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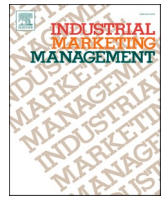
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Gain-sharing in performance-based contracting: How risk and fairness drive business customers' willingness-to-switch to a gain-sharing arrangement

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ABSTRACT

Gain-sharing arrangements, which involve the seller promising to realize a measurable economic performance gain that is shared between the seller and customer, are used in the context of performance-based contracting. Prior academic research explicating the implementation of this managerially relevant practice has mainly utilized anecdotal evidence and has primarily focused on the seller's perspective. Thus, we lack rigorous explanations as to what drives customers' willingness-to-switch to a gain-sharing arrangement. To overcome this limitation, we build on agency theory and equity theory to develop two competing and theoretically grounded explanations (risk-based vs. fairness-based) to explain customers' willingness-to-switch. We conducted a qualitative pre-study and collaborated closely with an industry partner to develop a realistic experimental scenario and tested the proposed explanations with data from 437 professional purchasers. The results show that decision-makers in customer firms respond differently to economically equivalent gain-sharing arrangements that feature different pricing schemes. More specifically, the fairness perception, but not risk perception, drives the customer's willingness-to-switch. The findings of this study advance B2B pricing research by showing that buying decisions in firms are not necessarily guided by economic rationality-based arguments. Instead, in the context of gain-sharing arrangements, the choice is guided by what is perceived as fair.

1. Introduction

Business-to-business (B2B) markets have witnessed a major shift towards a service logic, whereby sellers increasingly focus on supporting customers' value creation (Grönroos & Voima, 2013; Vargo & Lusch, 2016). Consequently, many B2B sellers have moved from selling individual products and services to selling solutions that improve customer outcomes (Raja, Frandsen, Kowalkowski, & Jarmatz, 2020; Terho, Eggert, Ulaga, Haas, & Böhm, 2017; Visnjic, Jovanovic, Neely, & Engwall, 2017). Logically, the shift would also involve sellers changing from input-based pricing (pricing based on the supplier's deeds) to outcome-based pricing (pricing based on the customer's realized performance gains) so that they can be appropriately compensated for their efforts (Ulaga & Reinartz, 2011).

In the most advanced form of outcome-based pricing, the seller offers performance-based contracts (PBC) and is compensated through gain-sharing arrangements (Sawhney, 2006; Thomson & Anderson, 2000). Under a gain-sharing arrangement, the seller promises to realize a measurable improvement in the customer's performance. Realized economic gains are then shared between the seller and customer in a pre-determined manner, which is reflected in the pricing scheme that stipulates how the gains are to be split. Gain-sharing arrangements are thus a key design element in PBCs (Selviaridis & Wynstra, 2015), and their main purpose is to align the interests of the seller and customer in a way that maximizes the value of collaboration in outcome-based contracts (Keränen, Terho, & Saurama, 2021; Ulaga & Reinartz, 2011).

Current literature is clear on the potential benefits that gain-sharing arrangements can offer to both sellers and customers (Sawhney, 2006),

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and in practice, firms such as Rolls-Royce (power-by-the-hour agreements), Siemens (energy performance contracts), and SKF (rotating equipment performance agreements) are examples of globally operating suppliers who have ventured into gain-sharing arrangements (Keränen et al., 2021; Kowalkowski & Ulaga, 2017; Ulaga & Reinartz, 2011). The extant research on value-, outcome-, and performance-based pricing in B2B marketing and the purchasing domain (e.g., Böhm, Backhaus, Eggert, & Cummins, 2016; Essig, Glas, Selviaridis, & Roehrich, 2016; Hinterhuber, 2008; Schaefer, Ruffer, & Böhm, 2021) has provided insights as to why and how sellers move towards gain-sharing arrangements. However, beyond anecdotal evidence suggesting that customers often resist gain-sharing arrangements in PBCs (Liinamaa et al., 2016; Sawhney, 2006), the current literature has largely remained silent as to the customer perspective towards these arrangements.

Against this background, the purpose of this study is to explain what drives customers' (un)willingness-to-switch to gain-sharing arrangements in the context of PBCs. We address this purpose with two specific research questions. First, how does the type of gain-sharing pricing scheme influence the customer's willingness-to-switch to a PBC? Second, what are the theoretical mechanisms that explain the customer's willingness-to-switch? In doing so, we build on agency theory (Bergen, Dutta, & Walker Jr, 1992; Jensen & Meckling, 1976; Zajac, 1990) and equity theory (Adams, 1965; Homans, 1961; Tyler & Lind, 1992) to offer competing explanations as to which arrangement should be favored by customers. We distinguish two potential competing mediators of perceived risk (in terms of the seller's performance) and perceived fairness. Perceived risk captures the customer's uncertainty whether the “contractually agreed-on outcomes [...] will be achieved” (Ulaga & Reinartz, 2011, p. 11). Perceived fairness captures the customer's “comparison of its actual outcomes to those outcomes the firm deems it deserves” (Kumar, Scheer, & Steenkamp, 1995, p. 55) when distributing the economic gains of a gain-sharing pricing scheme with the seller.

To build a realistic experiment, we conducted nine interviews with senior managers in different B2B industries to learn about the most common gain-sharing contract features (e.g., common split percentages, presence vs. absence of a fixed fee). We then developed a scenario-based experimental study and worked with a panel provider to gain access to professional purchasers to test our assumptions regarding the drivers of customers' willingness-to-switch to alternative forms of gain-sharing pricing schemes.

Buying is a complex phenomenon that can be studied at the organizational or individual level (Prior, 2021). This study focuses on the individual level since, ultimately, the customer organization's decision to switch to a gainsharing arrangement is made by an individual in charge of making the purchase decision. Accordingly, when we talk about the customer's willingness to switch into a gainsharing arrangement, we refer to the individual making the decision to switch.

This study makes three novel contributions to the contemporary B2B pricing and buying behavior literatures, where gain-sharing arrangements and value-based buying behavior have remained critical, yet poorly understood issues (ISBM, 2021; Schaefer et al., 2021; Sharma & Iyer, 2011). First, we develop a theoretically driven and empirically grounded explanation of what drives the customer's willingness-to-switch to gain-sharing arrangements in the context of PBCs. Specifically, we find that when presented with economically equivalent gain-sharing arrangements, customers prefer partial gain-sharing arrangements with a fixed fee over full gain-sharing arrangements with no fixed fee. This advances prior research that has considered gain-sharing arrangements in B2B markets largely anecdotally and from the seller's perspective (Keränen et al., 2021; Ulaga & Reinartz, 2011). In so doing, we respond to calls for a better understanding of the mechanisms that drive customer (un)willingness to adopt gain-sharing arrangements (Sawhney, 2006) and of specific design aspects of pricing schemes in PBCs (Selviaridis & Wynstra, 2015).

Second, we find that the equity theory driven mediator of perceived fairness, rather than the agency theory driven mediator of perceived

risk, explains the customer's switching intentions. This advances the current B2B pricing and buying behavior research that has primarily focused on developing rational and normative pricing models. Prior research has predominantly portrayed organizational buyers as rational decision-makers who pursue options that maximize their economic utility (see Iyer, Xiao, Sharma, & Nicholson, 2015; Saab & Botelho, 2020). In contrast, our findings provide support for a more behavioral perspective (Hinterhuber & Liozu, 2015; Kienzler, 2018; Steiner, Eggert, Ulaga, & Backhaus, 2016), whereby the decision-maker's fairness perceptions, rather than strict utility maximization, explains the willingness to switch in the context of gainsharing arrangements. This has important implications for B2B sellers, who often focus on economic benefits and reduced risk when selling value- and performance-based offerings (Keränen et al., 2021; Terho, Haas, Eggert, & Ulaga, 2012).

Third, we make a methodological contribution by responding to several recent calls for more experimental research in B2B marketing (Salonen, Zimmer, & Keränen, 2021; Zimmer, Salonen, & Wangenheim, 2020). More specifically, our study illustrates a rigorous multi-phase approach to increase the experimental realism and external validity of experiments, which is a key challenge in the B2B context (Viglia, Zae-farian, & Ulqinaku, 2021).

For managers in selling organizations, this study highlights what drives customers' willingness to accept gain-sharing arrangements and suggests ways to influence these drivers by developing appropriate pricing schemes. Specifically, our findings indicate that business customers feel more entitled to the performance gains achieved by suppliers in the context of PBCs, and thus prefer partial to full gain-sharing arrangements. To accommodate this, sellers should design pricing schemes that combine an up-front fee with a smaller gain-sharing component to increase customers' fairness perceptions and, thus, their willingness-to-switch to a PBC.

The rest of the paper is structured as follows. First, we explain our conceptual background and develop our theoretical assumptions. Then, we describe our experimental research design and report the empirical results. Finally, we discuss implications for theory and practice and highlight potential limitations and future research avenues.

2. Theoretical background

2.1. Gain-sharing arrangements in performance-based contracting in B2B markets

Customer value-based marketing has been one of the key domains of B2B marketing research and practice during the last two decades. The underlying idea of value-based marketing is to move from promoting products towards facilitating customer value (co-)creation based on an in-depth understanding of the customer's business (Anderson, Narus, & Ross, 2006; Anderson & Wynstra, 2010; Keränen, Salonen, & Terho, 2020; Terho et al., 2012; Ulaga & Eggert, 2006). In its most advanced form, PBCs tie the seller's compensation to the customer's value-in-use, thus including some form of a gain-sharing pricing scheme (Sawhney, 2006; Ulaga & Reinartz, 2011). We define the *gain-sharing pricing scheme* as an arrangement under which a seller promises to realize a measurable economic performance gain that is shared between the seller and customer in a predetermined manner (see Sawhney, 2006; Thomson & Anderson, 2000). Next, we delineate the gain-sharing concept and explicate its connection with closely related concepts, as summarized in Fig. 1.

The extant research addressing the specific role of pricing in outcome- or performance-based contracting is scattered across multiple but related research perspectives. Specifically, four key perspectives can be identified: value-based pricing (see Hinterhuber, 2004, 2008; Hinterhuber, Snelgrove, & Stensson, 2021; Kienzler, 2018; Töytäri, Keränen, & Rajala, 2017), outcome-based pricing (Böhm et al., 2016; Schaefer et al., 2021), performance-based pricing (Essig et al., 2016; Keränen et al., 2021; Liinamaa et al., 2016; Mouzas, 2016), and gain-

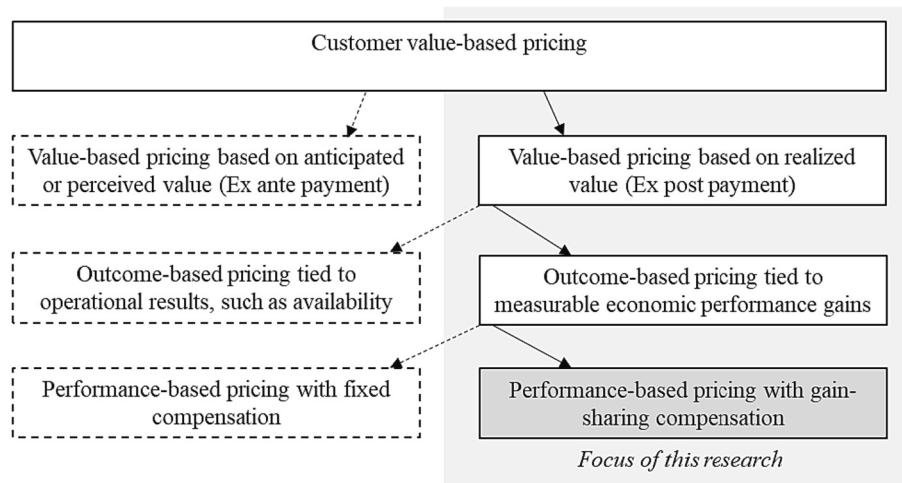


Fig. 1. A summary of customer value-based pricing concepts.

sharing pricing (Cook & Hegtvedt, 1983; Luo, 2009; Thomson & Anderson, 2000).

The broadest umbrella term related to PBCs is customer value-based pricing, where the seller is compensated based on customer value instead of relying on a predominantly cost- or competition-based pricing approach. When the seller co-creates superior customer value, this should increase the customer's willingness to pay (Monroe, 2003). Value-based pricing can be based on perceived customer value with ex-ante payment or realized value with ex-post payment (Eggert, Ulaga, Frow, & Payne, 2018). Interestingly, value-based pricing research has largely focused on understanding customers' acceptance of value-based pricing based on anticipated value outcomes and ex-ante compensation (Anderson, Thomson, & Wynstra, 2000; Anderson & Wynstra, 2010).

Much less research has been conducted concerning outcome-based pricing that builds on realized value. However, the research that exists classifies outcomes either as input-related, such as availability, or output-related, such as performance, with customers perceiving contracts that emphasize financial performance outcomes as more desirable (see Böhm et al., 2016; Stoppel & Roth, 2017). Finally, pricing that builds on financial performance outcomes can be based on fixed compensation or more sophisticated gain-sharing arrangements.

This study focuses on gain-sharing arrangements in the context of performance-based pricing, where customer compensation builds on realized economic gains for customers (see the gray box in Fig. 1 and Sawhney, 2006). A recent review of PBCs in business markets highlighted that most PBC research has been highly explorative, mainly addressing the seller's perspective, and lacks a sound theoretical grounding (Essig et al., 2016). Thus, while studies to date have provided broad qualitative insights into the varying aspects of the PBC process (Liinamaa et al., 2016; Nullmeier, Wynstra, & van Raaij, 2016; Schaefer et al., 2021; Sumo, van der Valk, Duysters, & van Weele, 2016), high-rigor, theory testing research is needed to understand how gain-sharing arrangements should be implemented to increase customers' acceptance of this managerially highly relevant but hard-to-implement pricing scheme in the context of PBCs (see Hypko, Tilebein, & Gleich, 2010; Liinamaa et al., 2016; Schaefer et al., 2021).

2.2. Customers' switching intention to gain-sharing in performance-based contracts

This study focuses on explaining customers' willingness-to-switch from input-based to output-based contracts by introducing a gain-sharing pricing scheme in the context of PBCs. Typically, a shift to performance-based pricing occurs when sellers can offer guaranteed value outcomes (Keränen et al., 2021; Thomson & Anderson, 2000). For

example, in the context of solution sales, the seller could take over the responsibility for optimizing a customer's process to increase the customer's economic performance (Sawhney, 2006; Ulaga & Reinartz, 2011).

While gain-sharing arrangements have been suggested as a way to align the interests of sellers and buyers in the context of PBC (Hypko et al., 2010; Kim, Cohen, & Netessine, 2007), the more prevalent applications of this concept can be traced to the context of employee compensation schemes. In this research stream, gain-sharing is an umbrella term for various pay-for-performance approaches that link financial rewards for employees to improvements in the performance of the entire unit (Welbourne & Mejia, 1995). However, several recent B2B marketing studies have suggested that gain-sharing should also be an applicable pricing scheme in PBCs (Keränen et al., 2021; Liinamaa et al., 2016; Thomson & Anderson, 2000; Ulaga & Reinartz, 2011). In this respect, the different price components and payment modalities, as well as the overall price level of the arrangement, matter to customers (Schaefer et al., 2021). The prior literature on PBC suggests that gain-sharing arrangements and the corresponding pricing schemes can be fully or partially tied to customer performance (Selviaridis & Wynstra, 2015).

In this respect, we examine how the design of different pricing schemes for gain-sharing arrangements affects the customer's likelihood to switch from a traditional supply contract with fixed pricing to a PBC incorporating a gain-sharing arrangement. Specifically, we examine whether customers prefer a full gain-sharing arrangement to a partial gain-sharing arrangement. We define the *full gain-sharing scheme* as a contract where the supplier's compensation is fully tied to its performance. In turn, the *partial gain-sharing scheme* refers to a contract where supplier compensation takes place through a combination of a fixed fee and a gain-sharing component.

To meaningfully study these alternative gain-sharing schemes, we 1) ensured that both pricing schemes have equivalent economic outcomes for the seller and customer in the case that the performance outcome projected by the seller is realized for the customer and 2) made sure that the pricing schemes are meaningful from a practitioner perspective (see Section 3.1). Based on practitioner feedback, we specified the full gain-sharing scheme as both the customer and seller getting 50% of the realized performance gain. The partial gain-sharing contract involves a fixed fee and a lower gain-sharing component where the customer gets 75% and the seller 25% of the realized gains. While the net impacts might slightly vary under different actual performance outcomes (lower/higher than expected outcome), the resulting differences are relatively low and superior to the existing baseline contract from which the customer is asked to switch to a gain-sharing price scheme. Thus, the

economically rational option for the customer is to switch. However, the selection of the pricing scheme depends on whether the customer is driven by risk or fairness considerations, as we will explain next in more detail.

To understand the theoretical mechanisms that explain the customer's willingness-to-switch, we build on the behavioral economics-based agency theory (Bergen et al., 1992; Jensen & Meckling, 1976; Zajac, 1990) and socio-psychological equity (justice) theory (Adams, 1965; Homans, 1961; Tyler & Lind, 1992), to explain why customers prefer full to partial gain-sharing when switching from a traditional supply contract to a PBC.

As noted by Essig et al. (2016), *agency theory* is a frequently employed foundational theory used to tackle performance specification as well as information and risk-sharing aspects in PBC (see Datta & Roy, 2011; Hypko et al., 2010; Kim et al., 2007; Mouzas, 2016). According to this theoretical perspective, making the seller's compensation contingent on achieving pre-specified performance enhancements can enable the alignment of the risks and incentives between sellers and customers in PBCs (Kim et al., 2007). In doing so, the interests of both parties align so that incentives act as a form of agent self-monitoring, thus reducing monitoring costs and residual loss (Welbourne & Mejia, 1995).

From a risk-sharing perspective, a full (50/50) gain-sharing arrangement aligns the interests of sellers and customers better than a partial gain-sharing arrangement. This is because the seller's compensation is fully tied to realized performance enhancements in a full gain-sharing arrangement. Under partial gain-sharing arrangements, a fixed fee component is an up-front cost for the customer (and an up-front gain for the seller), which the customer needs to pay irrespective of realized productivity enhancements. A full gain-sharing arrangement should better distribute both risks and rewards between customers and sellers (Hypko et al., 2010) because the seller has a higher incentive to commit to facilitating customer performance enhancements and to engage in self-regulation compared to partial gain-sharing. In contrast, with partial gain-sharing, there is a higher risk that the seller may invest less effort and even act opportunistically when the incentive for the seller is not as strongly tied to the customer's performance (Lu, Albert Ma, & Yuan, 2003). In sum, based on agency theory, and all other things being equal, we expect that: 1) *a full gain-sharing pricing scheme* (customer and seller both get 50% of the realized gains) *leads to a higher likelihood of switching to a PBC among customers than partial gain-sharing* (customer gets 75% and seller 25% of the realized gains + a fixed fee), and 2) *this preference is explained by customers' lowered risk perceptions* (risk is a mediating mechanism).

An alternative explanation is provided by the socio-psychological equity (justice) theory (Adams, 1965; Homans, 1961; Tyler & Lind, 1992). Fairness and justice have been applied to understand economic exchanges in interorganizational or channel relationships (for a review, see Bouazzaoui, Wu, Roehrich, Squire, & Roath, 2020). Furthermore, recent research (Keränen, Totzek, Salonen, & Kienzler, 2023) suggests equity theory as a promising foundational theory to be applied to test individual-level customer responses to seller-initiated communication in the context of value-based selling.

When placed in the context of gain-sharing pricing, the customer's willingness-to-accept gain-sharing arrangements should depend on their procedural or distributive fairness perceptions (Welbourne & Mejia, 1995). This is in line with the notion that fairness considerations are important when partners explore their engagement in economic exchange relationships (Crosno & Dahlstrom, 2011; Lind, 2001). More specifically, customers' perception of the specific gain-sharing mechanism, for example, in terms of fairness, depends on their evaluation on whether both parties invest similar resources into the relationship, as well as their perception of whether equal payoffs are justified (Jap, 2001).

While gain-sharing arrangements should thus generally be perceived as fair, customers should also evaluate them against reference transactions in established supply contracts (e.g., Kahneman, Knetsch, &

Thaler, 1986a, 1986b). In this respect, customers are expected to feel more entitled to gains resulting from improvements in their business processes or performance, even if these improvements are due to the seller's actions. Thus, customers should prioritize their profit entitlement over the seller's profit entitlement, and, as a result, sharing more of these gains should be perceived negatively. In addition, when customers compare to an established supply contract with fixed prices, sharing additional gains with the seller also implies higher total costs for the contract. Thus, customers should perceive gain-sharing pricing schemes that include a proportionally higher entitlement component for themselves as fairer and prefer such contracts even if it means having to pay suppliers a fixed up-front fee (as is the case for established supply contracts). Also, an arrangement that incorporates a floor income for the seller and entitlement components for both creates a system of dual security, which is thought to have important motivational properties for those working under a fair distribution rule (Cooper, Dyck, & Frohlich, 1992).

In sum, based on equity (justice) theory, we can expect that: 1) *a partial gain-sharing pricing scheme* (customer gets 75% and seller 25% of the realized gains + a fixed fee) *leads to a higher likelihood of switching to a PBC among customers than full gain-sharing* (customer and seller both get 50% of the realized gains), and 2) *this preference for partial gain-sharing is explained by customers' enhanced fairness perceptions* (fairness acts as a mediating mechanism).

3. Method

3.1. Pre-study activities

Before the main study, we conducted several pre-tests to ensure the realism and comprehension of the experiment. Designing and validating the experimental scenarios is particularly important to ensure that the experiment captures “all the complexities and nuances of a B2B context” (Hada, 2022, p. 645).

Following each pre-study activity, we adapted the experimental materials. First, we conducted nine interviews with industry experts to learn about the most common gain-sharing features, such as the presence vs. absence of a fixed fee and the meaningful gain-sharing split percentages. To select relevant and knowledgeable industry experts, we used a purposive sampling logic (Patton, 2015) to identify senior managers from different B2B industries who have experience in selling or purchasing PBCs with gain-sharing arrangements (see Table 1).

We then iteratively developed the experimental material in close collaboration with a globally operating industrial bearings supplier to specify the experiment's empirical context and develop a realistic and authentic scenario of a purchasing situation typical to the introduction of gain-sharing arrangements to customers (see also Hada, 2022). The interviews allowed us to craft the two competing gain-sharing schemes so that they are meaningful from a practitioner's perspective and lead to similar economic outcomes for buyers and sellers under expected performance outcomes.

Table 1
Overview of the participants in the qualitative pre-study.

| # | Title | Industry |
|---|--|-----------------------------------|
| 1 | Senior Managing Partner | Management consulting |
| 2 | Chief Value Officer | Electrical systems |
| 3 | Director of Corporate Programs | Chemical technology |
| 4 | President of Automation | Mining & metallurgical technology |
| 5 | General Manager | Power & energy technology |
| 6 | Service Unit Director | Power & energy technology |
| 7 | Director of Automation | Pulp, paper, & energy technology |
| 8 | Business Development & Strategic Account Manager | Industrial bearings |
| 9 | Supplier Development Manager | Paper, pulp, & timber |

Finally, we pre-tested the experiment with a group of MBA students to identify potential flaws and to refine our materials using respondents with some professional experience but less domain-specific knowledge (see also Luoma, Falk, Totzek, Tikkanen, & Mrozek, 2018). Due to these pre-study activities and the type of participants in the main study, our experiment draws on the ideas of situated experiments—such as increasing internal validity by exposing participants to a more realistic experimental setting (see Greenberg & Tomlinson, 2004). Table 2 lists these and other pre-, intra-, and post-study activities aimed at increasing research quality.

3.2. Participants

We contracted a market research firm (Qualtrics) to recruit purchasing professionals and relevant business decision-makers from the United States for a 10-min online survey. We received responses from 1725 participants. To ensure reliable and high-quality data, we pre-registered our data collection and analysis plan (https://aspredicted.org/blind.php?x=FJG_G6P).

Before data analysis, we excluded 1288 participants: 6 as test responses from the panel provider²; 18 for not providing consent, 11 for not currently being a resident in the United States, 141 for working for companies with fewer than 10 employees, 320 with fewer than one year of professional purchasing experience, 192 for not being involved in purchasing decisions during 2021, 84 for failing one attention check, 4 duplicates, 244 with missing data, 261 for taking less than 240 s to complete the survey, and 7 whose age minus professional experience in purchasing was less than 14 years. We adapted this two-part screening procedure to increase research quality.

This left us with 437 participants ($M_{age} = 40.98$, $SD_{age} = 8.88$; 185 female).³ These participants had, on average, 10 years of professional purchasing experience, and 67% stated they had previously negotiated the purchase of gain-sharing contracts. More background information can be found in Table 3.

3.3. Procedure, materials, and measures

After providing consent, participants were screened for eligibility concerning the following characteristics (see preregistration for more details): country of residence, company size, professional purchasing experience, purchase involvement during 2021, and with one attention check. The survey was automatically terminated for participants who did not pass all these tests.

Then, participants were given the base scenario (see Appendix A for

Table 2
Activities to increase research quality.

| Phase | Activity |
|-------------|---|
| Pre-study | <ul style="list-style-type: none"> Exploratory interviews with practitioners Development of experimental material in consultation with practitioners Pre-testing experimental material with MBA students Pre-registration of data collection and analysis plan |
| Intra-study | <ul style="list-style-type: none"> Participant recruitment through business panel Two-stage screening: general screening for eligibility by panel provider and specific screening within the survey. Analysis based on pre-registered analysis plan with additional post-hoc tests to investigate the robustness |
| Post-study | <ul style="list-style-type: none"> Experimental material reported in Appendix A and Appendix B Open data availability through the data repository |

² This exclusion rule was not preregistered.

³ Due to oversampling by the panel provider, we received additional responses.

Table 3
Demographic details of participants ($n = 437$).

| Variable(s) | Count | Percentage |
|---|-------|------------|
| Company size (full-time employees) | | |
| 0–9 employees | 0 | 0.0% |
| 10–49 employees | 85 | 19.5% |
| 50–249 employees | 126 | 28.8% |
| 250–499 employees | 48 | 11.0% |
| 500–999 employees | 84 | 19.2% |
| 1000 or more employees | 94 | 21.5% |
| Industry | | |
| Construction | 69 | 15.8% |
| Manufacturing | 102 | 23.3% |
| Transportation, communications, electricity, gas, sanitary services | 23 | 5.3% |
| Wholesale and retail trade | 68 | 15.6% |
| Finance, insurance, real estate | 45 | 10.3% |
| All other private service business | 62 | 14.2% |
| Public administration | 17 | 3.9% |
| Other | 51 | 11.7% |
| Overall purchasing amount (involved with during 2021) | | |
| Less than \$100,000 | 63 | 14.4% |
| Between \$100,000 and \$499,999 | 136 | 31.1% |
| Between \$500,000 and \$999,999 | 96 | 22.0% |
| Between \$1,000,000 and \$4,999,999 | 89 | 20.4% |
| Between \$5,000,000 and \$9,999,999 | 32 | 7.3% |
| More than \$10,000,000 | 21 | 4.8% |
| Management level | | |
| No immediate subordinates | 24 | 5.5% |
| First-level management (e.g., team leader) | 104 | 23.8% |
| Middle-level management (e.g., department/division manager) | 187 | 42.8% |
| Top-level management (e.g., managing director) | 122 | 27.9% |
| Educational level (highest completed or highest degree) | | |
| Lower than high school degree | 4 | 0.9% |
| High school degree | 80 | 18.3% |
| Vocational school degree | 61 | 14.0% |
| University bachelor's degree | 177 | 40.5% |
| University master's degree | 78 | 17.8% |
| Higher than a university master's degree | 37 | 8.5% |

more details): they were about to make a strategic purchase of production line equipment and could either continue with the current type of bearings contract or switch to a gain-sharing contract. After reading about what a gain-sharing contract entails, the participants were presented with two contract options in randomized order (i.e., single factor within-subjects design experiment) on separate pages.

We measured the following four variables immediately after each contract (see Table A1 and Table A2 in Appendix A). Since no ready measures exist for gain-sharing arrangements, we adapted existing scales. We measured each variable with a single item to minimize the number of survey questions after each contract scenario in our within-subjects design, in line with prior research assessing in experimental settings (e.g., Bambauer-Sachse & Helbling, 2022; Hada, 2022). We adapted the switching intention measure from Anderson and Wynstra (2010): (“If you were in this purchasing situation, how likely would you be to switch from the current contract to this gain-sharing contract?”) using a slider scale (–50 = “I would definitely not switch”; 50 = “I would definitely switch”). Following Dickson and Kalapurakal (1994), we measured perceived fairness with a single item (“How fair is the gain-sharing contract in your opinion?”), using a slider scale (–50 = “Extremely unfair”; 50 = “Extremely fair”). To capture the participant's general evaluation of execution risk (Ulaga & Reinartz, 2011), we used a single item (“How risky is the gain-sharing contract in your opinion?”) on a slider scale (–50 = “Not risky at all”; 50 = “Totally risky”) following Young and Albaum (2003).

Table 4

Mean rating per contract and test of differences.

| Variable(s) | Mean (SD) | | Shapiro-Wilk | Paired samples t-test | Wilcoxon rank test |
|-------------------------------------|---------------|---------------|--------------|----------------------------|-----------------------|
| | 50/50 | 75/25 | | | |
| Switching intention | 11.51 (29.01) | 15.67 (27.84) | $p < .001$ | $t(436) = -2.94, p = .004$ | $z = -3.26, p = .001$ |
| Perceived fairness | 11.69 (26.52) | 15.46 (25.09) | $p < .001$ | $t(436) = -2.94, p = .003$ | $z = -3.35, p < .001$ |
| Perceived risk | 10.30 (26.64) | 9.51 (25.64) | $p < .001$ | $t(436) = 0.62, p = .535$ | $z = 1.09, p = .277$ |
| Estimated productivity improvements | 11.53 (23.42) | 11.61 (21.67) | $p < .001$ | $t(436) = -0.08, p = .933$ | $z = 0.09, p = .930$ |

To capture a potential confounding effect, we examined whether the split in the gain-sharing arrangement affected participants' expectations regarding the gain to be shared – although information was identical for both arrangements (see Appendix A). For each contract, we measured estimated productivity improvement with a single item (“Do you think the realized productivity improvements will be lower, equal, or higher than the estimated amount?”) on a slider scale (–50 = “Much lower”; 0 = “Equal”; 50 = “Much higher”). Finally, after the evaluation of both contracts, we measured the participant's focus on contract features when assessing the two contracts (“What was more relevant to you when evaluating the contracts?”) on a 7-point scale (1 = “Fixed costs”; 7 = “Percentage share”).

The participants then entered the second part of the survey, which was an extension of the original scenario (see Appendix B). Participants were told they were still in the same purchasing situation and to make four choices. For each choice, participants were presented with two potential gain-sharing options and a ‘no-choice’ option (i.e., keep the current contract) from which to select (see Table B1 in Appendix B). The order of the two gain-sharing contracts was randomized, but the current contract (i.e., the ‘no-choice’ option) was always the third option.

After making four choices, participants rated the experimental realism of the business scenario and finished by providing demographic details (for more details, see preregistration).

4. Analyses and results

4.1. Realism check

We asked participants to evaluate the realism of the business scenario with one item (“I was able to imagine myself in the situation described in the scenario.”) inspired by Geiger, Dost, Schönhoff, and Kleinaltenkamp (2015). We measured realism on a 7-point scale (1 = “strongly disagree” to 7 = “strongly agree”). A one-sample *t*-test ($M \neq 4$) provided evidence for sufficient realism ($M = 5.68$; $SD = 1.18$; $t(436) = 29.71, p < .001$).

4.2. Main effects of contract type

Participants showed a higher switching intention for the contract with the 75/25 split and a \$100,000 fixed fee⁴ ($M = 15.67, SD = 27.84$), compared with the contract denoting a 50/50 split and no fixed fee ($M = 11.51, SD = 29.01$; $z = -3.26, p = .001$). The contract with the 75/25 split and the \$100,000 fixed fee ($M = 15.46, SD = 25.09$) was also perceived as fairer compared with that denoting a 50/50 split and no fixed fee ($M = 11.69, SD = 26.52$; $z = -3.35, p < .001$). There was no significant difference between the two contracts in terms of perceived risk ($z = 1.09, p = .277$). Also, participants did not evaluate the two contracts differently in terms of the estimated productivity improvements ($z = 0.09, p = .930$). Table 4 shows the mean ratings for our dependent measures per contract.

In addition, descriptive results indicate that the degree to which participants focus on the percentage share (rather than the fixed fee)

relates to their contract evaluations. In this respect, switching intention for the contract with the 75/25 split and the \$100,000 fixed fee was also positively associated with customers' self-assessed focus on percentage share ($r = 0.25, p < .001$), but no association was found for the other contract ($r = 0.07, p = .136$).

4.3. Indirect effect of contract type on switching intention

We used Model 1 of the MEMORE plug-in for SPSS (Montoya & Hayes, 2017) to run a parallel mediation model with 5000 bootstrap samples. The MEMORE plug-in can be applied to within-participant data, enabling researchers to test multiple indirect effects in one model (Montoya & Hayes, 2017). In particular, the plug-in allowed us to test whether differences in perceived fairness and perceived risk ($M_{75/25 \text{ split}} - M_{50/50 \text{ split}}$) mediate the effect of contract type on differences in switching intention ($Y_{75/25 \text{ split}} - Y_{50/50 \text{ split}}$). As a confound check, we also included estimated productivity improvements as an additional mediator to ensure we captured potential effects through this alternative path. The results are summarized in Fig. 2 below.

The findings (see Fig. 2) show that differences in perceived fairness mediated the effect of contract types on differences in switching intention: When comparing the 75/25 to the 50/50 split, the indirect effect via perceived fairness is positive (estimate = 2.12, $SE = 0.80$) and significant as the 95% confidence interval (CI) excludes zero [0.66, 3.79]. However, the difference in perceived risk was not significant (indirect effect = 0.04, $SE = 0.13$, 95% CI = [–0.15, 0.39]). These results underscore our fairness-based account of switching intentions in line with equity (justice) theory: Customers prefer to switch to a partial gain-sharing pricing scheme because they evaluate this arrangement as fairer.

In addition, although participants' estimated productivity improvements affect their switching intentions (see path 0.23*** between these two constructs in Fig. 2), the type of gain-sharing contract does not have an impact on switching intentions through the estimated productivity improvements (see path .09 n.s. in Fig. 2; indirect effect = 0.02, $SE = 0.25$, 95% CI = [–0.48, 0.54]). Thus, we can rule out this path as an alternative explanation for why participants are more likely to switch to the partial versus full gain-sharing arrangement.

4.4. Choice data

To begin with, we calculated choice shares across all four choice sets (see Fig. 2 and Appendix B). The results show that across all choices, a contract with a 75/25 split – irrespective of whether an additional fixed fee was attached – was generally the preferred option.

The difference between the shares of the two gain-sharing contracts is not statistically significant when both contracts are economically equivalent (Choice 1: gain-sharing contract with a 75/25 split and a \$100,000 fixed fee vs. a 50/50 split and no fixed fee; $\chi^2 = 2.3, df = 1, p = .129$). However, the difference was significant in all other choice sets (at $p < .05$) and on an aggregate level. Fig. 3 further highlights that a substantial proportion of participants (between 27% and 28% across choice sets) still preferred a traditional contract, although both gain-sharing alternatives were economically superior.

For additional analyses, we examined how the split of the gain-sharing contract or the fixed fee affected participants' choices across the four choice sets. The results of a conditional logit model with fixed

⁴ The first number always indicates the customer's share (i.e., 75/25 = customer keeps 75% and seller gets 25%).

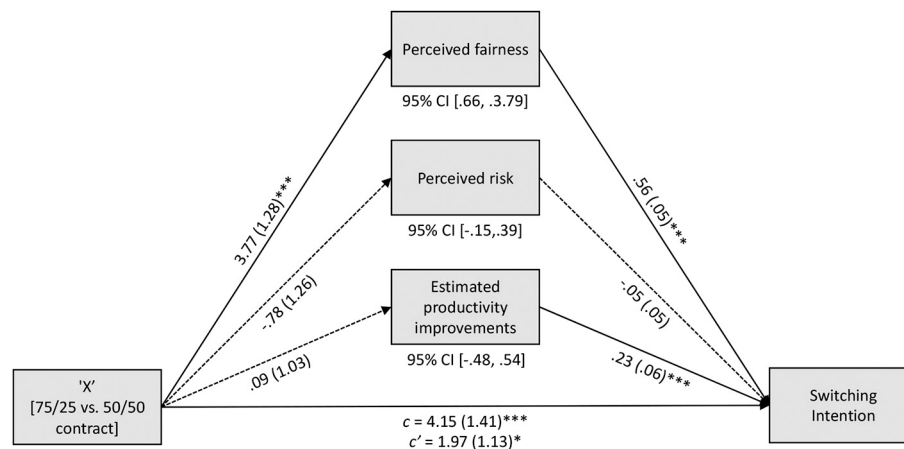


Fig. 2. Parallel mediation model for contract type.

Note: * $p < .10$, ** $p < .05$, *** $p < .01$; mediators were mean centered.

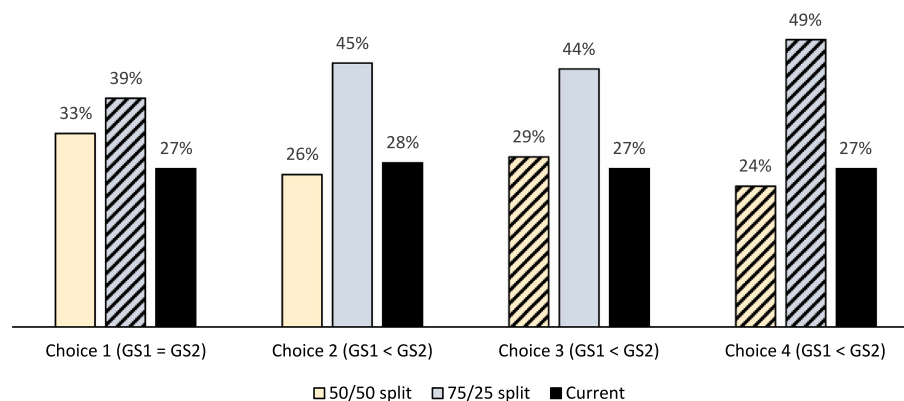


Fig. 3. Choice shares across choice situations.

Note: Bars with black stripes indicate that the contract included a \$100,000 fixed fee; comparison operators show which gain-sharing contract was the most economical choice (the current contract was always the least economical).

effects across all choices and clustered standard errors for respondents show that preferences were driven by the 75/25 split and not the 50/50 split or fixed fee. The same holds for a more complex choice model accounting for the multi-level nature of the data in terms of preference heterogeneity across respondents.

4.5. Non-preregistered analyses and robustness checks

We first checked for order effects by separating our main analysis by contract presentation order (see Table 5). The results were largely consistent with those of the preregistered analysis (see Table 3), except for switching intention and perceived risk for those participants who first saw the contract with the 50/50 split and no fixed fee. These results may suggest some order effects.

However, to further investigate order effects, we followed up with a between-subjects analysis (single factor: 50/50 split vs. 75/25 split). To do so, we compared switching intention and the three perception measures by only considering the ratings of the first contract seen by a participant. That is, we only used ratings for a single contract per participant. This analysis allowed us to investigate the impact of order effects more thoroughly since presentation order is—by definition—not relevant when only comparing participants' ratings for the first contract they assessed (see Table 6).

Additionally, we used Model 4 of the PROCESS plug-in for SPSS (Hayes, 2017) to run a parallel mediation model with 5000 bootstrap samples. The results confirmed that switching intentions were higher for

the 75/25 contract, including a fixed fee, compared with the 50/50 contract. Further, the indirect effect via perceived fairness is positive (estimate = 3.87, SE = 1.90) and significant as the 95% confidence interval (CI) excludes zero [0.13, 7.64]. Again, this was not the case for perceived risk (indirect effect = 0.23, SE = 0.29, 95% CI = [−0.30, 0.90]) and for estimated productivity improvements (indirect effect = −0.23, SE = 0.40, 95% CI = [−1.11, 0.54]).

These results are in line with the preregistered within-subjects results. Thus, order effects seem to be of little practical concern in our data. Additionally, the close overlap of the preregistered within-subject and post-hoc between-subject analysis provides strong evidence that our results are not a methodological artefact of the within-subject design.

5. Discussion and conclusions

Gain-sharing arrangements are an increasingly relevant phenomenon in contemporary B2B markets, where many sellers are offering different value-, outcome- and performance-based contracts (Essig et al., 2016; Keränen et al., 2021; Terho et al., 2017; Visnjic et al., 2017). For example, in solution sales, sellers frequently take over the responsibility for optimizing customers' processes to realize measurable financial outcomes (Uлага & Reinartz, 2011).

The current literature is clear on the potential benefits that gain-sharing arrangements can offer to both sellers and customers (Sawhney, 2006). However, beyond anecdotal evidence suggesting that customers often resist gain-sharing arrangements in PBCs (Liinamaa et al.,

Table 5

Mean rating per contract and test of differences separated by presentation order.

| | Mean (SD) | | Shapiro-Wilk | Paired samples <i>t</i> -test | Wilcoxon rank test |
|---|---------------|---------------|-----------------|---|-----------------------------------|
| Variable(s) | 50/50 | 75/25 | | | |
| <i>50/50 contract shown first (N = 212)</i> | | | | | |
| Switching intention | 12.75 (29.15) | 13.36 (25.55) | <i>p</i> < .001 | <i>t</i> (211) = −0.32, <i>p</i> = .752 | <i>z</i> = −0.08, <i>p</i> = .938 |
| Perceived fairness | 11.67 (26.37) | 13.92 (23.18) | <i>p</i> < .001 | <i>t</i> (211) = −1.37, <i>p</i> = .172 | <i>z</i> = −1.79, <i>p</i> = .073 |
| Perceived risk | 12.40 (24.61) | 8.76 (24.30) | <i>p</i> < .001 | <i>t</i> (211) = 2.14, <i>p</i> = .033 | <i>z</i> = 2.03, <i>p</i> = .043 |
| Estimated productivity improvements | 12.78 (22.10) | 11.80 (20.09) | <i>p</i> < .001 | <i>t</i> (211) = 0.69, <i>p</i> = .489 | <i>z</i> = 0.74, <i>p</i> = .458 |
| <i>75/25 contract shown first (N = 225)</i> | | | | | |
| Switching intention | 10.35 (28.89) | 17.84 (29.73) | <i>p</i> < .001 | <i>t</i> (224) = −3.64, <i>p</i> < .001 | <i>z</i> = −4.30, <i>p</i> < .001 |
| Perceived fairness | 11.71 (26.71) | 16.91 (26.73) | <i>p</i> < .001 | <i>t</i> (224) = −2.66, <i>p</i> = .008 | <i>z</i> = −2.93, <i>p</i> = .003 |
| Perceived risk | 8.31 (28.34) | 10.21 (26.88) | <i>p</i> < .001 | <i>t</i> (224) = −1.03, <i>p</i> = .304 | <i>z</i> = −0.44, <i>p</i> = .661 |
| Estimated productivity improvements | 10.35 (24.58) | 11.44 (23.10) | <i>p</i> < .001 | <i>t</i> (224) = −0.74, <i>p</i> = .462 | <i>z</i> = −0.62, <i>p</i> = .537 |

Note: Results in bold are in line with the results of the preregistered analysis.

2016; Sawhney, 2006), the current literature has largely remained silent as to the customer perspective towards these arrangements. To overcome this limitation, we set to explain what drives customers' (un)willingness-to-switch to gain-sharing arrangements in the context of PBCs. In doing so, we bring greater conceptual clarity to the gain-sharing phenomenon. Most prior gain-sharing research is normatively oriented, with researchers paying insufficient attention to defining key constructs and positioning their findings and related contributions within the broader value-based pricing research stream.

We define the gain-sharing pricing scheme as an arrangement under which a seller promises to realize a measurable economic performance gain that is shared between the seller and customer in a predetermined manner (see Sawhney, 2006; Thomson & Anderson, 2000). Furthermore, we distinguish between full and partial gain-sharing schemes depending on whether the compensation is fully based on performance or incorporates a fixed element. We additionally position gain-sharing schemes (Cook & Hegtvedt, 1983; Luo, 2009; Thomson & Anderson, 2000) within the broader value-based pricing stream (see Hinterhuber, 2004, 2008; Hinterhuber et al., 2021; Kienzler, 2018; Töytäri et al., 2017) and in doing so explain how it relates to other close concepts, such as outcome-based pricing (Böhm et al., 2016; Schaeffers et al., 2021) and performance-based pricing (Essig et al., 2016; Keränen et al., 2021; Liinamaa et al., 2016; Mouzas, 2016) as summarized in Fig. 1.

The results from this study show that individuals who make buying decisions respond differently to economically equivalent gain-sharing contracts with different pricing schemes (see Table 7). A gain-sharing split that compensates suppliers with a fixed up-front fee but entitles customers to a higher share of future productivity improvements increases their acceptance of gain-sharing arrangements in the context of PBCs. The equity theory driven mediator of perceived fairness, rather than the agency theory driven mediator of perceived risk, explains the customer's switching intentions.

Unlike the prior literature that emphasizes the centrality of risk-based explanations (Essig et al., 2016), we show that the customers' perceived fairness is the primary underlying mechanism that explains the customers' evaluations of alternative pricing schemes in the context of PBCs. The findings contrast with extant B2B pricing research that predominantly highlights organizational decision-makers as actors who

choose options that minimize risks and maximize utility (see Böhm et al., 2016; Iyer et al., 2015; Thomson & Anderson, 2000). In choosing a partial gain-sharing contract, customers risk paying higher prices in low-performance situations.

Perceived fairness captures the customer's "comparison of its actual outcomes to those outcomes the firm deems it deserves" (Kumar et al., 1995, p. 55) when distributing the economic gains of a gain-sharing pricing scheme with the seller. The fixed fee pricing scheme allows customers to prioritize their gains over the supplier's gains. It could be that customers feel more entitled to these gains since they result in improvements in the customer's own process, even if the gain is achieved via the seller's interventions. To compensate the seller for the right to

Table 7

Overview of key results.

| Effect | Result | Implication |
|---|--------|--|
| Contract type has a direct effect on... | | |
| switching intention | ✓ | Economically equivalent contracts do differ in switching intention. A 75/25 split with a \$100,000 fixed fee is more attractive than a 50/50 split without a fixed fee. |
| perceived fairness | ✓ | Economically equivalent contracts do differ in perceived fairness. A 75/25 split with a \$100,000 fixed fee is perceived as fairer than a 50/50 split without a fixed fee. |
| perceived risk | ✗ | Economically equivalent contracts <u>do not differ in perceived risk</u> . |
| The effect of contract type on switching intentions is mediated by... | | |
| perceived fairness | ✓ | Differences in perceived fairness drive switching intention. The prior literature has not sufficiently investigated fairness-based explanations. |
| perceived risk | ✗ | Differences in perceived risk <u>do not</u> drive switching intention. The prior literature has potentially overstated risk-based explanations. |
| Contract type has an effect on... | (✓) | Traditional contracts—the least economic contract form—are still chosen by many. Gain-sharing contracts with a 75/25 split and a \$100,000 fixed fee are the preferred choice across most choice situations. |

Table 6

Mean rating per contract and test of differences for the first contract only.

| Variable(s) | Mean (SD) | | Shapiro-Wilk | Independent samples <i>t</i> -test | Mann-Whitney U |
|--|----------------------|----------------------|--------------|------------------------------------|-----------------------|
| | 50/50 | 75/25 | | | |
| Switching intention | 12.75 (29.15) | 17.84 (29.73) | $p < .001$ | $t(435) = -1.81, p = .072$ | $z = -2.25, p = .024$ |
| Perceived fairness | 11.67 (26.37) | 16.91 (26.73) | $p < .001$ | $t(435) = -2.06, p = .040$ | $z = -2.53, p = .011$ |
| Perceived risk | 12.40 (24.61) | 10.21 (26.88) | $p < .001$ | $t(435) = 0.89, p = .376$ | $z = 0.63, p = .526$ |
| Estimated productivity improvements | 12.78 (22.10) | 11.44 (23.10) | $p < .001$ | $t(435) = 0.62, p = .537$ | $z = 0.29, p = .776$ |

Note: Results in bold are in line with the results of the preregistered analysis.

claim a higher stake in potential gains, the customer is willing to guarantee the supplier a guaranteed base income by incorporating a fixed fee component. An arrangement that includes a floor income for the seller and entitlement components for both provides a system of dual security, which is an arrangement thought to have important motivational properties for those working under a fair distribution rule (Cooper et al., 1992).

5.1. Theoretical implications

The results of this study have several important implications for contemporary B2B marketing theory and practice. From the marketing perspective, previous research has highlighted the key role of gain-sharing contracts in selling complex solutions and value-based offerings in B2B markets (Keränen et al., 2021; Ulaga & Reinartz, 2011). At the same time, customers often resist gain-sharing arrangements in PBCs (Liinamaa et al., 2016; Sawhney, 2006).

Against this background, the purpose of this study has been to explain what drives customers' (un)willingness-to-switch to gain-sharing arrangements in the context of PBCs. We addressed this purpose with two specific research questions. First, how does the type of gain-sharing pricing scheme influence customers' willingness-to-switch to a PBC? Second, what are the theoretical mechanisms that explain the customer's willingness-to-switch?

To understand the source of customer resistance, we build on agency theory and equity theory to develop two competing and theoretically grounded explanations (risk-based vs. fairness-based) to explain customers' willingness-to-switch. The results from our experimental study with professional B2B purchasers show that customers' perceptions of fairness, but not risk, drive their switching intentions towards gain-sharing arrangements. These findings shed light on the key mechanisms that drive customers' decisions when evaluating gain-sharing arrangements and help explain why customers might resist gain-sharing arrangements that are economically superior but appear subjectively less fair to customers (Sawhney, 2006).

From the pricing perspective, our results show that perceived price fairness plays a key role in B2B markets (Ferguson, Brown, & Johnston, 2017; Xia, Monroe, & Cox, 2004). This complements previous studies, which have shown that different price presentation formats (i.e., separation vs. bundling) for economically equivalent B2B service elements influence customers' willingness to pay (Steiner et al., 2016). We extend this research by demonstrating how different pricing schemes (gain-sharing ratio + fixed fee) for economically equivalent B2B offerings influence customers' willingness-to-switch to gain-sharing arrangements. These are important insights, as they demonstrate that how suppliers set and present prices for economically equivalent B2B offerings is not a trivial or a non-consequential task but can instead have significant ramifications in terms of customers' willingness-to-switch.

From the organizational buying perspective, we show that individuals making decisions in firms are not necessarily guided by economic rationality-based arguments. Instead, in the context of gain-sharing arrangements, their choices are guided by what is perceived as fair. This advances the current B2B pricing and buying behavior research that has largely been rooted in rational and normative pricing models. More specifically, prior research has predominantly portrayed organizational buyers as rational decision-makers who pursue options that maximize their economic utility (see Iyer et al., 2015; Saab & Botelho, 2020). In contrast, our findings provide support for a more behavioral perspective (Hinterhuber & Liozu, 2015; Kienzler, 2018; Steiner et al., 2016). This has important implications for B2B sellers, who often focus on economic benefits and reduced risk when selling value- and performance-based offerings (Keränen et al., 2021; Terho et al., 2012). In our research context, fairness perceptions overshadow strictly risk and economic rationality-based optimization. This offers important insights into explaining customer willingness to engage in long-term contractual relationships with suppliers (c.f. Anderson &

Wynstra, 2010; Crosno & Dahlstrom, 2011).

From a methodological perspective, we respond to several recent calls for more experimental research in B2B marketing (Salonen et al., 2021; Zimmer et al., 2020). High-quality experiments are challenging to conduct in the B2B context due to requirements for high experimental realism, representative samples, and measurement of actual behavior (Viglia et al., 2021). We demonstrate how these tenets can be applied in practice by presenting a multi-phase approach that includes a systematic set of pre-, intra-, and post-study activities to increase the quality and realism of our experiment (see Table 2). These include, among other things, developing and (pre)testing the experimental material with practitioners, using pre-registered screeners to increase data quality, and rigorous data analysis. We present our scenarios in Appendix A and B and make the data used in this study publicly available. This should offer concrete guidance and benchmarking opportunities for both authors and reviewers of B2B experiments.

5.2. Managerial implications

For managers in selling organizations, this study offers several important and actionable insights that can help them design and implement gain-sharing arrangements in B2B markets. First, our results show that *customers respond differently to economically equivalent gain-sharing arrangements* that have different gain-sharing splits and fixed fees. This means the decision to choose the pricing scheme for economically equivalent value propositions is not trivial and can be the deciding factor that steers customers' buying decisions when evaluating gain-sharing arrangements. Put differently, a failure to suggest the right pricing scheme for the right customers can translate into lost opportunities to realize (often substantial) gains for both the seller and the customer. Managers should thus pay particular attention to how they structure their gain-sharing arrangements and where possible, consider offering different pricing structures for otherwise economically equivalent gain-sharing arrangements.

Second, our results demonstrate that *business customers prefer gain-sharing arrangements where they get to keep larger shares of the potential future productivity improvements*, even if they would have to pay higher fixed fees up-front. This suggests suppliers should err on the conservative side when designing possible gain-sharing splits and instead consider how they could recoup a smaller gain-sharing split through higher fixed and/or up-front fees. Interestingly, both anecdotal evidence and our field interviews with practitioners suggest that many sellers consider 50/50 gain-sharing splits "ideal targets" primarily because they are seen as more rewarding and fairer from the seller's perspective. They also represent "equal" investments into value co-creation. However, our findings demonstrate that customers do not consider 50/50 splits ideal since they violate their sense of entitlement and are thus perceived to be less fair. Therefore, we caution sellers against simply aiming for 50/50 splits because they seem the fairest and most rewarding alternative on the surface. Instead, managers should think about alternative routes to the same economic outcomes that would be easier for customers to accept.

Third, our results indicate that *all customers are not receptive to gain-sharing arrangements*, even when they would offer economically superior gains. A surprisingly high proportion of the decision-makers involved in our experiment were not willing to switch to the proposed gain-sharing contract, even though it offered significant cost savings and productivity improvements (~\$300,000 p.a.). This means suppliers should not expect that convincing all customers is possible and that identifying and prioritizing customers who are receptive to gain-sharing arrangements is critical for it to be a viable business model (c.f., Keränen et al., 2021).

Fourth, the dominant industry practice that sellers use to convince customers of the potential value of gain-sharing arrangements seems to be customer references and value guarantees, which aim to reduce customers' perceived risk in terms of getting the promised economic outcomes (Anderson & Wynstra, 2010; Keränen et al., 2021; Terho et al.,

2012). However, our findings demonstrate that *customers' risk perceptions have little impact on their switching decisions to gain-sharing arrangements*. In contrast, their fairness perceptions are the primary underlying mechanism that explains their switching intentions. This is an important insight, as it suggests that the current best practices in value communication that are geared towards reducing customers' perceived risk (Terho et al., 2012) do not address the key customer concerns about fairness. This might help explain why customers often resist gain-sharing contracts despite their superior economic value. Thus, sellers should find ways to complement their value communication practices by making their gain-sharing arrangements appear fairer to customers.

Finally, our findings highlight that the *prevailing behaviors of decision-makers in customer organizations are likely to leave significant economic gains on the table*. This is a critical issue, especially given the increasing pressure towards value-based purchasing in many industrial sectors (Gray, Helper, & Osborn, 2020; Meehan, Menzies, & Michaelides, 2017). We advise business customers to critically evaluate their decision-making logic in the context of gain-sharing arrangements and encourage them to (re)think whether fairness perceptions are a valid reason to forego substantial economic gains and/or whether it is possible to adjust the structure of the gain-sharing arrangement in a way that would deliver the sought for economic gains without violating their fairness perceptions.

5.3. Limitations and suggestions for further research

As with all research, the present study is not without limitations. However, some of these limitations provide fruitful areas for further research. First, our study is based on one main experiment. An extensive set of pre-test activities increased the experiment's quality, a relatively large sample allowed for both within- and between-subjects testing and a coupled design with two parts investigated both stated preferences and choices. However, a single experiment is inevitably narrow in its focus. Therefore, further research should build on the present study with additional experiments. For example, a logical next step would be to test whether customers' risk and fairness perceptions are similar between different buying and usage center members, or between different buying (new buy vs. re-buy) or customer (existing vs. new customer) situations, and, if not, what factors explain potential differences and how they influence customers' switching decisions. Furthermore, while we focused on the two most common gain-sharing features, the gain-sharing split and the presence versus absence of a fixed fee, future research could consider additional features and their effects on switching intentions. For example, the use of value guarantees and supplier penalties (for not meeting a predetermined level of productivity improvements) seem also to be relevant features in understanding gain-sharing contracts from a theoretical and practical point of view.

Second, while we applied an experimental research design to test specific theoretical explanations, future research could consider other methods to expand our understanding of the drivers for gain-sharing contracts in B2B markets. For example, qualitative research designs and in-depth interviews with organizational buyers could be employed to reveal the underlying reasons why buyers accept some and reject other gain-sharing deals, and fuzzy-set qualitative comparative analyses (c.f., Salonen et al., 2021) could be used to identify the conditions necessary to ensure the acceptance of gain-sharing deals. Alternatively, organizational ethnographies (c.f., Keränen & Prior, 2020) could delve deeper into the cultural, psychological, and social factors that explain how and why individual and group level expectations and judgments of gain-sharing contracts manifest in buying and usage centers.

Third, while we considered agency theory and equity theory in building and testing our assumptions, future research could consider alternative theoretical perspectives (c.f., Keränen et al., 2023). For example, framing theory could be applied to test whether framing the performance gains as cost savings or productivity improvements impacts customers' fairness and risk perceptions (Tversky & Kahneman, 1981) or whether framing the supplier's role as delivering, co-creating, or helping the customer realize the promised gains has a differential impact on customers' perceptions of distributive and procedural fairness (c.f., Ferguson, Ellen, & Bearden, 2014). Alternatively, signaling theory (Spence, 2002) could be used to test how different signals, such as the presence or absence of customer references and value guarantees (Anderson & Wynstra, 2010), or specific firm, offering, or salespeople level qualities, influence customers' risk and fairness perceptions of gain-sharing arrangements, or under which market, supplier and customer conditions different signals are more (less) effective.

Fourth, our results show that a surprisingly high proportion of customers prefer to stay with the current contract type rather than switch to an economically superior gain-sharing arrangement, which challenges prevalent notions of economic rationality in guiding decision-making. While our data are not able to explain why customers behave this way, recent literature suggests that various institutional pressures can reduce customers' willingness to accept value-based offerings in B2B markets, even in cases where the offering would leave customers (and other value chain partners) economically better off (Kokshagina & Keränen, 2022; Kropp & Totzek, 2020; Töytäri, Rajala, & Alejandro, 2015). Understanding these dynamics would be an important area for future research. Furthermore, while gain-sharing arrangements and performance-based pricing can be effective in reducing agency problems, governance problems and the risk of opportunistic behavior of suppliers and customers might still be present (Colm, Ordanini, & Bornemann, 2020; Pieringer & Totzek, 2022). As we did not address the role of opportunism in this study, future research could investigate in more detail how alternative gain-sharing arrangements not only shape fairness perceptions but also the customer's fear of supplier opportunism or the customer's opportunistic mindset (Pieringer & Totzek, 2022).

Fifth, our experimental scenario concerned a purchase of production line equipment. Future research could empirically study whether the findings hold true in different empirical contexts other than investment goods or whether there are substantial differences between industries in terms of risk and fairness perceptions.

Finally, gain-sharing arrangements represent an important but little understood industry practice in modern B2B markets (Keränen et al., 2021; Ulaga & Reinartz, 2011), and we hope this study encourages more research on this increasingly managerially relevant yet academically underexplored area.

Data availability

Research data is included as supplementary files

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Appendix A. Experiment – Part 1

Scenario introduction:

Imagine you are responsible for strategic purchasing of production line equipment for a large manufacturing company. Your current contract for production line bearings is soon to expire (see example picture below).

[due to a copyright, the actual picture used in the experiment is not included in the Appendix].

You have a long-term relationship with your current bearings supplier. After extensive research, you decide to continue to purchase from this supplier. As requested, the supplier has sent you a quotation to continue the current bearings contract for three years. The costs for bearings is \$100,000 per year.

Instead of paying this annual amount, the supplier asks you to consider switching to a gain-sharing contract. Under this new contract type, the supplier still provides the required bearings, and additional services targeting reduced bearing consumption and increased production line availability. This approach is designed to improve your firm's productivity. However, the proposed gain-sharing contract would mean that the supplier gets a percentage share of any resulting productivity improvements in addition to the annual fixed costs as specified in the contract. Note that these improvements are contingent on these additional services and disappear once your firm chooses another contract, such as the current contract.

Experimental condition 1:

In option 1, the supplier estimates that the productivity improvements are worth **\$400,000** per year under this gain-sharing contract. The fixed costs for bearings and services in the new contract is **\$0** per year, and you would pay the supplier **50% (an estimated \$200,000)** of the realized productivity improvements. Thus, the yearly net impact of the gain sharing contract (in relation to the current contract) is estimated at **+\$300,000**. However, the actual net impact can be lower or higher, depending on the actual productivity improvements. A summary of both contracts is provided below*:

Table A1

Illustration of the gain-sharing contracts in experimental condition 1.*

| | Current contract: annual numbers | Gain-sharing contract: annual numbers |
|---|-------------------------------------|--|
| 1. Fixed costs | -\$100,000 | -\$0 |
| 2. Estimated productivity improvements | | \$400,000 |
| Your impact: (expected savings for you) | | \$200,000 (50% of estimated productivity improvements) |
| Supplier's impact: (expected costs for you) | | \$200,000 (50% of estimated productivity improvements) |

* All dollar amounts represent the net present value of these costs/savings.

Experimental condition 2:

In option 2, the supplier estimates that the productivity improvements are worth **\$400,000** per year under this gain-sharing contract. The fixed costs for bearings and services in the new contract is **\$100,000** per year. In addition, you would pay the supplier **25% (an estimated \$100,000)** of the realized productivity improvements. Thus, the yearly net impact of the gain sharing contract (in relation to the current contract) is estimated at **+\$300,000**. However, the actual net impact can be lower or higher, depending on the actual productivity improvements. A summary of both contracts is provided below*:

Table A2

Illustration of the gain-sharing contracts in experimental condition 2.*

| | Current contract: annual numbers | Gain-sharing contract: annual numbers |
|---|-------------------------------------|--|
| 1. Fixed costs | -\$100,000 | -\$100,000 |
| 2. Estimated productivity improvements | | \$400,000 |
| Your impact: (expected savings for you) | | \$300,000 (75% of estimated productivity improvements) |
| Supplier's impact: (expected costs for you) | | \$100,000 (25% of estimated productivity improvements) |

* All dollar amounts represent the net present value of these costs/savings.

Appendix B. Experiment – Part 2

Description of the experimental design:

Participants saw the following four choice sets in random order:

1. Gain-sharing contract 1 (split: 50% buyer/50% Supplier; no fixed fee) vs. gain-sharing contract 2 (split: 75% buyer/25% Supplier; \$100,000 fixed fee) vs. current contract.
2. Gain-sharing contract 1 (split: 50% buyer/50% supplier; no fixed fee) vs. gain-sharing contract 2 (split: 75% buyer/25% supplier; no fixed fee) vs. current contract.
3. Gain-sharing contract 1 (split: 50% buyer/50% supplier; \$100,000 fixed fee) vs. gain-sharing contract 2 (split: 75% buyer/25% supplier; no fixed fee) vs. current contract.
4. Gain-sharing contract 1 (split: 50% buyer/50% supplier; \$100,000 fixed fee) vs. gain-sharing contract 2 (split: 75% buyer/25% supplier; \$100,000 fixed fee) vs. current contract.

The current contract was the least attractive economic choice across all four choice situations. Both gain-sharing contracts were equally attractive in Choice 1. Contract 2 (split: 75% buyer/25% supplier; \$100,000 fixed fee) was most attractive in Choice 2, Choice 3, and Choice 4. Choice 1 featured the same gain-sharing contracts as in the first part of the experiment (see [Table A1](#) and [Table A2](#)).

Scenario introduction:

Next, you will make four choices. Imagine that you are still in the same purchasing situation described earlier. For each choice, you will see two potential gain-sharing options and a ‘no-choice’ option (i.e., keep the current contract) that the supplier offers you. For each choice, decide which contract you would choose.

Example (Choice 1):

Table B1

Illustration of the first choice set in the second part of the experiment.

| Option 1 | Current contract: annual numbers | Gain-sharing contract: annual numbers |
|--|----------------------------------|--|
| 1. Fixed costs | -\$100,000 | -\$0 |
| 2. Estimated productivity improvements | | \$400,000 |
| Your impact: (expected savings for you) | | \$200,000 (50% of estimated productivity improvements) |
| Supplier's impact: (expected costs for you) | | \$200,000 (50% of estimated productivity improvements) |
| * All dollar amounts represent the net present value of these costs/savings. | | |
| Option 2 | Current contract: annual numbers | Gain-sharing contract: annual numbers |
| 1. Fixed costs | -\$100,000 | -\$100,000 |
| 2. Estimated productivity improvements | | \$400,000 |
| Your impact: (expected savings for you) | | \$300,000 (75% of estimated productivity improvements) |
| Supplier's impact: (expected costs for you) | | \$100,000 (25% of estimated productivity improvements) |
| * All dollar amounts represent the net present value of these costs/savings. | | |
| Option 3 | Keep the current contract | |

Appendix C. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.indmarman.2023.09.013>.

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