SELECTING LEGAL ADVISORS IN M&AS: ORGANIZATIONAL LEARNING AND THE ROLE OF MULTIPLICITY OF MENTAL MODELS*

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ABSTRACT

Management scholars have identified a variety of firm characteristics as antecedents to organizational learning. In this study, we conceptualize intra-organizational multiplicity of mental models as a complementary element that facilitates shifting from lower- to higher-level learning. Specifically, we investigate whether multiplicity of mental models—proxied by four different measures—, helps acquirers to categorically adapt selection rules for legal advisors in M&As from domestic towards international settings. In developing our conceptual framework, we integrate resource-based, social network, and organizational learning perspectives. Empirically, we draw on 11,511 acquisition attempts announced in 1998–2010 (completion/ abandonment assessed as of January 10th, 2015, at the latest). The results largely support our theory: First, choosing legal advisors in domestic and international deals calls for different selection rules. While in domestic deals, network-related characteristics are more important drivers of lawyers' performance relative to their country-specific expertise, the comparative relevance of these attributes is reversed in cross-border deals. Yet, initially, acquirers fail to recognize this. Also, they do not initially adjust their selection criteria appropriately in response to accumulating M&A experience of their own. Only after having attempted a substantial number of cross-border M&As, they reach a turning point at which they rebalance their selection criteria such that they reflect the predominant relevance of country-expertise in cross-border settings. Finally, recognition of the need to categorically reassess selection criteria in international deals is significantly facilitated by an acquirer's multiplicity of mental models.

Keywords: Organizational learning; experiential learning; social networks; legal advisors; cross-border vs. domestic M&As; acquisition completion

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INTRODUCTION

Some organizations appear to be systematically better at learning than others (Argote, 2013). What sets them apart? Argote and Miron-Spektor (2011) conceptualized the organizational context as composed of various elements whose interplay affects an organization's ability to learn. Prior research has empirically identified several contextual antecedents of organizational learning, such as organizational scope (specialist vs. generalist), culture, absorptive capacity, aspiration level, intra- and inter-organizational network relations, IT and knowledge management systems, and, for intra-organizational group learning processes, lower-level constructs such as team member diversity (Argote, 2013).

Here, we propose intra-organizational multiplicity of mental models—defined as a count of distinct mental models relating to a specific information domain within the organization—as a complementary contextual element that may foster specific types of organizational learning. Our arguments differ from prior research in that we propose that the impact of multiplicity of mental models is less domain-specific than the influence of related constructs such as absorptive capacity (Cohen & Levinthal, 1990). We suggest that it allows for 'meta-contextual' learning, that is learning in and across various and even otherwise unrelated domains. In the context of organizational learning, mental models have been characterized as "deeply held internal images of how the world works" (Senge, 1990:163). Greater multiplicity of mental models within the organization, first, makes available a larger range of cognitive structures for describing and dealing with a *specific* type of task (e.g., sourcing advisory services). Second, we propose that multiplicity of mental models facilitates the emergence of a *generalized* awareness of the existence of a whole range of cognitive structures—independent of the specific task. By highlighting, *generally*, the possibility of 'doing things differently', we maintain that multiplicity may facilitate a specific type of learning: recognition, in response to accumulating experience, of the need to shift from lower-level learning, which entails adaptation within a given set of rules, to higher-level, rule-changing learning (cf. Fiol & Lyles, 1985).

In this paper, we thus seek to address whether an organization's multiplicity of mental models positively affects recognition of the need to shift to higher-level learning. We address this issue in the context of a specific research setting: Acquirers' selection of legal advisors in mergers and acquisitions (M&As) constitutes the object of learning in this study. Given that the relevance of different types of advisors varies across the M&A process, we zoom in on a specific stage during which legal advisors are of particular importance, the *public takeover phase* (Karsten, Malmendier, & Sautner, 2014; Krishnan & Masulis, 2013). We study if acquirers apply selection rules, which they have developed in domestic M&As, to international deals: On the one hand, institutional differences across countries (e.g., Dikova, Rao Sahib, & van Witteloostuijn, 2010) create strong pressures to re-assess established routines, in particular related to the role of country-specific legal expertise. On the other hand, the credence good nature of legal services (Coates, 2001) and the potential 'dark side' of embeddedness (e.g., Lee, 2013) of acquirers' network relations with lawyers counteract these pressures.

Following research on partner selection (e.g., Gulati & Gargiulo, 1999; Hitt, Dacin, Levitas, Arregle, & Borza, 2000; Lee, 2013), we blend resource-based, social network, and organizational learning perspectives in deriving our hypotheses. First, we analyze acquirers' reliance in *domestic* deals on relational- vis-à-vis expertise-related law firm attributes for advisor selection and consider their respective contribution to advisor performance. Second, we investigate whether the same criteria govern advisors' performance in *international* M&As and whether acquirers employ them as a basis for selection. Our basic expectation is that bidders need to nominate advisors based on a reversed weighting of relational and expertise-related attributes when they operate internationally, but that they do not recognize this initially. Next, we study the effect of experiential learning: When accumulating international M&A experience, do acquirers learn to fundamentally rebalance the selection criteria to better align them with the drivers of law firm performance in international deals? Following Haleblian and Finkelstein's (1999) theory of inappropriate generalization, we expect that they will initially fail to do so, but that sufficient experience will facilitate the shift from lower- to higher-level learning needed for a categorical rebalancing of selection criteria. Lastly, we ask whether firms with greater multiplicity of mental models require less experience in order to reach this turning point.

An analysis of 5,594 domestic and 5,917 cross-border M&A attempts announced in 1998–2010 supports our theory. First, selecting legal advisors calls for distinct weighting of network- relative to expertise-related attributes in domestic and international deals. Second, acquirers learn from experience: There exists a turning point beyond which the typical bidder relies more on expertise- rather than network-related selection criteria in cross-border deals. Third, multiplicity of mental models—assessed at various organizational levels and in several domains—appears to facilitate the required shift from lower- to higher-level learning. In sum, this study provides important insights regarding organizational learning, social networks, and M&As, and for managerial practice.

RESEARCH SETTING: THE ROLE OF LEGAL ADVISORS IN COMPLETING M&AS

M&A processes consist of two broad stages: pre-completion, which ends with the official resolution, and integration (Haspeslagh & Jemison, 1991). Two critical events mark the pre-completion phase (Boone & Mulherin, 2007): The *private* takeover period starts with the initial screening of potential business combinations and ends with the official announcement of a preliminary merger agreement. The ensuing *public* takeover phase starts with this announcement and ends with either completion or abandonment. While a legal advisor might be involved in drafting the preliminary agreement, the primary duty of the counsel begins *after* this agreement is signed and the deal is announced (DePamphilis, 2008). The counsel is then responsible for (i) obtaining shareholder, regulatory, and third-party consent, and (ii) structuring, drafting, and completing the definitive agreement of purchase and sale in a way that accommodates the diverse interests and complies with all relevant regulations of every country where acquirer and target are listed or incorporated (Gilson & Black, 1996). Lawyers advise clients on responsibilities in making or responding to offers, act as principal negotiators for legal terms, provide legal due diligence, draft contracts, ensure that corporation, anti-trust, securities and tax laws are being followed, and are responsible for M&A related litigation (Krishnan & Masulis, 2013). How can their performance during the public takeover phase be assessed?

While the release of new information may always prompt the necessity to reassess a deal (Chakrabarti & Mitchell, 2016; Zhou, Xie, & Wang, 2016), prior literature has argued that during this public takeover stage, completion and, in particular, *closing time* (i.e., the time it takes to proceed from the initial public announcement to the definitive agreement) constitute important outcome variables from the viewpoint of acquirers (Chakrabarti & Mitchell, 2016; Dikova et al., 2010; Karsten et al., 2014).[1] Particularly at this stage, the involved parties need to resolve issues of legal nature in order to swiftly complete an announced M&A. M&As are complex legal transactions because of the large number of stakeholder groups that is involved, including managers, shareholders, banks, employees, and regulatory authorities (Boone &

Mulherin, 2007; DePamphilis, 2008). Against this background, the legal counsel has been described as a "transaction cost engineer" (Gilson, 1984: 244) who has a major impact on the likelihood that an agreement is reached and, in particular, on the time it takes to close a deal (Gilson & Black, 1996; Krishnan & Masulis, 2013; Karsten et al., 2014). Hence, a lawyer's contribution to *reducing closing time* can be viewed as a key indicator of its performance.

THEORY AND HYPOTHESES

Acquirers' Selection of Legal Advisors and Law Firm Performance in Domestic M&As

How do acquirers select lawyers for the public takeover phase and what drives advisors' performance? Little direct evidence exists, but research on partner selection (e.g., Hitt et al., 2000) including alliances (e.g., Chung, Singh, & Lee, 2000; Gulati & Gargiulo, 1999), suggests at least two categories of selection criteria, which may also affect performance: first, social network relations; second, access to complementary resources and capabilities.

Social network relations. The literature on partner selection in inter-organizational networks (e.g., Gulati, 1995; Mitsuhashi & Min, 2016) and on social networks in professional services (e.g., Baum, Rowley, Shipilov, & Chuang, 2005; Jensen, 2003) has identified *network-related attributes*—also referred to as *embeddedness*—, such as past direct ties between organizations as strong predictors of selection in future exchange episodes. Social networks provide unique mechanisms for the governance of transactions and dissemination of information (Powell & Smith-Doerr, 1994). Ties from repeat interactions between the same actors enable mutual learning, motivate the sharing of private information, and reduce the potential for frictions in subsequent episodes (Uzzi & Lancaster, 2004).

Studies on network relations of professional service firms (e.g., Baker, 1990; Uzzi & Lancaster, 2004) suggest that past direct ties between clients and advisors not only matter for selection but may also affect outcome variables—as would be expected from a rational capability-based logic of partner selection. How may network relations between acquirer and lawyer enable the legal counsel to perform better during the public takeover phase? Past interactions can help in various ways: First, they enable direct learning about the partner's corporate culture and internal procedures. Familiarity with the bidder's ways of working during the public takeover stage, with its intra-organizational routines, organizational structure, and decision-making bodies—both formal and informal—facilitate coordination between lawyer and client regarding the design of the acquisition contract (Karsten et al., 2014) and, generally, the structuring of the diverse interests and compliance with all relevant regulations. Second, past ties facilitate the emergence of trust (Gulati, 1995; Uzzi & Lancaster, 2004); especially if accompanied by a degree of closeness and exclusivity in the relationship (Coleman, 1990; Gargiulo & Benassi, 2000) that goes beyond mere familiarity. Trust stimulates relationship-specific investments, for example, in terms of inter-organizational routines in jointly handling legal issues during the public takeover stage. Also, it may stimulate sharing of private information (Gulati, 1995; Uzzi & Lancaster, 2004) about motives of and intentions for a merger. Such information, in turn, enables the lawyer to better anticipate the acquirer's concerns during negotiations, speeding up internal discussions between bidder and advisor and, thereby, also the process of exchanging mark-ups between the parties (Karsten et al., 2014).

Country-specific expertise. Firms tend to team up with other firms that possess complementary resources or capabilities (e.g., Chung et al., 2000; Mitsuhashi & Min, 2016; Shah & Swaminathan, 2008). While much research considers horizontal alliances, the argument likely extends to acquirers' relationships with legal advisors. Given the complexity of M&As, which touch upon many different areas of law (Gilson & Black, 1996), and their relative rarity as corporate events, most companies find it inefficient to rely strongly on in-house counsel. Instead, they seek the expertise of law firms specializing in M&As (e.g., Heinz, Nelson, & Laumann, 2001). A broad range of legal domains is relevant in mergers and countries differ significantly in these respects. Also, given the dispersed and highly regulated nature of the international legal service industry (e.g., Faulconbridge & Muzio, 2016), law firms' M&A expertise is often country-specific: Local experts are often regional or even local players, suggesting (target) country-specific expertise as a key selection criterion.

Here, the mechanisms that enable a country expert to shorten closing time are particularly relevant. First, familiarity with the legal and regulatory framework of a focal country implies the ability to efficiently ensure compliance with all relevant regulations of this country (Gilson & Black, 1996). Second, routines to apply efficient information verification techniques, which may vary by country, allow for expediting legal due diligence, among others, because familiarity with the specific context facilitates interpretation and an assessment whether and what additional information needs to be collected from local information providers. Third, as suggested by studies on cultural influences on negotiations, dealings with the seller and its legal counsel are likely to be influenced by country context (e.g., Adair & Brett, 2005). Having routines in place to carry out these negotiations should reduce completion time. Fourth, established relationships with local authorities are an important form of social capital. They facilitate interpretation and appraisal of regulatory requirements and preparation of necessary documents, thereby reducing the time that the deal is being reviewed by the authorities. Overall, a law firm's country-specific legal expertise likely allows it to engage more effectively in 'engineering' a deal. Studies in financial economics have indeed shown how bidders may benefit from hiring lawyers with superior general and, to some extent, country-specific expertise during the final phases of M&As, especially in terms of quicker closing (Karsten et al., 2014; Krishnan & Masulis, 2013).

Which of these lawyer characteristics—network relations or country-specific expertise—is more important for an acquirer's *selection* of a legal counsel; and which is a better predictor of the counsel's *performance*? For domestic M&As, we suggest that country-specific expertise is less important in both respects: Acquirers generally face difficulties in assessing the quality of an unknown lawyer, both ex-ante and ex-post (Coates, 2001). Heterogeneity among domestic law firms in terms of their country-specific expertise in the domestic context is, by definition, limited. In addition, acquirers are themselves familiar with the basic tenets of the legal framework governing business operations in their home country. Therefore, we expect acquirers to rely on their trusted counsel, as they stand to gain little from appointing an unfamiliar one; and this choice will be in line with the drivers of lawyers' performance. Overall, we expect:

Hypothesis 1a (H1a): In domestic M&As, network- and expertise-related attributes of a law firm are positively associated with the likelihood of being selected as counsel, but acquirers place relatively more weight on network-related criteria.

Hypothesis 1b (H1b): In domestic M&As, network- and expertise-related attributes of a law firm are positively associated with its performance in terms of shorter closing time, but network-related criteria have a relatively stronger impact on performance.

Acquirers' Selection of Legal Advisors and Law Firm Performance in International M&As

First, *selection*: Do bidders transfer domestic advisor selection routines to the international domain? Prior research offers contrary perspectives. Some scholars have argued that acquirers in international deals are acutely aware of their unfamiliarity with the deal context, including the institutional environment (e.g., Barkema & Schijven, 2008; Muehlfeld, Rao Sahib, & van Witteloostuijn, 2012), suggesting an increased sensitivity to the need to adapt.

Yet, collecting information about competencies and reliability of another firm is costly and time consuming (e.g., Stinchcombe, 1990). For legal services, this challenge is aggravated by the fact that “legal advice often involves questions of judgment under conditions of uncertainty that will persist even after a trial or negotiation or other legal event is completed” (Coates, 2001: 1301). Hence, as acquirers face difficulties in assessing the quality of an unknown (host country) lawyer vis-à-vis the proven qualities of a known advisor, they may transfer the network-heavy weighting of selection criteria from the domestic to the international domain. Research on social networks supports this view, pointing to “embeddedness as a solution to relational hazards in market exchanges” (Lee, 2013: 1238). In the very situations that require specific expertise to handle a complex task with uncertain outcomes, actors often resort to what they perceive as the least risky option: their well-known, trusted partners (Lee, 2013; Mizruchi & Stearns, 2001). This is not to say that acquirers necessarily select their counsel based on irrational motives. Rather, the uncertainty they face in the nomination decision, combined with the complexity and uncertainty of the cross-border deal itself, may make them highly risk averse, ‘nudging’ them away from the local expert, and towards the familiar counsel: “when trustworthy partners are already available, searching for strangers is hard to be rationalized” (Chung et al., 2000: 5). Indeed, Howard, Withers, Carnes, and Hillman (2016) found that greater firm-level uncertainty led firms to reinforce alliance ties rather than engage in a broadening of ties. Thus:

Hypothesis 2a (H2a): In cross-border M&As, network- and expertise-related attributes of a law firm are positively associated with the likelihood of being selected as counsel, but the typical acquirer places relatively more weight on network-related criteria.

Second, *performance*: How could target country-specific expertise reduce closing time? Essentially, we expect the same mechanisms to apply as proposed above: familiarity with the legal framework, routines for information verification and legal due diligence, familiarity with culture-specific negotiation styles and customs, established relationships with authorities. However, compared to domestic M&As, acquirers are up against greater challenges in attempting to complete international deals due to, among others, national differences in terms of formal and informal institutions (Dikova et al., 2010; Weitzel & Berns, 2006), such as nation-specific legal and tax systems and accounting practices (Very & Schweiger, 2001). This complication affects, in particular, legal issues during the closing phase. Not only does the legal service industry feature a high degree of national embeddedness (Faulconbridge & Muzio, 2016), legal advisors additionally face the task of ensuring legal compliance in a highly fragmented environment with increasingly complex national takeover regulations (White & Case, 2009). Thus, the provision of legal services in M&As has only limited potential for developing any generalized expertise (cf. Karsten et al., 2014). In addition, the limitations to transferability of local expertise are exacerbated by the fact that many countries have installed widespread impediments to the entry of foreign lawyers. Hence, a lawyer's local expertise in a core country of its operations constitutes a key asset in advising deals that involve this country. In sum, we expect that a law firm's target country-specific expertise allows it to engage more effectively in "engineering" a deal including quicker legal due diligence, reduced time for drafting and revising the contract and mark-ups, more efficient negotiations with the counter-party, and shorter time that the deal is being reviewed by authorities. Given the eminent role of legal contingencies during the public stage, we further maintain that in cross-border deals, target country expertise is even more significant for advisor performance than a trustful relationship and reduced relational frictions between bidder and advisor. Overall, we expect that the relative importance of network- and expertise-related attributes is reversed, compared to domestic deals:

Hypothesis 2b (H2b): In cross-border M&As, network- and expertise-related attributes of a law firm are positively associated with its performance in terms of shorter closing time, but expertise-related criteria have a relatively stronger impact on performance.

In sum, while *H1a-H2a* fit into an (at least boundedly) rational capability-based logic of partner selection, *H2b* breaks this logic: In cross-border deals, acquirers continue to rely on their long-term partners, with ties initially established in domestic settings, but these embedded lawyers are unlikely to be experts in the specific host country environment and *vice versa* (cf. Mitsuhashi & Min, 2016). Social network research provides a possible rationale for such a discrepancy between drivers of selection and of law firms' performance in cross-border M&As: Acquirers may favor familiar choices over the most capable ones, because they fall prey to a behavioral bias arising from a dark side of embeddedness (e.g., Lee, 2013). Can experience eliminate this discrepancy by stimulating learning? And, if so, could multiplicity of mental models within the acquirer firm facilitate this learning process?

Types of Organizational Learning and Selection of Legal Advisors in International M&As

Organizational learning refers to an experience-driven change in an organization's knowledge, which includes both declarative and procedural knowledge, that is, facts as well as skills and routines, thus embracing both cognitive and behavioral elements (e.g., Argote, 2013; Fiol & Lyles, 1985). Routines represent collective, repetitive, and fairly stable patterns (Nelson & Winter, 1982) that may relate to operational, administrative, and strategic activities, such as, for example, procedures to select advisory services in M&As. By performing a task, an organization accumulates experience, giving rise to learning.

Yet, there is more than one kind of learning. Different kinds of learning appear to co-exist in organizations (e.g., Miller, 1996) and most scholars agree on the existence of at least two types of qualitatively distinct learning (cf. Tosey, Visser, & Saunders, 2012). Tosey et al. (2012) identify as the most common labels to capture this dichotomy: lower- and higher-level learning (Fiol & Lyles, 1985), single- and double-loop learning (Argyris & Schön, 1978), exploitation and exploration (Levinthal & March, 1993; March, 1991), incremental and radical (Miner & Mezias, 1996), and adaptive and generative (Senge, 1990). Further, they suggest that a "consensus seems to have been established that they refer to comparable learning processes and outcomes" (Tosey et al., 2012: 292). Here, we use the terms lower- and higher-level learning. Lower-level learning occurs within a given set of rules, norms, and frameworks, is based on existing routines, maintains the core features of the relevant 'theory-in-use', and restricts "itself to detecting and correcting errors within that given system of rules" (Fiol & Lyles, 1985: 808; referring to Argyris & Schön, 1978). Higher-level learning implies changing underlying rules, norms, and frameworks, and aims at developing "new cognitive frameworks within which to make decisions" (Fiol & Lyles, 1985: 808). It requires "unlearning" of conceived knowledge and reorientation of cognitive structures (Nystrom & Starbuck, 1984).

Acquirers' Adaptation of Selection Criteria from Domestic to International Settings

Applied to our research setting, we characterize lower-level learning as attempts to improve the selection of legal counsels in cross-border M&As without questioning the basic selection rules, that is, for example, by adapting the weights attached to the two different kinds of selection criteria transferred from the domestic context, but without categorically changing the predominant importance of network-related attributes. Based on *H1-H2*, we argue, though, that acquirers ultimately need to recognize that the relative significance of network- vis-à-vis expertise-related attributes is *reversed* in cross-border M&As. This requires a switch from lower- to higher-level learning.[2] Are acquirers able to use their M&A experience to achieve this shift?

The value of experience for performance-enhancing learning crucially depends on the extent to which it applies to a future activity (March, 1991), i.e., its transferability is bound by its context-specificity. Prior studies have emphasized the limits of such transferability and, thus, of the generalizability of prior experience (e.g., Haleblian & Finkelstein, 1999). Discriminating between appropriate and inappropriate generalization appears to be particularly difficult in complex corporate domains due, among others, to causal ambiguity (Argote, 2013). Firms may need to accumulate a lot of experience before performance improves and, initially, more experience may even reduce performance due to inappropriate generalization (e.g., Duijsters, Heimeriks, Lokshin, Meijer, & Sabidussi, 2012; Haleblian & Finkelstein, 1999). Individuals as well as organizations tend to suffer from resistance to adaptation, due, for example, to cognitive biases (e.g., Samuelson & Zeckhauser, 1988) and greater uncertainty of exploring new alternatives vis-à-vis refining existing ones (March, 1991). When the required learning entails a shift from lower- to higher level, it is likely to be particularly challenging, as it requires 'distant search', while the initial response to unsatisfactory outcomes tends to be 'local search' (Cyert & March, 1963), which may result in further suboptimal outcomes (Barkema & Schijven, 2008).

When acquirers gain experience with selecting advisors, the repeated experience of prior knowledge (about selection criteria) conflicting with to-be-learned information (antecedents to advisor performance in cross-border deals), may give rise to the gradual emergence of novel, alternative cognitive structures for how to select the most suitable legal advisor for a particular type of deal—domestic or cross-border. Yet, it may take many M&As to achieve this. Thus, we expect that acquirers' initial learning will result, if anything, in greater weight of past ties as a selection criterion, relative to (target) country expertise; and that they need to accumulate a lot of experience before adequately appreciating a law firm's (target) country expertise. The turning point marks, as we argue, the sketched shift in selection routines.

Hypothesis 3 (H3): With growing cross-border M&A experience, acquirers first attach more relative weight to network-related criteria and, after a turning point, increasingly attach less weight to network-related relative to expertise-related criteria.

The Impact of Intra-Organizational Multiplicity of Mental Models

Prior research has identified three major types of moderators of the relationship between experience and learning outcomes (Argote, 2013), that is, *types of experience* (e.g., direct vs. indirect), attributes of the learning *process* (e.g., its mindfulness), and elements of the *organizational context* (e.g., organizational culture). Adding to the third domain, we propose that structural attributes of organizational cognition—in particular, *multiplicity of mental models*—may foster a specific aspect of organizational learning, i.e., the ability to recognize, based on the accumulation of experience, the need to shift from lower- to higher-level learning.

Mental models have initially been conceptualized at the individual level. Rouse and Morris (1986: 360) characterized a mental model as a "mechanism whereby humans generate descriptions of system purpose and form, explanations of system functioning and observed system states, and predictions of future system states." As such, mental models represent "organized knowledge frameworks that allow individuals to describe, explain, and predict behavior" (Lim & Klein, 2006: 404). Senge (1990: 163) characterized them as "images that limit us to familiar ways of thinking and acting." Similar to other related concepts (e.g., cognitive map; for a review, see Walsh, 1995), a mental model thus constitutes a form of knowledge structure or schema—a fundamental top-down information processing construct characterized by

Walsh (1995: 281) as a "mental template[s] that individuals impose on an information environment to give it form and meaning". Scholars have subsequently transferred the knowledge structure construct to more aggregate levels and have, using a variety of labels, discussed the existence of supra-individual knowledge structures at the team/group, organization, and even industry level of analysis (cf. Walsh, 1995, for a review). For example, in the context of product diversification, Prahalad and Bettis (1986: 491, 485) characterized dominant logic as a "mind set or worldview or conceptualization of the business and the administrative tools […] stored as a shared cognitive map", which "consists of the mental maps developed through experience in the core business". Based on these studies, we define mental models at the level of groups within the organization as collective organized knowledge frameworks that allow for describing, explaining, and predicting behavior related to a specific information domain. For example, we expect business units operating in different product markets to each be guided by such a collective knowledge framework that allows the unit to describe, explain, and predict behavior in its sector, related, for example, to industry conduct.[3]

It follows from the characterization of mental models as *organized* knowledge frameworks that they have both *content* and *structure* (Walsh, 1995). Attributes relating to both of these dimensions are thought to impact the consequences of these knowledge structures in guiding future behavior. In terms of content, for example, knowledge structures that represent an information environment build on experience in this domain, and the context in which this experience was gained, constitutes an important boundary condition (e.g., Kaplan, 2008; Walsh, 1995). The emergence of knowledge structures appears to entail reflection upon and interpretation of this experience, including the development of perceptional filters that affect subsequent information acquisition and processing (e.g., Simons & Chabris, 1999). Here, we focus solely on structure, though; and, unlike most prior studies concerned with structural attributes, we consider the structure of a whole *set* of mental models rather than the structure of an individual schema. Prior research on schema structure has analyzed differentiation, i.e., the number of a knowledge structure's internal dimensions, and integration, i.e., the extent of interconnectedness of these dimensions (see Walsh, 1995, for a review). Using the term '*multiplicity*' we consider differentiation at the level of a *set* of knowledge structures (e.g., the number of group-level mental models associated with the product markets served by an organization), a structural attribute that is also referred to as 'richness' in organizational ecology (e.g., Boone, Wezel, & van Witteloostuijn, 2013). Richness captures a pure count of the number of distinct types in a population or system. Accordingly, *multiplicity of mental models* refers to a count of the number of distinct mental models relating to a given information domain within an organization. Thereby, our definition of multiplicity is both related to and yet distinct from diversity as commonly conceptualized in management research (see Harrison & Klein, 2007, for a review). Harrison and Klein (2006) outlined three major ways in which the diversity construct is being used, that is, diversity as separation, disparity, and variety. The latter is closest to our definition of multiplicity. Yet, diversity as variety typically takes into account both richness and abundance or relative distribution of these types (i.e. the proportion of unit members who belong to a particular type). Thus, multiplicity is a simpler concept, without specific assumptions on more complex distributional characteristics.

In terms of influencing an acquirers' ability to shift from lower- to higher level learning, we argue that multiplicity of mental models leverages the organization-level "ability to reflect on, understand, and control" (Schraw & Dennison, 1994: 460) the entity's learning, in particular, by facilitating the formulation of strategies for considering alternative cognitive mechanisms and for deliberately selecting from a set of available mechanisms those that are to be applied in a specific situation (Flavell, 1987). Thus, we propose that multiplicity enables firms to better utilize their (domain-specific) experience as input for their learning by facilitating more accurate reflection on the generalizability of this experience: First, multiplicity of mental models relating to a certain domain may have *task*- or *domain-specific effects*—akin to potentially positive effects from diversity of experience (e.g., Haunschild & Sullivan, 2002; Nadolska & Barkema, 2014)—by making available a range of cognitive structures for describing and dealing with a specific type of task (e.g., selecting lawyers). By allowing for consideration of a larger range of perspectives, qualitatively better decisions may become possible (e.g., Bell, Villado, Lukasik, Belau, & Briggs, 2011; Dahlin, Weingart, & Hinds, 2005), with positive effects of heterogeneity potentially resulting from superior information processing related to range, depth, and integration of information use.

Second, resting on our conceptualization of multiplicity of mental models as a content-independent, structural attribute, we propose that it may additionally stimulate a *generalized* awareness effect *independent* of the specific task or domain. Each mental model rests on a set of assumptions, rules, and norms. Greater multiplicity of mental models illustrates the possibility to view the world through a larger number of sets of rules. By raising awareness of the existence of many distinct worldviews, such multiplicity may facilitate a specific aspect of organizational learning, that is, recognition of the need to switch from lower- to higher-level learning that implies changing the underlying rules. Thereby, multiplicity of mental models could allow for more accurate reflection on the categorization, transferability, and generalizability of experience—processes that are fraught with difficulties, as prior studies have emphasized (e.g., Haleblian & Finkelstein, 1999). Based on the assumption that the co-existence of a multitude of worldviews in a domain is widely known throughout the organization, acquirers with greater multiplicity of mental models should thus require less experience to move from lower- to higher-level learning. Hence, our arguments as to this generalized effect imply that we expect the beneficial effects of multiplicity to apply *beyond* a specific task, ranging from closely related domains to fairly distant and even unrelated ones (for a similar argument, see Powell & Rhee, 2016). What matters are not actual similarities between two tasks, but demonstration of the—at least hypothetical—possibility to 'do things differently'. Thus, while experience represents a major building block for knowledge structures such as mental models (Walsh, 1995), knowledge about the co-existence of worldviews related to a specific domain (e.g., product markets associated with business units) may permeate the organization in a way that knowledge about specific experiences in this domain could not. Thereby, the proposed generalized effect differs from concepts such as knowledge transfer between units, which often suffers from stickiness that impedes the reuse of practices in other subunits (Szulanski, 1996). Overall, we expect:

> *Hypothesis 4 (H4): Multiplicity of mental models is positively associated with an acquirer's experiential learning: Acquirers with greater multiplicity of mental models require less cumulative cross-border M&A experience to reach the turning point beyond which they attach relatively less weight to network- vis-à-vis expertise-related criteria.*

METHODOLOGY

Data and Sample

We retrieved data from the Thomson Reuters' Financials SDC M&A database (henceforth: Thomson). It records all publicly announced M&As worldwide, including details on all legal counsels involved in the transactions. Our initial Sample A consists of 153,622 domestic and international M&A attempts announced in 1994-2010. We used the available information on acquirers and counsels to construct our main variables, whereby our definition of acquirer and counsel coincides with the variables 'acquirer ultimate parent' and 'legal advisor' in Thomson. We then reduced Sample A to a smaller set (5,594 domestic; 5,917 cross-border M&As) for our hypotheses tests. This Sample B includes acquirers and deals (a) that are neither self-tenders nor minority deals, (b) that have at least one law firm on board, (c) with acquirer and target primarily active in the non-financial non-legal service industries, (d) where the acquirer attempted at least one M&A in the four years prior to the focal deal, and (e) where all relevant variables are filled.[4]

Dependent Variables

For testing *H1b* and *H2b*, we generated for each M&A in Sample B the integer variable *duration of the closing phase*. It measures the difference between the dates of initial public announcement and of unconditional completion for every merger officially consummated before January 11th, 2015. Because durations range from 1 to 3213 days, with a median of 53 days, we included their natural logarithm, thereby alleviating concerns that the results might be driven by a small number of deals with a very long closing phase. However, the correct unit of analysis for testing *H1b* and *H2b* is not a merger, but an advisor-acquirer dyad. In order to avoid the statistical interdependency between the considerable number of M&As in Sample B (34%), where the acquirer employed a team of two or more advisors, we focused on the 'lead advisor', i.e., the largest lawyer in terms of *law firm worldwide experience* (variable introduced below).[5]

For testing *H1a, H2a, H3,* and *H4,* we constructed for each M&A in Sample B a 'risk set' of potential legal counsels. Within this set, we examined the probability that a given law firm was selected by the focal acquirer, measured as the *likelihood of selection*, which is 1 for every law firm that was appointed (0 otherwise). The risk sets include, next to the *actually* appointed counsels, also lawyers that could have *potentially* been selected. As there are many firms that are obviously implausible candidates, e.g., a German lawyer in a U.S.-Japan deal, we constructed sets of 'shortlisted' candidates, that had counseled in at least one other deal in the year of the focal M&A's announcement, and were among the top 5 percent of firms in terms of at least one of the four network- and expertise-based law firm attributes described below. A typical risk set in our analysis then consists of, on average, 104 law firms per deal. Multiplied by the 11,511 deals in Sample B, the total risk set (Sample C) comprises 1,160,232 acquirer-law firm dyads.

Independent Variables

Advisor-client relationship. We measured the intensity of the law firm-acquirer relationship by prior interactions between them. We counted for each law firm-acquirer dyad in Samples B and C the number of (*prior) advisor-client ties* as recorded in Thomson and interpret this, in line with Gulati (1995), as a measure of inter-organizational familiarity. Further, we divided this count measure by the total number of law firms an acquirer had previously worked with to obtain the percentage variable *advisor-client tie strength*. Following network literature (e.g., Jensen, 2003; Mizruchi & Stearns, 2001), this measure serves as an indicator of inter-organizational trust, as it captures the degree of 'exclusivity' of a relationship. The data—as for all law firm-related variables—was retrieved from Sample A. We counted all matches of the same name pair in the transactions prior to a focal M&A that precede the deal by no more than four years. Prior studies on organizational networks have often used such a moving time window (e.g., Gulati & Gargiulo, 1999; Lee, 2013). For the legal counsel market, it is further justified by high turnover of personnel, especially in the elite of the profession (Heinz et al., 2001).

Law firm country-specific expertise. We operationalized country-specific expertise by *law firm acquirer country expertise* and *law firm target country expertise* (henceforth *acquirer country expertise* and *target country expertise*). Each variable counts a firm's prior M&A

advisory appointments in the home country of the focal acquirer and the focal target, respectively. Using transaction history as expertise measure has several advantages over alternatives; in particular, as it captures, next to knowledge embedded in the firm, also its business experience. Uzzi and Lancaster (2004), for example, measure legal expertise of a law firm directly by weighting the law school degrees of lawyers in each of a firm's (foreign) offices. Yet, as expertise is rewarded with more offers, the number of past appointments is a viable proxy for these more direct dimensions of legal expertise (Lazega, 2001). At the same time, it portrays a more accurate picture of the service quality, as the transaction history also captures experience and routines developed through actual practice of the law. We calculated acquirer and target country expertise as the percentage shares of the total number of a law firm's past appointments in the four years prior to a deal. A value of 100% (0%) reflects high (low) expertise in the legal framework of a country. In this way, the variables capture those elements of service quality that are difficult to transfer across national contexts. Only very few large law firms are truly international: Linklaters (U.K.) and Clifford Chance (U.S.), for example, advised foreign clients in 62%, and 75% of their deals during our sampling period, respectively. The vast majority of firms, even among the top tier, focus almost entirely on a domestic clientele. By controlling for overall transaction history, this percentage measure thus reflects the high degree of geographical specialization in the industry.

Acquirer cross-border M&A experience. *Acquirer cross-border M&A experience* counts, for every acquirer in Sample B, all prior cross-border M&As attempted by the firm in the four years preceding the focal deal. For testing *H3*, the variable is included in the legal advisor selection models, where it is interacted with the law firm variables described above. As learning might be non-linear (e.g., Haleblian & Finkelstein, 1999), we also included the square of cross-border M&A experience in the selection models.

Acquirers' multiplicity of mental models. Measuring multiplicity of mental models is challenging, especially in large-scale research settings, which allow only for indirect assessment (for direct methods with smaller samples, see, e.g., Kaplan, 2008; Markoczy, 2001). Thus, we used several measures, which vary along two dimensions. First, in terms of level of analysis, we constructed three measures at the organizational level and one at the level of the top management team (TMT). Second, regarding distance from the object of learning, we included several corporate domains, ranging from more to less distant from selecting legal advisors in M&As.

At the *organizational level*, we assessed multiplicity of mental models (*mmm*), first, in the domain of antitrust systems (e.g., Glendening, Khurana, & Wang, 2016). We classified all countries in Sample A according to the Wiki project "Antitrust around the World" (Hylton & Deng, 2007). This Wiki identifies core dimensions of antitrust systems and cardinally ranks countries' current and historic systems in terms of the scrutiny they exercise in each of them. We used the overall antitrust system score. As the overall country scores are clustered between 17 and 25 points, we grouped countries by score percentiles to obtain a more discriminatory classification. Our theory emphasizes the impact of the simple prevalence of a range of distinct mental models rather than trying to weight them according to their frequency or relatedness—as is often done in studies focusing on diversity of experience (e.g., Haunschild & Sullivan, 2002; Powell & Rhee, 2016). In contrast to such studies, we therefore constructed a simple count measure (*mmm antitrust systems*) of the number of different antitrust score percentiles an acquirer had been exposed to during the four years prior to a focal deal (similarly, see, e.g., Dahlin et al., 2005).

Second, as M&As are frequently subject to political manoeuvring (Serdar Dinc & Erel, 2013), we measured multiplicity of mental models in the domain of political systems (*mmm political systems*). We classified the countries in Sample A according to the ‘political stability’ indicator of the Worldbank Worldwide Governance Indicators database. The index is a cardinal number ranging from -2.5 to 2.5 and is available as of 1996. Similar to the *mmm antitrust systems* measure, we counted for each acquirer the number of different political systems’ score percentiles that the firm had been exposed to in the four years prior to the focal deal, which means that the variable is available for deals announced in 2000-2010. Both of these measures have the advantage that they depict the focal structural attribute of an organization’s mental models (i.e., their multiplicity) in a domain that is closely related to the object of learning, i.e., selecting legal counsels in cross-border M&As. Yet, for this very reason, it is difficult to disentangle their effect from the impact of experience (in terms of both volume and diversity) in these domains. In fact, experience constitutes a major building block of the emergence and development of any knowledge structure and thus, also a key driver of multiplicity of mental models. Therefore, in order to test *H4*, we also sought to assess mental models in less related corporate domains that bear no immediate relation with the selection of legal counsels in M&As.

Thus, third, we considered the domain of product markets. Prior research has argued that product markets or industry sectors are associated with distinct, industry-specific shared concepts of business conduct (Spender, 1987), which may be associated with distinct mental models (e.g., Ginsberg, 1989, on the impact of diversification on the content of managers’ mental models). Various ways exist to assess the degree to which firms have operations in more than product market, such as the Herfindahl index (e.g., Wan, Hoskisson, Short, & Yiu, 2011). Again, in line with our theory, we instead used a simple count of the total number of distinct 4-digit SIC codes in which an acquirer was active at the time of announcing the focal deal. Thomson records for both acquirer and target in every merger all their industry activities as measured by SIC codes. Since our unit of analysis is the acquirer's ultimate parent, we aggregated the subsidiary SIC codes and counted for every ultimate parent in Sample B the number of unique SIC codes of all affiliations with the parent at the time of announcing the focal M&A and in the prior four years. The result is the time-varying variable *acquirer mmm product markets*.

Fourth, finally, we included a measure of multiplicity related to a firm's *TMT*. We measured the number of *nationalities* represented among the top decision-makers, divided by the size of the TMT. Upper Echelon (UE) studies (e.g., Bromiley & Rau, 2016; Hambrick, Davidson, Snell, & Snow, 1998; Nielsen & Nielsen, 2013) and team studies in general (e.g., Dahlin et al., 2005) suggest that nationality/national origin may be particularly strongly related to the worldviews of decision-makers and the mental models they hold (see, related, Marano, Arregle, Hitt, Spadafora, & van Essen, 2016; although this view is not uncontested, e.g., Markoczy, 1997; for details, see online appendix 1). Note that our operationalization differs from the way in which UE and team studies usually assess team composition, often based on the Blau index (e.g., Carpenter & Frederickson, 2001; in relation to TMT diversity and acquisition learning, e.g., Nadolska & Barkema, 2014), as we are interested purely in how many distinct mental models are present in a TMT, rather than in any group dynamics. As TMT data are not recorded in Thomson, we collected this information from archival sources. This, though, required us to focus, in line with extant UE studies (e.g., Carpenter & Frederickson, 2001), on a smaller sample of deals and associated acquirers. In order to keep the data collection tractable, while maximizing the chances of finding the required TMT information, including as well non-U.S. firms, we zoomed in on the year 2010 and on the largest 50 acquirers that appeared at least once during that year. Following prior studies (e.g., Carpenter & Frederickson, 2001), we operationalized the TMT as the top two tiers of management: CEO, members of the Executive Board (e.g., chief financial officer) and the next-highest management tier including other senior managers listed as executive officers. We obtained information from firms' annual reports, SEC 10-K Filings, and, if otherwise not available, from company websites and public sources such as directorstats.co.uk. Thereby, we were able to acquire complete information for 30 firms involved as acquirers in 65 cross-border M&As from among our sample in 2010.

Control Variables

In terms of *lawyer attributes*, based on the close link between service quality and market rewards (Lazega, 2001), *law firm worldwide experience* captures general quality differences between firms. In a service industry such as the legal sector, it also proxies for firm size. *Number of advisors* controls for the influence of the size of the advisory team (Hunter & Jagtiani, 2003). Considering *acquirer attributes,* as M&A experience has been shown to also have a direct, potentially non-linear, influence on pre-completion outcomes (e.g., Dikova et al., 2010), we included an *acquirer's cross-border M&A experience* and the squared experience as control variables in the outcome analyses. For the same reason, we also included the mental model variables and *acquirer country experience* and *target country experience* in these analyses. We constructed the latter variables in the same way as the corresponding law firm variables. *Acquirer network size* counts the number of different law firms a bidder has previously worked with. Together with *advisor-client tie strength*, this variable defines an acquirer's 'market interface' (Baker, 1990) with the legal industry. *Public acquirer* indicates whether an acquirer is publicly listed (1/0 otherwise) and *acquirer size* measures the total asset value of an acquirer and its subsidiaries (in U.S.$). In terms of *transaction attributes*, based on prior research (e.g., Wong

& O'Sullivan, 2001), we included *public target* (1/0 otherwise); *deal value* (in U.S.$); *number of bidders*; the percentage variable *stock payment* measuring the acquirer's intended share of stock payments; and *tender offer* to identify deals where the acquirer approaches the target's shareholders directly (1/0 otherwise). We controlled for timing of a deal by including *year dummies*. Based on La Porta, Lopez-de-Silanes, and Shleifer (2008), we controlled for regulatory hurdles by adding a *common law origin* dummy if the target country has a common law origin, i.e. a more merger friendly control regime (Rossi & Volpin, 2004) (1/0 otherwise). Finally, *same legal origin* indicates acquirer-target country pairs with the same legal origin (1/0 otherwise).

Estimation Techniques

The major issue with our simultaneous estimation of selection criteria and outcomes is that the law firms in Sample B are not randomly allocated to deals. Instead, they are selected by the decision of an acquirer who chooses, as hypothesized, only the most suitable candidates from Sample C. This may confound the true effect of a law firm's network- and expertise-based attributes in the outcome analysis (Cameron & Trivedi, 2005). Even though this problem is partially alleviated by including various control variables, which together account for the likely fact that a more difficult case calls for a more competent lawyer, several dimensions of transaction complexity that we do *not* observe are likely to remain. To account for these unobserved dimensions, we estimated Heckman two-stage models (Heckman, 1979) with the likelihood of selection as the dependent variable in the first stage and duration in the second stage of our regressions. These models require some regressors in the selection equation that are not included in the outcome equation, but none of the aforementioned variables qualifies as such an exclusion restriction, as we constructed all of them based on the assumption that they might affect outcomes. We therefore followed recent research in financial economics (e.g., Acharya, Davydenko, & Strebulaev, 2012) and generated several auxiliary interaction terms from the available law firm variables that capture the notion of 'herd behavior': An acquirer is likely to put more weight on an attribute as selection criterion, if more other acquirers rely on the same criterion. We opted for *law firm worldwide experience*, interacted it with the variable's average among all lawyers appointed as legal counsel in the same country and same year as the focal deal, and included the resulting interaction term in the selection equations.

RESULTS

Summary Statistics

Table 1 presents means, SDs, and Pearson correlation coefficients of all variables in Sample B (see online appendix 2 for the corresponding table for the larger Sample C.) As the variable range of many of the count measures is substantial, while their means and medians are comparatively small, we computed the natural logarithms to ensure that our regression results are not driven by a few firms with very large counts. Correlations between the *mmm* variables vary between -.06 and .78, supporting the notion that they indeed describe knowledge structures in different domains (Walsh, 1995). Also, the correlations between (a) the *mmm* variables and (b) *acquirer cross-border M&A experience* and *acquirer size*, respectively, are—with a maximum of P.C.<.81—in the range of values typical of experiential learning studies (e.g., Haunschild & Sullivan, 2002).

Insert Table 1 about here

Acquirers' Criteria for Selecting Legal Advisors

Table 2 presents the results of testing *H1a* and *H2a*. Model 1 (2) investigates the selection criteria that acquirers apply in their choice of a legal counsel for a domestic (cross-border) deal.

Insert Table 2 about here

H1a suggested that an advisor would more likely be selected for a domestic deal, if it had more country expertise and closer connections with the acquirer. Indeed, *advisor-client ties*, *advisor-client tie strength*, and *acquirer country expertise* are all significant and positive in Model 1. We also posited that network-related criteria would have a stronger impact on selection. As both *advisor-client tie strength* and *acquirer country expertise* are measured in percentage points, we tested this formally by comparing their unweighted effect sizes. In particular, as suggested by Wiersema and Bowen (2009), we compared their marginal effects. The results showed that *advisor-client tie strength* alone is a more important selection criterion than *acquirer country expertise* over the entire range of observations, i.e., acquirer-law firm dyads in Sample C ($p<.021$). Thus, *H1a* is supported. *H2a* suggested that acquirers would transfer selection rules from domestic to cross-border M&As using basically the same relative weight of criteria, with prior ties being predominant. In Model 2, the coefficients of all four law firm attributes are significant and similar in size to the ones of Model 1. Also, a test on the relative size of marginal effects of *advisor-client tie strength* vs. the country expertise variables shows that even tie strength alone is more important for selection than the two expertise-related variables together ($p<.001$). *H2a* is therefore supported.

Determinants of Pre-Completion Outcomes

First, we check in how far sample selection is an issue and in how far our exclusion restriction is a valid instrument. Our exclusion restriction, the 'herd variable', is included in the selection equations in Models 1 and 2 (Table 2). The coefficient is highly significant ($p<.001$), suggesting that acquirers indeed seem to follow other acquirers in their selection criteria, supporting our case of a valid instrument. The final lines of Models 7-10 (Table 3) present the coefficients of the Inverse Mills ratio constructed from the selection equations and included in the corresponding outcome equations. The ratio is only significant in the control variable specification for domestic deals (Model 7, $p=.002$). It is insignificant in all other models ($p>.438$), suggesting that sample selection is not a major issue for the analysis, in particular not for the cross-border models. Because Heckman selection models are prone to produce inefficiently high standard errors, Models 8-10 present, as recommended (Cameron & Trivedi, 2005: 552), coefficients and p-values of a standard OLS regression.

Insert Table 3 about here

H1b predicted that a lawyer's country-specific expertise and strength of links with the acquirer would reduce closing time in domestic M&As. According to Model 9, only *advisor-client tie strength* has the hypothesized negative effect ($p<.001$). *Acquirer country expertise* has the predicted sign but is insignificant; *advisor-client ties* has no meaningful effect. We also hypothesized that prior relations would contribute relatively more to completion than country expertise. This is confirmed in a Wald test on the relative strength of *advisor-client tie strength* against *acquirer country expertise* ($p=.016$). Thus, *H1b* is supported for the effect of advisor-client tie strength. *H2b* predicted a significant role of expertise and prior ties also for the completion of cross-border deals, but, in contrast to *H1b*, with country expertise as the pre-dominant factor. The first part of *H2b* is partly supported; the second part is fully supported: Only *acquirer country expertise* and *target country expertise* have the predicted negative effects on duration, whereby the latter shows a stronger effect (Model 10). The two relational variables are insignificant. A Wald test on the relative strength of *target country expertise* vs. *advisor-client tie strength* shows that the difference in effect sizes is statistically significant (p=.008). *H2b* is supported, especially for a counsel's target country expertise in cross-border deals.

In terms of economic impact, raising target country expertise from the average value of 0.21 in Sample C to the maximum of 1.0 reduces the closing phase of an international deal by 21%. At an average duration of 80 days, this corresponds to a reduction of ~17 days. The effect of *advisor-client tie strength* in domestic deals is equally sizable: Duration decreases by 26% or 21 days. Both effects are in the range of values found for established determinants of pre-completion outcomes (Wong & O'Sullivan, 2001). They are larger than, for example, the difference between a private and a tender offer for an attempted cross-border deal (15 days) and almost match the difference between an all-cash and a stock financed deal (26 days).

Testing for Learning and the Impact of an Acquirer's Multiplicity of Mental Models

H3 postulated that the discrepancy between selection criteria and drivers of law firm performance in cross-border deals would be curvilinear in bidders' cross-border M&A experience, with a turning point beyond which acquirers would predominantly consider country expertise in their selection. This curvilinear effect is tested in Model 3 (Table 2) by means of four interaction terms between *acquirer cross-border M&A experience*, the square of experience, and the two key variables of our outcome models: *advisor-client tie strength* and *target country* *expertise*. If such a curvilinear effect were to exist, we would expect that the moderating effect of bidder's *cross-border M&A experience* on *advisor-client tie strength* as a selection criterion *(EL1)* was significantly larger than the moderating effect of bidder's experience on *target country expertise (EL2)*. Also, we would expect the moderating effect of the square of bidder experience on *advisor-client tie* strength (*EL3*) to be lower than the moderating effect of the square of experience on *target country expertise (EL4).* Both conjectures are supported (Table 2). They can, moreover, be corroborated in a comparison of the *true* moderating effects, as recommended by Wiersema and Bowen (2009): In more than 99% of our acquirer-lawyer dyads, the moderating effects (ME) of experience are statistically significant ($p<.05$ across both comparisons) and satisfy as predicted in *H3*: $ME(EL1)-ME(EL2)>0$ and $ME(EL3)-ME(EL4)<0$. Hence, with sufficient experience, acquirers may overcome the initial bias in their international selection decisions. Another question is whether the typical acquirer will ever accumulate enough experience to reach the turning point. The corresponding marginal effects plot shows that a transaction history of at least 13 cross-border deals is necessary to reach this point (see online appendix 4, Figure A1). This is the privilege of 12.5% of the most frequent acquirers: For the majority of firms in our sample, experience alone is thus insufficient.

Models 4-6 (Table 2) test whether bidders with a greater number of mental models reach the turning point earlier, requiring less experience (*H4*). The results largely support this hypothesis. First, the positive difference between the linear parts of the experiential learning interactions, *EL1* and *EL2*, prevails in Models 4-6, suggesting that, at low levels of experience, acquirers lean increasingly more on *advisor-client tie strength* for selection. At high levels of experience, in turn, acquirers put more weight on *target country expertise* for selection, especially if they also exhibit greater multiplicity of mental models. This is suggested by the positive difference between the coefficients on the mental model interaction terms (*MM2-MM1>0* in all three models). To confirm this formally, we also computed the *true* second-order moderating effects (2ME) of our *mmm* variables. As the code is not by default implemented in the statistical software package, we predicted the moderating effects manually based on the STATA source code printed in the appendix of Wiersema and Bouwens (2009: 690). Online appendix 5 presents our code and Table A4 an overview of the results. Online appendix 8 presents additional robustness checks. To summarize, the moderating effects of all three *mmm* variables satisfy, as predicted in *H4: 2ME(MM1)-2ME(MM2) < 0* for at least 90% of the acquirer-law firm dyads in Sample C. Thus, the turning point seems contingent on an acquirer's multiplicity of mental models, i.e. multiplicity shifts down the critical number of M&As required before an acquirer puts more weight on a lawyer's target country expertise. The marginal effects plots of Figure 1 illustrate this, too: The typical bidder with low multiplicity never reaches the turning point, regardless of the amount of experience it accumulates as observed in our data. In contrast, almost all acquirers with a high level of multiplicity reach the turning point (see Table A5 in online appendix 6 for details). Finally, we assessed *H4* in a sub-sample of deals announced in 2010. We computed correlations between the number of *TMT nationalities* of the acquirers and attributes of their counsels (see also online appendix 7, Table A6). In support of *H4, TMT nationalities* is positively correlated with, and only with, *target country expertise* (P.C.=.29, $p<.001$).

DISCUSSION

In the context of acquirers' selection of legal advisors in M&As, this study, first, examined whether firms transfer specific routines and rules from one context (domestic) to another (cross-border); further, we analyzed whether such a transfer might result in an (initially) suboptimal match (in terms of legal counsels' performance) between the transferred routines and the novel context. On this basis, the study investigated whether accumulation of M&A experience would allow acquirers to overcome any such mismatch by revising their selection criteria in cross-border deals. Such rebalancing, we argued, would require a *categorical* reversal of the relative importance attached to the two types of law firm attributes studied—country expertise vis-à-vis network relations. We suggested that acquirers' experiential learning would need to involve a shift from lower-level learning, which occurs within a given set of rules (Fiol & Lyles, 1985), to higher-level learning that would entail adjusting these rules themselves. Finally, this study examined whether acquirers featuring a greater number of distinct mental models would enjoy advantages in terms of a specific aspect of their organizational learning, i.e., their ability to recognize earlier the need to switch to higher-level learning.

The empirical results of this study indicate that selecting lawyers for domestic and international mergers indeed calls for distinct selection rules: In domestic deals, bidders predominantly select their legal counsels based on prior network relations, which also dominate as determinants of lawyers' performance towards shortening time to completion. In cross-border deals, acquirers tend to rely as well (at least initially) on lawyers with whom they share prior business relationships. Yet, these law firms are less likely to be experts in the specific target country environment. In line with extant social network studies, we thus find evidence in this novel empirical context of a dark side of embeddedness, i.e., acquirers (at least initially) pay insufficient attention to better matching partners outside their network. Acquirers appear to learn, though, when they accumulate M&A experience. After counter-productive lower-level learning at first, they reach a turning point (after a large number of deals) at which they categorically reverse the relative weights of network- and expertise criteria. Finally, acquirers with a greater number of mental models needed less experience before reaching this turning point. Overall, we believe that our results have important implications for theory and practice.

Organizational learning research. First, conceptually and empirically, this study builds on and extends research into components of the organizational context that are conducive to organizational learning (e.g., Argote, 2013; Argote & Miron-Spektor, 2011; Fiol & Lyles, 1985). In particular, it adds to research on organizational learning by investigating multiplicity of mental models as a complementary facilitator of a specific aspect of firms' experiential learning: the ability to recognize the need to switch from lower- to higher-level learning. The ability to identify when to engage in which type of learning has been highlighted as an important element of organizations' learning already by Fiol and Lyles (1985). To the extent that it is closely related to reflection on the underlying learning processes itself, our results also speak to studies that seek to establish foundations of a third type of learning such as 'meta-learning' (Visser, 2007) drawing, in particular, on Argyris and Schön (1996) (for overviews, see, Visser, 2007; Tosey et al., 2012). The shift from lower- to higher-level learning that is central to this study adds an outcome-oriented element to this concept. By empirically documenting such a shift, and identifying factors conducive to it, we also contribute empirically to this literature, which is largely conceptual in nature or rests on anecdotal evidence. Further, with respect to *H4*, the notion that a firm's level of diversification might be related to "skills for higher-level learning" (Fiol & Lyles, 1985: 811) has been voiced earlier, although the specific mechanisms that could give rise to such an association have mostly not been spelled out explicitly (e.g., Fiol & Lyles, 1985; related, Miller, 1996). For example, Fiol and Lyles (1985: 811) concluded their conceptual study with questions for future research, one of them being whether "diversified firms have better skills for higher-level learning than do single business firms". Conceptually, we propose a possible mechanism—multiplicity of mental models—that could give rise to such an effect and empirically test the resulting prediction for a specific aspect of learning, i.e. recognition of the need to shift to higher-level learning.

Our findings may also hold value for research at the interface of organizational learning and diversification (e.g., Dujisters et al., 2012; Pennings, Barkema, & Douma, 1994). While the dominant view in the literature on diversification is skeptical regarding its implications for firm value (e.g., Lang & Stulz 1994; Wan et al., 2011), recent studies cautiously point to potential, yet contingent benefits of diversification—for some firms, in certain contexts, and in relation to particular tasks (e.g., Mackey, Barney, & Dotson, 2017; Tate & Yang, 2015). Our results add a specific aspect of learning to the list of corporate activities that could be positively affected by diversification, including as well a suggestion for a possible mechanism underlying this effect.

Social network research. This study adds to social network studies by focusing on how experiential learning may provide a safeguard against the 'dark side' of strong network ties that may lead organizations to pay insufficient attention to better matching partners outside their network (e.g., Lee, 2013; Mitsuhashi & Min, 2016). Our results support this view by documenting the contingent value of network relationships in a novel empirical context (e.g., Gulati, 1995; Yang et al., 2011). In addition, we show that firms appear to face significant difficulties in overcoming the risks of over-embeddedness, as they need to accumulate substantial experience before starting to pay due attention to local experts outside their networks. Factors such as causal ambiguity and infrequency of experiences complicate organizational learning in complex corporate domains (Argote, 2013). In the present context, a complementary influence may impede bidders' learning: strategic behavior of familiar partners. Past ties may become a source of opportunistic exploitation, as the creation and presence of trust generates precisely those conditions under which fraudulent behavior yields the highest payoffs (Granovetter, 1985). As familiar counsels gain from exclusive relationships, they might, strategically or unintentionally, obstruct acquirers' learning by striving to exclude more competent (local) experts from the counseling team.

M&A research. This study adds to literature on M&A completion (e.g., Chakrabarti & Mitchell, 2016; Dikova et al., 2010; Muehlfeld et al., 2012; Zhou et al., 2016) by pointing to legal advisors as a complementary influence. The explanatory power of the results, compared with prior studies, implies that this type of factor—external advisors whose relevance likely varies depending on the specific merger phase—is important to include in future studies.

Implications for practice. First, the results shed light on the value of experience for learning how to overcome the dark side of embeddedness. They suggest that learning might be impeded by external parties who strive to exclude competent (local) experts from their alliances for strategic reasons—and acquirers should be aware of this. Second, positive effects for organizational learning may result from the presence of a whole range of mental models available in an organization. These findings, thus, point into a similar direction as other studies such as Tate and Yang (2015) who argue that firms may reap productivity benefits from redeploying labor internally to alternative uses—a type of human capital investment that likely contributes to the diffusion of knowledge about multiplicity of mental models throughout the organization. In a similar vein, Powell and Rhee (2016) emphasized the value of variance (though in experience), among others due to greater caution with which decision-makers interpret past experience. Embracing a healthy dose of skepticism as to the generalizability of an organization's own experience and keeping an open mind for alternative worldviews may enable firms to more easily engage in rule-changing higher-order learning, if needed.

LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

As any study, this study has its limitations, which could be addressed in future research. A first limitation relates to internal validity. Future research might complement our dependent variable with other measures, such as, for example, completion time including search time (related, Uzzi & Lancaster, 2004). Yet, the relevance of different types of external advisors (e.g., lawyers, investment banks; see, e.g., Hayward, 2003) varies across the M&A process. Outcome variables and scope of influence of the type of advisor should be aligned. For example, while legal advisors impact the speed of closing, they are not usually heavily involved in bargaining about premiums. Still, future research should probe whether our conclusions extend to other combinations of advisor-outcome variables. A second limitation pertains to our measures of organizational learning and multiplicity of mental models, neither of which is directly observed. It is standard procedure in much of the learning literature to use counts of cumulative experience as input measures (for an overview, Argote, 2013). Still, future research should probe the robustness of our results using alternative measures and settings, as our data do not allow us to unambiguously identify the factors that drive the initial discrepancy between selection criteria and antecedents of lawyers' performance in international deals, and the sluggishness of acquirers' adaptation. Consequently, we cannot fully rule out alternative explanations: For example, even if a familiar advisor cannot provide the same high service quality as a local expert, the long-term advisor might charge lower fees (Uzzi & Lancaster, 2004) or be more trustworthy in terms of the variability of outcomes (cf. Baum et al., 2005).

Further, operationalizing multiplicity of mental models and disentangling the time and cross-sectional dimensions, i.e. addressing potential overlaps in the effects of experience and mental models, remains a challenge, not least because experience constitutes a key ingredient of the emergence and development of knowledge structures (Walsh, 1995). By using different indicators across several organizational domains and levels, we sought to alleviate such concerns. Yet, we acknowledge the difficulty of appropriately operationalizing multiplicity of mental models, in particular given the aggregate and indirect nature of our data. While we have done our best to control for experience, our proxies for multiplicity of mental models may still be intertwined with experience. Therefore, our empirical results should be interpreted as indicative of our theory at best. Future research could consider alternative proxies and, using smaller samples, employ other research designs, such as in-depth qualitative studies (e.g., Kaplan, 2008) and methods such as causal mapping (e.g., Markoczy, 2001) that have been developed for the elicitation and quantification of knowledge structures. Such an approach would allow for incorporating the micro-foundations of organizational cognition, i.e. the social dynamics that influence the development of shared cognition within organizations (e.g., Kaplan, 2008; Markoczy, 2001)—a dimension that is absent from this study. Follow-up research could then add valuable insights by offering a multi-level perspective (cf. Eggers & Kaplan, 2013). For example, inter-organizational differences at the micro-level in the degree and way that managers come to hold congruent mental models might translate into distinct levels of the proposed generalized awareness effect, despite the same number of mental models as assessed here, thus accounting for some of the remaining variation in our data. Finally, future research could consider, focusing on performance feedback (Greve, 2003), how a lawyer’s performance, relative to the acquirer’s aspiration level, interacts with or is influenced by multiplicity of mental models. Our data did not allow us to pursue such questions, but they emanate from this study and we hope that they will foster scholarly conversation on organizational learning in complex corporate domains.

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FOOTNOTES

[1] First, the public announcement presupposes that fundamental issues such as strategic fit have mostly been resolved (Haspeslagh & Jemison, 1991). Second, announcing a deal entails the revelation of private information about a bidder's strategy (Officer, 2003), and disruption of organizational routines (Jemison & Sitkin, 1986), and puts reputations on the line (Luo, 2005). Third, Karsten et al. (2014) emphasize agency concerns: Acquirers may prefer a fast closing as sellers retain control until official consummation, allowing them to extract private benefits.

[2] Various factors may trigger a switch between levels of learning: first, factors external to the learning process such as crises (e.g., Fiol & Lyles, 1985); second, factors inherent to the learning process such as experience (e.g., Haleblian & Finkelstein, 1999). Third, performance feedback theory emphasizes their joint influence by focusing on how performance is interpreted relative to own historical and to social aspiration levels (e.g., Greve, 2003), predicting the existence of a performance threshold beyond which organizations engage in distant rather than local search.

[3] Thus, we assume a substantial degree of collectivity of these group mental models, rather than investigating the dynamic and interactive social processes that influence the development of shared cognition within organizations (e.g., Kaplan, 2008, 2011; Markoczy, 1997, 2001).

[4] To improve data quality and validity of results, we manually corrected for typos in lawyer names and country affiliations (by checking the websites), accounted for mergers in the industry, and removed undisclosed acquirers and acquirers that represent nations or investor groups.

[5] As alternatives to focusing on the largest advisor, we (1) analyzed only single-advised deals and (2) reproduced the analysis at the advisor team level, by calculating the law firm-related variables based on averages and maxima of the counsels' attributes, respectively. Results (available upon request) remained qualitatively unchanged.

Table 1
Summary Statistics of Sample B

Variables	Mean	Std. Dev	Min	Max	1.	2.	3.	4.	5.	6.	7.
					Pearson pairwise correlations						
1. Completion time (log(days))	3.0	1.9	0	8.1							
2. Advisor-client ties (#)	1.6	3.5	0	48.0	.01						
3. Advisor-client tie str. [0,1]	.19	.29	0	1	-.09*	.39*					
4. Law firm acq. ctr. exp. [0,1]	.46	.39	0	1	-.06*	.17*	.23*				
5. Law firm target ctr. exp. [0,1]	.33	.37	0	1	-.07*	.07*	.06*	.42*			
6. Law firm worldwide exp. (log(#))	5.3	1.4	0	7.0	.12*	.13*	.08*	-.14*	-25*		
7. Number of advisors (#)	1.7	1.3	1	12.0	.24*	-.03	-.13*	-.13*	-.19*	.29*	
8. Acq. internat. M&A exp. (log(#))	1.2	1.1	0	4.3	.08*	.24*	-.20*	-.19*	-.10*	.09*	.05*
9. (Acq. internat. M&A exp. (log)) ^{2}	2.8	3.5	0	18.9	.07*	.25*	-.18*	-.14*	-.09*	.09*	.04*
10. Acq. network size (log(#))	1.6	.92	0	4.0	.08*	.28*	-.19*	-.03*	-.04*	.15*	.07*
11. Acq. home ctr. exp. [0,1]	.77	.32	0	1	-.04*	.02	.19*	.19*	.13*	-.03	-.01
12. Acq. target ctr. exp. [0,1]	.14	.24	0	1	.01	.13*	.18*	.45*	.50*	-.06*	-.06*
13. Acq. mmm antitrust systems [1,10]	2.6	1.6	1	9	.04*	.22*	-.15*	-.14*	-.09*	.07*	.02
14. Acq. mmm political systems [1,10]	3.3	2.0	1	10	.07*	.21*	-.17*	-.15*	-.11*	.12*	.05*
15. Acq. mmm product markets (log(#))	2.1	.93	0	4.8	.08*	.22*	-.15*	-.04*	-.02	.06*	.03*
16. Acq. nationalities TMT [0,1]	.35	.25	.07	1	-.04*	-.01	-.13	-.10*	.15	.03	.02
17. Acq. size (log($US))	9.2	2.4	-3.2	14.9	.18*	.12*	-.22*	-.12*	-.04*	.08*	.01*
18. Public acquirer (0,1)	.74	.44	0	1	.04*	-.05*	.14*	-.01	.01	-.01	.03*
19. Deal value (log($US))	5.2	1.7	2.3	12.2	.45*	.05*	-.12*	-.09*	-.07*	.25*	.43*
20. Number of bidders (#)	1.04	.21	1	4	.09*	-.02	-.04*	-.01	-.01	.05*	.12*
21. Public target (0,1)	.30	.47	0	1	.37*	-.01	-.08*	-.02	.02	.08*	.22*
22. Stock payment [0,1]	.12	.31	0	1	.17*	.03*	.08*	.13*	.06*	-.02	.11*
23. Tender offer (0,1)	.14	.35	0	1	.21*	-.03	-.06*	-.07*	-.02	.05*	.15*
24. Common law ctr. (0,1)	.70	.46	0	1	-.01	08*	.08*	.29*	.54*	-.01	-.02
25. Same legal origin (0,1)	.98	.10	0	1	-.01	.06*	.05*	.20*	.23*	-.06*	-.05*

	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.
9. (Acq. internat. M&A exp.) ^{2}	.94*										
10. Acq. network size	.72*	.71*									
11. Acq. home ctr. exp.	-.36*	-.34*	-.29*								
12. Acq. target ctr. exp.	-.18*	-.17*	-.08*	.36*							
13. Acq. mmm antitrust systems	.81*	.82*	.64*	-.34*	-.17*						
14. Acq. mmm political systems	.79*	.79*	.70*	-.33*	-.16*	.78*					
15. Acq. mmm product markets	.55*	.63*	.56*	-.25*	-.08*	.53*	.55*				
16. Acq. mmm nationalities TMT	-.08	-.03	-.12*	-.35*	-.06	-.06	-.01	.01			
17. Acq. Size	.58*	.58*	.51*	-.32*	-.12*	.52*	.52*	.46*	-.02		
18. Public acquirer	-.29*	-.29*	-.29*	.44*	.11*	-.27*	-.29*	-.30*	.24	-.26*	
19. Deal value	.18*	.16*	.17*	-.05	.02	.13*	.15*	.13*	.04	.31*	.04*
20. Number of bidders	.01	.01	.01	-.02	-.01	-.01	.01	.01	-.01	-.01	-.01*
21. Public target	.06*	.05*	.03*	-.05*	.07*	.03	.03	.06*	.21	.01	-.01*
22. Stock payment	-.11*	-.09*	-.13*	.14*	.19*	-.09*	-.14*	-.11*	-.10	-.06*	.20*
23. Tender offer	.05*	.04*	-.01	-.09*	-.03*	.03	.01	.04*	.30	-.01	.04*
24. Common law ctr.	-.12*	-.11*	-.04*	.10*	.40*	-.13*	-.10*	.01	.19	-.08*	.01
25. Same legal origin	-.10*	-.09*	-.03*	.17*	.42*	-.09*	-.08*	-.03*	-.08	.04*	.05*

	19.	20.	21.	22.	23.	24.
20. Number of bidders	.12*					
21. Public target	.18*	.21*				
22. Stock payment	.18*	.03	.24*			
23. Tender offer	.08*	.17*	.59*	-.01		
24. Common law ctr.	-.01	.02	.09*	.08*	.01	
25. Same legal origin	.01	.01	.06*	.11*	.02	.31*
No. announced mergers = 11,511						

NOTES: (a) * Significance level: $p<.001$. (b) Pairwise correlations for *acquirer nationalities TMT* only available for a sample of 65 law firm-merger dyads in 2010.

Table 2
Results of the Selection Models

	Expected sign	Domestic mergers (1)	Internat. mergers (2)	Internat. mergers: experiential learning (3)	Internat. mergers: antitrust systems exposure (4)	Internat. mergers: politcial systems exposure (5)	Internat. mergers: Product markets exposure (6)
		Selection equations: Probability of selecting a law firm					
Mental model second-order interactions							
Mental model variable X							
Experiential learning int.3 (**MM1**)	(H4: -)				-.02 (.072)	-.01 (.317)	-.10 (.000)
Experiential learning int.4 (**MM2**)	(H4: +)				.01 (.002)	.01 (.000)	-.01 (.529)
Experiential learning interactions							
Acq. cross-border M&A exp. (log) X							
Advisor-client tie strength **(EL1)**	(H3: +)			.31 (.002)	.21 (.059)	.20 (.059)	.10 (.388)
Law firm target ctr. exp. **(EL2)**	(H3: -)			-.05 (.165)	.02 (.685)	.03 (.372)	-.04 (.326)
(Acq. cross-border M&A exp. (log))^2 X							
Advisor-client tie strength **(EL3)**	(H3: -)			-.07 (.121)	.04 (.565)	.14 (.821)	.26 (.000)
Law firm target country exp. **(EL4)**	(H3: +)			.03 (.025)	-.03(.170)	-.03 (.052)	.01 (.452)
Exclusion restriction							
Law firm worldwide experience (log) X							
Avg. law firm exp.in same country-year	(+)	.01 (.000)	.01 (.000)	.01 (.000)	.01 (.000)	.01 (.000)	.01 (.000)
Law firm variables							
Advisor-client ties	(H1: +)	.06 (.000)	.09 (.000)	.09 (.000)	.09 (.000)	.09 (.000)	.10 (.000)
Advisor-client tie strength	(H1: +)	2.08 (.000)	2.02 (.000)	1.90 (.000)	1.90 (.000)	1.90 (.000)	1.88 (.000)
Acquirer country expertise	(H1: +)	.77 (.000)	.20 (.000)	.20 (.000)	.20 (.000)	.21 (.000)	.20 (.000)
Target country expertise	(H1: +)	---	.66 (.000)	.66 (.000)	.65 (.000)	.64 (.000)	.65 (.000)
Worldwide experience (log)	(+)	32 (.000)	.21 (.000)	.20 (.000)	.21 (.000)	.20 (.000)	.21 (.000)
Number of advisors	(+)	.20 (.000)	.17 (.000)	.17 (.000)	.17 (.000)	.17 (.000)	.17 (.000)
Acquirer variables							
Cross-border M&A exp. (log)	(-)	.09 (.000)	.02 (.031)	.02 (.200)	.02 (.193)	.02 (.173)	.02 (.347)
(Cross-border M&A exp. (log))^2	(-)	-.03 (.000)	-.02 (.000)	.02 (.001)	-.01 (.004)	-.01 (.001)	-.02 (.002)
Network size (log)	(?)	-.10 (.000)	-.02 (.006)	-.02 (.017)	-.02 (.015)	-.02 (.009)	-.02 (.014)
Home country experience	(-)	-.17 (.000)	-.04 (.023)	-.04 (.024)	-.04 (.022)	-.04 (.034)	-.05 (.012)
Target country experience	(-)	---	-.16 (.000)	-.16 (.000)	-.16 (.000)	-.15 (.000)	-.16 (.000)
Acq. mmm antitrust systems	(-)	---	-.01 (.398)	-.01 (.455)	-.01 (.149)	---	---
Acq. mmm political systems	(-)	---	---	---	---	-.01 (.866)	---
Acq. mmm product markets (log)	(-)	---	---	---	---	---	.02 (.226)
Acquirer size (log)	(?)	-.01 (.475)	.01 (.357)	.01 (.376)	.01 (.325)	-.01 (.307)	-.00 (.689)
Public acquirer	(?)	.01 (.319)	-.01 (.609)	-.01 (.555)	-.01 (.587)	-.01 (.780)	-.01 (.348)
Announced mergers (sample B)		5,594	5,917	5,917	5,917	5,680	5,917
Law firm-mergers dyads (sample C)		524,506	634,669	634,669	634,669	613,482	634,669

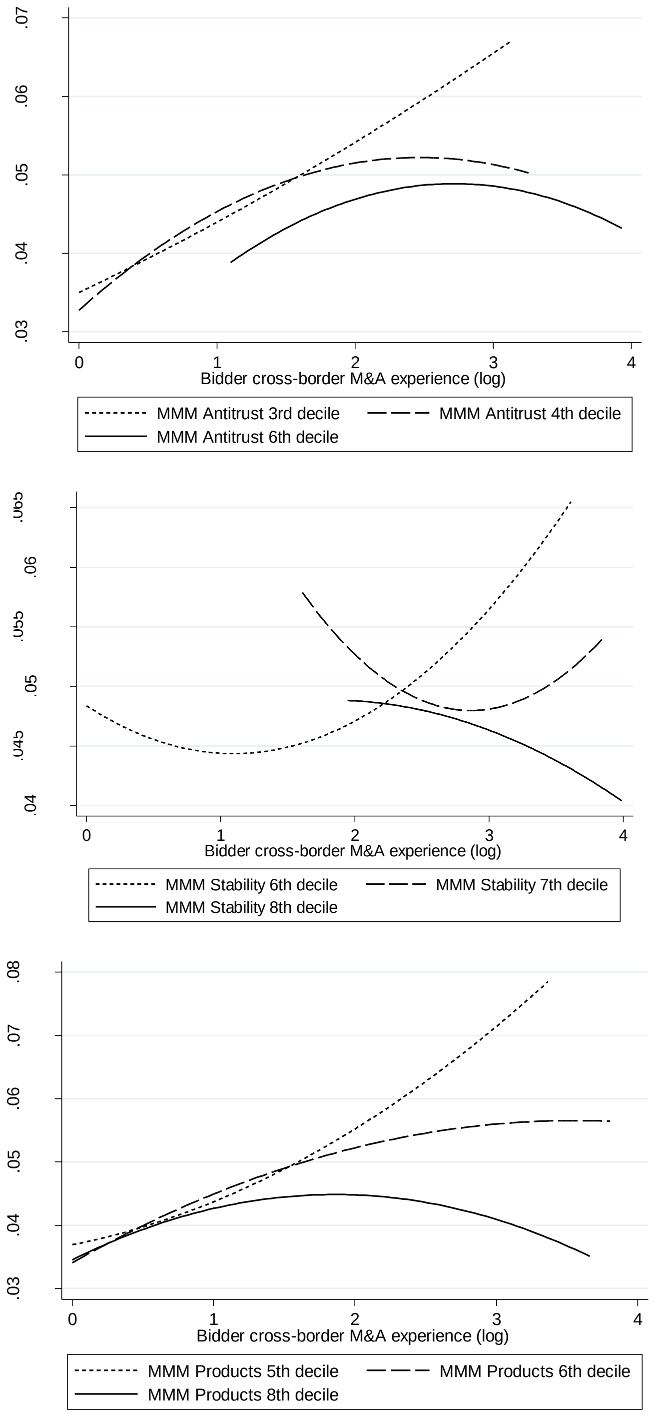
NOTES: (a) The table reports point estimates and p-values in parentheses. (b) All models include a constant, 7 merger control variables introduced in the methodology section, and 12 year dummies (not reported). (c) Models 4-6 omit two potential interaction terms between the multiplicity of mental model variables and the linear experience interactions, *EL1* and *EL2*. The omission has solely a statistical reason, since these "linear" interaction terms are highly correlated with *MM1* and *MM2* (P.C.>.95). Nevertheless, from a logical viewpoint, either set of interaction terms is sufficient to test *H4*, because both shift the turning point of the experiential learning parabola. The question still is whether our findings are robust to that choice. In online appendix 8 Table A8, we successfully reproduce the results presented above using the alternative set of mental model interaction terms.

Table 3
Results of the Outcome Models

		Outcome equations: Duration of closing phase (log)			
	Expected sign	Heckman: Domestic mergers (7)	OLS: International mergers (8)	OLS: Domestic mergers (9)	OLS: International mergers (10)
Law firm variables					
Advisor-client ties	(H2: -)			.01 (.065)	.01 (.530)
Advisor-client tie strength	(H2: -)			-.36 (.000)	.01 (.889)
Acquirer country expertise	(H2: -)			-.05 (.512)	-.21 (.018)
Target country expertise	(H2: -)			---	-.33 (.000)
Worldwide experience (log)	(-)	.02 (.311)	.04 (.038)	-.02 (.323)	.02 (.369)
Number of advisors	(+)	-.01 (.885)	.03 (.138)	.01 (.998)	.02 (.271)
Acquirer variables					
Cross-border M&A exp. (log)	(-)	-.05 (.371)	-.02 (.734)	-.07 (.240)	-.03 (.603)
(Cross-border M&A exp. (log))^2	(-)	.01 (.699)	-.02 (.399)	.01 (.594)	-.02 (.380)
Network size (log)	(-)	.02 (.579)	-.01 (.975)	.01 (.843)	.02 (.698)
Home country experience	(-)	-.03 (.767)	-.14 (.148)	-.03 (.718)	-.10 (.282)
Target country experience	(-)	---	.02 (.826)	---	.05 (.660)
Acq. mmm antitrust systems	(?)	---	-.03 (.209)	---	-.03 (.194)
Acquirer size (log)	(+)	.03 (.022)	.07 (.000)	.03 (.036)	.07 (.000)
Public acquirer	(+)	.14 (.013)	.13 (.040)	.15 (.011)	.13 (.037)
Merger variables					
Deal value (log)	(+)	.39 (.000)	.41 (.000)	.39 (.000)	.41 (.000)
Number of bidders	(+)	.05 (.708)	.01 (.934)	.06 (.614)	.02 (.909)
Public target	(+)	1.08 (.000)	.81 (.000)	1.08 (.000)	.80 (.000)
Stock payment	(+)	.39 (.000)	.38 (.000)	.39 (.000)	.38 (.000)
Tender offer	(+)	.02 (.814)	.20 (.035)	.02 (.817)	.20 (.033)
Common law target country	(-)	-.10 (.138)	-.11 (.045)	-.10 (.156)	-.01 (.977)
Same legal origin	(-)	---	-.030 (.544)	---	-.05 (.276)
Announced mergers (Sample B)		5,594	5,917	5,594	5,917
Law firm-mergers dyads (Sample C)		524,506	634,669	524,506	634,669
Inverse Mills Ratio		.13 (.001)	.04 (.383)	.49 (.124)	-.33 (.536)

NOTES: (a) The table reports point estimates and p-values in parentheses. (b) The p-values of *the Inverse Mills Ratio* stem from a Wald test for independence of the outcome equations (Models 7-10) from the corresponding selection equations (Models 1 and 2). H0: Coefficient of the Inverse Mills Ratio=0. The H0 is not rejected for Models 8-10. Thus, as Heckman selection models produce inefficiently high standard errors, we present, as recommended by Cameron & Trivedi (2005: 552), the coefficients and p-values of a standard OLS regression. (c) All models include a constant and year dummies (not reported). (d) Models 8 and 10 show that an acquirer's multiplicity of mental models, as measured by the variable *mmm antitrust systems*, has in itself no direct effect on duration. This also holds for the other two mental model proxies *mmm political systems* and *mmm product markets* (unreported regressions, available upon request).

Figure 1
The Moderating Effect of M&A Experience and Multiplicity of Mental Models



NOTES: (a) The panels present: ME(*advisor-client tie strength*) - ME(*law firm target country expertise*) on the likelihood of selection, at different levels of *acquirer cross-border M&A experience* and multiplicity of mental models (*mmm*). ME stem from Models 4-6 (Table 2) and are illustrated by quadratic prediction plots. (b) The values for the *mmm* variables are chosen so as to highlight the emergence and inwards shift of the turning point. The bottom panel, e.g., shows that no turning point is in reach for acquirers in the bottom 50% of *mmm product markets*. A turning point emerges for acquirers in the 6th decile and is shifted to the left in the 8th decile.