; revenue structures that included different hourly rates per phase; and bonus structures based on specific incentives. While the first two were rarely mentioned, negotiating a bonus structure seemed particularly popular among the firms in our sample. A large number of respondents saw a success bonus or performance-based bonus as a perfect way to make up for the lack of sufficient financial revenues in the initial phase of a project, as is illustrated in the quote below:

*We made an agreement with the contractor about a bonus. We would do the tender for cost price and if we won, we would receive a bonus. For them [it was] good because the work was initially cheaper. And for us [it was] good because we would get more with a bonus than what we would have if we had asked for our normal fee. (A13)*

In addition to this, we found that firms stuck to the strategy of postponing financial revenues in a project when the conditions for value capture became more difficult in the project's first phase. For example, when firms were asked to perform additional activities and were unable to convince the client to pay for these extra efforts, they increased their investment in the project. Architect A13 explained how he went along with his client's requests for additional work by negotiating an even greater return for the project's next phase:

*At a certain time, we had to do something again and then something else. So, we said: 'There is no more money, we would love to do it but we had an agreement'. Well, then we eventually solved it without additional payment, by making our subsequent assignment larger if we won.*

So although the costs were no longer covered, this firm continued its work. This shows that firms were willing to accept more financial risks and burdens in a project's first phase as long as they had a good chance to recover the outlays in subsequent phases of the job.

## Value slippage response: Taking the risk of financial value slippage

The postponing strategy demonstrates that firms sometimes took the risk of financial value slippage in a project, as they wished to be involved in the project to capture professional value. Firms considered the concerned projects nice additions to their portfolio and a way to benefit in the longer term. By enabling the client to benefit from a reduced fee in the first phase of a project, firms initially realized more use value than the exchange value they received in return. They thereby accepted that financial value slippage occurred in the first phase of a project. Although firms aimed to reverse this slippage of financial value over the course of the project by increasing the exchange value in later phases, they took the risk of receiving less exchange value than the created use value was worth if the project did not continue. Figure 4.1 shows that firms invested money in the first phase of the project and were able to recover their financial investment in later phases if the project was continued. In both phases of the project, the use value that was created also enabled the firm to capture professional value.

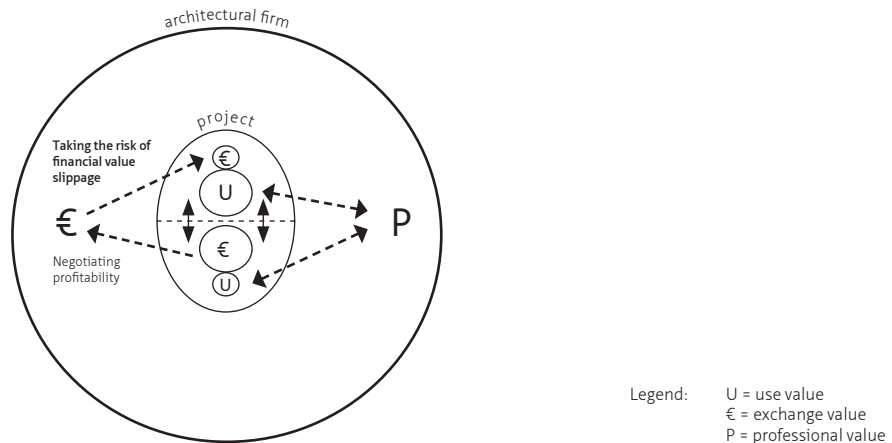


FIGURE 4.1 Postponing financial revenues in a project

As has been shown through the accounts of the postponing strategy, firms seemed willing to accept the risk of financial value slippage in a project or, if necessary, were even willing to accept an increased risk, as long as the risk was considered reasonable within the context of the project, and financially feasible for the organization. The results suggest that firms deemed that the risk of financial value slippage in a project



was particularly worthwhile when they saw the project as an opportunity for future work that fitted well with their professional goals.

From the viewpoint of the firm's portfolio and depending on the risk taken, postponing strategies were only possible to a limited extent, as firms needed a financial buffer to overcome the loss of financial revenues in the project's first phase and the further loss of financial revenues if the project did not continue. This suggests that firms could only engage in this strategy occasionally and needed to make financial agreements that allowed them to cover their expenses in the first phase and make a profit in later phases. It also indicates that, for each project, firms needed to decide to what extent the project context and the benefits envisioned in relation to the particular job justified taking the financial risk.

Time played a crucial role when taking the risk of financial value slippage. Firms faced the risk that the project would not continue after the first phase. They thus needed to ensure that they would indeed be commissioned for later project phases. Some respondents preferred to work with non-professional clients, such as hospitals and schools, in order to ensure this continuity, as, typically, these clients commission firms for the entire scope of a project, while commercial clients, such as developers or contractors, tend to divide projects into smaller parts and only offer certain aspects of the job to architectural firms. This suggests that the type of project and client influenced judgements about how beneficial it is for the firm to take the risk of financial value slippage in a project. Firms also needed to limit the time spent on the project to ensure that their costs did not get out of hand and they were able to compensate their initial investments in later project phases. Thus, to ensure that taking the risk of financial value slippage would lead to the successful capture of both financial and professional value, agreements regarding the nature of the firm's involvement and the payment of the firm in the project were particularly important.

#### § 4.4.2 Value capture strategy 2: Compensating for loss of financial revenues across projects

---

With the strategy of compensating for loss of financial revenues across projects, architectural firms deliberately engaged in non-profitable projects by compensating for any financial revenues lost with the revenues of other projects. We found that non-profitable projects represented a substantial part of the portfolio of many firms. For example, respondent A9 mentioned that one-third of his firm's portfolio, and sometimes even more, consisted of housing projects that did not generate any profit.

This implies that the compensating strategy is often used on a regular basis and strongly embedded in the management of a firm's entire portfolio.

### Underlying reasons

---

The compensating strategy was often used in projects that were characterized by tight budgets, such as social housing or projects for private clients. In these situations, architectural firms pursued the compensating strategy because they saw no opportunity to negotiate a higher fee but did not want to miss out on the project. Respondents emphasized that, in certain situations, it is simply impossible to be paid their actual worth. For example, they said that some clients did not have the expertise or experience to understand how much time it takes to come up with a project solution and are often unable to foresee the benefits that will result from the architectural firm's involvement:

*With private clients it is often the case that we are too expensive. It's an enormous investment to hire someone to spend that much time on your own personal wishes. [...] And in the end or during the process you often see that it finally makes sense. After all, you do so much, all the drawings, things ... then they eventually see the complexity of your work. (A9)*

The respondents believed that attempts to negotiate a higher fee would only lead to relational tensions and could even jeopardize their involvement in the project. As a result, firms deliberately did not insist on full payment.

Firms also used the compensating strategy in projects where financial resources were lacking altogether, such as projects initiated by architectural firms that did not directly involve a paying customer. Many architects believed that initiating projects would help them to claim a more comprehensive role in the design, engineering and construction process and thereby help them safeguard and improve the project's quality.

Non-profitable projects often appear to revolve around unique ambitions that are sometimes difficult to find in other assignments. The architects highlighted how they used non-profitable projects to expand their portfolio and further develop their skills and expertise, which also made these projects incredibly enjoyable to work on. The architects considered the high quality and learning experiences that resulted from these ambitious projects to be very lucrative in the long term because they enhanced their firm's reputation, helped them to further develop their expertise and added to their work pleasure. Thus, the architects were willing to 'take their losses', or invest in a project, as they envisioned other benefits from their involvement in that particular

project. An example concerns architect A14, who had immediately agreed to invest in a project because he expected his investment to pay off in terms of knowledge development:

*We knew beforehand that it wasn't a regular assignment. We knew that both of us [the client and the architectural firm] needed to invest. We also knew that for us it was a matter of developing yourself as an architect, but also of doing further study. You know, if you look at it very plainly, the BNA [professional association] expects you to get your credits every year. Do I need to pay the BNA to follow two or three courses there, or do I do it in the project, because a client asks me to do it?*

The quote illustrates how architect A14 considered the investment to be beneficial because it helped him to further develop his expertise and also helped him to achieve his professional training credits. Other respondents mentioned similar reasons for engaging in the compensating strategy. The respondents also gave examples that showed how the compensating strategy had resulted in the subsequent acquisition of large and/or prestigious projects:

*So, the identity of our firm, being a firm that is really good in transformations, is due to those ambitions of private clients, such as 'I'm going to buy a church and I'm going to live in it' or 'I'm going to buy a water tower and I'm going to live in it'. And eventually that results in the references needed to transform the Drents Archive Building [a national monument]. (A9)*

This quote illustrates that the involvement of firms in non-profitable projects through pursuing the compensating strategy may contribute to the development of expertise and reputation and, as such, may be very valuable for developing or strengthening a competitive advantage and generating future work. Respondents often argued that their firm would not have been selected for a certain project without having those non-profitable assignments in its portfolio. The increased competitive advantage that was due to the non-profitable projects also seemed to enhance the firms' ability to negotiate more exchange value in future projects. This reveals the positive impact that the strategy of compensating for loss of financial revenues across projects can ultimately have for the overall value capture of a firm.

### Examples of tactics used

---

Firms decided whether or not to engage in a non-profitable project on the basis of their entire portfolio of work. Some firms assessed the financial reserves that they had built up with past work to decide on the question: *'Can we afford to miss out on a few*

*thousand euros?’ (A20), or actively worked on creating a financial buffer so they could initiate projects themselves. Other firms compensated for a non-profitable project one on one with another active project. One architectural firm, for example, systematically used utility projects to compensate for the loss of financial revenues in housing projects. Respondent A21 said that his firm had always used this strategy in order to stay involved in the housing sector. At the time of the interview, his firm was using a retail project in order to realize a housing project. Respondent A21 argued that the retail development involved so much money that the architect’s fee was the least of the client’s concerns:*

*It [a retail assignment] needs to be finished on time. Opening the store in time involves so much earning power for the retailer; our fee barely plays a role in it. So, we evaluate the quality of our contribution very commercially and ask the client to pay a commercial value. It is often the case that this is not in proportion to the hours we spend, but that doesn’t matter at all, because he is willing to pay for it.*

The quote shows how architectural firms applied negotiating tactics in certain projects so that they could use them to compensate for non-profitable projects. Some clients particularly emphasized that they were willing to pay for the commercial value that resulted from the architectural firm’s involvement.

*The architect’s fee is, I wouldn’t say a pittance, but it is only a small part of the total investment that we make in a project. And still it gets a lot of consideration, while I would personally say ‘spend a bit more on that [...] because the added value that the architect can have will pay off anyway’. At the same time, it’s the factor that is most difficult to grasp. Because, does it matter for the revenues of the building, which are important for the financial feasibility of its 50 year operation, if you hire architect X or architect Y? That’s difficult to pinpoint, but there is definitely a difference; otherwise there would not be any difference between different buildings. (Developer from a housing association)*

The clients generally argued that architects need to be much more assertive in presenting reasons to be paid their full worth. This implies that the compensating strategy – which architectural firms may consider necessary with respect to the financial resources of certain kinds of projects and suitable with respect to attaining their own professional goals – is not always considered necessary by clients.

## Value slippage response: Accepting financial value slippage

The strategy of compensating for loss of financial revenues across projects illustrates how, in certain projects, firms willingly and knowingly accepted financial value slippage. They agreed to work for an exchange value that they considered to be less than the use value that was co-created through their activities, and compensated this slippage of financial value with other projects where exchange value exceeded or had exceeded use value. Figure 4.2 illustrates how firms invested money in Project A, with the profit they expected or had been able to generate from Project B. The figure also shows that the use value that was co-created in Projects A and B depended on, but also added professional value to, the firm.

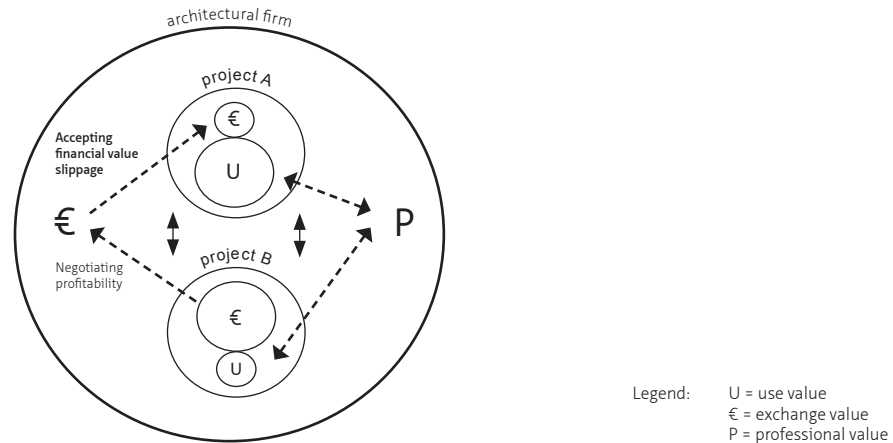


FIGURE 4.2 Compensating for loss of financial revenues across projects

When compensating for loss of financial revenues across projects, firms prioritized professional value dimensions over monetary value. Although financial value clearly slipped to the client, this did not necessarily lead to actors perceiving the project as unsuccessful. On the contrary, the architects in our sample often seemed to consider the professional value that they gained by accepting a 'lack of' exchange value, worth the financial value slippage. This is supported by the fact that architectural firms rather compensated for lower financial revenues of a project than to reject the job or endanger the professional benefits that they envisioned arising from the project. Thus, the response of accepting financial value slippage indicates that firms can be particularly eager to engage in a project that may endanger the firm's financial viability in the

short term because it allows the firm to capture professional value, which in turn may contribute to the firm's professional and financial performance in the long term.

A well-orchestrated and carefully managed balance between 'compensation' and projects 'to be compensated' on the portfolio level seemed particularly crucial when accepting financial value slippage. Even for firms that were able to create such a balance, the strategy involved considerable risks, as delays or complete abandonment of projects could severely damage the balance between different projects, and seriously impact the firm.

Accepting financial value slippage in a project also confronted firms with an important challenge with regard to time. The financial and professional 'inputs' and 'outputs' of the project needed to be consciously managed throughout the entire project process to ensure that the professional benefits pursued continued to outweigh the financial investments required. For example, the costs associated with the firm's time investment needed to be kept under control, while the professional value that was envisioned had to remain within reach.

### § 4.4.3 Value capture strategy 3: Rejecting a project

---

By using the strategy of rejecting a project, architects dismissed work of which the professional value that could be captured was not of sufficient interest for their firm. The data revealed a clear dichotomy between firms that used the rejecting strategy and firms that did not want to use it. Respondents from firms that attempted to avoid the rejecting strategy argued that clients might perceive the rejection of a project as indicating weakness in their firm. These firms preferred to put themselves in difficult positions to make the project work, rather than to disappoint the client and risk missing out on potential future work. Respondents from other firms addressed this situation in a completely different manner. These respondents mentioned that they had resolved to never accept projects that did not match their ambitions.

#### Underlying reasons

---

The rejecting strategy seemed particularly useful in projects where firms were not properly rewarded for their involvement and either could not or did not want to compensate for any loss in financial revenues. Respondents who mentioned that

they had to reject the project because it was unhealthy for business, often referred to as small assignments. This suggests that firms were more likely to reject a project when they did not foresee a substantial amount of professional value. Firms rejecting projects because they did not want to compensate for them, had recognized a clear mismatch between the project and the firm's professional ambitions. Architects used the rejecting strategy when they expected that the project would not contribute to achieving their professional goals, such as the level of quality they pursued, the development of their expertise or their work pleasure. Architect A9 listed three aspects that triggered him to reject a project:

*By saying 'yes' to all assignments offered by private clients, you sometimes face the risk that A) you don't produce quality, B) you don't enjoy the work, and C) that your business suffers from the work financially.*

This quote illustrates that architects evaluate whether a project will contribute to their professional and commercial goals in deciding whether they reject a project or not.

We noticed that the rejecting strategy was even used in situations where architects faced appropriate payment, but feared that the professional value that they had built up over the years would be endangered by the project. The respondents seemed very cautious about engaging in projects that might not result in a certain quality level. Many architects believed that engaging in 'marginal designs' would eventually destroy their firm's reputation. They argued that they had to develop and protect a high-quality brand in order to compete for interesting and fulfilling work. The respondents also gave examples of using the rejecting strategy to protect their resources and partners. For example, architect A15 considered rejecting a project because he believed that the developer involved would use his resources and partners in the wrong way and for the wrong purposes. This shows that the rejecting strategy was not only pursued because actors expected the project to prevent the capture of sufficient professional value, but also because they wished to protect the professional value that they had captured with other partners in earlier projects.

### Examples of tactics used

---

Saying no to the client prior to involvement was one of the tactics used by firms to reject a project. We found situations in which the architects immediately explained to the client that they could not be involved in the project or decided not to compete for selection in a project because they could not offer their services at a competitive rate. In these situations, the firms often wanted to do more than the client requested, in order to maintain their professional goals, or simply did not support the particular project.

Firms also used the rejecting strategy as a last resort when already engaged in a project. This often occurred when the project had evolved in such a way as to endanger or potentially endanger the professional value that the firm aimed to capture. For example, respondent A20 mentioned how his firm backed out of a competition for a school when the client decided to hire another party for the engineering work:

*The other day, we handed back a project. We withdrew from the competition because they excluded the construction drawings from our assignment. Then we said: 'Let's leave that school for what it is'. We don't want to be involved in that discussion, we know that it will result in one big misery. We know that the client will continue the design with a drafting firm and just change all kinds of things.*

Respondent A20 explained that the change in assignment immediately turned the project from interesting to not interesting because his firm would never be able to realize the level of quality that they aspired to if a drafting firm took over part of their work. Other respondents gave examples of telling the client to call off the project, or withdrawing because of an unexpected and unacceptable change in their assignment.

#### Value slippage response: Counteracting potential professional value slippage

---

The rejecting strategy reveals how firms counteracted potential professional value slippage in projects. [Figure 4.3](#) shows how firms rejected a project when they expected that the created use value would not contribute to the capture of professional value, being prepared to instantly lose any possibility of capturing value from the project. Although this may seem to be an overreaction and unhealthy for business, as firms do not generate any income by using the rejecting strategy, it does allow firms to realize their professional ambitions in the long run.



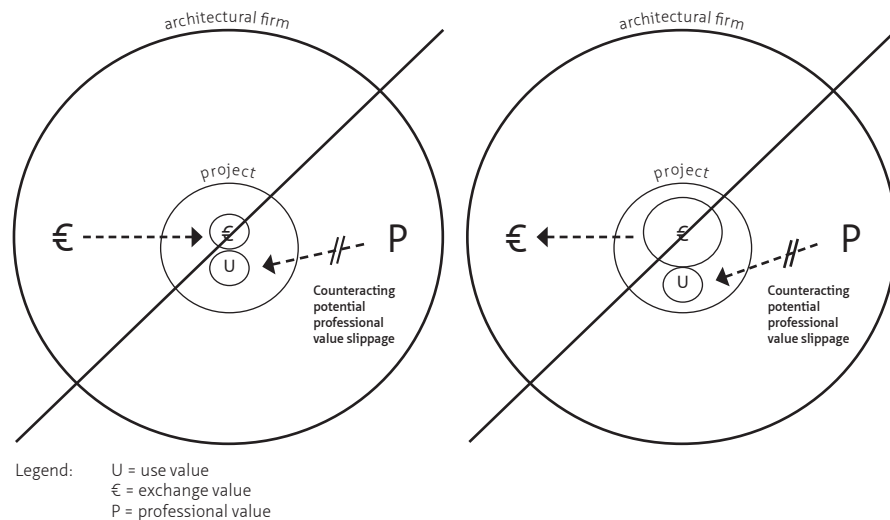


FIGURE 4.3 Rejecting a project

Counteracting potential professional value slippage largely occurred through firms' attempts to pursue and protect professional value in their projects. Cases of projects in which architects feared that they might not capture sufficient professional value from the use value that they would co-create, or that the co-created use value would eventually harm the firm's previously established professional value, indicate how firms were confronted with the risk of professional value slippage in projects. In these situations, firms used the rejecting strategy to avoid the slippage of professional value. Without the rejecting strategy, firms would have ended up working on each project that they crossed paths with, even if it did not align with their professional goals. According to the respondents, accepting professional value slippage can seriously damage a firm's reputation and its unique selling points and ultimately destroy its ability to capture financial and professional value in future projects. Thus, although the rejecting strategy prevents any capture of value in one project, it may contribute to a firm's value capture in the long term, which more than compensates for not engaging in the project.

The fact that firms did not generate any income or other value by rejecting a project implies that they needed to have sufficient work within their portfolio and a solid financial basis to be able to engage in the rejecting strategy. In some cases, firms really needed a project to keep their portfolio full and their employees working. In these situations, firms faced the choice of accepting the project and the limited professional value that was associated with it, or dismissing the project and laying off staff to survive as a firm. Examples of firms choosing for the latter, suggest that the rejecting strategy

may be particularly useful for firms that have a clear professional ambition and are willing to face and act upon the organizational implications of following that ambition.

The examples of tactics underlying the rejecting strategy show that firms used the strategy both before the start of a project and during projects. In situations where the created use value clearly outweighed exchange value, rejecting a project along the way resulted in financial value slippage. In this regard, timely go/no-go decisions for projects that are not clearly contributing to the firm's professional goals seem particularly important to avoid losses on financial investments in a project. In addition, taking time to negotiate sufficient professional value and exchange value in a project may also pay off.

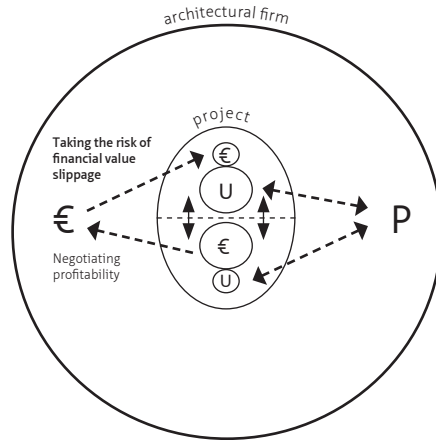
---

## § 4.5 Discussion and conclusion

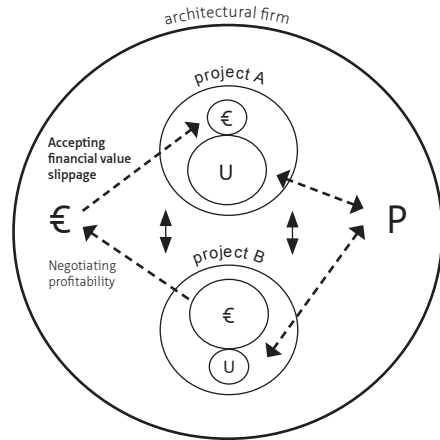
---

This research aimed to investigate how project-based firms attempt to capture multiple dimensions of value in projects. [Figure 4.4](#) presents an overview of how architectural firms' value capture strategies for projects largely revolve around responses to value slippage. With the strategy of *postponing financial revenues in a project*, firms attempt to benefit financially and professionally from risking financial value slippage over the course of a project's lifecycle. By *compensating for the loss of financial revenues across projects*, firms accept financial value slippage in a project for the sake of attaining their professional goals, and they compensate for this by ensuring they profit from another project. The strategy of *rejecting a project* shows how project-based firms may refuse to become or stay involved in certain projects to avoid a potential decline in professional value.

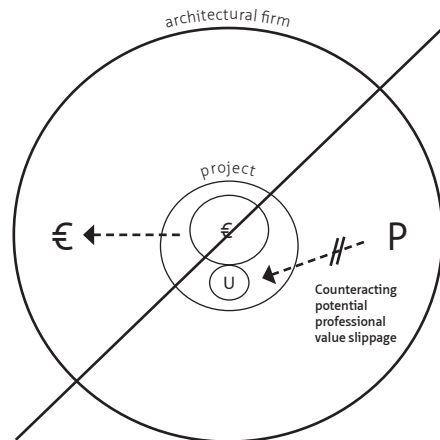
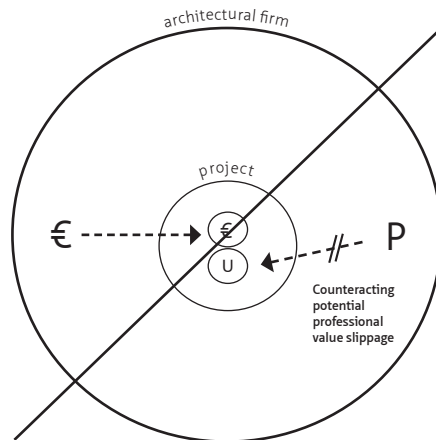
**Value capture strategy 1:  
Postponing financial revenues in a project**



**Value capture strategy 2:  
Compensating for loss of financial revenues across projects**



**Value capture strategy 3:  
Rejecting a project**



Legend: U = use value  
 € = exchange value  
 P = professional value

FIGURE 4.4 Overview of value capture strategies

## § 4.5.1 Contributions

---

Laursen and Svejvig (2016) and Martinsuo et al. (2017) recently identified the development of theory concerning value capture by project-based firms as an important research avenue, as value capture need to be distinguished from value co-creation (Bowman and Ambrosini, 2000; Lepak et al., 2007; Pitelis, 2009) and there are very few insights into the actual value capture of project-based firms (Laursen and Svejvig, 2016). Our work offers two important contributions to this area.

First, our study adds to the understanding of value creation and capture in projects (e.g. Artto et al., 2016; Laursen and Svejvig, 2016; Matinheikki et al., 2016) and project business (e.g. Artto and Kujala, 2008; Artto and Wikström, 2005; Kujala et al., 2010) by providing an extended and more nuanced conceptualization of value slippage. Although the notion of value slippage has, thus far, been used to refer to losing out on financial value, which should be avoided by firms (e.g. Chang et al., 2013; Lepak et al., 2007), our results indicate that value slippage has a more elaborate meaning in project business. We found that firms may also encounter issues of professional value slippage in their work, which led us to distinguish between 'financial value slippage' and 'professional value slippage'.

Our study shows how distinguishing between different types of value slippage and acknowledging that these can be both harmful and beneficial for a firm would be particularly useful to develop a better understanding of the complex and dynamic value-related processes that characterize projects, in particular when project-based firms face tensions between pursuing multiple strategic goals that require the capture of monetary, professional and/or social values. While respondents considered professional value slippage detrimental to their firms' long-term performance, financial value slippage was often perceived and even found to be beneficial to firms.

Second, the value capture strategies and embedded responses to value slippage highlight three areas in which project-based firms need to navigate between the project and the firm: value dimensions, firm portfolio and time. With regard to value dimensions, our results underline the important influence that professional value has on the value capture of project-based firms and thereby add additional insights to earlier work in this area (Bos-de Vos et al., 2016). Although existing research on value creation and value capture has started to consider other dimensions of value, such as social wealth (Thompson and MacMillan, 2010) or strategic value (Martinsuo and Killen, 2014), most of the research on value capture merely remains focused on financial revenues and profit generation (Lepak et al., 2007; Pitelis, 2009). Our results underline both the need for, and opportunities to include, multiple dimensions of

value in the study of project-based value capture. While the use of postponing and compensating strategies shows that beneficial outlooks of professional value capture trigger firms to risk or accept financial value slippage in a project, the use of the rejecting strategy shows that negative outlooks on professional value capture can be a deal breaker for engaging in a project.

With regard to firm portfolio, the results reveal that other projects in the firm's portfolio significantly influence and are impacted by the value capture strategies that firms choose to use. This emphasizes the importance of taking into account the portfolio level and study project-based value capture across multiple levels of analysis (Lepak et al., 2007). As firms can only postpone or compensate financial revenues in a project when other projects provide them with a solid financial basis to do so, they should consider their entire project portfolio when deciding on a value capture strategy for a project.

With regard to time, our study shows that value capture evolves over the complete lifecycle of a project. This underlines why it is important to consider the entire project lifecycle when studying value capture, thereby echoing existing work in other areas of project business that has emphasized the importance of a lifecycle perspective (e.g. Arto et al., 2016). The postponing strategy particularly highlights how value capture opportunities in projects may develop in either direction – becoming more interesting or more difficult in time. In some cases, firms were able to acquire prestigious work because of their use of the compensating strategy, revealing how certain value capture strategies may even have effects after a project has been finished.

Building on these insights, we argue that value capture studies in the field of project business can build on, but also need to develop beyond traditional value capture theories that have been developed in the field of strategic management (e.g. Bowman and Ambrosini, 2000; Lepak et al., 2007; Pitelis, 2009). They should include a multidimensional, multilevel and lifecycle perspective in order to arrive at a detailed understanding of project-based value capture processes and the dynamics they involve.

Finally, this study will assist managers and employees of project-based firms to better understand and oversee their value capture strategies in projects. By uncovering how value slippage can be intentionally risked, accepted or counteracted by firms, our results suggest that firms can have an active role in dealing with value slippage. This assists in the development of a more conscious approach to the management of the capture of value in and across projects by raising awareness of the notions of financial and professional value slippage in projects and the potential effects for the firm. Our results further demonstrate that specific attention should be paid to managing the capture and slippage of multiple value dimensions across projects and over time. Repeated attention to the capture and slippage of multiple value dimensions in

projects may help practitioners better oversee the entire scope of interrelated dynamics and arrive at optimal results at the firm level.

## § 4.5.2 Limitations and directions for future research

---

Based on the results of our study and the limitations of our methodological approach, we see three interesting directions for future research. First, processual studies (Langley, 2007) that focus on the value capture process over a longer period of time, either at the level of the firm or at the project level, would be highly relevant to increase the understanding of how the value capture of project-based firms evolves over time. By showing how perceptions of potential value slippage represent a thriving force behind the value capture strategies of project-based firms, our work emphasizes the importance of a perspective focused on human action and intention to study value capture processes in project settings (Florice et al., 2014). A practice perspective (Nicolini, 2009) could not only extend knowledge on actors' value-oriented approaches in relation to the lifecycle of a project (Arto et al., 2016) but also enhance insights into how project-based firms work and capture value in their projects on a daily basis.

Second, although it is important to clearly distinguish between the value that is created and the value that is captured (e.g. Laursen and Svejvig, 2016), studying value creation and value capture processes in their mutually shaping interaction presents a promising framework for gaining new insights into the delivery and capture of value in projects. Work that addresses how value capture opportunities in projects emerge and unfold over various parts of the project's lifecycle, and as a whole, in relation to the value that is co-created by involved stakeholders would contribute to a more detailed understanding of firms' value capture from these projects. The business model concept represents a powerful analytical tool to do so (Zott and Amit, 2013), especially when adopting an ecosystem perspective (Wieland et al., 2017).

Finally, research on value capture by different types of project-based firms or project-led firms (Hobday, 2000) would be highly recommended to determine whether and to what extent our results resonate for other types of project-based firms and for firms that combine projects with other approaches to generate revenues. We suggest a focus on firms that must capture different value dimensions (e.g. monetary, professional and social value) in order to attain multiple strategic goals. Studies around value capture based on a broader conceptualization of value can more profoundly extend or challenge already existing theories on value capture and thereby elaborate theory in ways that both account for and can support the challenges that many contemporary firms face.