

# Fishing in troubled waters? Strategic decision-making and value creation and appropriation from partnerships between public organizations

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**Research Summary:** Although partnerships have been conceptualized as vehicles for value creation, less is known about which partners appropriate more value out of them, especially among public organizations. We theorize how politics and procedural rationality in decision-making respectively are associated with value creation and value appropriation from partnerships between public organizations. Analysis of data from the Dutch water authority sector (2008–2014) shows that organizations employing more politics in decision-making appropriate more value from horizontal partnerships, whereas procedural rationality in decision-making may enhance combined value creation but limits partner-level value appropriation. Also as theorized, the collective decision-making context constrains value appropriation by partners using a discrepant decision-making approach. We discuss implications for research on public organizations, alliances, and strategic decision-making.

**Managerial Summary:** Although much is known about how partnerships can create value for firms, we know relatively less about which of the partners can appropriate more value from them. In this paper, we theorize and find that (public) organizations that employ more politics in decision-making can generally appropriate more value from partnerships. Organizations that are more procedurally rational, which entails the extensive collection and analysis of information to make decisions, are able to create more value for the partnership, but generally appropriate less value from the partnership. Moreover, an organization that has a different decision-making

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approach than its partners' end up appropriating less value from the partnership. Thus, when forming partnerships, managers should carefully consider the way their potential partners make decisions.

#### KEY WORDS

organizational politics, procedural rationality, public partnership, value appropriation, value creation

## 1 | INTRODUCTION

Public organizations must increasingly “confront demands for greater efficiency and effectiveness” (Cabral, Mahoney, McGahan, & Potoski, 2017, p. 1). In response, these organizations have tapped into strategies employed by business firms, such as collaborating when the organization lacks sufficient resources or scale (Goes & Park, 1997; Hennart, 1988). Alliances, as vehicles for value creation (Lavie, 2007), are thus increasingly employed by public organizations, where they are commonly referred to as partnerships. Furthermore, although many such partnerships pair a public organization with a private or nonprofit partner, public-public partnerships are both very common and very worthy of study given their potential benefits, even when the outcome is measured by efficiency gains rather than effectiveness or equity goals (Andrews & Entwistle, 2010).

However, aside from value creation, partnerships (like other governance choices) raise issues of value appropriation (Cuypers, Cuypers, & Martin, 2017; Lavie, 2007). We know relatively less about who gains from the value that is jointly created, especially when two public organizations partner. Specifically, what explains which organizations appropriate more or less value from partnerships? This is an important question as it also contributes to explaining performance heterogeneity, a central concept in strategy research, in the case of public organizations. Key to explaining the heterogeneity in value appropriation from partnerships is whether the decision-makers are well versed in designing partnerships that create collective value while protecting and furthering their own goals. We study this essential contrast.

Specifically, we study this question of value appropriation heterogeneity by focusing on two essential and separate dimensions of strategic decision-making processes, namely politics and procedural rationality (Dean & Sharfman, 1993b; Eisenhardt & Zbaracki, 1992). Following a behavioral framework of boundedly rational decision-making in organizations (Simon, 1997), we theorize how organizations that are more or less procedurally rational and more or less political in their strategic decision-making processes are differentially able to jointly create and individually appropriate extra value from partnerships.

We study this question by analyzing the extent to which Dutch water authorities contribute to total value created, and appropriate value that exceeds the value that they can be expected to appropriate given their relative size in a partnership. These water authorities are public organizations whose remit is dedicated to regional water management. Specifically, we study the partnerships for shared laboratory or taxation activities between all water authorities between 2008 and 2014. We measure procedural rationality and politics of strategic decision-making by applying word count analyses on a unique and complete collection of the minutes of meetings of the board of directors of these water authorities.

This paper's contributions are four-fold. First, we adapt a model that allows the examination of distinct if related value creation and value appropriation effects, and elaborate the first known application to public organizations and specifically to the analysis of public-public partnerships, an important but understudied type of alliances (Andrews & Entwistle, 2010). Second, we add to the alliance and partnership literature by specifying how decision-making approaches affect how organizations can create and appropriate more value. In so doing, we elucidate a puzzle in the current alliance literature, pertaining to the effects of politics on alliance outcomes at different levels (organization vs. partnership). Third, we contribute to the strategic decision-making literature by elucidating under what conditions politics and procedural rationality in decision-making have negative or positive consequences. This literature has concluded that procedural rationality in strategic decision-making is positively and politics in strategic decision-making negatively related with organizational performance (e.g., Elbanna & Child, 2007; Goll & Rasheed, 1997); we show that the conclusion is different, and more nuanced, when considering the distinction between value creation and value appropriation. Fourth, we make a methodological contribution by introducing the use of a form of content analysis, and offering the resulting dictionaries, for quantifying the two core decision-making dimensions.

## 2 | BACKGROUND: VALUE IN PUBLIC ORGANIZATIONS AND DECISION-MAKING

In most strategy research dealing with private firms, the concept of performance centers on some measure of firm value or profitability. This naturally relates with the value appropriated by the firm for its shareholders. Such concepts are hardly applicable to public organizations, which besides not relying on equity markets, may exhibit different and diverse goals and governance conditions (e.g., Moore, 1995; Perry & Rainey, 1988). Thus, Klein et al. (2010, p. 5) argue that for public organizations "the objectives are complex and often ill-specified; measurement of public gains and losses is difficult; the selection environment is complicated..." Still, the broad concepts of efficiency and effectiveness are generally held to be applicable to them (Afonso, Schuknecht, & Tanzi, 2005; Rainey, Backoff, & Levine, 1976). Furthermore, a growing number of countries face a declining trend in economic growth or overburdened systems (relative to the perceived debt or tax-carrying capacity) that create fiscal pressure or "austerity" conditions (Pollitt & Bouckaert, 2017). As a result, cost efficiency becomes a critical goal for public organizations (Ostroff & Schmitt, 1993; Pollitt & Bouckaert, 2017).

Under such circumstances, a comparatively reliable and fast means of gaining efficiency is for two or more peer organizations to pool selected activities and resources in a partnership.<sup>1</sup> We define partnerships as voluntary, durable arrangements between two or more organizations for the mutual contribution, sharing, and co-development (in our case), or exchange of resources or activities (see Gulati, 1998; Kivleniece & Quelin, 2012). A formal alliance thus requires consensus about a set of common goals agreed by all partners and whose accomplishment involves reciprocal collaboration (Gulati & Singh, 1998; Krishnan, Martin, & Noorderhaven, 2006; Luo, 2008). Where peer organizations are involved, the partnerships are referred to as scale alliances (Hennart, 1988).

<sup>1</sup> Aside from going it alone, alternatives to partnering may exist in some cases (though not in our empirical setting, as described below), but these alternatives have limitations. First, in general, pooling of whole organizations via merger does not favor the fast and selective targeting of which assets or activities to pool for maximum gain (Hennart & Reddy, 1997; Reuer & Koza, 2000). Second, outsourcing to a party that generates efficiencies by pooling multiple clients' business can be attractive, but entails a loss of autonomy and competence (Jain & Thietart, 2014).

Implementing a scale alliance requires making choices about capacity reduction, shifting and addition throughout the lifespan of the alliance. Although technological uncertainty may be modest, mostly pertaining to feasible scale, detailed information and analysis is required to evaluate alternatives. If properly executed, the alliance generates benefits in terms of lower costs; though with incorrect or skewed decisions, an alliance can generate negative value (extra costs) for some or all partners (Hennart, 1988). Following this, a primary concern becomes how to allocate costs between partners. These costs include primary operating costs, but over time additional decisions about equipment and personnel must be made, leading to the possibility of side claims and payments. Ongoing decisions and negotiations thus affect both the overall costs of the alliance, and the respective costs borne by each partner.

Given this, we refer to the sum of the positive or negative benefits that accrue to all partners as *total value created* in the partnership (see also Cuypers et al., 2017; Kumar, 2008). In scale alliances, total value created results from the total cost reductions the partnership achieves. Furthermore, given total value created, the value accruing to each partner need not be proportionate to their contribution to the alliance's scale. Any deviation results in at least one partner obtaining *extra value appropriated*, that is, benefits that exceed what could be expected given the partner's contribution to the alliance. In scale alliances, this results from the amount of costs the organization gets allocated relative to its contribution in the partnership. Pursuit of excess returns is taken for granted among private firms, but we expect that public organizations, despite or even because of their social mission, are prone to seek them too (Kivleniece & Quelin, 2012).

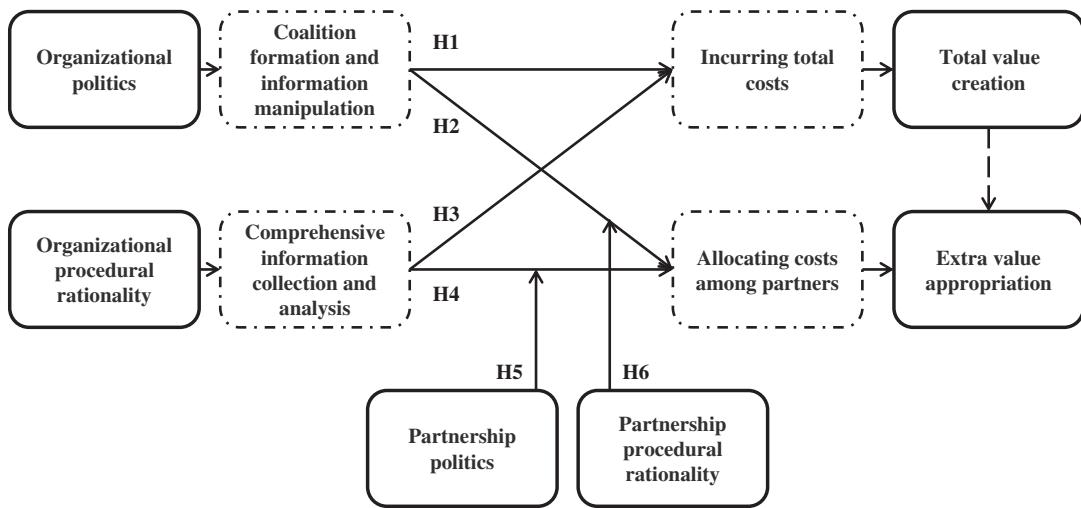
To sort out value creation and value appropriation outcomes, given the respective organizations' contributions to the partnership's scale, we turn to *how* each organization makes decisions, including partnership negotiation and conduct. A considerable literature has identified two core and "independent dimensions of the strategic decision-making process" (Dean & Sharfman, 1993b, p. 1069): politics and procedural rationality (Eisenhardt & Zbaracki, 1992), and more recently their role has been considered in studying alliances between private firms (Walter, Kellermanns, & Lechner, 2012). In Appendix S1, Supporting Information, we elaborate on the relationship between politics and procedural rationality, as separate and independent constructs. We will now examine politics and procedural rationality in turn in developing hypotheses.

### 3 | HYPOTHESIS DEVELOPMENT

Figure 1 outlines our theoretical framework. The dashed boxes contain latent intervening constructs, indicated here as decision-making tactics and topical decision-making processes respectively. The left-most and right-most boxes include concepts we will measure and test.

#### 3.1 | Politics in decision-making

Within an organization, politics pertains primarily to "the management of influence to obtain ends not sanctioned by the organization" (Mayes & Allen, 1977, p. 675). Adapting this to our context, we define partnership politics as the use of influence to pursue goals other than those agreed among all partners. Overwhelmingly, the process of politics involves two main tactics in the pursuit of influence (Eisenhardt & Bourgeois, 1988; Mayes & Allen, 1977; Narayanan & Fahey, 1982). The first tactic, coalition formation and use, means that a subset of partners pursue a goal without or against other partners, such that at least one partner is disempowered. The second tactic involves conflictual communication with withholding and manipulation of information and agenda (Eisenhardt & Bourgeois,



**FIGURE 1** Theoretical framework

1988; Narayanan & Fahey, 1982). Bounded rationality exacerbates the effects of these tactics (Cyert & March, 1992). Although we do not get to observe these tactics in each partnership directly—other than their trace in some of our supporting fieldwork—we can infer specific consequences for value creation and extra value appropriation.

First, insofar as politics involves a partner(s) privileging a subset of goals or even discrepant goals, and a subset of partners in the coalition, the aggregate input available to support partnership-level decision-making is truncated. That is, a political partner will only contribute some of the information and propose some of the possible resource combinations for the partnership to consider, privileging their subgoals rather than the partnership optimum. Second, if there is more politics in decision-making, opinions substitute for facts and influence seeking for analysis. This encourages the nonelicitation and withholding of information, or even the presentation of biased or misleading information, as serves some organization(s)'s effort to influence others and control the agenda (Eisenhardt & Bourgeois, 1988; Pettigrew, 1973; Pfeffer, 1981). At the collective level, this impedes both access to and processing of information, limiting partners' ability to collectively consider a full set of alternatives with the requisite information, skewing choices and hampering the quality of decision-making (e.g., Dean & Sharfman, 1996; Elbanna & Child, 2007). As the general aim of scale alliances is to reduce costs, decreased quality of decision-making effectively means that the most cost-effective options are prone to be missed.

A related manifestation of politics involves tactical timing and opportunistic release of information and the provision of preference- rather than fact-based information when it is least likely to elicit attention and potential criticism (Eisenhardt & Zbaracki, 1992; Quinn, 1980). This in turn enables the provision of lower-quality inputs, even though all the while, the politically minded party promotes their view as accurate and compelling (Shrivastava & Grant, 1985). Again, this impedes the collective identification and analysis of alternatives. Furthermore, this impedes the pursuit of robust common goals, even with the information available (Pfeffer, 1981). Ultimately, decision-making is halting, less thorough and distorted when a political actor is involved (Eisenhardt & Bourgeois, 1988). This is even more consequential given bounded rationality (Simon, 1997). As a result, in the implementation of a purported scale partnership, a cost-reducing solution may arise that is deemed

satisfactory given the political partner's influence tactics, yet more collectively favorable alternatives are ignored or foregone. That is, the cost benefits of a politically impacted partnership are lower.

Not surprisingly, a considerable body of research has shown that a political approach to decision-making has a substantial negative effect on an organization's performance (Eisenhardt & Bourgeois, 1988; Eisenhardt & Zbaracki, 1992; Elbanna & Child, 2007; Fredrickson, 1984). A nascent literature also documents negative effects of politics on the performance of alliances between business firms (Walter et al., 2012; Walter, Lechner, & Kellermanns, 2008). Although less work has examined this relationship explicitly in public organizations, compelling work on power (Pfeffer & Salancik, 1974) and the fact that public organizations are intermingled with political processes and authority (Kivleniece & Quelin, 2012; Rainey, 2015) imply that this prediction is relevant for them too.

**Hypothesis 1 (H1):** *The extent to which politics are present in an organization's decision-making is negatively associated with total value created in a partnership in which the organization participates.*

Assuming a partnership is formed, the next question is how politics is associated with value appropriation. In scale alliances, the main mechanism by which heterogeneity arises in value appropriation is in how costs are allocated across the different partners. Organizations can manipulate these allocations by engaging in politics.

Considering the first tactic, conflictual discussions and information manipulation are means of generating an asymmetric distribution of value. By constraining information, expressing preferences as facts, and manipulating the agenda, a political partner aims to shape cost allocations by bending the general allocation system or, equally, by insisting on side payments or idiosyncratic adjustments in its favor. Indeed, these tactics are especially effective at reallocating costs when it comes to budgetary decisions with mild and drawn-out pacing (Eisenhardt & Bourgeois, 1988), as are typical of scale alliances. Moreover, a political partner may manipulate information to pass some of its (poorer) assets onto the partnership above fair value, thus burdening the partnership with a share of the partner's own costs.

Turning to coalition tactics, we first note that the point of forming a coalition is to generate an imbalance with greater negotiation weight given to partners within the coalition than to other partners. This also magnifies the above-mentioned information and agenda manipulation potential. The focused weight of the coalition reinforces efforts to reshape the general cost allocation or obtain exceptions and side payments.

However, the distributional effect of coalition politics goes beyond that. The partner that initiates and leverages a coalition—that is, the political actor—also gets a claim on the residuals of the coalition. As March (1962, p. 674) put it: The leader should “select a coalition so as to maximize the difference between the demands of [...] coalition members and the potential return from the environment of the coalition.” Here, the environment of the coalition is the partnership as a whole, and the difference means extra value appropriated by the political actor even beyond any extra value appropriated by other coalition members.

Such influence tactics stand to be especially effective at shaping cost allocations in scale alliances and under the assumption that actors are boundedly rational, because pursuing scale requires that partners eventually forego the use of their own assets which are pooled into or replaced by a joint facility and cannot be readily (if at all) returned to the previous owner (Hennart, 1988). At least in the short term, this leaves each partner dependent on the joint facility each other and without ready alternative, and thus exposed to the asymmetric negotiation influence that results from coalition tactics.

Evidence about the effects of politics on value appropriation in alliances and partnerships is scarce, though there is ample evidence of dispersion in returns to alliances that could be explained by heterogeneous decision-making approaches (e.g., Kumar, 2010). As for public organizations, with their hierarchical governance (Perry & Rainey, 1988) and proximity to centers of power that can issue and change rules, they are prone to seek the uneven distribution of value (Kivleniece & Quelin, 2012). We expect aggregate resource reductions and efficiency pressures, as many public organizations are currently experiencing, to encourage this further. In summary, we expect politics to be associated with value appropriation as follows:

**Hypothesis 2 (H2):** *The extent to which politics are present in an organization's decision-making is positively associated with the amount of value that the organization appropriates from a partnership.*

### 3.2 | Procedural rationality in decision-making

Having addressed the effects of politics, we turn to those of procedural rationality. Procedural rationality refers to "the extent to which the decision process involves the collection of information relevant to the decision and the reliance upon analysis of this information in making the choice" (Dean & Sharfman, 1993b, p. 1071). In such a process, decision makers work with and toward known, common objectives and shared goals and use the most complete information possible concerning the alternatives and their consequences, with information and analysis subject to bounded rationality (Simon, 1976). An organization that is procedurally rational in its decision-making is intendedly analytical and extensive (Dean & Sharfman, 1993a), given limited cognitive capacity of its decision-makers (Simon, 1993).

Although the literature justifies the direct and positive effect of procedural rationality on performance at the firm level (Eisenhardt, 1989; Fredrickson, 1984; Goll & Rasheed, 1997), the more limited literature on alliances shows a different pattern: Walter et al. (2008) and Walter et al. (2012) find no substantive effect of a partner's procedural rationality on performance. Given this contrast, we again consider that a decision-making approach may have different consequences for the alliance as a whole versus the focal partner (as we predict for politics in H1 and H2), and thus consider these effects separately.

Procedural rationality sets the organization to seek out and analyze extensive information about the situation on hand, including the pros and cons of various alternatives. Applied to a scale partnership, this implies that a procedurally rational organization collects and analyzes information about a broad set of possible joint facility configurations, and thoroughly examines their overall cost and other consequences. Although this does not guarantee that the configuration adopted will have the optimal cost structure, a procedurally rational partner's informational and analytical input will increase the chances that a properly cost-effective solution is identified. Furthermore, the procedurally rational partner's due diligence will contribute to managing the ongoing tasks of the partnership in a cost-effective manner (Walter et al., 2008) and to identifying ongoing improvement opportunities. The benefits of the partner's procedural rationality thus accrue to the partnership as a whole, enabling consistent cost improvements that result in greater total value creation.

Taking into account bounded rationality, these benefits stand to be relatively achievable in a scale partnership because the solution search pertains to inputs and outputs that are tangible and largely quantifiable. In addition, the number of possible facility configurations is bounded and their proper analysis is likely to be subject more to information availability than to computational constraints.

Thus, in a scale partnership the benefits of procedural rationality are quite definite in enabling the pursuit of cost efficiencies.

We expect procedural rationality to be beneficial for partnerships formed by public organizations too. Although public organizations may differ from private firms in the goal sets and constituencies they serve (e.g., Ring & Perry, 1985), the benefits of procedural rationality when it comes to identifying a stream of jointly beneficial options apply to them too (see also Andrews & Entwistle, 2010; Cuypers & Martin, 2007; Martin & Li, 2015). Accordingly, we predict that:

**Hypothesis 3 (H3):** *The extent to which an organization's decision-making is procedural rational is positively associated with total value created in a partnership in which the organization participates.*

As for value appropriation, two main arguments suggest that a partner following a procedurally rational approach to decision making should be able to claim a substantial amount of value, through reduced cost allocations, even beyond their share of the partnership's activities. First, all else equal and under bounded rationality, an organization with a more procedurally rational approach should better anticipate the distributional consequences of the general cost allocation rules within the partnership, because it processes scenarios more thoroughly. This will allow it to objectively advocate a setup that is appropriate to its interests (as well as being acceptable to the partnership as a whole). Again, this benefit stands to be comparatively reliable in scale partnerships given that they entail tangible and quantifiable costs.

Second, as thorough data collection and analysis allows the procedurally rational organization to comprehend cost allocation consequence, it will also be more mindful of when and how to request adjustments and exceptions (side-payments). For instance, considering its facilities that have become (partly) superfluous through increased scale efficiencies, it will have greater insight into what costs are partnership-related and thus what one-off corrections to negotiate and on what basis. This should contribute to lowering the relative cost position of the procedurally rational organization.

Although comparisons in the public-public setting are scant to our knowledge, distributional anticipation is characteristic of public organizations' partnership efforts (Kivleniece & Quelin, 2012). Furthermore, the horizontal nature of scale partnerships should facilitate anticipation in procedurally rational organizations. Thus, we expect that:

**Hypothesis 4 (H4):** *The extent to which an organization's decision-making is procedural rational is positively associated with the amount of value that the organization appropriates from the partnership.*

### 3.3 | Decision-making in partnership context

Once a partnership has been set up, the conditions for value appropriation revolve around the attitude of partners. Thus, the dominant decision-making in the partnership conditions the benefits of a partner's decision-making. We start with procedural rationality (H4). Procedural rational organizations will have the tendency to share their processed information, to allow it to be used in the decisions that are being made (Dean & Sharfman, 1993b). To the extent that an organization is procedurally rational amidst peer firms that are receptive to the resulting inputs and arguments in the pursuit of shared goals, the conditions for it to appropriate benefits exist as the organization's arguments will be accepted by all. However, under conditions where other partners pursue different subgoals, then the focal partner's procedural rationality will not help. This is especially so, since the shared information

is analyzed and codified by the procedural rational organization, and thus easy to use for others to further their subgoals. Anticipation will be less effective, while the focal partner's reasoned arguments will not sway other partners that prioritize different goals and are prone to ignore or manipulate any information they receive (as they do with information they provide).

Furthermore, in a politically oriented partnership, the focal partner will encounter conditions that impede procedural rationality. Recall that procedural rationality involves comprehensive information collection and analysis. In a partnership, mutual sharing and collectively agreed (even if distributed) analysis are required to make the best of the information available to each partner. However, in a predominantly political partnership, other partners will provide information selectively depending on subgoal and coalition intent, and use temporal gambits whereby information is timed to serve certain goals; they may also report biased conclusions of their own analyses (Narayanan & Fahey, 1982). This will hinder the effectiveness of the focal partner's procedural rationality. As Narayanan and Fahey (1982, p. 32) put it: "The analytical rigor of the rational model is dependent on the availability of reliable data, but the collection, evaluation, and utilization of such data are highly problematical from a political perspective." Worse yet, the information and analyses reported by a procedurally rational partner may be used against them as political partners use these to decide what information to reveal and what conclusions to favor (Inkpen & Beamish, 1997).

In summary, any benefits of an organization's procedural rationality in terms of value appropriation will be reduced when the partnership exhibits high politicality.

**Hypothesis 5 (H5):** *The interaction of an organization's level of procedural rationality with the partnership's aggregate level of politics in decision-making is associated with a lower amount of value that the organization appropriates from the partnership.*

It is also worth considering the effect of partnership-level procedural rationality on a politically inclined organization's prospects. Remember that a political actor will be prone to manipulate information and its delivery so as to obscure coalition intent and advance subgoals and to engage in conflictual discussion (Eisenhardt & Bourgeois, 1988; Tushman, 1977). However, if the organization's partners collectively espouse a procedurally rational process, then the focal organization's tactics will eventually stand out for failing to contribute genuinely to the collective process, and its promotion of subgoals and cooptation attempts will stand out for diverging from the collective goal-setting and analytical approach of the collective. Alienation between the politically inclined organization and its partners will result. Furthermore, the politically inclined partner's conflictual approach will be prone to run afoul of the consensus arising out of procedural rationality, and fail to sway it. Under such conditions, a political actor withdraws its tactics or gets silenced (Vecchio, 1997). Thus, we expect the value appropriation benefits of politicality to be at least partly neutralized. Accordingly, we predict that:

**Hypothesis 6 (H6):** *The interaction of an organization's level of politicality with the partnership's aggregate level of procedural rationality in decision-making is associated with a lower amount of value that the organization appropriates from the partnership.*

Figure 1 summarizes the relationships between decision-making approaches and total value created and extra value appropriated. Moreover, in Appendix S2 we present some corroborating evidence of the intervening mechanisms—political and procedurally rational tactics and practices—that we have assumed in this theory section.

## 4 | RESEARCH DESIGN

We test our hypotheses in the Dutch *water authority* sector, not to be confused with water utilities found in many countries including the Netherlands (Van den Oever & Martin, 2015). Dutch water authorities are responsible for safety (e.g., against flooding from rivers), water quantity (e.g., availability for farming), water quality (e.g., as wildlife habitat), and bulk sewage treatment (but not water distribution to households).

Each water authority has a board of approximately 30 directors. These parent boards hold critical influence over total costs and cost allocations in partnerships, in two ways. First, at least one of the directors must participate on the board of any partnership the water authority joins. Indeed, the whole board of a partnership “consists of members appointed... from among the directors of the participating water authorities.” (Law on Joint Arrangements, Article 13, Clause 1). Via this form of board interlock, the decision-making approach of a parent organization directly influences negotiations within the partnership.

Second, the boards of the partners have the first and last say on the budgets of partnerships. This is again a function of the law, whereby parent organizations (the water authorities) preview, recommend or even dictate the partnership's budget. This is why it is valid to measure politics and procedural rationality at the parent level and infer its effects on negotiation processes and thus on outcomes at the partnership level. Furthermore, related negotiations pertaining to cost allocation, both between parent and in the partnership board, take place through the year and are timed to influence the same year's financial accounts. Therefore, the politics and procedural rationality of a parent authority generally affect the total costs incurred by the partnership and the extra value appropriated by that parent in the same year (time  $t$  in the formulas below). In Appendix S3, we elaborate on the research setting, including the partnerships' focus on costs as determinants of value, and how parent boards shape partnerships' costs and negotiate cost allocations.

We examined water authorities' participation in partnerships for two activities during the period 2008–2014. The activities are laboratory (the running of extensive facilities for testing, monitoring and reporting water quality) and taxation (the levying and administration of the taxes that water authorities are entitled to collect from households, business, farmers, and so on). We focused on these two activities because they are important for water authorities (see below) and have a characteristic that enables a more rigorous research design: Water authorities do not have the option to outsource to private or nonprofit parties their laboratory<sup>2</sup> or taxation<sup>3</sup> activities. That is, the water authorities must either conduct these activities themselves, or pool them into a partnership with one or more other water authorities. This also means that the partnerships observed are all, consistently, public-public partnerships. Furthermore, each partnership is a separate legal entity that focuses on one of the activities, so its effects can be identified precisely.

### 4.1 | Data

We started with the population of 27 water authorities that were in existence during the period 2008–2014. We obtained partnership data from public records and verified them using interviews. We chose not to go back further than 2008 to ensure that we collected comparable and reliable data. We collected data about the participation of each water authority in a partnership for laboratory activities in a

<sup>2</sup>Even if third parties were authorized, they would likely be unable and unwilling to make the required asset-specific investments; and even if they did that, the water authorities would then have to pay a 21% value added tax for the services (which they do not pay in public-public partnerships).

<sup>3</sup>Less critical parts of the operational levying of taxes can be done by third parties, but core activities of taxation, including setting tax rates, must be done by the water authority or in a public-public partnership.

given year, and likewise for taxation activities. The unit of analysis is thus the participation of a water authority in one of the two activities (laboratory or taxation) in a given year—that is, organization-activity-year observations where the organization has been involved in a partnership for that activity. Focusing on cases where a year-to-year comparison was possible within a partnership, we ended up with 137 observations pertaining to 13 partnerships.<sup>4</sup> We conduct our analysis at the organization level (via organization-activity-year observations) because our interest is in the effects of an organization's decision-making approach on value creation, and most importantly on heterogeneous value appropriation.

To measure the dimensions of decision-making, we collected internal minutes and decision lists of the board of director meetings of each individual water authority. To measure various control variables and our dependent variables, we also collected their annual reports.

## 4.2 | Dependent variables

*Total value created and extra value appropriated.* We follow and adapt an approach that has been used fruitfully to study value creation and appropriation in corporate acquisitions and alliances (Cuypers et al., 2017; Kumar, 2008, 2010; Seth, Song, & Pettit, 2000, 2002). The core idea is that if multiple organizations engage in a joint endeavor toward a common goal, the sum total of the change in a goal-relevant outcome across the partners represents the combined (total) value effect within the endeavor; furthermore, the respective change observed at each partner indicates the value obtained or appropriated by them (for a recent application see Cuypers et al., 2017).

We started by collecting data on the total costs incurred by each organization on the laboratory and taxation activity respectively. We calculated the change in these costs from  $t - 1$  to  $t$ . Given that value is created when the costs go down, we took the opposite of this change to measure the value obtained by each organization while in a partnership:

$$\text{Value Obtained}_{i,j,t} = -(\text{costs}_{i,j,t} - \text{costs}_{i,j,t-1}),$$

where,  $i$  denotes an organization  $i$ ,  $t$  denotes a year, and  $j$  specifies an activity. This measure is available at  $t$  for any partner that was in the partnership at both  $t$  and  $t-1$ .<sup>5</sup> We summed the value obtained by the partners to identify the total amount of value created in the partnership:

$$\text{Total Value Created}_{j,k,t} = \sum_{i=1}^N \text{Value Obtained}_{i,j,t},$$

where  $k$  denotes partnership  $k$ , featuring partners 1 through  $N$ .

To measure which organization appropriated more or less than would be expected given its size and expected contribution to the partnership, we proceeded in two steps. First, we calculated the relative size of the organization in the partnership. Consistent with the orientation of the partnerships toward generating efficiencies from scale, we used the cost driver of each partnership. Following sector experts, this is for a laboratory the total length of water canals (in kilometers) in the organization's region, which determines sampling and testing compliance requirements, and for the taxation activity, the total budgeted amount of tax to be collected. Relative size in partnership  $k$  was then measured as:

<sup>4</sup>To measure value accretion, the focal organization must have been in a partnership for two consecutive years. Six partnerships were for laboratory activities, with 18 water authorities participating in one of these partnerships at some point during the study period. Seven partnerships were for taxation activities, with 24 participating organizations. The partnerships included two to nine partners each (median = 3).

<sup>5</sup>Measuring extra value appropriated requires that the organization is already in a given partnership, as otherwise there is no baseline of expected share of costs (see Relative Size measure below). This precludes measuring the dependent variable during the first year of a partnership or of an organization's participation in it.

$$\text{Relative Size}_{i,j,t} = \frac{\text{Cost driver}_{i,j,t}}{\sum_{i=1}^N \text{Cost driver}_{i,j,t}}$$

If the total value created is shared proportionately to the organization's share of the pool, we would expect the costs borne by each organization to be consistent with its relative size. Therefore, the amount of extra value that the organization appropriates is measured by:

$$\text{Extra Value Appropriated}_{i,j,t} = \text{Value Obtained}_{i,j,t} - (\text{Relative Size}_{i,j,t} * \text{Total Value Created}_{j,k,t})$$

#### 4.3 | Independent variables

We used content analysis to measure politics and procedural rationality. Appendix S4 reports the specific steps taken to construct and validate the dictionaries. In short, we applied the eight-step “Weber Protocol” (Weber, 1985) to assemble observed keywords into dictionaries. Since no pre-existing dictionary existed to measure politics and procedural rationality in decision-making, we built new ones based on an extensive literature review.

*Organization – level Politics<sub>i,t</sub>* and *Organization – level Rationality<sub>i,t</sub>*. The final dictionaries for politics and procedural rationality are reported in Tables 1 and 2, respectively. We summed the occurrences of each word at the organization-year level (Duriau, Reger, & Pfarrer, 2007) to measure *Organization – level Politics<sub>i,t</sub>* (in short, O.-level politics) and *Organization – level Procedural Rationality<sub>i,t</sub>* (in short, Organization-level Rationality or O.-level rationality).

#### 4.4 | Moderators

To test H5 and H6, we computed partnership-level version of the procedural rationality and politics measures. We computed the aggregate *Partnership-level Procedural Rationality<sub>k,t</sub>* (in short,

TABLE 1 Dictionary for politics

Cat.	English	Dutch	Total hits	False hit rate
D	We think (we believe)	Wij denken	3	0.0000
D	We find (we are of the opinion)	Wij vinden	11	0.0000
*D	Fraction/political group	Fractie	122	0.1803
D	Our opinion	Onze mening	6	0.0000
E	Preference	Voorkeur	5	0.0000
G	Discussion/conflict	Discussie	90	0.2000

TABLE 2 Dictionary for procedural rationality

Cat.	English	Dutch	Total hits	False hit rate
D	Case	Case	19	0.1579
D	Research	Onderzoek	60	0.1333
*D/I	Risk	Risico	79	0.1266
F/I	Possibilities	Mogelijkheden	20	0.1500
*I	Evaluation	Evaluatie	27	0.0370
J/K	Give full attention to	Aandacht	32	0.1250

Note. Keywords that were found inductively are indicated with an asterisk (see text for explanation).

Partnership-level Rationality or PL-rationality) in each partnership-year record, by summing the respective values of Organization-level Procedural Rationality for the participating water authorities. Likewise, we computed *Partnership-level Politics<sub>k,t</sub>* (in short, PL-politics) as the sum of the partners' respective Organization-level Politics values.<sup>6</sup>

#### 4.5 | Control variables

We list our control variables in Table 3 below.

#### 4.6 | Analysis, identification approach, and limitations on inference

We employ a multi-stage regression model, estimating the following equations:

$$\text{Total Value Created}_{i,j,t} = \beta_0 + \beta_1 \text{Politics}_{i,t} + \beta_2 \text{Procedural Rationality}_{i,t} + \beta_4 \text{CV}_{i,j,k,t} + \text{FE}_{i,j} + \text{FE}_t + \varepsilon_{i,j,t}$$

and

$$\begin{aligned} \text{Extra Value Appropriated}_{i,j,t} = & \beta_0 + \beta_1 \text{Politics}_{i,t} + \beta_2 \text{Procedural Rationality}_{i,t} \\ & + \beta_3 \text{IV}(\text{Total Value Created}_{i,j,t}) + \beta_4 \text{CV}_{i,j,k,t} + \text{FE}_{i,j} + \text{FE}_t + \varepsilon_{i,j,t} \end{aligned}$$

The identification of the associations we theorize is challenging, not least because there is no way to determine the complete antecedents of variation in politics and procedural rationality, and even of partnership formation. Furthermore, our dependent variables are only observable for organizations that are in a partnership, so we cannot implement matching methods and have to focus on variation

**TABLE 3** Control variables

Variable	Motivation	Measurement
Total value created (instrumented)	This enables insights into how the creation and appropriation of value are related in a partnership (Cuypers et al., 2017; Seth et al., 2000, 2002).	See dependent variables section.
Relative size	Greater relative size will increase the amount of value the organization will appropriate.	See dependent variables section.
Scope	As the number of municipalities increases, the organization needs to make a greater effort to coordinate and execute its activities.	Number of municipalities in the region in which the organization operates.
Cash	An organization's cash position may affect its negotiation power.	Cubic root of the amount of cash.
Board stakeholder diversity	A more diverse board may be more polarized or differently able to create or appropriate value for their organization.	Blau heterogeneity index of the stakeholder categories each director presents.
Number of partners	This could affect scale in particular.	Count of partners.
Partner size concentration	The associated power can affect the use of politics in particular (Pfeffer, 1981).	Herfindahl index.
Partnership age (instrument)	See footnote 7.	How many years a partnership has been in existence.
Organization-activity fixed effects	To account for organization-activity fixed effects.	Dummy for each organization-activity observation.
Year fixed effects	To account for year fixed effects.	Dummy for each year, excluding 2009.

<sup>6</sup>In interaction analyses, we also employed versions of the partnership-level measures that exclude the focal organization's score, that is, that measure other partners' aggregate scores only. The results were robust.

within the sample, without the benefit of a quasi-experimental treatment or shock. Nevertheless, we implement a series of quantitative and qualitative steps that, together, make us more confident in the inferences we can draw.

First, we implement two sets of fixed effects that capture some unobserved heterogeneity. Year fixed effects control for time trends and general environmental influences such as the national economic situation, insofar as they affect all organizations. We also use organization-activity fixed effects, because they match our research question and because sets of them will add up to activity fixed effects (laboratory versus taxation) and organization fixed effects, and closely approximate partnership-level effects. These thus address nontime varying differences between organizations and activities. We also obtained robust *SEs* to account for the clustering of observations at the partnership and organization levels.

Second, since the total amount of value created is endogenously determined, we considered several system-of-equation solutions. As a starting point, we possess one instrument which is conceptually appropriate and of roughly adequate strength for value created, namely partnership age.<sup>7</sup> This allows us to implement a multi-stage model accounting for the relationship between value created and extra value appropriated.

Third, heterogeneity in procedural rationality and politics presents an inference challenge. We examined a partial solution with organizational net total costs (in million euros), excluding partnership-activity-related costs, as a plausible instrument for politicality.<sup>8</sup> The results were consistent with those reported below. Unfortunately, we do not possess an instrument for procedural rationality, so fully instrumenting the predictors is not possible. Given this, instead of a two-stage least squares (2SLS) specification with partial instrumentation of the hypothesized independent variables, we opted for a 3SLS specification, while still duly instrumenting total value created (via partnership age) given inter-stage dependence in predicted variables. The 3SLS estimator is asymptotically more efficient than 2SLS and provides identification by using available variables to create a combined “best” instrument (Cuypers et al., 2017; Greene, 2017; Kennedy, 2008). We also ascertained the stability and robustness of the results with a limited information maximum likelihood (LIML) estimator that addresses potential finite-sample bias but assumes over-identification (Angrist & Pischke, 2008). Results of these analyses are reported in Appendix S5.

Fourth, the choice of whether to join a partnership should be related with its expected benefits from it, and thus we consider whether sample selection is an issue. We ran Heckman models where the first stage distinguished organizations that did not enter a partnership (outside the current sample) from organizations that entered a partnership (and thus the current sample). We found our results robust, and the IMR was insignificant ( $p = 0.779$ ).<sup>9</sup>

Fifth, reverse/simultaneous causality may be an issue. However, this is less likely in our research design: We measure independent variables at the board level of the parent organization, whereas our dependent variables are measured at the partnership or partnership-organization level. In a Granger

<sup>7</sup>An alliance's maturity affects the potential for creating value from joint investments, but does not systematically explain value appropriation among partners. The F statistic exceeds Stock and Yogo's (2005) rule of thumb ( $F = 10$ ) in most models, and reduced-form results imply a sufficiently valid instrument regardless (Angrist & Pischke, 2008).

<sup>8</sup>Net total costs are the costs pertaining to the activities of the water authority, minus all revenues other than from taxes. To improve suitability as an instrument, we exclude all costs and revenues from partnerships. Higher net costs create pressure to cut costs or raise taxes, unpalatable options that cause political infighting amidst scarce resources (Cyert & March, 1992). The F statistic for this specification exceeds Stock and Yogo's (2005) rule of thumb and reduced-form results are supportive.

<sup>9</sup>With more observations to work with in that case, we could use exclusion restrictions pertaining to neighbors forming or having formed a partnership. However, because a Heckman specification is sensitive to other sources of endogeneity (Greene, 2017), we decided against using it for our main analyses.

sense, we replicated our main results with various lags in independent variables, albeit with many fewer observations available.

Sixth, we conducted qualitative work, encompassing a detailed review of the regulatory and sector literature and a series of interviews with six managers, to confirm our understanding of the mechanisms at play. Details are in Appendix S3; in brief, following points about governance introduced earlier, we found that the regulation specific to the Dutch public sector and board practices ensures a direct and near-instantaneous impact of a partner authority's decision-making on the partnership, for several reasons: (a) the board of a partnership is made up of board members of the partner authorities, who furthermore have a mandate to represent their water authorities' interest; (b) the partner water authorities' boards get to shape the partnership spending and investment plans starting early each year; and (c) partners can thus also negotiate among themselves changes in cost allocations and related terms on an ongoing basis. This validates our specification of how and when decision-making at the level of water authorities' boards impacts the value created and appropriated in partnerships.

Together, the quantitative and qualitative analyses make us confident that there is a meaningful, nonincidental association between decision-making (politics or procedural rationality) and partnership outcomes (total value created and extra value appropriated). It remains that we do not have an experimental setup, or even the benefits of a sharply defined quasi-experimental intervention or full instrumentation. Thus, we remain cautious in making the strongest, causal inferences from the quantitative analysis alone.

## 5 | RESULTS

The descriptives and correlations are reported in Tables 4 and 5.<sup>10</sup>

Table 6 shows the results of the regressions with Total Value Created as dependent variable. In Table 7, we report on the last stage of the regression, where Extra Value Appropriated is the

**TABLE 4** Descriptive statistics ( $n = 137$ )

Variable	Mean	SD	Min	Max
Total value created	-1,093,831	4,014,534	-18,500,000	4,261,528
Extra value appropriated	107,943	741,012.9	-2,426,604	3,502,615
Organization-level measure of politics	211.08	227.46	0	1,012
Organization-level procedural rationality	161.54	138.88	7	635
Partnership-level measure of politics	1,019.59	672.41	164	2,408
Partnership-level procedural rationality	814.57	569.38	112	1,858
Relative size	0.27	0.18	0.04	0.74
Organization scope	18.34	7.87	6	44
Cash	59.84	66.87	-90.43	320.74
Board stakeholder diversity	0.48	0.04	0.39	0.56
Number of partners	4.74	2.49	2	9
Partnership age	3.67	2.77	0	10
Partner size concentration	0.31	0.15	0.14	0.62

<sup>10</sup>We did not detect multicollinearity in the results reported here, where VIFs were lower than 10. The presence of negative as well as positive values of Total Value Created is consistent with our bounded rationality framework. Although the mean value of Total Value Created is negative in Table 3, this is mostly due to negative values being repeated for some partnerships; the true median is positive.

**TABLE 5** Correlation matrix ( $n = 137$ )

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1 Total value created												
2 Extra value appropriated	-0.55											
3 Organization-level politics	-0.05	-0.12										
4 Organization-level rationality	-0.07	-0.12	0.83									
5 Partnership-level politics	-0.27	0.16	0.28	0.32								
6 Partnership-level rationality	-0.29	0.22	0.18	0.32	0.92							
7 Relative size	0.21	-0.14	0.04	-0.03	-0.64	-0.66						
8 Organization scope	0.03	0.05	-0.10	-0.21	-0.01	0.06	0.24					
9 Cash	0.05	0.01	-0.17	-0.16	-0.00	0.01	-0.09	0.18				
10 Board stakeholder diversity	0.11	0.04	-0.23	-0.28	-0.21	-0.24	-0.02	-0.36	-0.12			
11 Number of partners	-0.30	0.26	0.06	0.17	0.83	0.93	-0.72	0.08	0.05	-0.18		
12 Partnership age	0.31	-0.18	-0.17	-0.30	-0.65	-0.69	0.42	0.02	-0.05	0.30	-0.63	
13 Partner size concentration	0.26	-0.23	-0.08	-0.13	-0.78	-0.78	0.78	0.06	-0.02	0.04	-0.87	0.43

**TABLE 6** 3SLS fixed effects regression results: Determinants of total value created

Model (DV = Total value created)	1		2		3	
	Coef.	p Value	Coef.	p Value	Coef.	p Value
Organization-level measure of politics					-3,326.18	0.580
					(5,991.47)	
Organization-level procedural rationality					9,500.68	0.197
					(7,306.68)	
Partnership-level measure of politics			3,343.79	0.062	3,969.74	0.054
			(1,767.88)		(2,033.24)	
Partnership-level procedural rationality			4,129.52	0.258	1,497.34	0.720
			(3,624.50)		(4,163.94)	
Relative size	5,592,996	0.487	6,902,532	0.378	7,095,001	0.370
	(8,015,424)		(7,794,812)		(7,879,767)	
Organization scope	-521,492.9	0.171	-695,165.8	0.064	-637,872	0.093
	(378,078.4)		(371,286.1)		(375,642.6)	
Cash	18,183	0.019	17,044.93	0.026	17,583.48	0.022
	(7,592.75)		(7,512.80)		(7,538.00)	
Board stakeholder diversity	40.8*e^6	0.103	41.2*e^6	0.090	40.2*e^6	0.123
	(24.8*e^6)		(24.8*e^6)		(25.8*e^6)	
Number of partners	157,618.1	0.814	-466,197.2	0.527	-142,033.2	0.855
	(668,962.6)		(733,963.8)		(776,239.4)	
Partnership age	185,152.5	0.675	1,479,518	0.025	1,394,894	0.043
	(440,775.3)		(647,899.2)		(680,306.9)	
Partner size concentration	8,896,181	0.453	1,146,198	0.923	2,051,917	0.863
	(11.8*e^6)		(11.8*e^6)		(11.9*e^6)	
Constant	-15.3*e^6	0.344	-13.9*e^6	0.376	-15.8*e^6	0.328
	(16*e^6)		(15.6*e^6)		(16.1*e^6)	
Observations	137		137		137	
R <sup>2</sup>	0.477		0.521		0.530	

Note. Year and organization-activity fixed effects are included in all models. SEs are in parentheses.

**TABLE 7** 3SLS fixed effects regression results: Determinants of extra value appropriated

Model (DV = extra value appropriated)	4		5		6		7		8	
	Coef.	p Value								
Organization-level measure of politics					1,944.76	0.027	2,318.48	0.010	3,791.74	0.001
					(881.91)		(898.107)		(1,096.85)	
Organization-level procedural rationality					-3,017.67	0.025	-1,159.227	0.488	-2,867.71	0.044
					(1,346.90)		(1,673.222)		(1,426.46)	
Partnership-level measure of politics	-69.784	0.819	-396.626	0.252	-66.814	0.865	-496.43	0.168		
	(304.461)		(346.079)		(393.599)		(359.85)			
Partnership-level procedural rationality	-259.263	0.589	619.379	0.289	441.607	0.460	697.51	0.255		
	(480.425)		(584.185)		(597.287)		(612.56)			
O.-level rationality * P.-level politics					-1.936	0.022				
					(0.848)					
O.-level politics * P.-level rationality							-2.509	0.002		
							(0.817)			
Total value created (instrumented)	0.187	0.776	-0.087	0.200	-0.092	0.212	-0.048	0.499	-0.009	0.900
	(0.656)		(0.068)		(0.073)		(0.072)		(0.073)	
Relative size	-1,200,990	0.778	268,637.6	0.833	417,187.6	0.745	-323,258.6	0.804	-1,527,227	0.283
	(4,266,439)		(1,270,547)		(1,284,897)		(1,300,269)		(1,421,764)	
Organization scope	52,874.25	0.884	-84,256.17	0.237	-109,971.9	0.120	-75,467.95	0.283	-30,725.99	0.678
	(361,027.2)		(71,205.55)		(70,646.6)		(70,317.54)		(73,922.44)	
Cash	-5,593.26	0.641	-619.84	0.698	-732.57	0.662	-2,022.85	0.227	-2,448.16	0.155
	(11,979.26)		(1,600.15)		(1,673.80)		(1,674.42)		(1,720.03)	
Board stakeholder diversity	-5,823,843	0.839	5,299,925	0.274	7,360,838	0.161	5,289,244	0.309	1,778,207	0.744
	(28.6*e^6)		(4,843,316)		(5,255,758)		(5,202,539)		(5,436,042)	
Number of partners	3,783.95	0.985	77,911.09	0.484	-22,497.64	0.845	13,607.55	0.907	45,546.93	0.713
	(198,042)		(111,400)		(114,841.2)		(116,923.2)		(123,829.6)	
Partner size concentration	-3,505,156	0.640	-749,068.1	0.689	-970,297.0	0.600	-925,323.5	0.619	-1,006,856	0.605
	(7,503,628)		(1,870,015)		(1,850,060)		(1,859,375)		(1,944,371)	
Constant	4,107,301	0.714	-90,899.44	0.973	-138,084.1	0.961	-44,164.87	0.987	790,066.3	0.786
	(11.2*e^6)		(2,643,061)		(2,798,015)		(2,803,866)		(2,909,871)	
Observations	137		137		137		137		137	
$\chi^2$	26.09		92.41		111.49		114.82		108.84	

Note. Year and organization-activity fixed effects are included in all models. SEs are in parentheses.

dependent variable. Given the small sample, we enter a single interaction at a time and interpret the interactions accordingly. We report monetary magnitudes in euros, as in the original data.

Starting with total value created, in Model 3 the effect of the organization-level measure of politics is negative as expected, but not statistically significant and small in magnitude; thus not supporting H1. Also in Model 3, the organization-level measure of procedural rationality is positively associated with total value created in the partnership, as expected. Although statistical significance is limited (equivalent to  $p = 0.098$  for a one-tailed test, as could be warranted given the existing literature), the marginal effect of 9,501 euros is large. A one SD increase in the number of procedural

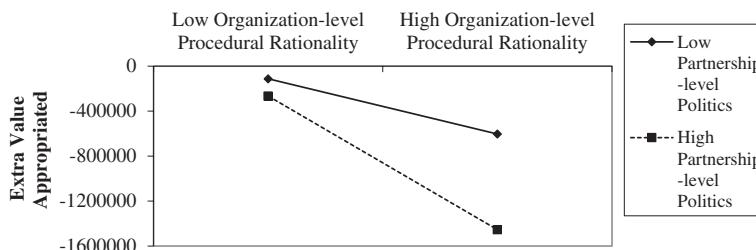
rationality-related words used by the focal organization would be associated with an increase in the total value created in the partnership by a considerable 1,319,499 euros. In that sense, there is a substantive effect associated with organization-level procedural rationality, consistent with H3.

Turning to extra value appropriated (Table 7), in Model 6 we find a positive association between the organization-level measure of politics and extra value appropriated ( $\beta = 1945, p = 0.027$ ), with a one  $SD$  increase in the variable associated with 442,410 more euros being appropriated. This is an economically substantive effect, and consistent with H2. Conversely, we find a negative association between the organization-level measure of procedural rationality and extra value appropriated ( $p = 0.025$ ). Taking into account the coefficient estimate of  $-3,018$ , a one  $SD$  in the number of procedural rationality-related words employed by the focal organization is associated with 419,140 euros less in extra value appropriated by that organization. This evidence is inconsistent with H4. In Appendix S6 we report on post-hoc analyses to probe this result. Moreover, the inconsistent result raises the question of whether either effect is contingent. We turn to this next.

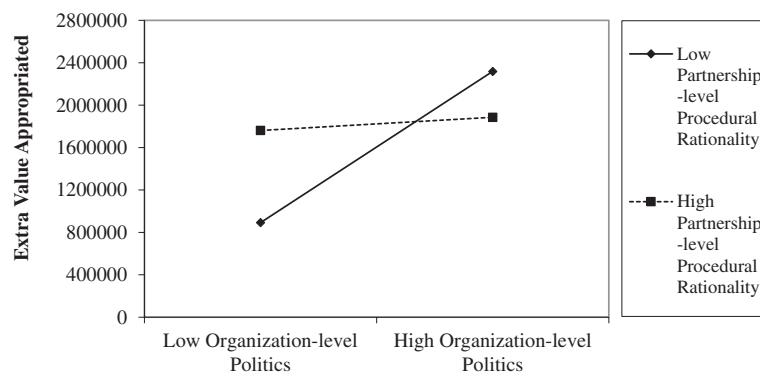
In Model 7, we find a negative interaction of Organization-level Procedural Rationality and Partnership-level Politics ( $\beta = -1.936, p = 0.022$ ). This is consistent with H5. Interpretation is done via the graphical representation in Figure 2. The figure shows that higher partnership-level politics is associated with considerably lower extra value appropriated if the focal organization is highly prone to procedural rationality in decision-making; whereas the difference based on partnership-level politics is much less if the focal organization is low in the measure of procedural rationality keywords (based on one  $SD$  departures from the mean). This explains part of the surprising result regarding H4, in that the penalty associated with organization-level procedural rationality is considerably smaller when partnership-level politics is low—though a penalty still exists (consistent with the main effect).

In Model 8, we find a negative interaction of Organization-level Politics and Partnership-level Procedural Rationality ( $\beta = -2.509, p = 0.002$ ). This is consistent with H6. In Figure 3, the difference between representative focal organizations with low versus high levels of politicality is associated with a smaller amount of extra value appropriated if the partnership as a whole contains members exhibiting high procedural rationality. The slopes exhibit an interesting crossover that we interpret as follows: In terms of extra value appropriated, organization-level politics pays off relatively less when the partnership is high in our measure of collective procedural rationality, that is, partnerships high in procedural rationality constrain disruptive peers. A focal organization that is high in its use of politics receives extra value to appropriate regardless (comparing the left and right of the figure, and consistent with H2), but the degree of this is contingent on partnership-level procedural rationality.

Although our results are broadly in line with our theory, it remains—as typical—that our quantitative analysis does not shed the most direct light on the intervening mechanisms of politics and procedural rationality. In order to elucidate these further, we conducted a further series of supplemental



**FIGURE 2** Moderating effect of partnership-level politics on the relationship between organization-level procedural rationality and extra value appropriated



**FIGURE 3** Moderating effect of partnership-level procedural rationality on the relationship between organization-level politics and extra value appropriated

interviews. In Appendix S2, we include some of the fieldwork findings that further support the mechanisms as specified in the theory. In brief, the fieldwork revealed patterns linking decision-making within parent boards with negotiations in partnerships about what costs to incur and how to allocate them, that can explain the observed variation in costs. In instances where a water authority's board became more political, they attempted to manipulate information and form coalitions to affect cost allocation by passing their (poorer) assets to the partnership above fair value, or pushing the partnership to make investments that were suboptimal for the whole partnership but from which they would benefit (as in H2 and H1). Conversely, where a board was high on procedural rationality, their input swayed negotiations on investments, personnel, and so on toward the highest joint cost reductions (H3). Procedural rational organizations also attempted to anticipate developments that would affect cost allocations, being mindful of ways to benefit from these (H4). Overall, this is consistent with decision-making driving value. Furthermore, two contrasting cases described by interviewees demonstrated that partnership-wide conditions matter (H5–H6): The negotiating tactics of a highly political water authority in the negotiations misfired when rational partners countered its influence attempts and imposed discipline, while a highly procedurally rational organization was repeatedly abused by its set of political partners.

## 6 | DISCUSSION

Although strategy research has contributed a large pool of theory and evidence about the consequences of the two main decision-making approaches to strategic decisions—politics and procedural rationality—the applicability of this research to partnerships and to public organizations remained more ambiguous. Drawing on the distinction between value creation and value appropriation, which had hitherto been under-used in research about these decision-making approaches in alliances, we uncovered the respective roles of politics and procedural rationality as they pertain to total value created and partner-level value appropriated from alliances and partnerships. We specifically examined these issues as they pertain to public organizations and public-public partnerships. In this section, we will focus on discussing the hypothesized associations; we discuss the findings in light of other variables in Appendix S7.

The basic pattern of main associations means that, as predicted, an organization being high in its use of procedural rationality is associated with higher total value being created in a partnership it enters; while a political organization is associated with greater value being appropriated from a partnership. Contrary to expectation, procedural rationality is associated with lower value appropriated. We also

theorized, and found, that the partnership-level context matters. Specifically, where partners as a set are political, the value appropriation prospects of a procedurally rational organization are lower, though we also found that meanwhile this collective politicality is associated with considerable total value created, so as a net effect a procedurally rational organization may obtain a net gain (although not the highest it could be). Finally, partnership-level procedural rationality has a strong effect in neutralizing the value appropriation gains associated with “selfish” (organization-level) politicality.

These results differ from past studies that concluded that procedural rationality and politics have plain positive and negative effects, respectively, on firm performance. A plausible explanation is that in an alliance, organizations that seek to thoroughly plan the partnership are prone to get blindsided by more political partners. Through their procedural rationality, these organizations contribute to increasing joint benefits. However, this is not helpful—to the contrary indeed—when it comes to obtaining extra value for themselves and their stakeholders.

## 6.1 | Limitations of the study and opportunities for future research

We point out four areas of limitations and future research opportunities. First, as acknowledged in the “Analysis, identification approach, and limitations on inference” subsection above, we lack sufficient instruments for a fully instrumented model, and do not have a quasi-experimental setup. Drawing stronger inferences about the causal effect of decision-making would require strong instruments or an unambiguous understanding of what shocks may precipitate politics and procedural rationality. That requires more research on the antecedents of decision-making approaches, especially on sources of politics about which the literature says little so far.

Second, we have theorized that cost allocation mechanisms drive value appropriation. Our data precluded measuring the degree and type of political tactics used, and how specific cost items were allocated, so as to establish the correlations between these concepts. Access to this data would allow us to show more precisely how approaches to decision-making affect value appropriation. Yet, politics entails the use of covert tactics (Eisenhardt & Bourgeois, 1988), which leads to a paradox. If we were able to measure precisely which tactics were used, they would presumably have been visible for the actors involved as well, rendering these tactics far less effective. As such, we surmise that it is precisely *because* these tactics are nigh impossible to measure and observe (e.g., we can only infer some of them from ex-post fieldwork) that we find the statistical results reported in this paper. Finding a research design where one is able to observe these tactics while linking them to real value outcomes would be a major advance.

Third, although we implemented panel data so as to control for period effects and model a short temporal sequence, we lacked sufficient observations to fully examine longer-term consequences and dynamics of partnerships. It is worth studying the long-term effects of politics and procedural rationality, and how they may be sequenced between successive partnerships. We elaborate some such research possibilities in Appendix S7.

Fourth, although our empirical focus contributes to the deeper understanding of these effects in public-public partnerships, it would be useful to replicate and generalize this research to cross-sectoral partnerships too (Andrews & Entwistle, 2010; Martin, 2014).

## 6.2 | Contributions

Our study offers several research contributions. First, we specifically examine value creation and appropriation in the context of a set of public organizations. Empirically, our study centers on the applicability of theory about strategic decision-making to a set of public organizations. Specifically,

we examine public-public partnerships, an important but understudied type of alliances (Andrews & Entwistle, 2010). We show that decision-making approaches are related with sharp heterogeneity among partnerships and peer public organizations with otherwise similar mandates, governance and resource bases. Building on this core finding, in Appendix S8 we elaborate further implications for the study of public organizations and partnerships: We compare them with private ones, given the distinctive goals of public organizations (Mahoney, McGahan, & Pitelis, 2009), and elaborate on the diversity *between* (types of) public organizations. If anything, we believe that our decision-making framework will become all the more relevant as public organizations face growing pressure to improve efficiency and effectiveness (Pollitt & Bouckaert, 2017).

Second, we contribute to the value creation and appropriation from alliances literature by distilling an essential source of heterogeneity. Past research has used factor-market and resource or structural conditions to explain which partner will appropriate more value (Adegbesan & Higgins, 2011; Lavie, 2007). We show that the propensity (and presumably ability) of the organization to pursue subgoals—as politics entails—is another important explanation of why some organizations benefit more than others from their partnerships. Thus, our framework offers new insights into the nature and genesis of organizations' abilities to elicit and appropriate value.

Third, this study contributes to research on strategic decision-making. Prior studies reported inconclusive results about the effect of firm-level procedural rationality and politics on alliance performance, contrasting with mainstream results at the firm level. Although this may not show up in an aggregate measure of alliance performance, our study shows that the decision-making dimensions operate differently on total value creation and extra value appropriation. Furthermore, we theorize and test how the collective context of decision-making (i.e., partnership-level politics and procedural rationality) conditions the effects of organization-level decision-making approaches. This elucidates a novel yet powerful pathway through which politics and procedural rationality can shape value via its creation but also via collective constraints on the value appropriated by discrepant partners.

Moreover, the literature has overwhelmingly described adverse effects of politics (e.g., Dean & Sharfman, 1996; Elbanna & Child, 2007), also in studies of alliances (Walter et al., 2008; Walter et al., 2012). In contrast, we show the benefits of politics for the organization, plausibly since it builds the capability to pursue subgoals via conflictual means. This certainly appears relevant in appropriating value from partnerships, but plausibly from other activities and relationships too.

Fourth, this paper makes a methodological contribution. Building on a thorough review of the literature on politics and procedural rationality, we apply content analysis to measure these core dimensions of strategic decision-making. We hope that this demonstration of a quantitative solution, and the dictionaries it yielded, will help energize the decision-making literature. This study also broadens the scope for the use of content analysis in the study of strategy. Furthermore, in Appendix S7 we discuss managerial implications of the study.

## 7 | CONCLUSION

Our theory and empirics describe the differential effects of politics and procedural rationality on value appropriation, while also considering their effects on value creation. In so doing, we add to the literature on strategic decision-making and alliances, with specific application to public-public partnerships. We describe nuanced tradeoffs between the two strategic decision-making approaches as pertains to value creation and appropriation. Perhaps most strikingly, we find that politics has a strong positive effect on value appropriation by a partner, whereas procedural rationality is only beneficial for collective value creation (but not for value appropriation). Furthermore, these effects are

subject to a novel collective constraint, resulting from discrepancies between an organization's and its partners' decision-making approaches. The contributions are relevant to public organizations and beyond.

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