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Research Paper

Contracting abroad: A comparative analysis of contract design in host and home country outsourcing relations

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ABSTRACT

Cross-border business relationships often involve significant risk because they entail greater information asymmetry and complexity to manage collaboration than domestic relationships. Yet, little is known about the contractual design of such relationships. We examine a prominent form of cross-border collaboration – firms' strategic outsourcing in a host country where they operate – and contrast contracting choices with those made for similar home country relations. We collect survey data from Japanese subsidiaries operating and outsourcing in the Netherlands, and from Japanese firms outsourcing in Japan. Results show that contract complexity does not differ between similar home and host country relationships; however, consistent with our hypotheses, host country contracts have a shorter duration, more renewal provisions, less flexibility, and relatively greater contracting costs.

1. Introduction

Interfirm relationships increasingly transcend national boundaries (Handley and Angst, 2015). Prior studies recognize that cross-border collaboration can provide firms with significant benefits such as cost reduction, but also that such relations can be fraught with risk. The literature on interfirm collaboration identifies two types of risk in interfirm collaboration: relational risk (i.e. lack of cooperation between partners which could result in opportunistic behavior); and performance risk (i.e., failure despite full cooperation) (Das and Teng, 1996; Langfield-Smith, 2008). While just as in domestic collaboration, firms engaging in cross-border collaboration are exposed to such risks, they face greater information asymmetry and complexities in managing relationships due to spatial, legal, institutional and cultural differences, increasing informational frictions, and heightening monitoring and coordination costs (Asmussen et al., 2016; Aulakh and Gençtürk, 2008; Boeh, 2011; Costello, 2013; Handley and Angst, 2015; Jung and Lee, 2017). Therefore, cross-border relations are considered more 'risky' than equivalent relationships with domestic business partners (e.g., Giannetti and Yafeh, 2012; Larsen et al., 2013). Notably, although a considerable amount of research has examined the use of interfirm contracts as a primary mechanism for managing risks of interfirm

collaboration (e.g., Anderson and Dekker, 2005, 2014; Ding et al., 2013; Macher and Richman, 2008; Schepker et al., 2014), few studies have done so in a cross-border setting where the greater information asymmetry and complexities in managing relationships can evoke different contract design choices.

We examine contract design in a particular form of cross-border collaboration, namely outsourcing by firms' subsidiaries in a host country where they operate. Host country outsourcing differs from other forms of cross-border collaboration, such as international alliances and offshoring, as it involves foreign subsidiaries outsourcing to local partners.¹ Examining this setting enables us to provide insight into how, as compared to domestic outsourcing relationships, firms outsourcing in a host country make different contract design choices in order to cope with the greater information asymmetry and complexities they face. In addition, as contracting in a cross-border setting can be fraught with additional inefficiencies, a critical question to address is how this impacts contracting costs, which will influence the cost-benefit tradeoffs that firms make in contracting. Addressing these questions not only provides insight into differential contract design and cost-benefit tradeoffs for host country outsourcing, but also enhances insight into the organizational complexities and costs of maintaining foreign operations for which local sourcing is typically a necessity (Jung and Lee, 2017).

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E-mail addresses: h.c.dekker@vu.nl (H.C. Dekker), tkawai@mail.doshisha.ac.jp (T. Kawai), ju_sakaguc@soec.nagoya-u.ac.jp (J. Sakaguchi).¹ While part of a foreign entity, the subsidiary is located in the host country, which reduces effects of spatial distance (which though remains for the parent firm), and over time can reduce the impact of other (e.g., cultural, institutional, legal) differences with the home country.

To address this question, we conduct a comparative analysis of contract design between host country outsourcing relationships and comparable domestic outsourcing relationships. The outsourcing by firms' subsidiaries in a foreign host country to local business partners (i.e., 'host country outsourcing') is a commonly occurring form of cross-border collaboration (e.g., Jung and Lee, 2017) that to date has received only limited attention in interfirm research.² We focus on 'strategic outsourcing,' in which firms in the pursuit of value creation outsource the delivery of key products, parts, or services to another firm (Holcomb and Hitt, 2007; Quinn, 1999). A key motive to engage in strategic outsourcing is to leverage firm capabilities by obtaining access to a partner firm's unique capabilities and resources. Such relations, however, also create significant demands to develop good contracts to mitigate the risks of locating critical tasks outside the firm.

Based on prior contracting studies, we identify four key design dimensions of interfirm contracts: complexity, duration, renewal and flexibility. Following the argument that firms outsourcing abroad face greater information asymmetry and complexities in managing relationships, we theorize that contracting differences will exist with domestic outsourcing relations. In particular, we predict that host country outsourcing contracts will be more complex, have a shorter duration, include more renewal clauses, and provide less flexibility than home country outsourcing contracts. In addition, we examine differences in the cost of contracting as relating to negotiating and drafting contracts. We predict that host country outsourcing will involve greater contracting inefficiencies and consequently relatively greater contracting costs. Finally, we explore the effects of host country experience, which through learning reduces information asymmetry and inefficiencies (e.g., Basuil and Datta, 2015), and test whether the hypothesized effects hold primarily for firms with limited experience in the host country.

To test these expectations, we have collected survey data from Japanese firms with strategic outsourcing relations in a domestic setting (i.e., in Japan) and from Japanese firms outsourcing in a host country (i.e., in the Netherlands). This approach, in which the nationality of the outsourcing firm remains constant, enables us to conduct a comparative analysis of contracting differences. To conduct an adequate comparison, we match similar home and host country observations regarding outsourcing characteristics that proxy for exchange hazards. Consistent with prior research rooted in transaction cost economics (TCE), we find that with greater exchange hazards (as proxied by transaction characteristics), firms develop more complex contracts of longer duration, which make more use of renewal clauses and, particularly when facing high uncertainty, provide greater flexibility. Our analysis of interrelations among the four contract design dimensions also support the idea that these choices are interrelated decisions that need to be considered in conjunction. Over and above these effects, we find that contract design choices differ when the outsourcing relation is located in the host country. While we observe no differences in contract complexity, host country contracts have a shorter duration, make more use of renewal provisions and provide less flexibility. In addition, controlling for variation in contract design and outsourcing characteristics, we find that contracting costs are greater for host country outsourcing, and that this relates to the relatively greater cost of contract complexity. Finally, consistent with the idea that information asymmetry and inefficiencies are reduced through learning, we find that the identified comparative differences hold primarily for firms with limited host country experience.

² For instance, a recent survey of the Japanese Ministry of Economy, Trade and Industry on firms' overseas business activity reported that subsidiaries of Japanese manufacturing firms in Europe procured 36.2% of their total procurement amount in the local (host) country, 27.7% from other European countries, and 26.5% from the home country Japan (Ministry of Economy, Trade and Industry, 2015). Jung and Lee (2017) report a local sourcing ratio of 48% in a sample of 171 international subsidiaries of Korean firms across 31 countries in 2007.

This study contributes to the evolving literature on the management and control of interfirm relationships by examining the influence of cross-border relations on interfirm contract design, particularly in the setting of host country outsourcing. While prior studies have considered interfirm contracts as mechanisms for the management of interfirm risks that arise from transaction characteristics (Anderson and Dekker, 2014), we show that in a host country setting contract design differs from home country contracts for otherwise comparable transactions. These differences are consistent with theoretical predictions of the effects of heightened information asymmetry and complexities to manage relations in a host country that evoke different design choices. We also provide evidence on differential economics of contracting for host country outsourcing, which we find to be more costly than for home country relations. Finally, we provide evidence of the influence of host country experience, which through learning and reduced information asymmetry and inefficiencies, reduces the differences in both contract design and costs. In the next section, we review the relevant literature and develop hypotheses. In the sections thereafter we discuss our research method, data and analyses, and provide a discussion of the results, implications and limitations of the study.

2. Literature review and hypothesis development

2.1. Contracting for strategic outsourcing

Interfirm contracts are a key mechanism in the governance of interfirm relations as they provide the formal arrangements on which collaboration is based and a framework within which cooperation proceeds (Anderson and Dekker, 2005, 2014). In particular, contracts enable firms to manage exchange hazards relating to relational risks and performance risks (Reuer and Ariño, 2007; Schepker et al., 2014). While relational risks relate to potential opportunistic behaviors by an exchange partner, performance risks relate to coordination needs that ask for communication, coordination and adaptation across firm boundaries to realize collaborative objectives (Das and Teng, 1996; Langfield-Smith, 2008). Well-developed contracts provide clauses that align and safeguard partners' interests and facilitate coordination and adaptation.

Prior TCE-based studies have shown that exchange hazards affect contract design in terms of contract complexity (e.g., Anderson and Dekker, 2005; Ding et al., 2013; Macher and Richman, 2008; Reuer and Ariño, 2007; Poppo and Zhou, 2014). Complex contracts provide for greater control as they allow firms to safeguard their interests against misappropriation by exchange partners by supporting the enforcement of agreements and incentivizing partners to act in their interests. In addition, they facilitate coordination by specifying a division of labor and providing guidelines to integrate partners' activities, resulting in simplified decision making and reduced disagreements about how to accomplish tasks (Ding et al., 2013; Reuer and Ariño, 2007; Schepker et al., 2014). More complex contracts are characterized by greater inclusiveness of agreements, greater detail with which terms, clauses and issues are specified and codified, and greater use of provisions that facilitate adaptation to anticipated contingencies (Ding et al., 2013; Luo, 2002; Luo and Tan, 2003; Schepker et al., 2014).

In addition to contract complexity, prior studies have shown that exchange hazards also influence other contract design choices (Anderson and Dekker, 2014). First, a range of studies has examined the duration of interfirm contracts, finding that exchange hazards induce partners to engage in longer-term contractual commitments (Costello, 2013; Harris and Holmstrom, 1987; Joskow, 1987; Lyons, 1996; Schepker et al., 2014; Weber et al., 2011). Often (but not necessarily) longer-duration contracts are more complex as the contract needs to cover agreements for a longer period, in which more contingencies can emerge. In addition, the economic value of long-term collaboration is typically greater than that of short-term relationships, making investments in complex contracts economically more feasible.

Second, interfirm contracts often include renewal clauses by providing a fixed term with the option of extension or renewal that is typically based on performance.³ Renewal clauses reduce risk as they provide firms with a real option to terminate the relationship at the moment of contract expiry in case of underperformance, undesirable behavior or unforeseen circumstances, and as they emphasize greater performance monitoring and incentive provision to partners to ‘win’ the contract again (Schepker et al., 2014; Schloetzer, 2012; Weber et al., 2011). The real option nature of renewal clauses also reduces costs of ex post renegotiation and opportunistic bargaining that are more likely to occur in their absence (Schepker et al., 2014). Because of these properties, renewal clauses are considered more desirable when exchange hazards are significant. Renewal clauses typically are associated with more complex contracts that provide in greater detail the conditions (e.g., performance targets to be achieved) for renewal. While renewal clauses are typically associated with the choice for a certain contract duration, not all contracts with a fixed duration necessarily included renewal clauses (e.g., when the collaboration has a clear ending date), and contracts that do include such clauses can vary in duration.

Third, contracts vary in flexibility, which is the extent to which the contract is, deliberately or unintentionally, left open ended with room for interpretation and adaptation during the relationship (Asanuma, 1989; Gietzmann, 1996; Sako, 1992). Although contract complexity and flexibility are related, they are different dimensions, and in situations with high exchange hazards firms may write contracts that are characterized by both high complexity (e.g., by providing an elaborate set of detailed provisions and contingency clauses) and flexibility (e.g., keeping the contract open with respect to issues that are too difficult, constraining or costly to contract on). Contract flexibility is particularly valuable when partners face high uncertainty as it allows for adaptation over time and avoids costly revision and renegotiation of fixed contract terms (Aulakh and Gençtürk, 2008; Krishnan et al., 2011; Luo, 2002; Masten and Saussier, 2002; Schepker et al., 2014). Importantly, while contingency adaptation provisions in complex contracts specify responses to anticipated contingencies (which can limit flexibility), contract flexibility provides the ability to deal with and adjust to unanticipated changes, and relates to the impossibility or excessive costs of writing complete agreements or elaborate contingency-adaptation provisions.

Prior studies recognize that negotiating and drafting outsourcing contracts is costly and presents firms with a cost-benefit tradeoff; however, empirical evidence on these issues is scarce. Contracting costs are incurred during the bargaining and contract-drafting process while firms attempt to come to a mutually acceptable agreement (Anderson and Dekker, 2005; Ariño et al., 2014; Boeh, 2011).⁴ In the next section we assess how host country outsourcing is expected to affect contract design choices and contracting costs.

2.2. Host country outsourcing contracts

Following the significant increase in practice of cross-border outsourcing, recent research has focused on the outsourcing of business processes across national boundaries, such as offshoring and host country outsourcing (i.e., the outsourcing of activities by subsidiaries of internationally operating firms to local business partners), and

particularly the challenges in managing such relations (Hahn et al., 2009; Handley and Angst, 2015; Larsen et al., 2013). However, studies on contract design for cross-border relations are scarce, and prior empirical evidence primarily concerns interfirm collaboration within a domestic context. Below we review studies on cross-border business relationships to derive implications for contract design in the setting of host country outsourcing.

A key reason why host country outsourcing contracts may differ from contracts for equivalent domestic relationships is because of the heightened information asymmetry and complexities that arise from cultural, institutional, spatial, and legal differences (Asmussen et al., 2016; Aulakh and Gençtürk, 2008; Costello, 2013; Jung and Lee, 2017; Tong et al., 2015). As Das and Teng (1996) argue more generally, when a firm does business with local partners in a foreign country, it has to deal with a competitive environment characterized by a different legal system, market structure, consumer behavior, and customs. Foreign firms often have less information and experience in a host country, and incur additional costs in identifying relevant differences between countries and for adjusting to a host country (Jung and Lee, 2017; Zaheer, 1995). Thus, the firm is confronted with greater complexities and information asymmetry and consequently greater risk, while at the same time it can rely less on domestically accumulated contracting knowledge and expertise. This adds to the difficulties in acquiring information, evaluating partner assets, negotiation and monitoring partner behavior (Costello, 2013; Tong et al., 2015). The paucity of shared cognitive and regulatory frameworks complicates contract design even further (Abdi and Aulakh, 2012), while there is a greater need to overcome different understandings and expectations (Adair et al., 2001; Basuil and Datta, 2015; Rao and Schmidt, 1998). Prior studies show how collaboration with foreign, culturally distant partners can result in greater relational difficulties and instability following from complex communication, misunderstanding of priorities and preferences, friction, and conflict (Barkema and Vermeulen, 1997; Brett and Okumura, 1998; Giannetti and Yafeh, 2012). These effects should be most pronounced in host country outsourcing relations when the outsourcer's experience in the host country is limited (e.g., Basuil and Datta, 2015).⁵

The above conditions provide tension in the design of complex outsourcing contracts in a host country. On the one hand, firms will prefer tighter contractual control to reduce risk by developing more elaborate and detailed specifications that support the enforcement of agreements, coordination, and the handling of contingencies as they arise. On the other hand, the greater information asymmetry places constraints on the (cost-efficient) development of complex contracts. In addition to contract complexity, differences can also be expected in contract duration, renewal clauses and flexibility. Prior research finds that contract duration is reduced when information asymmetry between partners increases (Costello, 2013). A shorter contract duration can particularly be associated with the use of renewal clauses that provide the option to terminate the relationship in a more timely fashion in case of unsatisfactory collaboration, outcomes or conflict. Such clauses enable firms to continue the relationship if it works to their satisfaction and incentivize outsourcing partners to act collaboratively and re-win the contract for a next term (Schepker et al., 2014; Schloetzer, 2012; Weber et al., 2011). Short-term contracts also allow firms to reduce information asymmetry and inefficiencies by allowing time for learning about collaboration with a local partner, and after renewal (or partner change) to use this learning to renegotiate and adjust the agreement.

Furthermore, to avoid misunderstanding, misaligned expectations and potential conflict, host country outsourcers likely will develop

³ A related decision is the use of clauses that allow for relationship termination, such as in the case of undesired performance or behavior (e.g., Ariño et al., 2014). While we do not examine termination clauses separately, they typically are part of enforcement clauses included in the contract complexity construct (Anderson and Dekker, 2005).

⁴ Although contract flexibility might be expected to result in lower contracting costs, this should only be the case for unintended flexibility (e.g., if contract issues that may arise are not recognized). Instead, deliberate design and negotiation of flexibility (e.g., negotiating which elements (not) to cover in intellectual property, coordination or contingency adaptation clauses) will elicit greater effort. Krishnan et al. (2011), for instance, describe how flexibility in contracts involves specification of collaborative agreements that express firms' shared expectations.

⁵ Particularly in the earlier stages of host country operations it can be expected that parent firms keep tighter control and that there is greater involvement of home country managers (i.e., expats) to manage those operations.

Fig. 1. Hypotheses and empirical model.

more explicit and less open-ended agreements that leave less leeway for diverging interpretations. Contractual flexibility is considered most useful when firms have some degree of common understanding and schemas for adjusting to uncertain and changing circumstances (Asanuma, 1989; Gietzmann, 1996). This is more likely the case in a domestic setting. Accordingly, host country outsourcing contracts can be expected to be less flexible.⁶ The following four hypotheses summarize our expectations:

Hypothesis 1. *Host country outsourcing contracts are more complex than contracts for similar domestic outsourcing relations.*

Hypothesis 2. *Host country outsourcing contracts are of shorter duration than contracts for similar domestic outsourcing relations.*

Hypothesis 3. *Host country outsourcing contracts are subject to more renewal provisions than contracts for similar domestic outsourcing relations.*

Hypothesis 4. *Host country outsourcing contracts are less flexible than contracts for similar domestic outsourcing relations.*

2.3. Differences in contracting costs

In addition to differences in contract design, we also predict that the relative efficiency of contracting, and thus firms' contracting costs, will differ for host country contracts. These costs include the effort spent on contract negotiation and drafting (Anderson and Dekker, 2005; Ariño et al., 2014; Boeh, 2011; Dekker and Van den Abbeele, 2010), and increase when firms face greater difficulty in acquiring relevant information, negotiating agreements, and evaluating partner assets and behavior (Costello, 2013; Tong et al., 2015). Prior studies find that cross-border negotiations often face greater inefficiencies following from different understanding, expectations and schemas used to negotiate (Adair et al., 2001; Brett and Okumura, 1998; Rao and Schmidt, 1998). Giannetti and Yafeh (2012) conclude that cultural and institutional dissimilarities that increase information asymmetry can make negotiations more cumbersome and lengthy. In addition, the greater information asymmetries in cross-border transactions require greater investment in information search (Boeh, 2011), while the difficulty in gathering information can result in less extensive and less precise information (Giannetti and Yafeh, 2012). As a result, firms are expected to incur greater costs to negotiate and draft host country outsourcing contracts than they would for similar contracts in a domestic setting. Again, these effects should be most pronounced when the outsourcer's experience in the host country is limited, as over time learning helps to

resolve information asymmetries and inefficiencies (Basuil and Datta, 2015).⁷

Importantly, these arguments take as given the nature of the outsourcing relationship and of the contract agreed upon; that is, for similar contracts, contracting costs will be greater for host country outsourcing. Thus, while Hypothesis 1, Hypothesis 2, Hypothesis 3, Hypothesis 4 predict that host country outsourcing contracts differ in design, which can generate differences in contracting costs, we predict that these costs will be incrementally greater because of the greater contracting inefficiencies in the host country. Firms setting up operations in other countries often do so for reasons such as cost reduction, gaining access to overseas markets, engaging in local production and distribution, and so forth. This choice typically comes with the need for host country subsidiaries to engage in local sourcing and other types of partnerships (e.g., regarding distribution, sales, marketing). Evidence on differential contracting costs for host country outsourcing thus provides insight into the incremental and potentially unanticipated or 'hidden' transaction costs that can offset some of the expected benefits of cross-border operations (Larsen et al., 2013).

We hypothesize that:

Hypothesis 5. *The cost of contracting is relatively greater for host country outsourcing relations than it is for domestic outsourcing relations.*

Fig. 1 summarizes the hypothesized relationships and empirical model to be tested.

3. Sample and data collection

To test our hypotheses, we collected data from two samples of firms: (1) Japanese firms with strategic outsourcing relations with a local partner in their home country, and (2) subsidiaries of Japanese firms in the Netherlands with strategic outsourcing relations in the host country. We sampled Japanese firms as these are well known for developing extensive outsourcing relationships with business partners. Prior research also finds that formal contracting by Japanese firms is associated with transaction characteristics that proxy for risk (Dekker et al., 2013). In addition, Japanese firms are known to keep tight control over their foreign subsidiaries and to be directly involved in their management and decisions (Yoshihara, 2005). Studies, for instance, show that Japanese firms are deeply involved in executive selection and expatriate training for foreign subsidiaries, to which they typically send Japanese management and staff who understand and adhere to company and management philosophy (Belderbos and Heijltjes, 2005; Nakagawa, 2013). Corporate management typically is also closely involved in the management of the subsidiary through involvement in long- and short-term planning, and detailed monitoring of policy, operations and performance (Nakagawa, 2013). As strategic outsourcing decisions are of significant importance to firms' host country operations, these decisions (including contract design choices) likely will be closely coordinated with corporate management. This coordination with corporate management in the home country can add to the influence of information asymmetry and complexities in managing relations with local firms on host country outsourcing contracting decisions.

The Netherlands forms a suitable host country for the study as it has a long trade history with Japan and hosts a significant number of subsidiaries of Japanese firms with local operations.⁸ Shinohara (2001) identifies primary reasons for Japanese firms to choose the Netherlands for setting up operations in Europe, which include its favorable geographic location, infrastructure, English-language skills, tax rules and

⁶ More specific to our setting, prior studies characterize Japanese subcontracting relations as based on trust and flexibility in which suboptimal performance may not be seen as a reason for actions such as imposing penalties, contract termination and partner replacement, but instead induces firms to increase collaboration to restore performance (e.g., Asanuma, 1989; Cooper and Slagmulder, 2004; Gietzmann, 1996; Sako, 1992). One implication of these informal practices is the use of more flexible, open-ended contracts that are less subject to strict terms and termination or renewal clauses.

⁷ More specific for host country operations can also be that over time, headquarter control is loosened and host country subsidiaries increasingly rely on locally hired employees.

⁸ A pragmatic reason for collecting data from Japanese firms in the Netherlands was that one of the authors is located there, while the other authors were visiting during the questionnaire design and data collection.

Table 1
Industry characteristics of the research population and sample.

Characteristics	Full sample		Home country		Host country	
	Population (N = 1987)	Sample (N = 213)	Population (N = 1717)	Sample (N = 169)	Population (N = 270)	Sample (N = 44)
Industry						
Natural resources	44 (2%)	3 (1%)	38 (2%)	2 (1%)	6 (2%)	1 (2%)
Manufacturing	1146 (58%)	130 (61%)	945 (55%)	97 (57%)	201 (74%)	33 (75%)
Transportation and IT	195 (10%)	18 (8%)	164 (10%)	12 (7%)	31 (12%)	6 (14%)
Commerce	300 (15%)	32 (15%)	279 (16%)	29 (17%)	21 (8%)	3 (7%)
Financial services	144 (7%)	16 (8%)	141 (8%)	16 (10%)	3 (1%)	0 (0%)
Professional services	158 (8%)	14 (7%)	150 (9%)	13 (8%)	8 (3%)	1 (2%)

government support.⁹ Using detailed regional investment data of Japanese multinationals in Europe, [Priede \(2010\)](#) shows that between 1995 and 2005, the Netherlands was one of the primary countries selected for location choices.¹⁰ Importantly, in our research design we kept the nationality of the outsourcing firm constant, which allows us to draw inferences about differences in contract design when the outsourcing partner is located in the host country.¹¹

To gain in-depth information about the sample firms' outsourcing relations and contracts, we developed a detailed questionnaire. As the length of this questionnaire was expected to result in non-response, we used extensive sampling procedures to identify and contact firms across a range of industries in order to obtain a sufficiently large sample of observations.

We developed the questionnaire in two languages – Japanese for firms operating in Japan, and Japanese and English for firms operating in the Netherlands – in order also to provide non-Japanese respondents with the opportunity to reply. Most measurement items regarding transaction characteristics were derived from scales used in earlier studies (in particular [Anderson and Dekker, 2005](#); and [Jaworski and Kohli, 1993](#)). We specifically relied on the translated measures obtained from a prior study on Japanese outsourcing relations – measures that had been subjected to extensive translation and back-translation between English and Japanese and had satisfactory measurement properties ([Dekker et al., 2013](#)). All other questionnaire items that we use were similarly subjected to a translation and back-translation procedure to ensure similar explanation in both languages.

To collect data on Japanese home country outsourcing relations, we targeted all firms listed in the first section of the Tokyo Stock Exchange, except for one company of non-Japanese origin (Showa-Shell). We used a list of executives in Japanese firms ('Kaisha Shokuinroku') to identify the most suitable officer to address (i.e., corporate planning or purchasing executives whom we expected to possess the knowledge to complete the questions reliably) and to obtain firm and contact information. We received 176 responses (10.3%), of which seven were omitted because of significant missing values.

For the host country sample, we obtained a list of Japanese companies operating in foreign countries ('Kaigaikigyousouran Kunibetuhen'), which identified 363 Japanese companies with subsidiaries in the Netherlands. We ruled out companies if they had no local operations, employees or address information, if they had transactions with firms in non-European countries only, or if the same person

was in charge for multiple firms. This resulted in a sampling frame of 270 companies to which the survey was sent, again targeting corporate planning or purchasing executives. We received 47 responses (17.4%), of which three were omitted because of significant missing values. The large majority of host country respondents replied in Japanese, consistent with the expectation that host country operations are typically led by Japanese management. For the 44 host country cases, we additionally collected data on firm ownership. These data show that only in one case was the host country firm jointly owned with a local Dutch partner, while in all other cases the company was fully owned by the Japanese parent firm. This reduces the concern that contracting may be performed or informed by a local partner, and supports the appropriateness of our sample of host country observations for the hypothesis tests.

In the questionnaire, respondents were asked to select a representative outsourcing relationship of strategic importance to the firm, and to respond about the outsourcing of primary parts and/or services to this partner.¹² Respondents described what the outsourcing relationship they reflected on was related to. In both samples responses concern the outsourcing of IT, accounting, HR, tax, planning, logistics, production of raw materials or main parts, assembly, maintenance, engineering and design. Classifying these responses into general categories shows that 23% of the sample outsourced IT needs, 31% outsourced manufacturing activities, and 39% outsourced various kinds of services, with the remainder failing to answer the question. While in the main analyses we control for the extent of outsourcing of products and services, we obtain similar results as reported if we were also to add indicators to control for the type of outsourcing.

[Table 1](#) compares the final sample with the research population regarding firms' main industry, and shows for both home and host country observations similar percentages of responses across industries as in the population from which responses were drawn. The table also indicates some industry differences across the two samples. To minimize the potential impact of these differences, we include industry indicators in all analyses, and in a sensitivity test also match home and host country observations on industry.

4. Variable measurement

Construct measurement was based on existing scales when available. Unless stated otherwise, items were measured using a seven-point Likert scale, with '1' representing a 'low degree' or 'strongly disagree' and '7' representing a 'high degree' or 'strongly agree.' For all constructs, we use a reflective measurement model, in which observed item values are considered to be a function of the underlying latent construct. Cronbach Alpha (reported between parentheses) indicates adequate reliability for each multi-item construct. We use confirmatory

⁹ Based on our data, we cannot fully rule out that the endogenous choice to locate operations in the Netherlands is associated with anticipated outsourcing and contracting decisions. However, given these broader strategic and economic reasons for the choice of location of firm operations, this is unlikely to be the case, and contract design choices more likely follow the choice of location for overseas operations.

¹⁰ Other often selected locations include regions in the UK, Germany and France.

¹¹ Ideally, we would have sampled comparable home and host country relations set up by the same firm. This research design, however, turned out to be difficult because of the complexity in identifying firms that have similar home and host outsourcing relationships. Therefore, we instead ascertained that the outsourcer's nationality was constant and used propensity score matching to match comparable transactions.

¹² In the instructions in the questionnaire respondents were provided with the following definition of strategic outsourcing: 'The outsourcing of activities to another firm aimed at value creation, which involves the delivery of key products/parts and/or key services by this firm.'

Table 2
Descriptive statistics of measurement items and constructs.

Dependent variables	Min	Max	Mean	S.D.	Skew	Kurt	λ	t-value	λ^s
<i>Contract complexity ($\alpha = 0.85$)</i>	1	7	4.90	1.12	−0.79	0.78	–	–	–
Contract is detailed	1	7	4.78	1.27	−0.62	0.16	1.00	–	0.70
Issues/events arising	1	7	4.91	1.38	−0.78	0.13	1.27	10.48	0.82
Coordination and planning	1	7	4.62	1.49	−0.69	0.12	1.25	9.68	0.74
Enforcement	1	7	5.30	1.25	−1.02	1.17	1.14	10.34	0.81
<i>Contract duration</i>	1	7	4.33	1.23	−0.05	−0.14	1.00	–	0.89
<i>Contract renewal</i>	1	7	5.60	1.22	−1.11	1.55	1.00	–	0.89
<i>Contract flexibility</i>	1	7	4.53	1.28	−0.78	0.29	1.00	–	0.89
<i>Contracting costs</i>	1	7	4.56	1.35	−0.27	−0.05	1.00	–	0.89
Independent variables	Min	Max	Mean	S.D.	Skew	Kurt	λ	t-value	λ^s
<i>Transaction size</i>	1	7	4.94	1.35	−0.51	−0.26	1.00	–	0.89
<i>Asset specificity ($\alpha = 0.68$)</i>	1	7	4.79	1.27	−0.60	0.31	–	–	–
Difficulty switching	1	7	4.63	1.50	−0.57	−0.53	1.00	–	0.65
Large losses if delivery stops	1	7	4.95	1.43	−0.61	0.18	1.15	8.29	0.80
<i>Complexity ($\alpha = 0.75$)</i>	1	7	4.07	1.18	−0.27	−0.14	–	–	–
Broad range prod./serv.	1	7	4.05	1.28	−0.13	−0.38	0.85	7.83	0.73
Complex processes	1	7	4.09	1.36	−0.27	−0.41	1.00	–	0.82
<i>Environmental uncertainty ($\alpha = 0.85$)</i>	1	7	4.21	1.10	0.13	−0.22	–	–	–
Customer preferences	1	7	3.91	1.46	0.17	−0.73	0.65	7.31	0.50
Market activities competitors	1	7	3.81	1.34	0.09	−0.63	0.64	8.02	0.54
Technological developments	1	7	4.69	1.41	−0.60	0.11	1.00	–	0.80
Technology rapidly changing	1	7	4.22	1.41	−0.00	−0.45	1.17	14.49	0.93
Technological breakthroughs	1	7	4.43	1.38	−0.22	−0.46	0.96	12.33	0.78
<i>Monitoring problems ($\alpha = 0.81$)</i>	1	6.5	3.43	1.31	0.07	−0.64	–	–	–
Assessing quality and cost	1	7	3.34	1.41	0.29	−0.55	1.00	–	0.79
Comparing products/services	1	7	3.53	1.44	0.15	−0.74	1.12	6.34	0.86
<i>Competition ($\alpha = 0.74$)</i>	1	7	4.80	1.17	−0.62	0.60	–	–	–
Choose from many partners	1	7	4.80	1.30	−0.67	0.31	1.00	–	0.84
Many partners deliver same	1	7	4.80	1.32	−0.50	−0.05	0.90	6.33	0.70
<i>Relative firm size</i>	1	7	3.66	1.82	0.29	−0.79	1.00	–	0.89
<i>Outsourcing products</i>	1	7	3.68	1.94	0.09	−1.31	1.00	–	0.89
<i>Outsourcing services</i>	1	7	4.12	1.56	−0.17	−1.08	1.00	–	0.89
<i>Partner experience</i>	1	7	5.10	1.39	−0.78	0.27	1.00	–	0.89

$N = 213$. λ reflects the unstandardized factor loading and λ^s the standardized loading. Single-item constructs are given a fixed measurement error of 0.20 times the total item variance (Anderson and Dekker, 2005). Goodness of fit statistics: $df = 203$, $\chi^2 = 496.72$ ($p < 0.01$), $RMSEA = 0.076$, $SRMR = 0.063$, $CFI = 0.91$, $NNFI = 0.85$.

factor analysis to assess the quality of construct measurement.

4.1. Dependent variables

Contract complexity was measured with four items based on Luo (2002), Luo and Tan (2003), and Reuer and Ariño (2007), which capture the extent to which respondents agreed with statements that the contract: (1) is detailed, (2) specifies issues and events that may occur in the future, (3) specifies provisions and clauses that facilitate coordination and planning, and (4) specifies provisions that allow enforcement of agreements and obligations ($\alpha = 0.85$). The construct thus captures the diverse functions of contracts and the inclusiveness and detail that they include. *Contract duration* was measured by an item asking respondents to indicate the extent to which they agreed with the statement: ‘The duration of the contract is long.’¹³ *Contract renewal* was measured by an item that elicited respondents’ degree of agreement with the statement: ‘After the contract expires, it can be extended/renewed.’ *Contract flexibility* was similarly measured by one item that captured respondents’ agreement with the statement: ‘The contract that we wrote is open ended.’ Consistent with the discussion in the theory section, writing open-ended contracts can be an explicit design choice made to maintain flexibility (e.g., Asanuma, 1989; Sako, 1992).

¹³ We measured contract duration using a perceptual scale as we sampled firms from different industries and with different outsourcing transactions, which causes complications in comparing objective measures (e.g., number of years). This heterogeneity likely will be associated with cross-sectional differences in contract length (Lyons, 1996). Our measurement aimed to avoid such differences and to ‘standardize’ responses on duration (what is ‘long?’) given the type of transaction under consideration.

Contract negotiation and drafting form the primary components of firms’ *contracting costs* (Anderson and Dekker, 2005; Ariño et al., 2014; Boeh, 2011; Dekker and Van den Abbeele, 2010; Giannetti and Yafeh, 2012). We used one item to capture these costs. Respondents were asked to indicate to what extent they agreed with the statement: ‘Negotiating and writing the contract was a costly process.’¹⁴ Validity tests with three other measures (see Appendix A) support construct validity. We also test for predictive validity of the contract design dimensions through our model specification, in which these dimensions are related to contracting costs. Our later results show that this association is strongest for contract complexity, consistent with the idea that creating more complex contracts involves greater costs.

4.2. Independent variables

Our test variable used for the hypothesis tests, *Host country*, is an indicator that takes the value of 1 for outsourcing relations in the host country and 0 for home country relations. Host country outsourcing is theorized to result in differential contract design and costs because of the greater information asymmetry and complexities to manage relationships with which the outsourcing firm is confronted. One potential concern about this way of measurement is that the indicator may also capture other differences between the home and host country that relate to contract design choices. With the data available we are able to

¹⁴ We used a perceptual scale, as an objective measure of negotiation costs likely would suffer from cross-sectional differences caused by sample heterogeneity in types of outsourcing transactions. Thus, similar to contract duration, we aimed to ‘standardize’ responses (on what is ‘costly’) relative to the type of transaction under consideration.

Table 3
Descriptive statistics for the home and host country subsamples.

Panel A	Home country observations (N = 169)				Host country observations (N = 44)				t value
	Min	Max	Mean	S.D.	Min	Max	Mean	S.D.	
Dependent variables									
Contract complexity	1	7	4.98	1.08	1.75	6.75	4.60	1.22	1.89*
Contract duration	1	7	4.46	1.19	2	6	3.84	1.27	2.89***
Contract renewal	1	7	5.57	1.25	3	7	5.70	1.09	−0.69
Contract flexibility	1	7	4.65	1.18	1	7	4.05	1.54	2.44**
Contracting costs	1	7	4.54	1.29	2	7	4.64	1.59	−0.37
Independent variables									
Transaction size	1	7	4.98	1.33	2	7	4.77	1.44	0.87
Asset specificity	1	7	4.92	1.23	1	6.5	4.27	1.32	2.94***
Complexity	1	7	4.12	1.19	1.5	6	3.90	1.14	1.13
Environmental uncertainty	1	7	4.16	1.07	2.2	6.8	4.42	1.20	−1.34
Monitoring problems	1	6.5	3.48	1.26	1	6	3.26	1.47	0.89
Competition	1	7	4.77	1.17	2	7	4.93	1.15	−0.85
Relative firm size	1	7	3.55	1.82	1	7	4.07	1.78	−1.71*
Outsourcing products	1	7	3.88	1.89	1	7	2.95	1.95	2.81***
Outsourcing services	1	7	4.08	1.55	1	7	4.30	1.61	−0.80
Partner experience	1	7	5.19	1.33	1	7	4.75	1.57	1.70*

Panel B	Matched home country observations (N = 88)				Host country observations (N = 44)				t value
	Min	Max	Mean	S.D.	Min	Max	Mean	S.D.	
Dependent variables									
Contract complexity	1	7	5.01	1.15	1.75	6.75	4.60	1.22	1.86*
Contract duration	1	7	4.45	1.22	2	6	3.84	1.27	2.64**
Contract renewal	1	7	5.36	1.38	3	7	5.70	1.09	−1.54
Contract flexibility	1	7	4.59	1.13	1	7	4.05	1.54	2.10**
Contracting costs	1	7	4.42	1.17	2	7	4.64	1.59	−0.80
Independent variables									
Transaction size	1	7	4.82	1.33	2	7	4.77	1.44	0.18
Asset specificity	1	6.5	4.61	1.25	1	6.5	4.27	1.32	1.40
Complexity	1	7	4.11	1.24	1.5	6	3.90	1.14	0.97
Environmental uncertainty	1	6.6	4.25	1.05	2.2	6.8	4.42	1.20	−0.80
Monitoring problems	1	6	3.49	1.24	1	6	3.26	1.47	0.90
Competition	1	7	4.93	1.09	2	7	4.93	1.15	0.00
Relative firm size	1	7	3.89	1.78	1	7	4.07	1.78	−0.53
Outsourcing products	1	7	3.29	1.79	1	7	2.95	1.95	0.97
Outsourcing services	1	7	4.38	1.43	1	7	4.30	1.61	0.30
Partner experience	1	7	4.88	1.41	1	7	4.75	1.57	0.45

The difference tests compare home country with host country observations. * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$ (two-tailed).

conduct three sets of tests to address this measurement concern: (1) validity testing of the measure, (2) testing for experience effects that should reduce information asymmetry, and (3) extending the analysis with measures of the firms' cultural orientation to control for the direct influences of cultural orientation on contract design. The validity tests reported in [Appendix A](#) provide support for measurement validity, while the other two tests are reported as supplemental tests in the results section.

4.3. Control variables

We add as control variables to the empirical analyses characteristics of the outsourcing relationship in order to control for heterogeneity between observations in exchange hazards that create a demand for contracting, as well as to match host and home comparable country observations in order to conduct the comparative analysis. To identify key exchange hazards that outsourcers face, we follow the approach of prior studies rooted in TCE to capture critical transaction characteristics that proxy for exchange hazards. In particular, we derive empirical measures from prior studies on the management and control of outsourcing and buyer-supplier relations (i.e., [Anderson and Dekker, 2005](#); [Dekker et al., 2013](#)).

Transaction size indicates the exposure to potential opportunism and

need for coordination, and is measured by an item about the financial value of the outsourcing arrangement.¹⁵ *Asset specificity* refers to significant investments in human or physical assets that have little or no value outside the transaction, creating exposure to opportunistic holdup and inducing a need for coordination across firm boundaries. Two items captured (1) the difficulty of switching partners immediately, and (2) the losses suffered by the firm if the partner were to stop delivery of their products or services ($\alpha = 0.68$). *Complexity* similarly increases the need for interfirm coordination, and introduces ambiguity about causes of transaction failure, making it difficult to apportion blame. Two items indicate to what extent the partner provides (1) a broad range of products/services, and (2) products/services through complex processes ($\alpha = 0.75$).

Environmental uncertainty reflects changes in market conditions and technology over time and is expected to induce use of more complex contracts that anticipate and help managing fluctuations, but also to

¹⁵ We used a perceptual scale ('the financial value of our outsourcing arrangement is substantial') instead of an objective measure because of sample heterogeneity that will be associated with differences in financial value across different types of outsourcing transactions. Thus, our measurement aims to capture how substantial the value of the transaction reflected upon is from the viewpoint of the firm, which should influence its contracting preferences.

greater flexibility to adjust to fluctuations (Geyskens et al., 2006). Five items (adapted from Jaworski and Kohli, 1993) capture the frequency of changes in the firm's environment caused by (1) changing customer needs, (2) changes in market activities of major competitors, (3) technological changes in the industry, (4) pace of technological obsolescence, and (5) technological innovation that facilitates new product ideas ($\alpha = 0.85$). In contrast, *monitoring problems* regarding the partner's behaviors and performance inhibit developing detailed agreements, and can lead to favoring risk taking over development of disproportionately costly controls (Anderson and Dekker, 2005; Geyskens et al., 2006). Two items capture the difficulty in (1) assessing the quality and costs of partners' products/services, (2) comparing different partners' products/services ($\alpha = 0.81$).

In addition to these transaction characteristics, we capture critical partner characteristics that can affect contract design. *Competition* alleviates concerns about exchange hazards by allowing comparison with alternative partners to switch to in case of suboptimal partner performance or behavior, but also provides better information for contracting (Anderson and Dekker, 2005). Two items capture whether (1) the buyer could search among many potential suppliers before engaging in the transaction, and (2) there are many suppliers that can deliver similar products/services ($\alpha = 0.74$). *Relative firm size* reflects power differences and may, in case of more power, ease switching partners and reduce the need for costly contracting (Yan and Gray, 1994). An indicator captures the extent to which the partner firm is bigger, with larger values indicating less power. *Partner experience* can affect contract design and contracting costs through trust development and learning (Dekker and Van den Abbeele, 2010), and is measured by the extent of transaction experience between the partners. We control for the type of outsourcing that the relationship relates to, and for potential scale and experience effects, with two measures (*outsourcing products* and *outsourcing services*) that capture the overall quantity of product and service outsourcing to the partner.

4.4. Descriptive statistics, measurement model results and variable correlations

Table 2 provides descriptive statistics of the measurement items and construct measures used in the main model. To establish the validity of construct measurement, for all measurement items we use confirmatory factor analysis. We estimate in LISREL 8.80 a fully specified measurement model (MM) that includes the theoretical constructs and measurement items. We use multiple fit measures to assess how well the estimated MM fits the sample data. The standardized root mean square residual (SRMR), and root mean square error of approximation (RMSEA) indicate how well the model reproduces the sample data, while the comparative fit index (CFI) and non-normed fit index (NNFI) compare the discrepancies from a 'null model' with those from the fitted model. Recommended cutoff values to assess model fit are smaller than 0.06 for RMSEA, smaller than 0.08 for SRMR, and around 0.95 for NNFI and CFI, with loosened values for combinations of measures (Hu and Bentler, 1999).

The fit statistics in Table 2 are within or reasonably close to the recommended values, indicating the MM has reasonable fit with the data ($df = 203$, $\chi^2 = 496.72$ ($p < 0.01$), $RMSEA = 0.076$, $SRMR = 0.063$, $CFI = 0.91$, $NNFI = 0.85$). When locating the major source of model misfit, we find that separating environmental uncertainty into two dimensions – market uncertainty and technological uncertainty – results in a significant improvement of fit ($df = 188$, $\chi^2 = 323.32$ ($p < 0.01$), $RMSEA = 0.052$, $SRMR = 0.046$, $CFI = 0.96$, $NNFI = 0.92$). However, we also find that this distinction does not appreciably influence the model results and inferences reported later. Therefore, we retain the theorized MM (noting that the identified effects for environmental uncertainty relate primarily to technological uncertainty).

To assess further the quality of the MM and whether there is a threat of common method bias, we additionally estimate a number of alternative MMs for comparison (i.e., on basis of chi-square difference tests,

fit indices and standardized factor loadings). We estimate MMs that consider (1) all items included in Table 2 to reflect one common factor, (2) all these items to reflect two separate factors for the dependent and independent variables, and (3) the items relating to different combinations of factors (i.e., combining: all contract design items; complexity and monitoring problems; monitoring problems and environmental uncertainty; competition and asset specificity; transaction size and asset specificity; and transaction size and complexity). All alternative MMs provide weaker model fit and factor loadings, providing support for the specified MM, and minimizing concerns about common method bias. As the factor loadings in the last three columns of Table 2 show, all items are significantly associated with the theorized construct, which supports construct validity. In the subsequent analyses, we use as construct measures the mean scores across items.

Table 3, Panel A, shows for all construct measures subsample descriptive statistics and difference tests between home and host country observations. Significant subsample differences exist not only in the contract design dimensions, but also for several independent variables. Thus, in order to provide meaningful inferences about differences in contract design between the subsamples, not only controlling for, but also matching on outsourcing characteristics is important.

The variable correlations in Table 4 show that the different contract design dimensions are correlated with each other and with contracting costs. The correlations between the independent variables provide no concerns about multicollinearity.

5. Data matching and estimation methods

A potential concern in our comparative analysis of contract design is that the two groups that we compare may be structurally different in outsourcing characteristics or on other dimensions. Such differences could be associated with contract design, and controlling for these characteristics may not be sufficient to rule out their effects on the model estimates. Therefore, we use propensity score matching (PSM) in which we match the most similar host and home country observations on the set of independent variables, and estimate our models on this sample of matched cases (Caliendo and Kopeinig, 2008; Li, 2013). The key benefit of PSM is that the dimensionality of matching is reduced to a single dimension rather than an attempted match on the complete set of covariates.

The selection of covariates to predict home and host country observations is an important decision as it affects the quality of matching (Caliendo and Kopeinig, 2008; Li, 2013). We base our selection on the set of outsourcing characteristics that we expect to affect contract design, as these variables may also relate to firms' choices for international operations and for host country outsourcing in particular.¹⁶

We first run a logit regression to predict the host country indicator using the set of independent variables, of which several are significant (-2Log likelihood: 184.67, Nagelkerke R^2 : 22%). We save the predicted probability of being a host country observation, and rank-order these propensity scores from most unlikely to most likely (as expected, host country rank orders are significantly higher ($p < 0.01$)). For each host country observation, we select the two nearest neighboring home country observations that reflect the most similar observations in terms of propensity score. Cases thus are matched on the conditional probability of being a host country observation, given the set of covariates. As the sample of home country observations is larger, we deliberately oversample to increase statistical power by using forward and backward selection (Caliendo and Kopeinig, 2008; Li, 2013). We do not use replacement of selected cases, and if an observation is already used, select the next available nearest observation.

This procedure results in a matched sample of 132 observations. To examine the success of the matching procedure, we conduct *t*-tests on

¹⁶ Adding the industry indicators as covariates results in a somewhat different set of matched observations, but provides similar results and inferences regarding home and host country differences in contract design.

Table 4
Correlations among the model variables.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.Contract complexity	1	0.44***	0.37***	0.26***	0.49***	0.30***	0.28***	0.31***	0.23***	-0.09	0.04	0.07	0.10	0.06	0.13*	-0.14**
2.Contract duration	0.50***	1	0.24***	0.38***	0.33***	0.21***	0.36***	0.21***	0.17**	-0.01	-0.02	0.14**	0.01	0.11	0.18***	-0.20***
3.Contract renewal	0.37***	0.24***	1	0.17**	0.31***	0.13**	0.25***	0.16**	0.13**	-0.06	0.11	-0.02	0.02	-0.04	0.18**	0.04
4.Contract flexibility	0.28***	0.46***	0.15*	1	0.31***	0.23***	0.20***	0.27***	0.29***	0.03	0.11	-0.04	0.22***	0.09	0.10	-0.19***
5.Contracting costs	0.54***	0.29***	0.31***	0.23***	1	0.27***	0.39***	0.31***	0.17**	0.10	0.03	0.21***	0.16**	0.05	0.05	0.03
6.Transaction size	0.33***	0.18**	0.12	0.23***	0.25**	1	0.35***	0.30***	0.14**	0.05	0.19***	0.23***	0.29***	0.38***	0.35***	-0.06
7.Asset specificity	0.33***	0.29***	0.27***	0.18**	0.41***	0.27***	1	0.25**	0.11	0.26***	-0.17**	0.13**	0.16**	0.17**	0.23**	-0.21***
8.Complexity	0.25***	0.19**	0.12	0.26***	0.29***	0.26**	0.22**	1	0.26**	0.05	0.18**	0.28***	0.24**	0.28**	0.12*	-0.08
9.Env. uncertainty	0.20**	0.18**	0.09	0.33***	0.14	0.11	0.09	0.29**	1	-0.03	0.10	0.05	0.22**	0.14*	0.06	0.10
10.Monitoring problems	0.02	0.03	0.00	0.10	0.14	0.18**	0.42***	0.16**	0.03	1	0.05	0.16**	0.01	0.10	-0.10	-0.07
11.Competition	0.08	0.04	0.17**	0.19**	-0.02	0.30***	-0.03	0.33***	0.14	0.07	1	0.14**	0.12	0.23**	0.17**	0.06
12.Relative firm size	0.02	0.01	0.05	-0.00	0.18**	0.31***	0.12	0.32***	0.10	0.17*	0.25**	1	-0.10	0.09	0.06	0.12
13.Outsourcing products	0.16*	0.03	-0.06	0.27***	0.09	0.22**	0.04	0.31***	0.18**	0.09	0.11	0.06	1	0.31	0.18***	-0.19***
14.Outsourcing services	0.16*	0.10	-0.00	0.17*	0.08	0.44***	0.25**	0.30***	0.11	0.20**	0.25**	0.09	0.37**	1	0.23**	0.06
15.Partner experience	0.11	0.13	0.15*	0.11	-0.00	0.33**	0.22**	0.13	0.11	-0.04	0.27***	0.13	0.04	0.29**	1	-0.13*
16.Host country	-0.16*	-0.23***	0.12	-0.20**	0.08	-0.02	-0.12	-0.08	0.07	-0.08	0.00	0.05	-0.09	-0.03	-0.04	1

Correlations below the diagonal are based on the matched sample (N = 132). Correlations above the diagonal are based on the full sample (N = 213). *p < 0.05; ***p < 0.01; two-tailed, respectively.

Table 5
Matched sample model estimates.

	Model 1				Model 2
	Contract complexity	Contract duration	Contract renewal	Contract flexibility	Contracting costs
A: Coefficient estimates					
Constant	2.56***	2.47***	3.05***	1.40**	0.41
Transaction size	4.26	3.65	4.37	2.15	0.58
Asset specificity	0.26***	0.10	0.04	0.13	0.03
Complexity	3.27	1.17	0.39	1.58	0.39
Env. uncertainty	0.27***	0.22**	0.34***	0.07	0.26***
Monitoring problems	3.21	2.33	3.49	0.74	2.81
Competition	0.13	0.11	0.08	0.09	0.16*
Relative size	1.48	1.16	0.83	0.97	1.67
Outsourcing products	0.13	0.14	-0.00	0.29***	-0.06
Outsourcing services	1.49	1.52	-0.01	3.22	-0.62
Partner experience	-0.14*	-0.07	-0.07	0.05	0.00
Host country	-1.79	-0.78	-0.77	0.59	0.05
Contract complexity	0.03	-0.01	0.24**	0.16*	-0.15
Contract duration	0.28	-0.09	2.21	1.57	-1.51
Contract renewal	-0.09	-0.07	-0.06	-0.14**	0.11*
Contract flexibility	-1.61	-1.07	-0.90	-2.32	1.73
Contracting costs	0.03	-0.03	-0.01	0.14**	-0.01
RMSE	0.53	-0.51	-0.19	2.17	-0.18
Chi-Square	-0.06	-0.03	-0.16*	-0.07	-0.06
R Square	-0.75	-0.41	-1.89	-0.93	-0.78
	-0.04	0.04	0.05	-0.00	-0.10
	-0.60	0.53	0.59	-0.05	-1.33
	-0.29	-0.48**	0.52**	-0.32*	0.53***
	-1.43	-2.14	2.21	-1.48	2.36
					0.51***
					4.95
					-0.03
					-0.28
					0.04
					0.48
					0.15
					1.64
B: Residual correlations					
Contract duration	0.37***				
Contract renewal	0.34***	0.17*			
Contract flexibility	0.06	0.35***	0.08		
RMSE	0.99	1.11	1.15	1.07	
Chi-Square	53.68***	37.77***	34.48***	61.53***	F: 5.10***
R Square	0.29	0.22	0.21	0.32	0.46
C: Effects of host country experience					
Low experience	-0.48	-0.67**	0.58**	-0.55**	0.82***
High experience	-1.79	-2.22	1.88	-1.91	2.74
	-0.14	-0.34	0.46*	-0.14	0.33
	-0.56	-1.24	1.63	-0.54	1.24

N = 132. The first four equations of Model 1 are estimated simultaneously using seemingly unrelated regression. The last equation (Model 2) is estimated using OLS. Industry indicators are included in all estimations. Cells show the coefficient estimate and z-value for the first four columns, and t-value for the last column. * p < 0.10; ** p < 0.05; *** p < 0.01; one-tailed for predicted host country effects; two-tailed for all other effects. Breusch-Pagan test of independence of the residuals of the four SUR equations: Chi-square = 54.207 (p = 0.01).

the independent variables between the host country and matched home country observations, expecting that any significant group differences between them before matching are no more significant after matching (Caliendo and Kopeinig, 2008). Panel B of Table 3, which compares the matched home and host country observations, indeed shows that this is the case (all $p > 0.10$). As a second overall test of matching quality, we re-estimate the logit model with only the matched observations, which should give a weak explanation of group membership (Caliendo and Kopeinig, 2008). Indeed, none of the variables is significant, supporting a lack of differences between the matched observations, and thus the adequacy of the matching procedure.

To test our hypotheses, we use seemingly unrelated regression (SUR) (Greene, 2008), because we expect the contract design dimensions to be interrelated choices that are affected by the same set of independent variables. When disturbances of the set of equations are expected to be related, SUR allows for more efficient estimation than separate OLS regressions. In addition, SUR provides a direct test of

disturbance correlations that allows examining the conditional interrelations between contract design dimensions (Arora and Gambardella, 1990; Brynjolfsson and Milgrom, 2012; Dekker, 2016). When all relevant (common) determinants of contract design choices are included, significant disturbance correlations provide evidence of interdependencies in these choices, with positive residual correlations indicating complementarity and negative correlations indicating substitution.

To test Hypothesis 1, we use SUR to estimate simultaneously the influence of the independent variables on the four contract design dimensions (Model 1 in Table 5). The coefficient for *Host country* shows the difference between host and home country outsourcing relationships, controlling for the influence of all other independent variables. To test Hypothesis 5, we use OLS estimation to assess how contracting costs differ between home and host country contracts, while controlling for the contract design dimensions and all independent variables (Model 2 in Table 5). In addition, we also run a model that adds

Table 6
Full sample model estimates.

	Model 1				Model 2
	Contract complexity	Contract duration	Contract renewal	Contract flexibility	Contracting costs
A: Coefficient estimates					
Constant	2.74***	2.10***	3.16***	1.84***	−0.61
	5.47	3.81	5.61	3.21	−0.98
Transaction size	0.17***	0.02	0.02	0.12*	0.03
	2.76	0.32	0.23	1.72	0.37
Asset specificity	0.17**	0.28***	0.30***	0.07	0.26***
	2.55	3.94	4.12	0.98	3.37
Complexity	0.18***	0.05	0.12	0.16**	0.08
	2.80	0.75	1.60	2.15	1.12
Env. uncertainty	0.17**	0.16**	0.07	0.27***	−0.06
	2.54	2.28	0.94	3.67	−0.82
Monitoring problems	−0.12**	−0.10	−0.08	0.03	0.05
	−2.20	−1.56	−1.32	0.40	0.77
Competition	0.05	0.01	0.18**	0.10	0.00
	0.82	0.13	2.40	1.39	0.04
Relative size	−0.03	0.05	−0.09*	−0.10**	0.09*
	−0.70	1.10	−1.95	−2.03	1.80
Outsourcing products	−0.05	−0.09*	−0.01	0.04	0.11**
	−1.16	−1.79	−0.22	0.72	2.35
Outsourcing services	−0.05	0.04	−0.16***	−0.06	−0.10*
	−1.07	0.77	−2.78	−0.96	−1.72
Partner experience	−0.03	0.04	0.09	−0.03	−0.10
	−0.46	0.65	1.40	−0.42	−1.60
Host country	−0.27	−0.50***	0.47**	−0.40**	0.65***
	−1.43	−2.44	2.25	−1.86	3.05
Contract complexity					0.40***
					4.83
Contract duration					0.06
					0.82
Contract renewal					0.09
					1.28
Contract flexibility					0.17**
					2.49
B: Residual correlations					
Contract duration	0.31***				
Contract renewal	0.29***	0.14**			
Contract flexibility	0.08	0.29***	0.06		
RMSE	0.97	1.07	1.09	1.11	
Chi-Square	69.39***	68.13***	48.87***	66.32***	F: 7.39***
R Square	0.25	0.24	0.19	0.24	0.42
C: Effects of host country experience					
Low experience	−0.44	−0.77***	0.54**	−0.67***	1.01***
	−1.78	−2.80	1.93	−2.36	3.52
High experience	−0.12	−0.28	0.41*	−0.17	0.39*
	−0.53	−1.12	1.60	−0.66	1.51

N = 213. The first four equations of Model 1 are estimated simultaneously using seemingly unrelated regression. The last equation (Model 2) is estimated using OLS. Industry indicators are included in all estimations. Cells show the coefficient estimate and z-value for the first four columns, and t-value for the last column. * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$; one-tailed for predicted host country effects; two-tailed for all other effects. Breusch-Pagan test of independence of the residuals of the four SUR equations: Chi-square = 62.969 ($p = 0.01$).

interactions between the four contract design dimensions and the host country indicator, expecting the association between contract design and costs to be stronger in the host country sample. Finally, we conduct a number of additional tests that include measures of host country experience and cultural orientation, and which employ the full sample instead of the matched sample.

6. Results

6.1. Home and host country differences in contract design

Table 5 reports the results of the model estimations. The estimates provide no evidence for Hypothesis 1 which predicts that outsourcing relations set up in home and host countries differ in contract complexity. This indicates that the use and detail of agreements for coordination, adaptation and enforcement is similar. Consistent with Hypothesis 2, Hypothesis 3, Hypothesis 4, the other contract design dimensions do differ significantly between home and host country relations in the predicted direction. Host country contracts have a shorter duration ($p < 0.05$), involve more renewal agreements ($p < 0.05$), and provide less flexibility ($p < 0.10$).

Regarding the control variables, consistent with prior studies, contract complexity relates positively and significantly to outsourcing characteristics, including transaction size and asset specificity, and negatively to monitoring problems that may limit the extent to which agreements can be developed. Contract duration is longer when asset specificity increases. Asset specificity and supplier competition are positively associated with the use of renewal agreements, likely to increase supplier incentives to perform well and to facilitate switching if deemed necessary. Finally, contract flexibility increases for more uncertain transactions, and when product outsourcing increases, while more powerful outsourcers design less flexibility into the contract. Noticeable in the estimates is that the primary TCE variable, asset specificity, relates most strongly to contract complexity, duration and renewal, while uncertainty primarily induces greater flexibility. We also note that while several coefficient estimates of the control variables are not significant, we also do not always have unambiguous expectations of their influence on the contract design dimensions. Instead, the main reason for their inclusion is to match on and control for structural differences between outsourcing characteristics in order to compare adequately home and host country contracts. Indeed, as the later results show (Table 6), several of the control variables gain significance in the full sample analysis, likely because of the greater sample size and sample variation.

In addition to providing evidence on contracting differences, the SUR analysis provides evidence on interrelations among the contract design dimensions. The significant Breusch-Pagan test indicates that significant residual correlations exist. The residual correlations of contract complexity, duration and renewal (see Panel B of Table 5) provide evidence of complementarity between these dimensions, such that given outsourcing characteristics, more complex contracts typically are of longer duration and include more renewal provisions. The insignificant residual correlations of contract flexibility with contract complexity and renewal indicate these dimensions are neither substitutes nor complements. The positive correlation with the contract duration residuals, however, indicates that longer-term contracts typically involve greater flexibility, likely due to the difficulty to predict the future when the time frame becomes longer.

6.2. Differences in contracting costs

Hypothesis 5 predicts that contracting costs will be relatively higher for host country outsourcing. We use OLS regression to test this hypothesis and include in the specification all outsourcing characteristics and contract design dimensions in order to control for differences in these variables that may affect contracting costs (Model 2 of Table 5).

By also controlling for the contract design dimensions, this model provides evidence on the *incremental* contracting costs that firms incur in a cross-border setting for negotiating and writing comparable outsourcing contracts. The estimates show that contracting costs are indeed greater for host country outsourcing contracts ($p < 0.01$), consistent with Hypothesis 5. The results further show that contracting costs increase primarily with contract complexity ($p < 0.01$), and incrementally with asset specificity, transaction complexity and relative firm size.

We additionally examine not only whether host country contracts are more costly to develop, but also whether these costs relate differently to the different contract design dimensions. To do so, we add to the model interactions of the host country indicator with each dimension. The results (not tabulated) support that this is the case for contract complexity as the interaction variable is positive and significant ($p < 0.05$). Thus, while the earlier results show that contract complexity does not differ between home and host country outsourcing relations, this analysis shows that the development of complex contracts is more costly for host country outsourcing.

6.3. The influence of host country experience

The primary argument as to why host country outsourcing contracts are expected to differ is because the outsourcer faces greater information asymmetry and complexities in managing relationships with local firms. As learning and experience built up over time reduce information asymmetry and inefficiencies (Basuil and Datta, 2015; Belderbos and Heijltjes, 2005; Hahn et al., 2009), the differences with home country relations should be greatest for outsourcers with less experience in the host country. To test this assertion, we create a measure of *Host country experience* by collecting archival data on firms' length of presence in the host country. Using the mean split, we categorize the 44 host country observations into firms with a low ($N = 21$; mean 8.5 years) and high ($N = 23$; mean 27.1 years) level of experience. We redo all matched sample analyses, replacing the host country indicator with the two experience indicators. As Panel C of Table 5 shows, Hypothesis 2, Hypothesis 3, Hypothesis 4, Hypothesis 5 hold in particular for firms with less host country experience.¹⁷ Thus, while both experience indicators have no significant effect on contract complexity, the differences in contract duration, renewal, flexibility, and contracting costs relate primarily to firms with limited host country experience. These results help to better attribute the results to the theorized effects of information asymmetry and inefficiencies instead of to other potential differences between home and host country relationships (e.g., unmeasured legal differences) that do not vary with firm experience.

6.4. Controlling for cultural orientation

In a subsequent test, we also control for firms' cultural orientation which may directly affect contract design, such as when firms adjust contract design to increase its 'congruence' with the local culture that guides partner behavior (Newman and Nollen, 1996).¹⁸ In collectivist cultures complex contracts are considered less needed for governing exchange than in individualistic cultures, as the norm is for group goals to be more important than individual ones, reducing the need for contracts to resolve conflict (Sako and Helper, 1998; Wagner, 1995; Wuys and Geyskens, 2005). Firms instead prefer brief and imprecise

¹⁷ A median split provides similar results as those for the mean split that we report. As a sensitivity test we repeated the analysis excluding eight host country observations that are within three years either side of the mean years of experience, and 16 matched home country observations. Results are similar, except for contract renewal, for which the difference between host and home country observations disappears.

¹⁸ Adjustment is facilitated when firms operating in a host country employ local employees and make use of local or global advisors (e.g., legal experts, consultants, sourcing experts) who consult on outsourcing practices and contract development.

contracts that commit them to work together in a longer-term, trust-based relationship. In contrast, in individualist cultures, the norm is for personal goals to have priority over group goals, and firms prefer formal contracts and control systems that ensure goal alignment, and define, control and evaluate individual contributions (Steensma et al., 2000; Wagner, 1995).

We base on Triandis and Gelfand (1998) to capture the outsourcer's perception of its partner's cultural orientation. The original measurement scale captures individuals' cultural orientation in terms of vertical and horizontal collectivism and individualism. We carefully rephrased all items to capture perceptions at the organizational level (see Appendix B).¹⁹ Given this rephrasing, we use exploratory factor analysis to test for dimensionality. Three items that were difficult to translate to the organizational level showed a bad fit and were removed. The remaining 13 items load well on two factors that reflect the partner's cultural orientation in terms of *partner collectivism* ($\alpha = 0.80$) and *partner individualism* ($\alpha = 0.75$).²⁰ In order also to control for potential differences in and influence of outsourcing firms' own cultural orientation, we add to the tests similar measures of *own collectivism* ($\alpha = 0.63$) and *own individualism* ($\alpha = 0.72$). If, after controlling for cultural orientation, the effect of the *Host country* measure persists, this effect can be better attributed to the theorized effects of information asymmetry and complexity of managing host country relationships.

Results (untabulated) show that adding these measures to the matched sample and full sample analyses does not change the inferences as the results for the *Host country* measure remain similar.²¹ This analysis helps to reduce the concern that the observed contracting differences relate to direct influences of cultural orientation that can differ between the host and home country observations.

6.5. Full sample analysis

Although we base our hypothesis tests on the matched sample, PSM results in a considerable reduction of the sample size and may be associated with attrition bias (Holmes and Olsen, 2010). Therefore, we also re-estimate the SUR and OLS models in the full sample of observations ($N = 213$). Table 6 reports the results. The differences between host and home country relations are similar to those reported in Table 5. Host country contracts do not differ significantly in complexity, but do have a significantly shorter duration ($p < 0.01$), make more use of renewal clauses ($p < 0.05$), and are less flexible ($p < 0.05$). Controlling for all outsourcing characteristics and contract design dimensions, contracting costs are also greater for host country outsourcing ($p < 0.01$). Similarly, in the model that adds interaction effects (untabulated), the interaction between contract complexity and the host country indicator is positive and significant ($p < 0.01$), again indicating that the development of complex contracts is more costly in the host country. As Panel C of Table 6 shows, similar to the matched sample analysis, the results are driven primarily by firms with limited host country experience. Furthermore, when adding the measures of cultural orientation to the full sample analysis, similar results are obtained (untabulated). Thus, the full sample results are consistent with the matched sample results. Table 6 also shows that as compared to the matched sample analysis, several outsourcing characteristics that are

controlled for gain significance, likely because of the increased sample size and sample variation.

As a final test, we also re-estimate the models in the full sample while adding the propensity score as a covariate to control for structural group differences (Holmes and Olsen, 2010). The results (untabulated) again are similar and provide the same inferences.

7. Discussion, conclusion and limitations

The key argument of this study is that host country outsourcing confronts firms with greater information asymmetry and complexities in managing the relationship, which evoke different contract design choices than would be made for comparable domestic outsourcing relationships. Our findings largely support this expectation by showing that outsourcing contracts in a host country differ in design from contracts for comparable home country relationships. In particular, while we find no evidence that home and host country outsourcing contracts differ in complexity, our results show that host country contracts are of shorter duration, include tighter renewal agreements and have less flexibility. These results are consistent with the expectation that firms outsourcing in a host country use tighter contracts of shorter duration that more strongly incentivize partners, provide clearer expectations and agreements with less room for interpretation and deviations, are easier to dissolve, and enable learning, adjustment, and renewal over a shorter time frame. The conditional correlations between the model residuals further indicate that these contract design choices are not independent, but instead are interrelated such that more complex contracts are typically of longer duration and make greater use of renewal agreements. These complementarities likely arise as longer during relationships are better supported by more complex contracts and renewal incentives, while the use of such incentives also is supported by more elaborate contract agreements. Contract duration also relates positively to flexibility that may be needed when the relationship's time horizon becomes longer. While not the primary focus of our study, these findings indicate that the alignment of choices is a critical element of contract design in both domestic and cross-border relationships, which constitutes an important avenue for future research.

Our results also provide evidence that the cost of negotiating and writing contracts is relatively greater in the host country. While endogenous differences in contract design can result in different contracting costs than would be incurred for domestic relationships, our analysis points particularly to the effects of contracting inefficiencies in the host country that cause contract negotiation and drafting to be more costly. Our results show that the difference in contracting costs relates primarily to contract complexity; thus, while the complexity of outsourcing contracts does not differ between home and host country relations, for host country outsourcing it takes more time and effort to negotiate and develop equally complex contracts that facilitate enforcement, coordination and contingency adaptation. These findings point to tension in contract design where, in a setting with greater information asymmetry and complexity to manage relations, firms need to make a tradeoff between on the one hand the benefits of more complex contracts and, on the other hand, the greater difficulty and costs of negotiating and drafting them. Additional analysis shows that the observed differences in contract design and contracting costs hold primarily for firms with limited host country experience, for which information asymmetry and contracting inefficiencies will be greatest. This suggests that contracting inefficiencies reduce with experience and learning, which can change the tradeoffs that firms make in interfirm contract design. Only a few prior studies have examined how the cost of control affects firms' tradeoffs in interfirm contract and control design (Anderson et al., 2017). Our results suggest that the cost of contracting differs for host country outsourcing, and that not only transaction experience but also international or foreign-country experience may help to alleviate contracting inefficiencies. Future studies could take up this issue and provide more insight into the tradeoffs that firms make in

¹⁹ Most missing values concerned the items about the partner's cultural orientation, and except for one, related to home country observations. The items regarding own and partner cultural orientation are significantly correlated, and we impute missing values on the partner items with the firm's own items using the Expectation-Maximization (EM) method. Five cases also had no responses on the firm items and are not imputed. Variable means, standard deviations and factor loadings for the partner items before and after imputation are practically identical.

²⁰ The items of both factors load on collectivism and individualism as they do in the original measurement instrument, but combine the dimensions of verticalism and horizontalism.

²¹ Because of missing values on the cultural orientation measures, the matched sample analysis is based on 130 observations and the full sample analysis on 208 observations.

interfirm contract design for domestic and international collaborative relationships, and how this is influenced by different types of experience.

Our findings carry several implications for practice. First, our study points to the importance of considering how in a cross-border setting interfirm contracts can be designed to accommodate the incremental information asymmetry, inefficiencies and associated risk that foreign firms face in an international business setting. It is of particular value to consider how different contract design dimensions can be adjusted in order to manage the risks associated with increased information asymmetry and complexity. Our findings, for instance, point towards reducing the duration of contracts together with the use of renewal clauses, which increases partner incentives, eases the inclusion of learning in renewed contracts, and provides a real option for relationship continuation or termination if needed. Similarly, they point to a reduction of contract flexibility to avoid misunderstandings, misaligned expectations and potential conflict in a setting where partners are less likely to have a common understanding and schemas for adjusting to changing circumstances. Second, our study highlights the contracting inefficiencies that firms face in a cross-border setting. Nowadays, many firms engage in international sourcing relations and strategic partnerships to obtain benefits such as cost reduction, market access, and local production and distribution. These benefits, however, may be reduced by unforeseen or ‘hidden’ transaction costs (Larsen et al., 2013), which can include the greater contracting costs that this study identifies. Both location decisions for international operations and outsourcing decisions could be enhanced if firms anticipate potential contracting inefficiencies that may emerge in a cross-border setting. In addition, firms may establish ways to learn more proactively from their international contracting experiences (e.g., through alliance functions, and knowledge storage and sharing mechanisms) to reduce future contracting inefficiencies and costs. In this way, intentional learning may be seen as an explicit part of firms’ strategies for international collaboration (Aasmussen et al., 2016).

Our findings need to be viewed in light of several limitations. One relates to the complexity of collecting data, resulting in unequal home and host country sample sizes, and in heterogeneity of firms and relationships sampled. While the PSM analysis further reduces the sample size, the full sample results are similar, alleviating concerns about sample composition and statistical power. Of course, the possibility remains that the subsamples differ on unmeasured factors; however, we have been careful to include a wide range of outsourcing characteristics that prior research has related to interfirm contract design. In additional tests we also control for firms’ cultural orientation to reduce the concern that observed differences relate to direct effects of cultural orientation. As cultural conflict may be one of the greatest challenges in cross-border collaboration (Handley and Angst, 2015), future studies could, however, more comprehensively conceptualize and capture different dimensions of culture and cultural distance in order to gain a

better understanding of how these influence contracting and governance choices.²²

Relatedly, we chose to collect data in only two countries. Future studies could examine a wider range of home and host countries to test if the results hold across different institutional and cultural settings. This could also allow disentangling better to what extent firms design contracts differently to mitigate the risks of outsourcing in a host country or to adapt these contracts to local culture, routines and expectations (Newman and Nollen, 1996). Such an analysis would benefit from including the role of contracting capabilities of internationally operating firms (e.g., using global sourcing experts and procedures) to manage contracts with partners across different countries, as well as the effects of outsourcing to internationally operating business partners. In addition, extending the analysis to other forms of cross-border collaboration with distinct control issues, such as offshoring (where e.g. there is no local subsidiary that manages the relation), would allow providing insights into similarities and differences in contracting practices across forms.

Another design limitation relates to the use of single items to measure the contract design dimensions of duration, renewal and flexibility, which limits insight into issues such as which specific renewal clauses and criteria are used, and how flexibility is designed. While this choice reflects a tradeoff between questionnaire length and comprehensiveness of measurement, future studies could provide more in-depth insights into these dimensions. Future studies could also collect more objective information on dimensions such as contract duration and contracting costs, more directly ask respondents to compare differences between host and home country contracts on these aspects, or use comparative reference sets for measurement (Brownell, 1995).

Finally, we do not provide any insight into differences in the actual management of host country outsourcing relationships. Contracts provide a ‘window’ on the management practices employed in interfirm relationships (Anderson and Dekker, 2005, 2014), and the differential design choices that we observe will likely be associated with different practices during the relationship. Future research on the management of cross-border relationships can shed more light on these practices.

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Appendix A. Validity tests

This Appendix provides details on the validation tests of the contracting costs and host country measures.

Contracting costs

As a validation test of the contracting costs construct, we correlated the single-item measure with three other measures which should relate positively to contracting costs: (1) an item regarding the length of the negotiation process, (2) an item that captured the extent to which before writing the contract the firm had many meetings and much interaction with the partner, and (3) a nine-item construct of the amount of information collected before writing the contract. The items of the last measure concerned the ex-ante collection by the outsourcer of information about the: (1) costs of the partner’s products/services, (2) profit of the partner’s products/services, (3) partner’s financial stability, (4) quality of the partner’s products/services, (5) delivery of the partner’s products/services, (6) technology/abilities of the partner, (7) partner’s ability to improve operations,

²² When considering Hofstede’s (2001) model of culture, Japanese and Dutch firms differ on dimensions such as uncertainty avoidance and pragmatism, which can also result in conflicting contracting preferences.

(8) partner's vision and ethics, and (9) possibility to build a long-term relationship with the partner ($\alpha = 0.89$). The significant positive correlations with the contracting costs measure ($r = 0.63$, $r = 0.50$ and $r = 0.37$, all $p < 0.01$) support construct validity. Models results and inferences are similar if we measure contracting costs as the combination of the primary measurement item and the length of the negotiation process that captures a primary element of a costly contracting process.

Host country

We conducted two validity tests of the *Host country* variable. First, we examined its effect on a pre-contracting process that should be affected by information asymmetry, namely partner search (Dekker and Van den Abbeele, 2010). As partner search in a setting characterized by high information asymmetry will be more complex and will require greater effort to find a good partner, search costs should be higher. We captured search costs with three items relating to the scope of search among potential partners, the amount of time invested in partner search, and the number of staff allocated to partner search ($\alpha = 0.83$). We regressed the measure of search costs on the *Host country* indicator while controlling for all other independent variables that may affect the effort dedicated to partner search. Results show that search costs are indeed higher for host country relations ($p < 0.05$). Second, we compared a measure of the difficulty to predict the market within the next few years between home and host country relations. The significantly higher mean score for host country outsourcers ($p < 0.05$) supports the idea that these firms have less understanding of the local market in which they operate as compared to firms operating in their home country.

Appendix B. Measurement of (partner) firm cultural orientation

Respondents were asked to indicate the extent to which they agree or disagree with the following 16 statements about the employees in their firm and the employees of their partner (1 = strongly disagree; 7 = strongly agree) (adapted from Triandis and Gelfand, 1998).

Measurement items	Min	Max	Mean	S.D.	Skew	Kurt	Partner collectivism	Partner individualism
- It is important for employees that they do their job better than others	1	7	4.73	1.08	-0.22	0.49		0.54
- Employees would rather depend on themselves than on others	1	7	4.36	1.06	-0.29	1.05		0.64
- If a coworker gets a prize, employees would feel proud	2	7	4.49	0.88	0.39	0.71	0.56	
- Supervisors and subordinates believe they must interact as much as possible	1	7	5.06	1.06	-0.22	0.23	0.58	
- Personal identity, independent of others, is very important to employees*	1	7	5.03	0.99	-0.01	0.38		
- Being successful is everything for employees	1	7	4.58	1.02	0.39	0.37		0.60
- The well-being of coworkers is important to employees	2	7	4.91	0.92	0.25	-0.25	0.74	
- It is employees' duty to take care of members of their group, even when they have to sacrifice what they want	1	7	4.17	0.91	-0.45	2.64	0.40	
- Employees often do 'their own thing'	2	7	4.04	1.00	0.33	0.53		0.49
- Competition is the law of nature for employees	2	7	4.72	1.00	0.21	-0.28		0.67
- It is important to employees that they respect the decisions made by their group	2	7	5.14	1.00	0.02	-0.65	0.64	
- Employees feel good when they cooperate with others	3	7	5.03	0.94	0.11	-0.89	0.74	
- When another person does better, employees get tense and aroused*	2	7	4.76	0.84	0.39	-0.05		
- Employees rely on themselves most of the time: They rarely rely on others	1	7	3.83	0.96	0.08	1.54		0.53
- Employees believe that group members should stick together, no matter what sacrifices are required*	1	7	3.87	0.97	-0.13	1.73		
- To employees, pleasure is spending time with others	3	7	4.28	0.69	1.09	1.63	0.54	
Cronbach Alpha							0.80	0.75

*Item deleted from the analysis because of bad fit with the factor solution.

Cell items are the factor loadings based on Maximum Likelihood estimation with Oblimin rotation. Total variance explained: 47.02%. The first Eigenfactor is 3.47 and the second is 2.65. In the initial run a third factor emerged with an Eigenvalue slightly above one (1.16) and three weaker cross-loading items on the first factor. This solution was discarded, and the analysis was rerun to extract two factors. N = 208 because of five missing values on the cultural orientation items.

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